



Q.P.

Industria y Comercio
SUPERINTENDENCIA

Delegatura de Propiedad Industrial

División de Nuevas Creaciones

PCI
SOLICITUD

PATENTE DE INVENCION

21 EXPEDIENTE No

04-110432

54 TITULO "COMPUSTOS DE AMIDINILFENILO Y SU USO COMO FUNGICIDAS"

51 CLASIFICACION INTERNACIONAL _____

71 SOLICITANTE E I DU PONT DE NEMOURS AND COMPANY

DOMICILIO WILMINGTON, DELAWARE, ESTADOS UNIDOS DE AMERICA

74 APODERADO ALVARO CORREA ORDOÑEZ
TP 20 281

22 BOGOTA, D.C., NOVIEMBRE 3 DE 2004

PETITORIO

1569001

Industria y Comercio
SUPERINTENDENCIA

SUPERINDUSTRIA Y COMERCIO

Radicación : 041104AE 00000000

Folios: 384

radicación

Fecha (MCA): 2004-11-03 16:41:54

Trámite : 011 PCT-PATENT 379 FASE NACI 411 PRESENTA

Dependencia: ESD DIVISION DE NUEVAS CREACIONES

FORMULARIO ÚNICO DE SOLICITUD DE PATENTE
PCT
ENTRADA EN FASE NACIONAL

①

SOLICITUD DE :

☒

Patente de Invención

☐

Patente de Modelo de Utilidad

☐

Capítulo I.

☒

Capítulo II.

②

SOLICITANTE
(71)

Nombre: E.I. DU PONT DE NEMOURS AND COMPANY

Dirección: 1007 Market Street, Wilmington, Delaware 19898,
Estados Unidos de América.Nacionalidad o Domicilio: Wilmington, Delaware, Estados Unidos de
América

Lugar de Constitución: Estados Unidos de América

Teléfono:

Fax:

E-Mail:

IDENTIFICACION

C.C.

☐

NIT

☐

C.E.

☐

Otro

☐

Cual

Número

③

REPRESENTANTE
O APODERADO

Nombre: ALVARO CORREA ORDOÑEZ

Dirección: Avenida 82 No.10-62 Piso 6

Teléfono: 634 15 00

Fax: 376 22 11

E-Mail: patents.bogota@bakernet.com

IDENTIFICACION

C.C.

☒

NIT

☐

C.E.

☐

Otro

☐

Cual

Número 79.143.366 de

Usaquén

TP 20.281

④

INVENTOR (ES)
(72)

Nombre: TSENG, Chi-Ping

Dirección: 1103 Artwin Road, Wilmington, Delaware 19803, Estados Unidos de América.

Nacionalidad o Domicilio: ESTADOUNIDENSE

⑤

PCT (85)

Solicitud Internacional No. PCT/US03/13371

Fecha Abril 30, 2003

Publicación Internacional No. WO 03/093224

Fecha Noviembre 13, 2003

⑥

Título (54)

COMPUESTOS DE AMIDINILFENILO Y SU USO COMO FUNGICIDAS.

⑦

Clasificación Internacional (51)

C07C 257/10

⑧

Prioridad

SI

☒

NO

☐

(33) País de Origen

US

(32) Fecha

Mayo 3, 2002

(31) Número de Solicitud

60/380.095

⑨

Comprobante de pago No. 04-54,357

Fecha JULIO 9 DE 2004

Instrucciones para el diligenciamiento del presente formulario, ver reverso de esta página

10

ANEXOS

- ☒ Comprobante de pago de la tasa de presentación de la solicitud
- ☒ Documento que acredite la existencia y representación legal cuando el solicitante sea persona jurídica
- ☒ Poderes, si fuere el caso
- ☐ Documento de cesión del inventor al solicitante o a su causante
- ☐ Declaraciones
- ☒ Copia de la solicitud internacional. (Resumen, descripción, reivindicaciones, dibujos)
- ☒ Traducción de la solicitud internacional al castellano. (Resumen, descripción, reivindicaciones, dibujos)
- ☒ Copia del examen preliminar internacional efectuado por la Autoridad Internacional de Examen preliminar (IPEA)
- ☐ Traducción del examen preliminar internacional efectuado por la IPEA
- ☐ De ser el caso, copia del contrato de acceso
- ☐ De ser el caso, documento que acredite la licencia o autorización de uso de conocimientos tradicionales de las comunidades indígenas
- ☐ De ser el caso, certificado de depósito del material biológico
- ☐ Arte final 12 x 12
- ☐ De ser el caso, información sobre otras solicitudes de patente o títulos obtenidos en el extranjero por el mismo titular o su causante, relacionadas parcial o totalmente con la invención de esta solicitud
- ☐ De ser el caso, modificaciones efectuadas a la solicitud internacional.
- ☐ Otros:

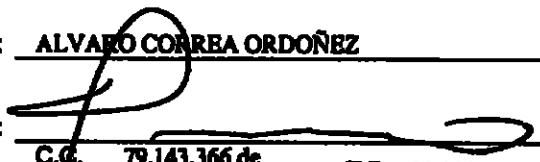
11

FIGURA CARATERISTICA

12

Solicito la concesión de la patente,

NOMBRE: ALVARO CORREA ORDOÑEZ

FIRMA: 

C.C. 79.143.366 de
Unquén

T.P. 20.281

#113 3
2000.3

KIT : 800176089-2

SUPERINDUSTRIA Y COMERCIO

Radicacion : 04110432 00000000

Folio: 284

Fecha (MS): 2004-11-03 16:41:54

Tramite : 011 PCT-PATENT 379 FASE NACI 411 PRESENTA

Dependencia: 2020 DIVISION DE NUEVAS CREACIONES

RECIBO OFICIAL DE CAJA : 04 - 54,357
FECHA : JULIO 9 DE 2004

ORDEN CONSIGNACION ORDEN

DEPOSITANTE	TIPO PAGO	BANCO	CUENTA	No. PAGO	FECHA PGO	Ur. PAGO
ALVARO CORDERA ORDONEZ	CONSIGNACION	BANCO POPULAR	050-00110-6	28088255	09/07/2004	98,739,000.00

ORDEN C O N C E P T O ORDEN

CANT.	RENTISTICO	CONCEPTO	TOTAL CONCEPTO
1	50005-01-01	SOLICITUDES	
		1 TRAMITES DE SOL. DE PATENTE DE IN	422,000.00
		TOTAL :	422,000.00

SUM: CUATROCIENTOS VEINTIDOS MIL PESOS

RESPONSABLE : 

RECIBO DE CAJA APLICADO AL EXPEDIENTE No. _____

POD-00666

LE LAS INSTRUCCIONES GENERALES AL RESPALDO DEL BORRADOR DE ESTE FORMULARIO.
FUERDE QUE TODOS LOS RENDONES DESEN ESTAR DILIGENCIADOS CON ALGUN VALOR EN CASO CONTRARIO, ESCRIBASE CERO (0).

872051642465

RECIBIDO
CÓDIGO 0410601001877
0410601001877 - 1
0410601001877 - 1

1. Administración de Impuestos de: BOGOTA		Código: 03	2. Teléfono: 2851400
3. Documento de Identificación (pasaporte X): C.E. S.T.I. C INT A No. 860.068.8403		4. Apellido y Nombre o Puesto (Bautista de los nombres) (Apellido NO Bautista): RAISBECK, LARA, RODRIGUEZ, RUEDA & GONZALEZ	
5. C.E. S.T.I. C INT A No.		6. Dirección (de la persona o entidad identificada en la celda 4): CALLE 35 No. 7-25, PISO 4o. BOGOTA D.E. CUNDINAMARCA	
7. Concepto (para persona física: tipo de actividad, indicando número, fecha, valor y naturaleza de la transacción): LEGALIZACION Y TRADUCCION EN EL MINISTERIO DE RELACIONES EXTERIORES DE UN DOCUMENTO DE E. T. DU PONT DE NEMOURS AND COMPANY		8. Cantidad de documentos entregados: UNO	

Responsable del pago: Nombre: MARIA JUDITH MORENO C.C. No. 41.382.748 BOGOTA	1. VALOR DEL IMPUESTO	1.553
	2. Descuentos	-0-
	3. Impuesto de renta	-0-
	4. TOTAL PAGOS (suma de 1 + 2 + 3)	1.553
Efectivo ☒ Cheque ☐ No. 1.553		Código Banco

Patentes

006501A-260868
0000-0-106
4125-155330

CONTRIBUYENTE

RECEIVED
OCT 2004
D.C. COLOMBIA
MINISTERIO DE BAUTISTA

TRADUCCION OFICIAL No. 6.698 de un documento escrito en Inglés el cual se sella con el sello de estas Oficinas de Traductores Asociados para fines de identificación. Esta es una Traducción Oficial efectuada el día 31 de Agosto de 1988 por la Sra. Margarita de Giraldo, c.c. 20.194.407 de Bogotá. Traductora e Intérprete Oficial según Resolución No. 7899 del Ministerio de Justicia.

Chapman & Co.
 MARCARITA DE GIRALDO
 TRADUCTORA E INTERPRETE OFICIAL
 RESOLUCION 7899 DEL
 MINISTERIO DE JUSTICIA

Autenticaciones Notariales y subsiguientes correspondientes a un Poder suscrito por E. I. DU PONT DE NEMOURS AND COMPANY y firmado por el Sr. JAMES J. FLYNN, Subsecretario de la Junta de Patentes de dicha Compañía.

Declaración Notarial expedida el día 13 de Julio de 1988 autenticando la firma y cargo del Sr. James J. Flynn como Subsecretario de la Junta de E.I. Du Pont de Nemours and Company.

Firmada por : FRANCES A. DANCHAK, Notario Público cuyo cargo expira el día 13 de Julio de 1988. Firma y sello de la Notario.

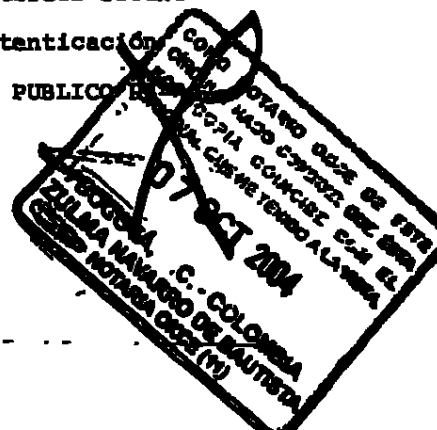
El Poder y la Declaración Notarial arriba mencionados no se traducen por encontrarse escritos en Español.

ESTADO DE DELAWARE

CONDADO DE NEW CASTLE

A SABER:

Yo, DEBORAH H. CAPANO, Protonotario del Tribunal Superior del Estado de Delaware, en y para el Condado de New Castle, Tribunal debidamente registrado, POR MEDIO DEL PRESENTE DOCUMENTO CERTIFICO que FRANCES A. DANCHAK, quien autentica el anterior reconocimiento o declaración, es y era en la fecha de autenticación de dicho reconocimiento o declaración, una NOTARIO PUBLICO.



el Estado de Dalaware, residente en el Condado de New Castle, debidamente comisionada y habilitada como tal para hacer reconocimientos de todas las escrituras e instrumentos por escrito y para tomar juramentos y declaraciones en dicho Estado, que conosco bien la escritura y caligrafia de dicha Notario y creo, en conciencia, que la firma que aparece en dicha prueba o reconocimiento es auténtica.

Quiero decir, ahora
MARGARITA LUNAS DE GRAIDS
TRANSCRIBIDA POR LA
SECRETARIA DEL TRIBUNAL

EN TESTIMONIO DE LO CUAL firmo y estampo el sello de dicho Tribunal a los 13 días del mes de Julio de 1988.

Firando: DEBORAH H. CAPANO

Protonotario del Tribunal Superior - Sello del Tribunal.

ESTADO DE DELAWARE

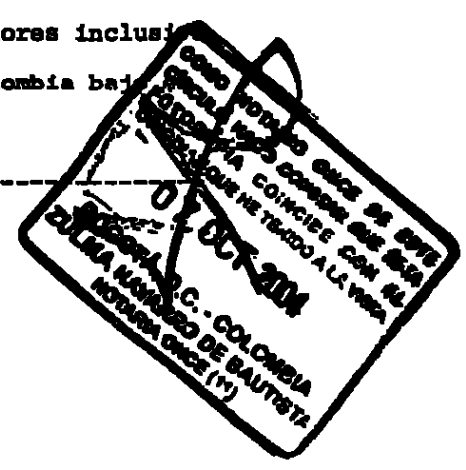
Yo, MICHAEL HARKINS, Secretario de Estado del Estado de Delaware, por medio del presente certifico que DEBORAH H. CAPANO, cuya firma auténtica aparece en el anterior documento, era en ese momento y es actualmente una Protonotario del Tribunal Superior del Estado de Delaware en y para el Condado de New Castle, debidamente elegida, comisionada y habilitada, y que se debe dar total fé y crédito a todos sus actos oficiales como tal.

EN TESTIMONIO DE LO CUAL estampo mi firma y sello oficial en mi despacho en Dover a los 18 días del mes de Julio de 1988.

MICHAEL HARKINS - Secretario de Estado

Firmado: Richard (Ilegible) - Subsecretario de Estado.

EN ESPAÑOL: La legalización de las firmas anteriores incluida por el Ministerio de Relaciones Exteriores de Colombia bajo No. 158460 del día 26 de Agosto de 1988.



ES TRADUCCION FIEL Y COMPLETA DE LA CUAL SE DEJA COPIA EN LOS
ARCHIVOS DE TRADUCTORES ASOCIADOS PARA SU CONFRONTACION.

Margarita Llinás de Giraldo

Margarita Llinás de Giraldo

c.c. 20.194.407 de Bogotá

Traductora e Intérprete Oficial

según Resolución No. 7899 del

Ministerio de Justicia.

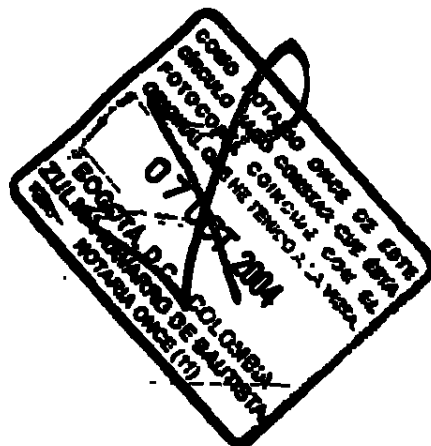
Margarita Llinás de Giraldo

MARGARITA LLINÁS DE GIRALDO
TRADUCTORA OFICIAL
RESOLUCION 7899 DEL
MINISTERIO DE JUSTICIA

Traductores Asociados

NO SE ASUME
RESPONSABILIDAD DEL TEXTO
97 JUL 22 AM 11
JEFES DE DEPARTAMENTOS
Y JEFES DE AGENCIAS

MINISTERIO DE RELACIONES
EXTERIORES
Margarita
53085
FIRMA APARECE EN EL
CERTIFICADO DE AUTENTICIDAD
DE LOS DOCUMENTOS INDICADOS

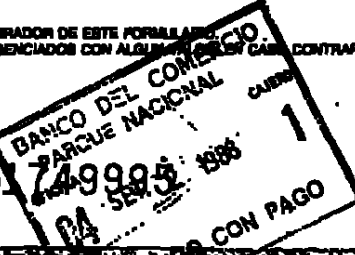


8

11301-2

LAS INSTRUCCIONES GENERALES AL RESPALDO DEL BORRADOR DE ESTE FORMULARIO
ASEGURE QUE TODOS LOS REVELONES DEBEN ESTAR DELICENCIADOS CON ALGUNO DE LOS SIGUIENTES CASOS: CONTRARIO, ESCRIBA CERO (0).

87205



0410601001916 - 0

0410601001916 - 0

0410601001916 - 0

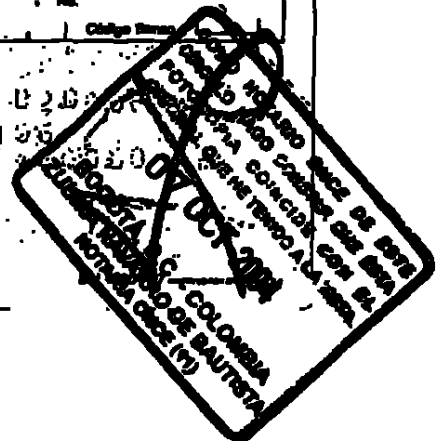
1 Administración de impuestos de: BOGOTÁ		Código: 03	2-850938
3 Documento de identificación (marcas X) C.C. & T.L. ☒ X NIT ☐ A No. 20.194.407		4 Apellidos y Nombres o Razón Social de las partes (transcribir en extenso) MARGARITA LLINAS DE GIRALDO	
5 C.C. & T.L. ☐ G NIT ☐ A No. ---		6 R. I. DU PONT DE NEMOURS AND CO.	
7 Dirección (de la persona o entidad identificada en la cédula) Cra. 7 No. 29-34 Of. 602		Municipio: BOGOTÁ	Departamento: CUNDINAMARCA
8 CONCEPTO (Reservar espacio para la documentación, indicando número, fecha, valor y naturaleza de la transacción)		9 Cantidad de documentos firmados UNO	
TRADUCCION OFICIAL No. 6.698 de un Poder suscrito por E. I. du Pont de Nemours and Company y firmado por el señor James J. Flynn, Subsecretario de la Junta de Patentes de dicha Compañía, efectuada el 31 de Agosto de 1988.			

Responsable del pago <i>[Firma]</i> Nombre: --- C.C. No. ---	1 VALOR DEL IMPUESTO	600
	2 Gastos	-0-
	3 Intereses de mora	-0-
	4 TOTAL PAGOS (sumamos 1 + 2 + 3)	600
	El pago ☒ X Cheque ☐ No. ---	Código Banco ---

501.701.4 020000
0000 0-1 006
4125

DEM-02-30-87

CONTRIBUYENTE





CONSULADO DE COLOMBIA
WASHINGTON, D.C.



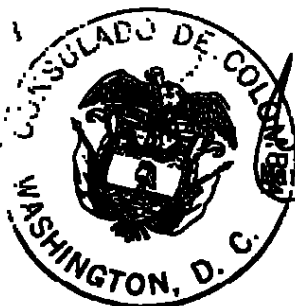
Nº 1414 A.

LA CONSUL DE COLOMBIA
en Washington, D.C.

CERTIFICA:

Que es auténtica la firma de MICHAEL HARKINS
quien el día 18 de julio de 1988
desempeñaba las funciones de SECRETARIO DEL ESTADO DE DELAWARE
la cual aparece al pie de los documentos anexos relacionados con
PODER Y CERTIFICACION NOTARIAL DE E.I. DU PONT DE NEMOURS AND CO.

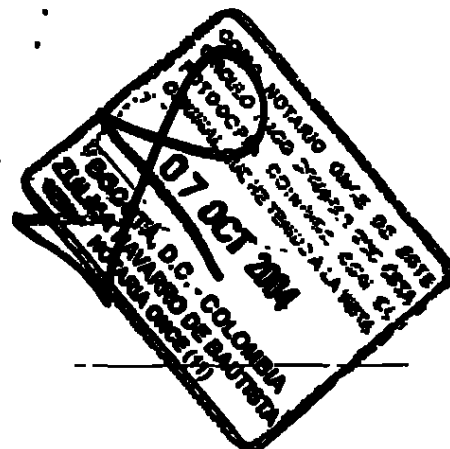
Dado en Washington, U.C., a los veintiocho (28) días del mes de
julio de mil novecientos ochenta y ocho. (1988).



Arturo Angel de Arbeláez
Cónsul de Colombia

(El Consulado no asume ninguna
responsabilidad por el conte-
nido de los documentos anexos)

DERECHOS A PAGAR
EN COLOMBIA U.S. \$ 5.00



10

MINISTERIO DE REASUNES EXTERIORES

LEGALIZACIONES

Folio 26 AGO. 1988 No. 58460

HACE CONSTAR

Que el señor
Mario de la Cruz
cuyo firma aparece al pie del presente
documento, desconocíase en sus
funciones allí indicadas.

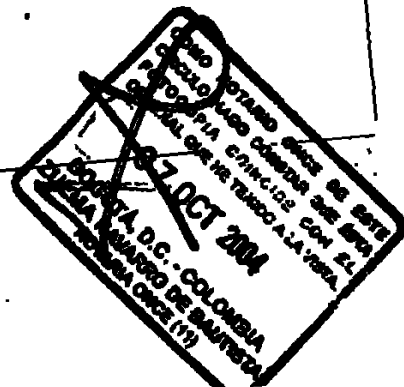
60

[Handwritten signature]

DATE: 12-1-78
BY: [illegible]
[illegible]

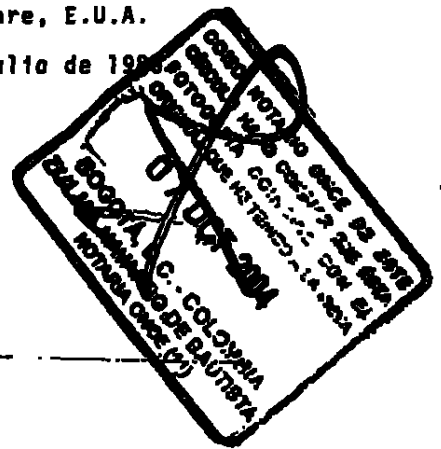
MARGARITA LYNAS DE CHAVEZ

T.O. 6-69
31-08-85



AFARTADO AEREO No. 37-48
BOGOTA, D. E. - COLOMBIA

PODER



NOTARIAL CERTIFICATE N

CERTIFICACION NOTARIAL

On this 13th day of July

A las 13 días del mes de julio

I, the undersigned Notary Frances A. Danchak

de las 8, el suscrito Notario Frances A. Danchak

CERTIFICATE

DA FE

1. That James J. Flynn

1. Que James J. Flynn

of legal age and domiciled in 2604 Montchanin Bldg.,
Wilmington, Delaware 19898,
United States of America
set his hand on the foregoing document.

Mayor y domiciliado en 2604 Montchanin Bldg.,
Wilmington, Delaware 19898
Estados Unidos de América
firmó en su poder y letra el documento que antecede.

2. That the grantor is to me personally known and that he/she
has legal capacity to execute the instrument.

2. Que conozco al otorgante y que éste tiene capacidad legal para
el otorgamiento.

3. That the grantor has executed the foregoing document as
Asst. Secretary of the Patent Board
of the judicial person

3. Que el otorgante ha suscrito el referido documento en su
carácter de
Secretario Asistente de la Junta
de Patentes.

E. I. DU PONT DE NEMOURS AND COMPANY

E.I. DU PONT DE NEMOURS AND COMPANY

4. That the judicial person

4. Que la persona jurídica

E. I. DU PONT DE NEMOURS AND COMPANY

E.I. DU PONT DE NEMOURS AND COMPANY

having its home office in 1007 Market Street,
Wilmington, Delaware 19898,
United States of America

con sede en 1007 Market Street,
Wilmington, Delaware 19898,
Estados Unidos de América

a duly organized, has present legal existence and that the
purposes for which the power of attorney is granted are within
the scope of its corporate purposes.

está legalmente constituida, que tiene existencia legal actual y
que el acto para el cual se ha otorgado el poder está comprendido
entre los que constituyen su objeto social.

5. That the grantor has in fact the referred to authority and that
his/her representation is legal.

5. Que el otorgante tiene efectivamente la representación que
otorga, y que ésta es legítima.

6. That I have heard certifications 2, 3 and 4 above on the
following authentic documents for such purpose exhibited to
me and which I mention specifically, giving their dates and
their origin or provenance: In accordance with the
appointment which I have seen issued in the
City of Wilmington, Delaware on September 11,
1987 by the Chairman and Vice Chairman of the
Patent Board of said corporation.

6. Que he leído las certificaciones 2, 3 y 4 anteriores en los
siguientes documentos auténticos que al efecto se me exhibieron
y que menciono específicamente con expresión de sus fechas
y de su origen o procedencia: De acuerdo al nom-
bramiento que he visto en la ciudad
de Wilmington, Delaware en septiembre
11 de 1987 por el Presidente y Vice
Presidente de la Junta de Patentes de
dicha compañía certifico que dicho
individuo está autorizado para firmar
el presente documento en nombre de
la compañía de acuerdo con su mencio-
nada posición. Finalmente certifico
que el objeto por el cual este ins-
tumento es para llevar a cabo las ac-
tividades de la compañía de acuerdo
con el acta de constitución de 1915 y
estatutos en la ciudad de Wilmington,
Delaware, de fecha septiembre 11, 1915
que los dos hemos visto.

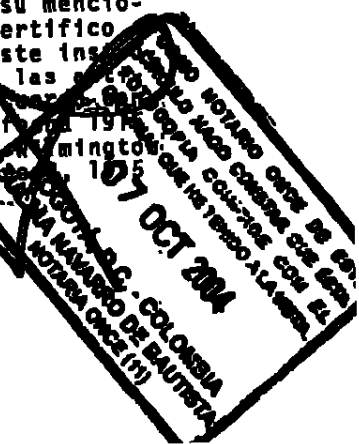
I further certify that said individual is
duly authorized to sign the foregoing instrument
in the name of said corporation, in accordance
with his above mentioned position.

I finally certify that the purposes for which
said instrument is granted are within the scope of
the objects or activities of said corporation, in
accordance with the Act of Incorporation issued in
1915 and/or the By-Laws issued in the City of
Wilmington, Delaware and dated September 8, 1915
which both I have seen. I attest.

Doy fé.

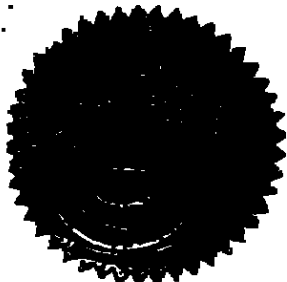
Frances A. Danchak
Notary Public

My Commission expires April 8, 1992



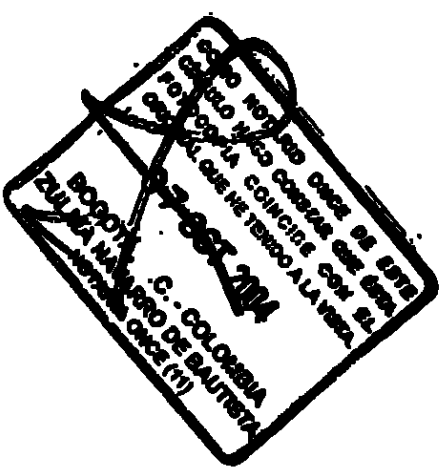
The State of Delaware

I, Michael Harkins Secretary of State of the
State of Delaware, do hereby certify that Deborah H. Capano
 whose genuine signature appears to the above and foregoing document
was at the time of making and now is a Prothonotary of the
Superior Court of the State of Delaware
in and for New Castle County
duly elected, commissioned and qualified, and that full
 faith and credit are, and ought to be, given to all of his official acts as such.

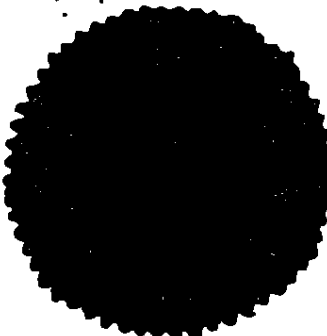


In Testimony Whereof, I have hereunto set my hand
 and official seal
of office at Dover, this
18th day of July
 in the year of our Lord one thousand nine hundred and
eighty-eight.

Richard P. Harkins Michael Harkins
Assistant Sec'y Secretary of State
of State



State of Delaware. }
New Castle County. } ss.



I, DEBORAH H. CAPANO, Prothonotary of the Superior Court of the State of Delaware, in and for New Castle County, which Court is a Court of Record, DO HEREBY CERTIFY, THAT Frances A. Danchak, by whom the foregoing affidavit or acknowledgment is certified, now is and was at the date of said affidavit or acknowledgment a Notary Public for the State of Delaware residing in New Castle County, and duly commissioned and qualified as such to take acknowledgments to all deeds and instruments in writing and administering oaths and take affidavits within said State, that I am well acquainted with the handwriting of said Notary Public and verily believe that the signature to said certificate of proof or acknowledgment is genuine.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seal of said Court, the 13th day of July, 1988.

Deborah H. Capano
Prothonotary of the Superior Court.



15

000118

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
13 November 2003 (13.11.2003)

PCT

(10) International Publication Number
WO 03/093224 A1

(51) International Patent Classification: C07C 257/10,
257/12, 335/16, 335/18, 335/20, A01N 37/52, 47/28, 47/40

(21) International Application Number: PCT/US03/13371

(22) International Filing Date: 30 April 2003 (30.04.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/380,095 3 May 2002 (03.05.2002) US

(71) Applicant (for all designated States except US): E.I. DU
PONT DE NEMOURS AND COMPANY [US/US]; 1007
Market Street, Wilmington, DE 19898 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): TSENG, Chi-Ping
[US/US]; 1103 Artwin Road, Wilmington, DE 19803
(US).

(74) Agent: HEISER, David, E.; E.I. DU PONT DE
NEMOURS AND COMPANY, LEGAL PATENT
RECORDS CENTER, 4417 Lancaster Pike, Wilmington,
DE 19805 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
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(54) Title: AMIDINYLPHENYL COMPOUNDS AND THEIR USE AS FUNGICIDES

(57) Abstract: Compounds of the formula (R³)_n-(R⁶A)-2-(R⁷)-1-[N=C(R¹)N(R²)(R³)]benzene and their agriculturally suitable salts, are disclosed which are useful as fungicides, wherein R¹ is H, OH, SH, SO₂H, CN, -OR⁷ or -SR⁷; C₁-C₁₀ alkyl, C₂-C₁₀ alkenyl, C₂-C₃ alkoxy carbonyl, C₂-C₁₀ alkynyl, a C₃-C₆ carbocycle or a 3-, 4-, 5- or 6-membered heterocycle, each optionally substituted; provided that when R_{4,17} is a heterocycle containing nitrogen as a ring member, it is not attached to the remainder of Formula I through said nitrogen ring member; R⁶ is C₃-C₂₁ alkyl, C₃-C₂₁ alkenyl, C₃-C₂₁ alkynyl, C₄-C₆ alkoxy carbonyl, C₄-C₆ alkylaminocar-
bonyl, C₃-C₁₀ dialkylaminocarbonyl or C₃-C₁₂ trialkylsilyl, each optionally substituted; or R⁶ is C₁-C₄ alkyl or C₂-C₃ alkyl carbonyl, each substituted with one or more R¹²; A is a direct bond, O, S(O)_n, or NR¹⁰; n is 0, 1 or 2; m is 0, 1, 2 or 3; and R², R³, R⁴, R⁵, R⁷, R¹⁰ and R¹² are as defined in the disclosure. Also disclosed are compositions containing the compounds of the formula (R³)_n-(R⁶A)-2-(R⁷)-1-[N=C(R¹)N(R²)(R³)]benzene and a method for controlling plant diseases caused by fungal plant pathogens which involves applying an effective amount of a compound of the formula (R³)_n-(R⁶A)-2-(R⁷)-1-[N=C(R¹)N(R²)(R³)]benzene.

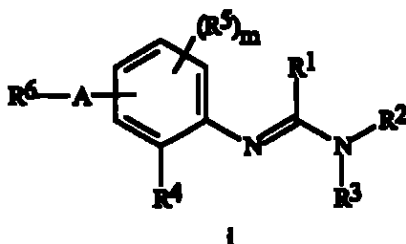
TITLE**AMIDINYLPHENYL COMPOUNDS AND THEIR USE AS FUNGICIDES****FIELD OF THE INVENTION**

This invention relates to certain amidines, their agriculturally suitable salts and compositions, and methods of their use as fungicides.

BACKGROUND OF THE INVENTION

The control of plant diseases caused by fungal plant pathogens is extremely important in achieving high crop efficiency. Plant disease damage to ornamental, vegetable, field, cereal, and fruit crops can cause significant reduction in productivity and thereby result in increased costs to the consumer. Many products are commercially available for these purposes. The need continues for new compounds which are more effective, less costly, less toxic, environmentally safer and/or have different modes of action.

WO 00/46184 discloses certain phenylamidines of formula i as fungicides



wherein,

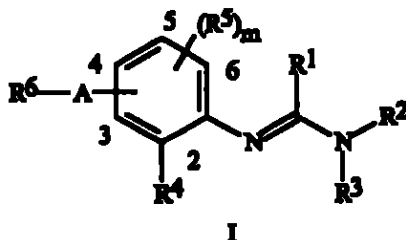
A and R¹ through R⁵ are as defined therein; and

R⁶ is optionally substituted carbocyclyl or heterocyclyl.

Various amidinylphenyl compounds are also disclosed in U.S. Patent No. 3,284,289, U.S. Patent No. 3,993,469, U.S. Patent No. 4,018,814, U.S. Patent No. 4,154,755, U.S. Patent No. 4,208,411, U.S. Patent No. 4,209,319 and U.S. Patent No. 5,219,868.

SUMMARY OF THE INVENTION

This invention is directed to compounds of Formula I (including all geometric, tautomeric and stereoisomers) and agriculturally suitable salts thereof, agricultural compositions containing them and their use as fungicides:



wherein

R¹ is H, OH, SH, SO₃H, CN, -OR⁷ or -SR⁷; C₁-C₁₀ alkyl, C₂-C₁₀ alkenyl, C₂-C₅ alkoxy carbonyl, C₂-C₁₀ alkynyl, a C₃-C₆ carbocycle or a 3-, 4-, 5- or 6-membered heterocycle, each optionally substituted; provided that when R¹ is a heterocycle containing nitrogen as a ring member, it is not attached to the remainder of Formula I through said nitrogen ring member;

R² is H, CN, -OR⁷, or -SR⁷; C₁-C₁₀ alkyl, C₂-C₁₀ alkenyl, C₂-C₁₀ alkynyl, C₃-C₆ carbocycle, a 3-, 4-, 5- or 6-membered heterocycle or C₂-C₁₀ alkyl carbonyl, each optionally substituted;

R³ is H; C₁-C₁₀ alkyl, C₂-C₁₀ alkenyl, C₂-C₁₀ alkynyl, a C₃-C₆ carbocycle, a 3-, 4-, 5- or 6-membered heterocycle or C₂-C₁₀ alkyl carbonyl, each optionally substituted; or

R² and **R³** are taken together with their interconnecting nitrogen to form a heterocyclic ring containing 3 to 7 atoms, said ring consisting of said interconnecting nitrogen atom, carbon and optionally one or two additional atoms selected from the group consisting of nitrogen, sulfur and oxygen, and said ring being optionally substituted with one or more R⁹;

R⁴ and each **R⁵** are each independently C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₆ cycloalkyl, C₁-C₆ haloalkyl, C₂-C₆ haloalkenyl, C₂-C₆ haloalkynyl, C₃-C₆ halocycloalkyl, halogen, CN, CHO, CO₂H, CONH₂, SF₅, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, C₁-C₄ alkylthio, C₁-C₄ alkylsulfinyl, C₁-C₄ alkylsulfonyl, C₁-C₄ haloalkylthio, C₁-C₄ haloalkylsulfinyl, C₁-C₄ haloalkylsulfonyl, C₁-C₄ alkylamino, C₂-C₈ dialkylamino, C₃-C₆ cycloalkylamino, C₂-C₆ alkyl carbonyl, C₂-C₆ alkoxy carbonyl, C₂-C₆ alkylaminocarbonyl, C₃-C₈ dialkylaminocarbonyl or C₃-C₆ trialkylsilyl;

R⁶ is C₅-C₂₁ alkyl, C₅-C₂₁ alkenyl, C₅-C₂₁ alkynyl, C₄-C₉ alkoxy carbonyl, C₄-C₆ alkylaminocarbonyl, C₃-C₁₀ dialkylaminocarbonyl or C₃-C₁₂ trialkylsilyl, each optionally substituted; or **R⁶** is C₁-C₄ alkyl or C₂-C₉ alkyl carbonyl, each substituted with one or more R¹²;

A is a direct bond, O, S(O)_n or NR¹⁰;

each **R⁷** is independently C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, a C₃-C₆ carbocycle or a 3-, 4-, 5- or 6-membered heterocycle, each optionally substituted;

each **R⁹** is independently halogen, CN, NO₂, C₁-C₄ alkoxy, C₁-C₄ alkyl, C₁-C₄ haloalkoxy or C₁-C₄ alkylthio;

R¹⁰ is H, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₁-C₄ alkylsulfonyl, C₁-C₄ haloalkylsulfonyl, C₂-C₆ alkyl carbonyl, C₂-C₆ alkoxy carbonyl, C₂-C₆ alkylaminocarbonyl, C₃-C₈ dialkylaminocarbonyl or C₃-C₆ trialkylsilyl;

each R¹² is independently CO₂H, CONH₂, NO₂, C₁-C₆ haloalkoxy, C₂-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl, C₁-C₆ haloalkylthio, C₁-C₆ haloalkylsulfinyl, C₁-C₆ haloalkylsulfonyl, C₁-C₆ alkylamino, C₂-C₈ dialkylamino, C₂-C₆ alkylcarbonyl, C₂-C₆ alkoxy carbonyl, C₃-C₉ alkoxyalkylcarbonyl, C₂-C₆ alkylaminocarbonyl, C₃-C₁₀ alkylaminoalkylcarbonyl, C₃-C₈ dialkylaminocarbonyl, C₄-C₈ dialkylaminoalkylcarbonyl, C₃-C₉ alkylthioalkylcarbonyl, C₃-C₉ trialkylsilyl, C₃-C₉ halotrialkylsilyl, C₄-C₉ alkoxytrialkylsilyl or C₃-C₉ trialkylsilyloxy; n is 0, 1 or 2; and m is 0, 1, 2 or 3.

DETAILS OF THE INVENTION

The compounds of Formula I as illustrated above can also be described as compounds of the formula (R⁵)_m-(R⁶A)-2-(R⁴)-1-[N=C(R¹)N(R²)(R³)]benzene, wherein R¹, R², R³, R⁴, R⁵, R⁶, A, m are as defined above.

In the above recitations, the term "alkyl", used either alone or in compound words such as "alkylthio" or "haloalkyl" includes straight-chain or branched alkyl, such as, methyl, ethyl, *n*-propyl, *i*-propyl, or the different butyl, pentyl or hexyl isomers. "Alkenyl" includes straight-chain or branched alkenes such as ethenyl, 1-propenyl, 2-propenyl, and the different butenyl, pentenyl and hexenyl isomers. "Alkenyl" also includes polyenes such as 1,2-propadienyl and 2,4-hexadienyl. "Alkynyl" includes straight-chain or branched alkynes such as ethynyl, 1-propynyl, 2-propynyl and the different butynyl, pentynyl and hexynyl isomers. "Alkynyl" can also include moieties comprised of multiple triple bonds such as 2,5-hexadiynyl. "Alkoxy" includes, for example, methoxy, ethoxy, *n*-propyloxy, isopropyloxy and the different butoxy, pentoxy and hexyloxy isomers. "Alkoxyalkyl" denotes alkoxy substitution on alkyl. Examples of "alkoxyalkyl" include CH₃OCH₂, CH₃OCH₂CH₂, CH₃CH₂OCH₂, CH₃CH₂CH₂CH₂OCH₂ and CH₃CH₂OCH₂CH₂. "Alkoxyalkoxy" denotes alkoxy substitution on alkoxy. "Alkylthio" includes branched or straight-chain alkylthio moieties such as methylthio, ethylthio, and the different propylthio, butylthio, pentylthio and hexylthio isomers. "Alkylthioalkyl" denotes alkylthio substitution on alkyl. Examples of "alkylthioalkyl" include CH₃SCH₂, CH₃SCH₂CH₂, CH₃CH₂SCH₂, CH₃CH₂CH₂CH₂SCH₂ and CH₃CH₂SCH₂CH₂. "Alkylthioalkoxy" denotes alkylthio substitution on alkoxy. "Alkylsulfinyl" includes both enantiomers of an alkylsulfinyl group. Examples of "alkylsulfinyl" include CH₃S(O), CH₃CH₂S(O), CH₃CH₂CH₂S(O), (CH₃)₂CHS(O) and the different butylsulfinyl, pentylsulfinyl and hexylsulfinyl isomers. Examples of "alkylsulfonyl" include CH₃S(O)₂, CH₃CH₂S(O)₂, CH₃CH₂CH₂S(O)₂, (CH₃)₂CHS(O)₂ and the different butylsulfonyl, pentylsulfonyl and hexylsulfonyl isomers. "Alkylamino", "dialkylamino", and the like, are defined analogously to the above examples.

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The term "carbocycle" includes "aromatic carbocyclic ring system", which denotes fully aromatic carbocycles and carbocycles in which at least one ring of a polycyclic ring system is aromatic (where aromatic indicates that the Hückel rule is satisfied), and "nonaromatic carbocyclic ring system", which denotes fully saturated carbocycles as well as partially or fully unsaturated carbocycles where the Hückel rule is not satisfied by any of the rings in the ring system. "Cycloalkyl" includes, for example, cyclopropyl, cyclobutyl, cyclopentyl, and cyclohexyl.

The term "hetero" in connection with rings refers to a ring in which at least one ring atom is not carbon and which can contain 1 to 4 heteroatoms independently selected from the group consisting of nitrogen, oxygen and sulfur, provided that each ring contains no more than 4 nitrogens, no more than 2 oxygens and no more than 2 sulfurs. "Heterocycle" includes "aromatic heterocyclic ring system", which denotes fully aromatic heterocycles and heterocycles in which at least one ring of a polycyclic ring system is aromatic (where aromatic indicates that the Hückel rule is satisfied), and "nonaromatic heterocyclic ring system", which denotes fully saturated heterocycles as well as partially or fully unsaturated heterocycles where the Hückel rule is not satisfied by any of the rings in the ring system. The heterocyclic ring systems can be attached through any available carbon or nitrogen by replacement of a hydrogen on said carbon or nitrogen.

The term "halogen", either alone or in compound words such as "haloalkyl", includes fluorine, chlorine, bromine or iodine. Further, when used in compound words such as "haloalkyl", said alkyl may be partially or fully substituted with halogen atoms which may be the same or different. Examples of "haloalkyl" include F_3C , $ClCH_2$, CF_3CH_2 and CF_3CCl_2 . The terms "haloalkenyl", "haloalkynyl", "haloalkoxy", "haloalkylthio", and the like, are defined analogously to the term "haloalkyl". Examples of "haloalkenyl" include $(Cl)_2C=CHCH_2$ and $CF_3CH_2CH=CHCH_2$. Examples of "haloalkynyl" include $HC\equiv CCHCl$, $CF_3C\equiv C$, $CCl_3C\equiv C$ and $FCH_2C\equiv CCH_2$. Examples of "haloalkoxy" include CF_3O , CCl_3CH_2O , $HCF_2CH_2CH_2O$ and CF_3CH_2O . Examples of "haloalkylthio" include CCl_3S , CF_3S , CCl_3CH_2S and $ClCH_2CH_2CH_2S$. Examples of "haloalkylsulfinyl" include $CF_3S(O)$, $CCl_3S(O)$, $CF_3CH_2S(O)$ and $CF_3CF_2S(O)$. Examples of "haloalkylsulfonyl" include $CF_3S(O)_2$, $CCl_3S(O)_2$, $CF_3CH_2S(O)_2$ and $CF_3CF_2S(O)_2$.

"Trialkylsilyl" includes 3 branched and/or straight-chain alkyl radicals attached to and linked through a silicon atom such as trimethylsilyl, triethylsilyl and *t*-butyl-dimethylsilyl. "Halotrialkylsilyl" denotes at least one of the three alkyl radicals is partially or fully substituted with halogen atoms which may be the same or different. "Alkoxytrialkylsilyl" denotes at least one of the three alkyl radicals is substituted with one or more alkoxy radicals which may be the same or different. "Trialkylsilyloxy" denotes a trialkylsilyl moiety attached through oxygen.

Examples of "alkylcarbonyl" include $C(O)CH_3$, $C(O)CH_2CH_2CH_3$ and $C(O)CH(CH_3)_2$. Examples of "alkoxycarbonyl" include $CH_3OC(=O)$, $CH_3CH_2OC(=O)$, $CH_3CH_2CH_2OC(=O)$, $(CH_3)_2CHOC(=O)$ and the different butoxy- or pentoxycarbonyl isomers. Examples of "alkylaminocarbonyl" include $CH_3NHC(=O)$, $CH_3CH_2NHC(=O)$, $CH_3CH_2CH_2NHC(=O)$, $(CH_3)_2CHNHC(=O)$ and the different butylamino- or pentylaminocarbonyl isomers. Examples of "dialkylaminocarbonyl" include $(CH_3)_2NC(=O)$, $(CH_3CH_2)_2NC(=O)$, $CH_3CH_2(CH_3)NC(=O)$, $CH_3CH_2CH_2(CH_3)NC(=O)$ and $(CH_3)_2CHN(CH_3)C(=O)$. Examples of "alkoxyalkylcarbonyl" include $CH_3OCH_2C(=O)$, $CH_3OCH_2CH_2C(=O)$, $CH_3CH_2OCH_2C(=O)$, $CH_3CH_2CH_2CH_2OCH_2C(=O)$ and $CH_3CH_2OCH_2CH_2C(=O)$. Examples of "alkylthioalkylcarbonyl" include $CH_3SCH_2C(=O)$, $CH_3SCH_2CH_2C(=O)$, $CH_3CH_2SCH_2C(=O)$, $CH_3CH_2CH_2CH_2SCH_2C(=O)$ and $CH_3CH_2SCH_2CH_2C(=O)$. Examples of "alkylaminoalkylcarbonyl" include $CH_3NHCH_2C(=O)$, $CH_3NHCH_2CH_2C(=O)$, $CH_3CH_2NHCH_2C(=O)$, $CH_3CH_2CH_2CH_2NHCH_2C(=O)$ and $CH_3CH_2NHCH_2CH_2C(=O)$.

The total number of carbon atoms in a substituent group is indicated by the " C_i-C_j " prefix where i and j are numbers from 1 to 21. For example, C_1-C_3 alkylsulfonyl designates methylsulfonyl through propylsulfonyl; C_2 alkoxyalkyl designates CH_3OCH_2 ; C_3 alkoxyalkyl designates, for example, $CH_3CH(OCH_3)$, $CH_3OCH_2CH_2$ or $CH_3CH_2OCH_2$; and C_4 alkoxyalkyl designates the various isomers of an alkyl group substituted with an alkoxy group containing a total of four carbon atoms, examples including $CH_3CH_2CH_2OCH_2$ and $CH_3CH_2OCH_2CH_2$. In the above recitations, when a compound of Formula I is comprised of one or more heterocyclic rings, all substituents are attached to these rings through any available carbon or nitrogen by replacement of a hydrogen on said carbon or nitrogen.

When a compound is substituted with a substituent bearing a subscript that indicates the number of said substituents can exceed 1, said substituents (when they exceed 1) are independently selected from the group of defined substituents. Further, when the subscript indicates a range, e.g. $(R)_{i-j}$, then the number of substituents may be selected from the integers between i and j inclusive.

When a group contains a substituent which can be hydrogen, for example R^1 or R^2 , then, when this substituent is taken as hydrogen, it is recognized that this is equivalent to said group being unsubstituted.

Compounds of this invention can exist as one or more stereoisomers. The various stereoisomers include enantiomers, diastereomers, atropisomers and geometric isomers. One skilled in the art will appreciate that one stereoisomer may be more active and/or may exhibit beneficial effects when enriched relative to the other stereoisomer(s) or when separated from the other stereoisomer(s). Additionally, the skilled artisan knows how to

separate, enrich, and/or to selectively prepare said stereoisomers. Accordingly, the present invention comprises compounds selected from Formula I, *N*-oxides and agriculturally suitable salts thereof. The compounds of the invention may be present as a mixture of stereoisomers, individual stereoisomers, or as an optically active form.

5 One skilled in the art will appreciate that not all nitrogen-containing heterocycles can form *N*-oxides since the nitrogen requires an available lone pair for oxidation to the oxide; one skilled in the art will recognize those nitrogen-containing heterocycles which can form *N*-oxides. One skilled in the art will also recognize that tertiary amines can form *N*-oxides. Synthetic methods for the preparation of *N*-oxides of heterocycles and tertiary amines are
10 very well known by one skilled in the art including the oxidation of heterocycles and tertiary amines with peroxy acids such as peracetic and *m*-chloroperbenzoic acid (MCPBA), hydrogen peroxide, alkyl hydroperoxides such as *t*-butyl hydroperoxide, sodium perborate, and dioxiranes such as dimethyldioxirane. These methods for the preparation of *N*-oxides have been extensively described and reviewed in the literature, see for example:
15 T. L. Gilchrist in *Comprehensive Organic Synthesis*, vol. 7, pp 748-750, S. V. Ley, Ed., Pergamon Press; M. Tisler and B. Stanovnik in *Comprehensive Heterocyclic Chemistry*, vol. 3, pp 18-20, A. J. Boulton and A. McKillop, Eds., Pergamon Press; M. R. Grimmett and B. R. T. Keene in *Advances in Heterocyclic Chemistry*, vol. 43, pp 149-161, A. R. Katritzky, Ed., Academic Press; M. Tisler and B. Stanovnik in *Advances in Heterocyclic Chemistry*,
20 vol. 9, pp 285-291, A. R. Katritzky and A. J. Boulton, Eds., Academic Press; and G. W. H. Cheeseman and E. S. G. Werstiuk in *Advances in Heterocyclic Chemistry*, vol. 22, pp 390-392, A. R. Katritzky and A. J. Boulton, Eds., Academic Press.

The salts of the compounds of the invention include acid-addition salts with inorganic or organic acids such as hydrobromic, hydrochloric, nitric, phosphoric, sulfuric, acetic,
25 butyric, fumaric, lactic, maleic, malonic, oxalic, propionic, salicylic, tartaric, 4-toluenesulfonic or valeric acids. The salts of the compounds of the invention also include those formed with organic bases (e.g., pyridine, ammonia, or triethylamine) or inorganic bases (e.g., hydrides, hydroxides, or carbonates of sodium, potassium, lithium, calcium, magnesium or barium) when the compound contains an acidic group such as a carboxylic
30 acid or phenol.

Of note are compounds of Formula I wherein

R^1 is H, OH, SH, SO_3H , CN, $-OR^7$ or $-SR^7$; C_1-C_{10} alkyl, C_2-C_{10} alkenyl, C_2-C_{10} alkynyl, a C_3-C_6 carbocycle or a 3-, 4-, 5- or 6-membered heterocycle, each optionally substituted; provided that when R^1 is a heterocycle containing
35 nitrogen as a ring member, it is not attached to the remainder of Formula I through said nitrogen ring member;

R^4 and each R^5 are each independently C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_6 cycloalkyl, C_1-C_6 haloalkyl, C_2-C_6 haloalkenyl, C_2-C_6 haloalkynyl,

5 C₃-C₆ halocycloalkyl, halogen, CO₂H, CONH₂, SF₅, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, C₁-C₄ alkylthio, C₁-C₄ alkylsulfinyl, C₁-C₄ alkylsulfonyl, C₁-C₄ haloalkylthio, C₁-C₄ haloalkylsulfinyl, C₁-C₄ haloalkylsulfonyl, C₁-C₄ alkylamino, C₂-C₈ dialkylamino, C₃-C₆ cycloalkylamino, C₂-C₆ alkylcarbonyl, C₂-C₆ alkoxy carbonyl, C₂-C₆ alkylaminocarbonyl, C₃-C₈ dialkylaminocarbonyl or C₃-C₆ trialkylsilyl; and

10 each R¹² is independently CO₂H, CONH₂, NO₂, C₁-C₆ haloalkoxy, C₂-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl, C₁-C₆ haloalkylthio, C₁-C₆ haloalkylsulfinyl, C₁-C₆ haloalkylsulfonyl, C₁-C₆ alkylamino, C₂-C₈ dialkylamino, C₂-C₆ alkylcarbonyl, C₂-C₆ alkoxy carbonyl, C₃-C₉ alkoxyalkylcarbonyl, C₂-C₆ alkylaminocarbonyl, C₄-C₁₀ alkylaminoalkylcarbonyl, C₃-C₈ dialkylaminocarbonyl, C₃-C₈ dialkylaminoalkylcarbonyl, C₃-C₉ alkylthioalkylcarbonyl, C₃-C₉ trialkylsilyl or C₃-C₉ trialkylsilyloxy.

15 Preferred compounds for reasons of cost, ease of synthesis and/or biological efficacy are:

Preferred 1. Compounds of Formula I above, and agriculturally suitable salts thereof, wherein

20 R¹ is H, SH, SO₃H, CN, -OR⁷ or -SR⁷; C₁-C₁₀ alkyl, C₂-C₁₀ alkenyl or C₂-C₁₀ alkynyl, each optionally substituted with one or more R⁸; or a C₃-C₆ carbocycle or a 3-, 4-, 5- or 6-membered heterocycle, each optionally substituted with one or more R⁹;

25 R² is H, CN, -OR⁷ or -SR⁷; C₁-C₁₀ alkyl, C₂-C₁₀ alkenyl, C₂-C₁₀ alkynyl or C₂-C₁₀ alkylcarbonyl, each optionally substituted with one or more R⁸; or a C₃-C₆ carbocycle or a 3-, 4-, 5- or 6-membered heterocycle, each optionally substituted with one or more R⁹;

30 R³ is H; C₁-C₁₀ alkyl, C₂-C₁₀ alkenyl, C₂-C₁₀ alkynyl or C₂-C₁₀ alkylcarbonyl, each optionally substituted with one or more R⁸; or a C₃-C₆ carbocycle or a 3-, 4-, 5- or 6-membered heterocycle, each optionally substituted with one or more R⁹; or

35 R² and R³ are taken together with their interconnecting nitrogen to form a heterocyclic ring containing 3 to 6 atoms, said ring consisting of said interconnecting nitrogen atom, carbon and optionally one or two additional atoms selected from the group consisting of nitrogen, sulfur and oxygen, and said ring being optionally substituted with one or more R⁹;

R⁶ is C₅-C₂₁ alkyl, C₅-C₂₁ alkenyl, C₅-C₂₁ alkynyl, C₄-C₉ alkoxy carbonyl, C₄-C₆ alkylaminocarbonyl, C₃-C₁₀ dialkylaminocarbonyl or C₃-C₁₂

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trialkylsilyl, each optionally substituted with one or more R¹¹; or R⁶ is C₁-C₄ alkyl or C₂-C₉ alkylcarbonyl, each substituted with one or more R¹²;

each R⁷ is independently C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, each optionally substituted with one or more R⁸; or a C₃-C₆ carbocycle or a 3-, 4-, 5- or 6-membered heterocycle, each optionally substituted with one or more R⁹;

each R⁸ is independently halogen, CN, NO₂, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy or C₁-C₄ alkylthio; and

each R¹¹ is independently halogen, CO₂H, CONH₂, NO₂, hydroxy, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, C₂-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl, C₁-C₆ haloalkylthio, C₁-C₆ haloalkylsulfinyl, C₁-C₆ haloalkylsulfonyl, C₁-C₆ alkylamino, C₂-C₈ dialkylamino, C₂-C₆ alkylcarbonyl, C₂-C₆ alkoxycarbonyl, C₃-C₉ alkoxyalkylcarbonyl, C₂-C₆ alkylaminocarbonyl, C₄-C₁₀ alkylaminocarbonyl, C₃-C₈ dialkylaminocarbonyl, C₄-C₈ dialkylaminocarbonyl, C₃-C₉ alkylthioalkylcarbonyl, C₂-C₈ dialkylphosphoryl, C₂-C₈ dialkylphosphinyl, C₃-C₉ trialkylsilyl or C₃-C₉ trialkylsilyloxy.

Of note are compounds of Preferred 1 wherein

R² is H, CN, -OR⁷ or -SR⁷; C₁-C₁₀ alkyl, C₂-C₁₀ alkenyl, C₂-C₁₀ alkynyl or C₂-C₁₀ alkylcarbonyl, each optionally substituted with one or more R⁸; or a C₃-C₆ carbocycle or a 3-, 4-, 5- or 6-membered heterocycle, each optionally substituted with one or more R⁹;

R³ is H; C₁-C₁₀ alkyl, C₂-C₁₀ alkenyl, C₂-C₁₀ alkynyl or C₂-C₁₀ alkylcarbonyl, each optionally substituted with one or more R⁸; or a C₃-C₆ carbocycle or a 3-, 4-, 5- or 6-membered heterocycle, each optionally substituted with one or more R⁹;

R⁴ and each R⁵ are each independently C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₆ cycloalkyl, C₁-C₆ haloalkyl, C₂-C₆ haloalkenyl, C₂-C₆ haloalkynyl, C₃-C₆ halocycloalkyl, halogen, CO₂H, CONH₂, SF₃, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, C₁-C₄ alkylthio, C₁-C₄ alkylsulfinyl, C₁-C₄ alkylsulfonyl, C₁-C₄ haloalkylthio, C₁-C₄ haloalkylsulfinyl, C₁-C₄ haloalkylsulfonyl, C₁-C₄ alkylamino, C₂-C₈ dialkylamino, C₃-C₆ cycloalkylamino, C₂-C₆ alkylcarbonyl, C₂-C₆ alkoxycarbonyl, C₂-C₆ alkylaminocarbonyl, C₃-C₈ dialkylaminocarbonyl or C₃-C₆ trialkylsilyl; and

each R¹² is independently CO₂H, CONH₂, NO₂, C₁-C₆ haloalkoxy, C₂-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl, C₁-C₆ haloalkylthio, C₁-C₆ haloalkylsulfinyl, C₁-C₆ haloalkylsulfonyl, C₁-C₆ alkylamino, C₂-C₈ dialkylamino, C₂-C₆ alkylcarbonyl, C₂-C₆ alkoxycarbonyl, C₃-C₉

alkoxyalkylcarbonyl, C₂-C₆ alkylaminocarbonyl, C₄-C₁₀ alkylaminoalkylcarbonyl, C₃-C₈ dialkylaminocarbonyl, C₃-C₈ dialkylaminoalkylcarbonyl, C₃-C₉ alkylthioalkylcarbonyl, C₃-C₉ trialkylsilyl or C₃-C₉ trialkylsilyloxy.

5 Preferred 2. Compounds of Preferred 1 wherein

R² is H, CN, -OR⁷ or -SR⁷; C₁-C₁₀ alkyl, C₂-C₁₀ alkenyl, C₂-C₁₀ alkynyl, each optionally substituted with one or more R⁸; or phenyl optionally substituted with 1 to 3 R⁹;

10 R³ is H; C₁-C₁₀ alkyl, C₂-C₁₀ alkenyl or C₂-C₁₀ alkynyl, each optionally substituted with one or more R⁸; or phenyl optionally substituted with 1 to 3 R⁹; or

15 R² and R³ are taken together with their interconnecting nitrogen to form a heterocyclic ring containing 3 to 6 atoms, said ring consisting of said interconnecting nitrogen atom, carbon and optionally one additional atom selected from the group consisting of nitrogen, sulfur and oxygen, and said ring being optionally substituted with one or more R⁹;

20 R⁴ and R⁵ are each independently C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₁-C₆ haloalkyl, halogen, CO₂H, CONH₂, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, C₁-C₄ alkylthio, C₁-C₄ alkylsulfinyl, C₁-C₄ alkylsulfonyl, C₁-C₄ haloalkylthio, C₁-C₄ haloalkylsulfinyl, C₁-C₄ haloalkylsulfonyl, C₁-C₆ alkylcarbonyl, C₂-C₆ alkoxycarbonyl, C₂-C₆ alkylaminocarbonyl, CN, CHO or C₃-C₈ dialkylaminocarbonyl;

25 R⁶ is C₅-C₁₅ alkyl, C₅-C₁₅ alkenyl or C₅-C₁₅ alkynyl, each optionally substituted with one or more R¹¹; or R⁶ is C₁-C₄ alkyl substituted with one or more R¹²;

each R⁷ is independently C₁-C₆ alkyl, optionally substituted with one or more R⁸;

A is a direct bond, O or S(O)_m; and
m is 0, 1 or 2.

30 Preferred 2a. Compound of Preferred 2 wherein R¹ is H, SH or C₁-C₁₀ alkyl.

Of note are compounds of Preferred 2 wherein

R¹ and R² are each independently H, CN, -OR⁷ or -SR⁷; C₁-C₁₀ alkyl, C₂-C₁₀ alkenyl, C₂-C₁₀ alkynyl, each optionally substituted with one or more R⁸; or phenyl optionally substituted with 1 to 3 R⁹;

35 R³ is H; C₁-C₁₀ alkyl, C₂-C₁₀ alkenyl or C₂-C₁₀ alkynyl, each optionally substituted with one or more R⁸; or phenyl optionally substituted with 1 to 3 R⁹;

R⁴ and R⁵ are each independently C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₁-C₆ haloalkyl, halogen, CO₂H, CONH₂, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, C₁-C₄

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alkylthio, C₁-C₄ alkylsulfinyl, C₁-C₄ alkylsulfonyl, C₁-C₄ haloalkylthio, C₁-C₄ haloalkylsulfinyl, C₁-C₄ haloalkylsulfonyl, C₁-C₆ alkylcarbonyl, C₁-C₆ alkoxy carbonyl, C₁-C₆ alkylaminocarbonyl or C₂-C₈ dialkylaminocarbonyl; and each R¹² is independently CO₂H, CONH₂, NO₂, C₁-C₆ haloalkoxy, C₂-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl, C₁-C₆ haloalkylthio, C₁-C₆ haloalkylsulfinyl, C₁-C₆ haloalkylsulfonyl, C₁-C₆ alkylamino, C₂-C₈ dialkylamino, C₂-C₆ alkylcarbonyl, C₂-C₆ alkoxy carbonyl, C₃-C₉ alkoxyalkylcarbonyl, C₂-C₆ alkylaminocarbonyl, C₄-C₁₀ alkylaminoalkylcarbonyl, C₃-C₈ dialkylaminocarbonyl, C₃-C₈ dialkylaminoalkylcarbonyl, C₃-C₉ alkylthioalkylcarbonyl, C₃-C₉ trialkylsilyl or C₃-C₉ trialkylsilyloxy.

Preferred 3. Compounds of Preferred 2 wherein

A is attached to the remainder of Formula I at the 4 position of the benzene ring.

Preferred 3a. Compounds of Preferred 3 wherein R¹ is H, SH or C₁-C₁₀ alkyl.

Of note are compounds of Preferred 3 wherein

R¹ and R² are each independently H, CN, -OR⁷ or -SR⁷; C₁-C₁₀ alkyl, C₂-C₁₀ alkenyl, C₂-C₁₀ alkynyl, each optionally substituted with one or more R⁸; or phenyl optionally substituted with 1 to 3 R⁹;

R³ is H; C₁-C₁₀ alkyl, C₂-C₁₀ alkenyl or C₂-C₁₀ alkynyl, each optionally substituted with one or more R⁸; or phenyl optionally substituted with 1 to 3 R⁹;

R⁴ and R⁵ are each independently C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₁-C₆ haloalkyl, halogen, CO₂H, CONH₂, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, C₁-C₄ alkylthio, C₁-C₄ alkylsulfinyl, C₁-C₄ alkylsulfonyl, C₁-C₄ haloalkylthio, C₁-C₄ haloalkylsulfinyl, C₁-C₄ haloalkylsulfonyl, C₁-C₆ alkylcarbonyl, C₁-C₆ alkoxy carbonyl, C₁-C₆ alkylaminocarbonyl or C₂-C₈ dialkylaminocarbonyl; and each R¹² is independently CO₂H, CONH₂, NO₂, C₁-C₆ haloalkoxy, C₂-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl, C₁-C₆ haloalkylthio, C₁-C₆ haloalkylsulfinyl, C₁-C₆ haloalkylsulfonyl, C₁-C₆ alkylamino, C₂-C₈ dialkylamino, C₂-C₆ alkylcarbonyl, C₂-C₆ alkoxy carbonyl, C₃-C₉ alkoxyalkylcarbonyl, C₂-C₆ alkylaminocarbonyl, C₄-C₁₀ alkylaminoalkylcarbonyl, C₃-C₈ dialkylaminocarbonyl, C₃-C₈ dialkylaminoalkylcarbonyl, C₃-C₉ alkylthioalkylcarbonyl, C₃-C₉ trialkylsilyl or C₃-C₉ trialkylsilyloxy.

Preferred 4. Compounds of Preferred 3 wherein

R¹ is H, SH or C₁-C₁₀ alkyl;

R² and R³ are each independently H or C₁-C₁₀ alkyl; or

R² and R³ are taken together with their interconnecting nitrogen to form a heterocyclic ring containing 3 to 6 atoms, said ring consisting of said interconnecting nitrogen atom, carbon and optionally one additional atom selected from the group consisting of nitrogen, sulfur and oxygen, and said ring being optionally substituted with one or more R⁹;

R⁴ and R⁵ are each independently halogen, CN, CHO, C₁-C₆ alkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, C₁-C₄ alkylthio, C₁-C₄ alkylsulfinyl, C₁-C₄ haloalkylthio, C₁-C₄ haloalkylsulfinyl or C₁-C₆ haloalkyl;

One R⁵ is attached to the remainder of Formula I at the 5 position of the benzene ring and an optional second R⁵ is attached at the 6 position of the benzene ring; and

m is 1 or 2.

Preferred 4a. Compounds of Preferred 4 wherein

R¹, R² and R³ are each independently H or C₁-C₁₀ alkyl;

R⁴ and R⁵ are each independently, halogen, C₁-C₆ alkyl or C₁-C₆ haloalkyl;

R⁵ is attached to the remainder of Formula I at the 5 position of the benzene ring;

each R¹² is independently CO₂H, CONH₂, NO₂, C₁-C₆ haloalkoxy, C₂-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl, C₁-C₆ haloalkylthio, C₁-C₆ haloalkylsulfinyl, C₁-C₆ haloalkylsulfonyl, C₁-C₆ alkylamino, C₂-C₈ dialkylamino, C₂-C₆ alkylcarbonyl, C₂-C₆ alkoxycarbonyl, C₃-C₉ alkoxyalkylcarbonyl, C₂-C₆ alkylaminocarbonyl, C₄-C₁₀ alkylaminoalkylcarbonyl, C₃-C₈ dialkylaminocarbonyl, C₃-C₈ dialkylaminoalkylcarbonyl, C₃-C₉ alkylthioalkylcarbonyl, C₃-C₉ trialkylsilyl or C₃-C₉ trialkylsilyloxy; and

m is 1.

Of note are compounds of Formula I (including but not limited to compounds of Preferred 1, Preferred 2, Preferred 2a, Preferred 3, Preferred 3a, Preferred 4 and

Preferred 4a) wherein R⁶ is alkyl, optionally substituted with halogen or C₁-C₆ alkoxy. Also of note are compounds of Formula I (including but not limited to compounds of Preferred 1, Preferred 2, Preferred 2a, Preferred 3, Preferred 3a, Preferred 4 and Preferred 4a) wherein R⁶ is alkenyl, optionally substituted with halogen. Examples include compounds wherein R⁶ is selected from the group consisting of (a) the branched alkyl moieties CH(CH₃)(CH₂)₃CH₃, CH(CH₃)(CH₂)₄CH₃, CH(CH₃)(CH₂)₅CH₃, CH(CH₃)(CH₂)₆CH₃, CH(CH₃)(CH₂)₇CH₃, CH(CH₃)(CH₂)₈CH₃, CH(C₂H₅)(CH₂)₃CH₃, CH(C₂H₅)(CH₂)₄CH₃, CH₂CH(CH₃)(CH₂)₂CH₃, CH₂CH(CH₃)(CH₂)₄CH₃, CH₂CH(C₂H₅)CH₂CH₂CH₂CH₃, (CH₂)₂CH(CH₃)(CH₂)₃CH(CH₃)₂, (CH₂)₂CH(CH₃)CH₂C(CH₃)₃,

$(\text{CH}_2)_2\text{CH}(\text{CH}_3)(\text{CH}_2)_3\text{C}(\text{CH}_3)_3$, $(\text{CH}_2)_2\text{C}(\text{CH}_3)_3$, $(\text{CH}_2)_3\text{C}(\text{CH}_3)_3$, $(\text{CH}_2)_3\text{C}(\text{C}_2\text{H}_5)_3$,
 $(\text{CH}_2)_3\text{CH}(\text{C}_2\text{H}_5)_3$, $(\text{CH}_2)_3\text{CH}(\text{CH}_3)_2$, $(\text{CH}_2)_4\text{CH}(\text{CH}_3)_2$, $(\text{CH}_2)_5\text{CH}(\text{CH}_3)_2$,
 $\text{CH}(\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_3)_2$, $\text{CH}(\text{CH}_2\text{CH}_2\text{CH}_3)(\text{CH}_2)_3\text{CH}_3$, $\text{CH}(\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_3)_2$,
 $\text{CH}(\text{C}_2\text{H}_5)\text{CH}_2\text{CH}_2\text{CH}(\text{CH}_3)_2$, $\text{CH}(\text{CH}_3)\text{CH}_2\text{CH}_2\text{CH}(\text{CH}_3)_2$, $\text{CH}(\text{CH}_3)\text{CH}_2\text{CH}_2\text{C}(\text{CH}_3)_3$,
 5 $\text{CH}(\text{CH}_2\text{CH}_2\text{CH}_3)\text{CH}_2\text{CH}_2\text{CH}(\text{CH}_3)_2$, $\text{CH}(\text{CH}_2\text{CH}_2\text{CH}(\text{CH}_3)_2)_2$, $\text{CH}(\text{CH}_2\text{CH}_2\text{CH}_3)_2$ and
 $\text{CH}(\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_3)(\text{CH}_2)_5\text{CH}_3$, (b) the linear alkyl moieties $(\text{CH}_2)_4\text{CH}_3$, $(\text{CH}_2)_5\text{CH}_3$,
 $(\text{CH}_2)_6\text{CH}_3$, $(\text{CH}_2)_7\text{CH}_3$, $(\text{CH}_2)_8\text{CH}_3$, $(\text{CH}_2)_9\text{CH}_3$, $(\text{CH}_2)_{10}\text{CH}_3$, (c) the branched alkenyl
 moieties $(\text{CH}_2)_2\text{CH}=\text{C}(\text{CH}_3)_2$, $(\text{CH}_2)_5\text{C}(\text{CH}_3)=\text{CH}_2$, $(\text{CH}_2)_6\text{C}(\text{CH}_3)=\text{CH}_2$,
 $(\text{CH}_2)_7\text{C}(\text{CH}_3)=\text{CH}_2$, $\text{CH}_2\text{CH}=\text{C}(\text{CH}_3)_2$, $\text{CH}_2\text{CH}=\text{C}(\text{CH}_3)(\text{CH}_2)_2\text{CH}=\text{C}(\text{CH}_3)_2$,
 10 $\text{CH}_2(\text{CH}=\text{C}(\text{CH}_3)(\text{CH}_2)_2)_2\text{CH}=\text{C}(\text{CH}_3)_2$, $(\text{CH}_2)_3\text{C}(\text{CH}_2)\text{CH}(\text{CH}_3)_2$,
 $\text{CH}_2\text{CH}=\text{CHCH}(\text{CH}_3)_2$, $\text{CH}_2\text{CH}=\text{CHCH}_2\text{CH}(\text{CH}_3)_2$, $\text{CH}_2\text{CH}=\text{CHC}(\text{CH}_3)_3$ and
 $\text{CH}_2\text{CH}=\text{CHCH}_2\text{C}(\text{CH}_3)_3$ and (d) the linear alkenyl moieties $(\text{CH}_2)_3\text{CH}=\text{CH}_2$,
 $(\text{CH}_2)_4\text{CH}=\text{CH}_2$, $(\text{CH}_2)_5\text{CH}=\text{CH}_2$, $(\text{CH}_2)_6\text{CH}=\text{CH}_2$, $(\text{CH}_2)_7\text{CH}=\text{CH}_2$, $(\text{CH}_2)_8\text{CH}=\text{CH}_2$ and
 $(\text{CH}_2)_9\text{CH}=\text{CH}_2$. Examples further include such compounds wherein R^6 is selected from
 15 said alkyl and alkenyl moieties (a), (b), (c) and (d) wherein at least one hydrogen has been
 replaced by halogen (e.g., compounds wherein R^6 is selected from said alkyl moieties
 wherein a CH_3 group has been replaced by a CF_3 group; and compounds wherein R^6 is
 selected from said alkenyl moieties wherein a $=\text{CH}_2$ group has been replaced by a $=\text{CF}_2$
 group). Examples also include such compounds wherein R^6 is selected from said alkyl
 20 moieties (a) and (b) wherein at least one hydrogen has been replaced by OCH_3 , OC_2H_5 ,
 $\text{OCH}(\text{CH}_3)_2$ or $\text{OC}(\text{CH}_3)_3$.

Of particular note are compounds of Formula I (including but not limited to
 compounds of Preferred 1, Preferred 2, Preferred 2a, Preferred 3, Preferred 3a, Preferred 4
 and Preferred 4a) wherein R^6 is selected from the group consisting of $(\text{CH}_2)_3\text{C}(\text{CH}_3)_2\text{OCH}_3$,
 25 $(\text{CH}_2)_3\text{C}(\text{CH}_3)_2\text{OC}_2\text{H}_5$, $(\text{CH}_2)_3\text{C}(\text{CH}_3)_2\text{OCH}(\text{CH}_3)_2$, $(\text{CH}_2)_3\text{C}(\text{CH}_3)_2\text{OC}(\text{CH}_3)_3$,
 $(\text{CH}_2)_3\text{C}(\text{CH}_3)_2\text{F}$, $(\text{CH}_2)_3\text{C}(\text{CH}_3)_2\text{Cl}$ and $(\text{CH}_2)_3\text{C}(\text{CH}_3)_2\text{Br}$.

Preferred 5. Compounds of Preferred 4 wherein

R^1 is H; and

30 R^6 is $\text{C}_6\text{-C}_{15}$ alkyl wherein at least one of the fourth and fifth carbon from A
 has one or no hydrogen attached or $\text{C}_5\text{-C}_{15}$ 2-alkenyl wherein the fourth
 or fifth carbon from A has one or no hydrogen attached (In other words,
 R^6 is branched at the fourth and/or fifth carbon).

Preferred 5a. Compounds of Preferred 5 wherein R^2 , R^3 , R^4 and R^5 are each methyl
 and m is 1.

35 Preferred 5b. Compounds of Preferred 5 wherein R^2 and R^3 are each independently
 methyl or ethyl.

Of note are compounds of Formula I (including but not limited to compounds of
 Preferred 1, Preferred 2, Preferred 2a, Preferred 3, Preferred 3a, Preferred 4, Preferred 4a,

Preferred 5, Preferred 5a and Preferred 5b) wherein R^6 is selected from the group consisting of (a) the alkyl moieties $(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$, $(CH_2)_3CH(CH_3)_2$, $CH(C_2H_5)CH_2CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_2CH(CH_3)_2$, $CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$ and $CH(CH_2CH_2CH(CH_3)_2)_2$ and (b) the alkenyl moieties $CH_2CH=CHCH(CH_3)_2$, $CH_2CH=CHCH_2CH(CH_3)_2$, $CH_2CH=CHC(CH_3)_3$ and $CH_2CH=CHCH_2C(CH_3)_3$. Also of note are compounds of Formula I (including but not limited to compounds of Preferred 1, Preferred 2, Preferred 2a, Preferred 3, Preferred 3a, Preferred 4, Preferred 4a, Preferred 5, Preferred 5a and Preferred 5b) wherein R^6 is $(CH_2)_3C(CH_3)_3$ or $CH(CH_3)CH_2CH_2C(CH_3)_3$,

10 Preferred 6. Compounds of Preferred 4 wherein

R^1 is H; and

R^6 is C_1 - C_4 alkyl substituted with one or more substituents selected from the group consisting of C_2 - C_6 alkylthio, C_1 - C_6 alkylsulfinyl, C_2 - C_6 alkoxy carbonyl, C_2 - C_8 dialkylamino, C_2 - C_6 alkyl carbonyl, C_3 - C_9 alkoxyalkyl carbonyl, C_2 - C_6 alkylaminocarbonyl, C_3 - C_8 dialkylaminocarbonyl, C_3 - C_9 trialkylsilyl, C_3 - C_9 halotrialkylsilyl, C_4 - C_9 alkoxytrialkylsilyl or C_3 - C_9 trialkylsilyloxy.

Preferred 6a. Compounds of Preferred 6 wherein

R^2 , R^3 , R^4 and R^5 are each methyl; and

R^6 is C_1 - C_4 alkyl substituted with one or more substituents selected from the group consisting of C_2 - C_6 alkylthio, C_1 - C_6 alkylsulfinyl, C_2 - C_6 alkoxy carbonyl, C_2 - C_8 dialkylamino, C_2 - C_6 alkyl carbonyl, C_3 - C_9 alkoxyalkyl carbonyl, C_2 - C_6 alkylaminocarbonyl, C_3 - C_8 dialkylaminocarbonyl, C_3 - C_9 trialkylsilyl or C_3 - C_9 trialkylsilyloxy.

25 Preferred 6b. Compounds of Preferred 6 wherein R^2 and R^3 are each methyl or ethyl.

Of note are compounds of Formula I (including but not limited to compounds of Preferred 1, Preferred 2, Preferred 2a, Preferred 3, Preferred 3a, Preferred 4, Preferred 4a, Preferred 5, Preferred 5a, Preferred 5b, Preferred 6, Preferred 6a and Preferred 6b) wherein R^6 is alkyltrialkylsilyl. Also of note are compounds of Formula I (including but not limited to compounds of Preferred 1, Preferred 2, Preferred 2a, Preferred 3, Preferred 3a, Preferred 4, Preferred 4a, Preferred 5, Preferred 5a, Preferred 5b, Preferred 6, Preferred 6a and Preferred 6b) wherein R^6 is alkyltrialkylsilyloxy. Examples include compounds wherein R^6 is selected from the group consisting of (e) the alkyltrialkylsilyl moieties $CH_2Si(CH_3)_3$, $CH_2CH_2Si(CH_3)_3$, $CH_2CH_2CH_2Si(CH_3)_3$, $CH_2CH_2CH_2CH_2Si(CH_3)_3$, $CH_2Si(C_2H_5)_3$, $CH_2CH_2Si(C_2H_5)_3$, $CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$, $CH_2CH_2CH_2Si(C_2H_5)_3$, $CH_2CH_2CH_2CH_2Si(C_2H_5)_3$, $CH_2Si(CH(CH_3)_2)_3$, $CH_2CH_2Si(CH(CH_3)_2)_3$, $CH_2CH_2CH_2Si(CH(CH_3)_2)_3$, $CH_2CH_2CH_2CH_2Si(CH(CH_3)_2)_3$, $CH_2Si(CH_3)_2C(CH_3)_3$, $CH_2CH_2Si(CH_3)_2C(CH_3)_3$, $CH_2CH_2CH_2Si(CH_3)_2C(CH_3)_3$ and

CH₂CH₂CH₂CH₂Si(CH₃)₂C(CH₃)₃ and (f) the alkyltrialkylsilyloxy moieties CH₂OSi(CH₃)₃, CH₂CH₂OSi(CH₃)₃, CH₂CH₂CH₂OSi(CH₃)₃, CH₂CH₂CH₂CH₂OSi(CH₃)₃, CH₂OSi(C₂H₅)₃, CH₂CH₂OSi(C₂H₅)₃, CH₂CH₂CH₂OSi(C₂H₅)₃, CH₂CH₂CH₂CH₂OSi(C₂H₅)₃, CH₂OSi(CH(CH₃)₂)₃, CH₂CH₂OSi(CH(CH₃)₂)₃, CH₂CH₂CH₂OSi(CH(CH₃)₂)₃, CH₂OSi(CH₃)₂C(CH₃)₃, CH₂CH₂OSi(CH₃)₂C(CH₃)₃, CH₂CH₂CH₂OSi(CH₃)₂C(CH₃)₃ and CH₂CH₂CH₂CH₂OSi(CH₃)₂C(CH₃)₃.

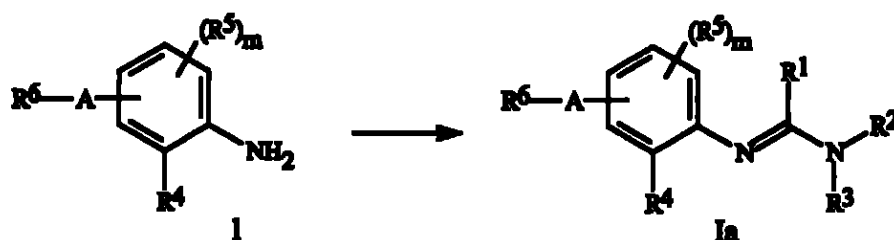
This invention also relates to fungicidal compositions comprising fungicidally effective amounts of the compounds of the invention and at least one additional component selected from the group consisting of surfactants, solid diluents and liquid diluents. The preferred compositions of the present invention are those which comprise the above preferred compounds.

This invention also relates to a method for controlling plant diseases caused by fungal plant pathogens comprising applying to the plant or portion thereof, or to the plant seed or seedling, a fungicidally effective amount of the compounds of the invention (e.g., as a composition described herein). The preferred methods of use are those involving the above preferred compounds.

The compounds of Formula I can be prepared by one or more of the following methods and variations as described in Schemes 1-9. The definitions of R¹ to R¹², A, m and n in the compounds of Formulae 1-13 below are as defined above in the Summary of the Invention and Details of the Invention unless otherwise stated. Compounds of Formulae Ia-Ig are various subsets of the compounds of Formula I, and all substituents for Formulae Ia-Ig are as defined above for Formula I unless otherwise stated.

As illustrated in Scheme 1, compounds of Formula Ia can be prepared from anilines of Formula 1. There are a variety of methods for this transformation. The following four methods are especially useful.

Scheme 1



wherein R¹ is H; C₁-C₁₀ alkyl, C₂-C₁₀ alkenyl, C₂-C₁₀ alkynyl, C₂-C₅ alkoxy carbonyl, a C₃-C₆ carbocycle or C₃-C₆ heterocycle.

Method 1: Treatment of an aniline of Formula 1 with an acetal of formula $R^2R^3NC(R^1)(OR^{13})_2$, wherein R^{13} is an alkyl. For a leading reference to this method see, Toste et al, *Synth. Commun.* 1994, 24(11), 1617-1624.

Method 2: Treatment of an aniline of Formula 1 with an amide of formula $R^1C(=O)NR^2R^3$ in the presence of a halogenating reagent such as, but not limited to, $POCl_3$ or $SOCl_2$. For a leading reference to this method see, Bergman et al, *Tetrahedron*, 1990, 46(17), 6058-6112.

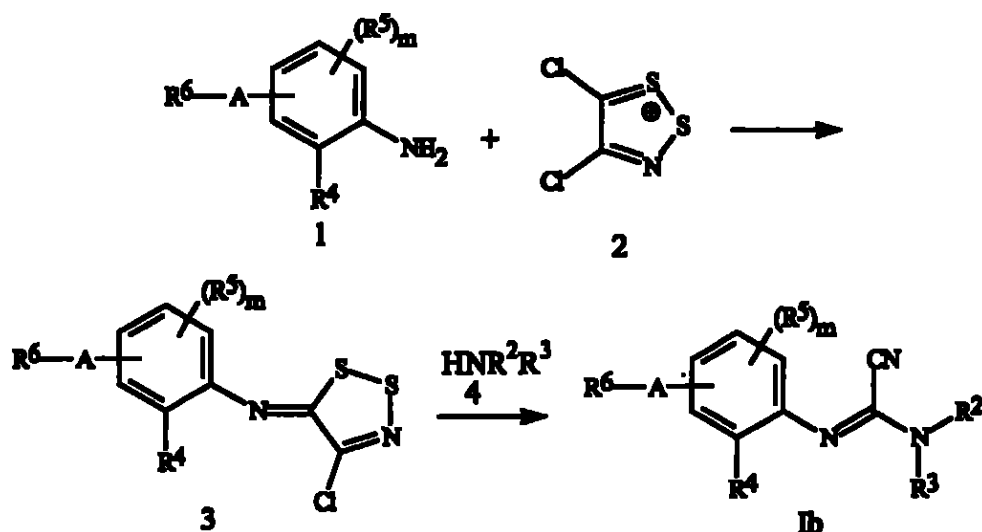
Method 3: Treatment of an aniline of Formula 1 with an orthoester of formula $R^1C(OR^{13})_3$, wherein R^{13} is alkyl, to form a corresponding iminoether followed by heating the iminoether with an amine of formula HNR^2R^3 . For a leading reference to this method see, Pissiotas et al, US 4209319.

Method 4: Treatment of an aniline of Formula 1 with phosgene to form an isocyanate followed by reaction of the isocyanate with an amide of formula $R^1C(=O)NR^2R^3$. For a leading reference to this method see, Charles et al, WO 00/46184.

Method 5: Treatment of an aniline of Formula 1 with $C_2H_5OCH=NCN$ to form an *N*-cyanoamidine followed by reaction of the *N*-cyanoamidine with an amine of formula HNR^2R^3 . For a leading reference to this method see, Charles et al, WO 00/46184.

Compounds of Formula Ib, can be prepared by the method outlined in Scheme 2. Treatment of a compound of Formula 1 with 4,5-dichloro-1,2,3-dithiazolium chloride (Formula 2) affords the corresponding 4-chloro-5-(phenylimino)-5*H*-1,2,3-dithiazole (Formula 3). Reaction of the said dithiazole with an amine of Formula 4 in a suitable organic solvent such as, but not limited to, dichloromethane at room temperature provides the compound of Formula Ib. For a leading reference to this method see, Lee et al, *J. Org. Chem.*, 1993, 58(25), 7001-7008.

Scheme 2

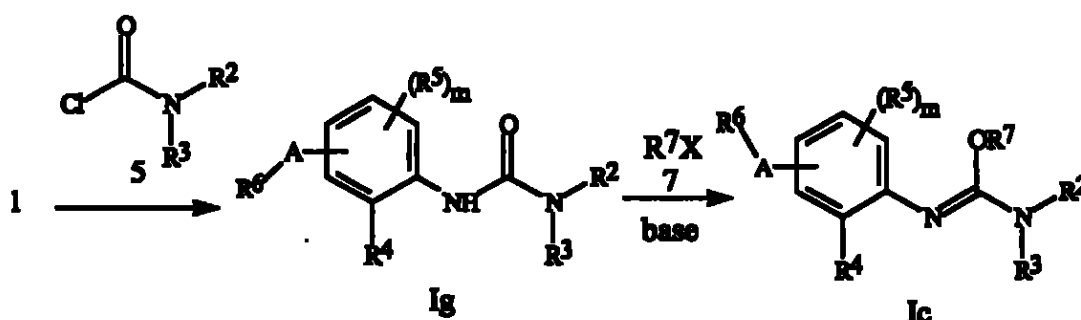


Compounds of Formula Ic, can be prepared by the method outlined in Scheme 3. Reaction of an aniline of Formula 1 with a carbamoyl chloride of Formula 5 provides the urea of Formula Ig. The urea of Formula Ig is then O-alkylated to form the compound of Formula Ic by contact with an alkylating agent of Formula 7 (R⁷X) in the presence of a base.

5 In the alkylating agent of Formula 7, X is a nucleophilic reaction leaving group such as halogen (e.g., Br, I), OS(O)₂CH₃ (methanesulfonate), OS(O)₂CF₃, OS(O)₂Ph-*p*-CH₃ (*p*-toluenesulfonate), and the like. The suitable bases can be, for example but not limited to, potassium carbonate (K₂CO₃) or silver oxide (Ag₂O). For a leading reference to this method see, Curtis et al, *Aust. J. Chem.*, 1988, 41(4), 585-595.

10

Scheme 3



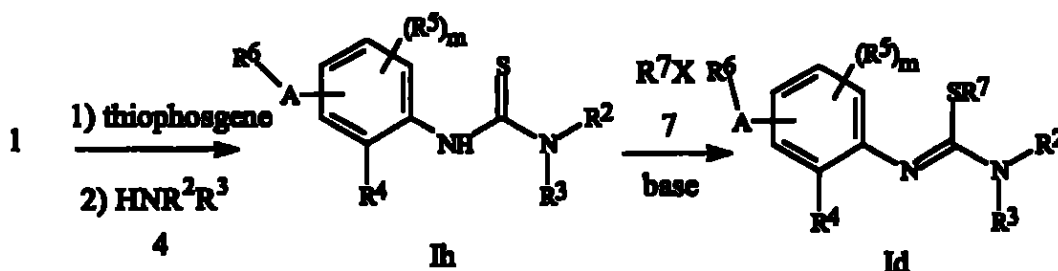
wherein X is a leaving group.

Compounds of Formula Id, can be prepared by the method outlined in Scheme 4. Treatment of an aniline of Formula 1 with thiophosgene (or its equivalent) provides the corresponding isothiocyanate. The isothiocyanate is then reacted with an amine of Formula 4 to afford the thiourea of Formula Ih. The thiourea of Formula Ih is then alkylated to give the compound of Formula Id by contact with an alkylating agent of Formula 7 (R⁷X). The suitable bases can be, for example but not limited to, potassium hydroxide. For a leading reference to this method see, Filip et al, *Tetrahedron*, 1985, 41(24), 5981-5988.

15

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Scheme 4



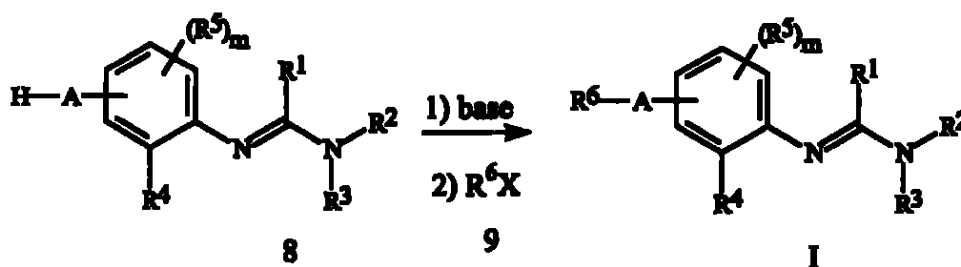
wherein X is a leaving group.

Of note is that R^2 and R^3 groups in compounds of Formula I can be converted to other R^2 and R^3 groups as defined above, by treatment with an appropriate amine or by acylation or alkylation when R^2 or R^3 is hydrogen.

As illustrated in Scheme 5, a compound of Formula I can also be prepared by alkylation of a compound of Formula 8 with an alkylating agent of Formula 9 in the presence of a base. Compounds of Formula 8 are known compounds or can be prepared by literature procedures (*J. Med. Chem.*, 1984, 27(12), 1705-10; EP 94052 and WO 00/46184). In the alkylating agent of Formula 9, X is a nucleophilic reaction leaving group as defined above for Formula 7. The reaction is conducted in the presence of at least one equivalent of a base, preferably from 1 to 2 equivalents. Suitable bases include inorganic bases, such as alkali metal (such as lithium, sodium or potassium) hydrides, carbonates and hydroxides, and organic bases, such as triethylamine, diisopropylethylamine and 1,8-diazabicyclo-[5.4.0]undec-7-ene. The reaction is generally conducted in a solvent, which can comprise aromatic solvents such as benzene and toluene, ethers such as tetrahydrofuran and diethyl ether, and polar aprotic solvents such as acetonitrile, *N,N*-dimethylformamide, and the like. The reaction is generally conducted between about -20 and 150 °C, and preferably between 20 and 140 °C. The reaction time can range from 1 hour to 7 days. The compound of Formula I can be isolated by conventional techniques such as extraction. Further experimental details for the method of Scheme 5 are illustrated in Example 1.

20

Scheme 5



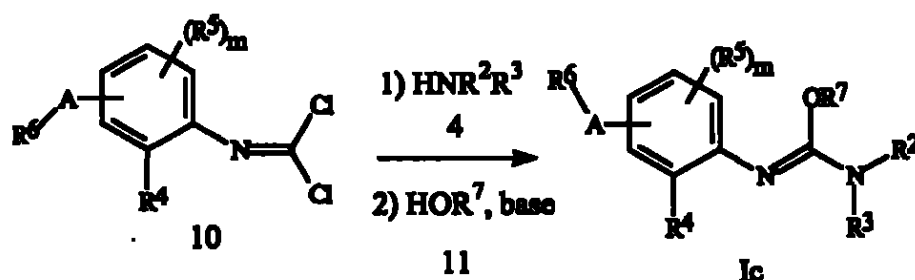
wherein A is O, S or NR^{10} ; and X is a nucleophilic reaction leaving group.

In addition, reductive amination of a compound of Formula 8, wherein A is NH , in the presence of an aldehyde or a ketone can also provide the compound of Formula I, wherein R^6 is an optionally substituted alkyl group. Reaction conditions for the reductive amination are taught in *J. Med. Chem.*, 1984, 17(12), 1705-1710, and references cited within.

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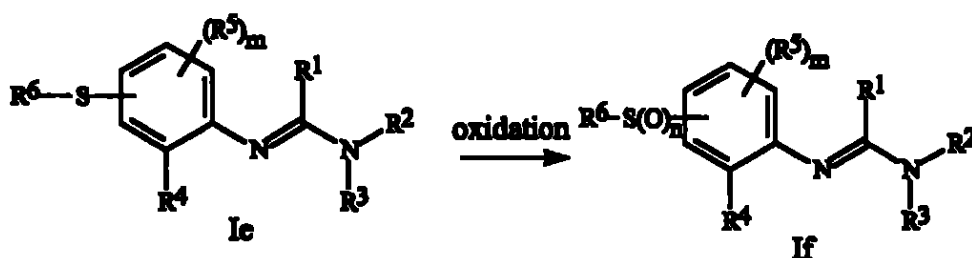
As an alternative to the method illustrated in Scheme 3, compounds of Formula Ic can also be prepared by the method outlined in Scheme 6. Heating a phenyl isocyanide dichloride of Formula 10 with an amine of Formula 4 provides the corresponding imidoyl intermediate. Treatment of the imidoyl intermediate with an alcohol of Formula 11 in the presence of an inert base such as, but not limited to, triethylamine, gives the compound of Formula Ic. For references to this method see, Filop et al, *Izv. Akad. Nauk SSSR, Ser. Khim.*, 1989, (11), 2596-2601, and references cited within. The phenyl isocyanide dichloride of Formula 10 can be prepared by literature procedures (*J. Chem. Soc., Perkin Trans. 1*, 1987, (5), 1069-1076; *Tetrahedron Lett.*, 1982, 23(35), 3539-3542; *Chem. Ber.*, 1987, 120(3), 421-424).

Scheme 6



Compounds of Formula If can be prepared by oxidation of compounds of Formula Ic as illustrated in Scheme 7. The oxidizing agent can be peracetic acid, hydrogen peroxide, potassium permanganate, sodium periodate or 3-chloroperoxybenzoic acid. The solvent can be, for example but not limited to, dichloromethane, acetic acid or water. Detailed conditions for this method can be found in *J. Med. Chem.*, 1996, 39(26), 5072-5082, *J. Med. Chem.*, 1983, 26(1), 107-110, and references cited within.

Scheme 7

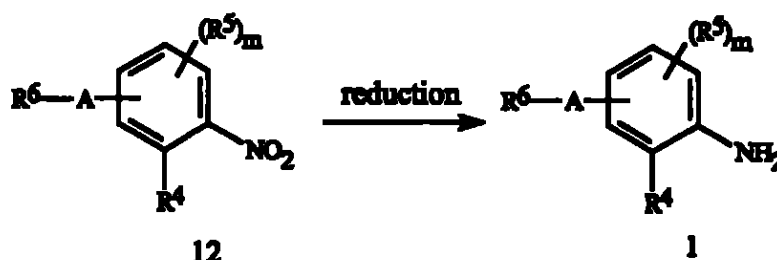


wherein n is 1 or 2.

Compounds of Formula 1 can be prepared by reduction of the nitro group in compounds of Formula 12. There are many methods for this reduction reaction. Preferred methods include stannous chloride reduction in concentrated hydrochloric acid (*J. Med.*

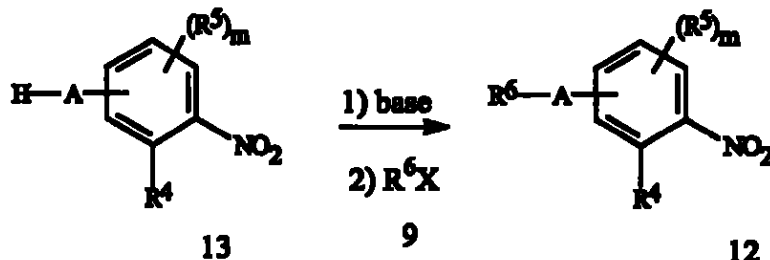
Chem., 1984, 24(12), 1705-1710) and iron powder reduction in a solution of acetic acid and water (*J. Org. Chem.*, 2001, 66(13), 4563-4575).

Scheme 8



- 5 As illustrated in Scheme 9, compounds of Formula 12 can be prepared by alkylation of compounds of Formula 13 with an alkylating agent of Formula 9 in the presence of a base. The reaction conditions for this alkylation are already described for the conversion of the compounds of Formula 8 to the compounds of Formula I in Scheme 5. Compounds of Formula 13 are known compounds or can be prepared by literature procedures (*Can. J.*
- 10 *Chem.*, 1984, 62(8), 1446-51; *Aust. J. Chem.*, 1991, 44(1), 151-6).

Scheme 9



wherein A is O, S or NR¹⁰; and X is a nucleophilic reaction leaving group.

- 15 Alternatively, compounds of Formula 12, wherein A is O, S or NR¹⁰ and R⁶ is an optionally substituted alkyl group, can also be prepared from compounds of Formula 13 through a Mitsunobu reaction, which involves reaction of a compound of Formula 13 with the appropriate alcohol R⁶OH. The general reaction conditions of Mitsunobu Reaction is well documented in the chemical literature. For a review of the Mitsunobu Reaction see
- 20 Hughes, *Org. React.*, 1992, 42, 335-656 and references cited within.

- Compounds of Formula 12, wherein A is a direct bond, are available by a variety of known methods. One skilled in art can prepare the compounds of Formula 12 by methods extensively described in the literature; see for example: *Synth. Commun.*, 2001, 31(14), 2113-2117; *Synth. Commun.*, 1999, 29(12), 2169-2174; *J. Chem. Res., Synop.*, 1998, (8),
- 25 410, 1701-1714; *J. Chem. Soc., Perkin Trans. 1*, 1998, (12), 1903-1912; *Synthesis*, 1982 (10), 836-9; *J. Org. Chem.*, 1977, 42(24), 3907-9.

It is recognized that some reagents and reaction conditions described above for preparing compounds of Formula I may not be compatible with certain functionalities present in the intermediates. In these instances, the incorporation of protection/deprotection sequences or functional group interconversions into the synthesis will aid in obtaining the desired products. The use and choice of the protecting groups will be apparent to one skilled in chemical synthesis (see, for example, Greene, T. W.; Wuts, P. G. M. *Protective Groups in Organic Synthesis*, 2nd ed.; Wiley: New York, 1991). One skilled in the art will recognize that, in some cases, after the introduction of a given reagent as it is depicted in any individual scheme, it may be necessary to perform additional routine synthetic steps not described in detail to complete the synthesis of compounds of Formula I. One skilled in the art will also recognize that it may be necessary to perform a combination of the steps illustrated in the above schemes in an order other than that implied by the particular sequence presented to prepare the compounds of Formula I.

One skilled in the art will also recognize that compounds of Formula I and the intermediates described herein can be subjected to various electrophilic, nucleophilic, radical, organometallic, oxidation, and reduction reactions to add substituents or modify existing substituents.

Without further elaboration, it is believed that one skilled in the art using the preceding description can utilize the present invention to its fullest extent. The following Examples are, therefore, to be construed as merely illustrative, and not limiting of the disclosure in any way whatsoever. Percentages are by weight except for chromatographic solvent mixtures or where otherwise indicated. Parts and percentages for chromatographic solvent mixtures are by volume unless otherwise indicated. ¹H NMR spectra are reported in ppm downfield from tetramethylsilane; s = singlet, d = doublet, t = triplet, q = quartet, m = multiplet, dd = doublet of doublets, dt = doublet of triplets, br s = broad singlet.

EXAMPLE 1

Preparation of N'-(2,5-Dimethyl-4-[(3-methyl-2-butenyl)-oxy]phenyl)-N,N-dimethylmethanimidamide

The title compound was prepared from N'-(4-hydroxy-2,5-dimethylphenyl)-N,N-dimethylmethanimidamide (prepared as described in WO00/46184). To a suspension of N'-(4-hydroxy-2,5-dimethylphenyl)-N,N-dimethylmethanimidamide (0.77 g, 4 mmol) in tetrahydrofuran (34 mL) under nitrogen at room temperature was added 60% sodium hydride in mineral oil (170 mg, 4.25 mmol). The mixture was then stirred at room temperature for about 45 minutes followed by addition of 4-bromo-2-methyl-2-butene (0.72 g, 4.8 mmol). The resulting reaction mixture was stirred at room temperature for 2 days and then poured into diethyl ether (250 mL). The organic layer was then washed with 1N aqueous sodium hydroxide solution (2x200 mL). The organic layer was then dried over MgSO₄ and filtered.

The filtrate was concentrated to give the title compound (1.02 g), a compound of the present invention, as a brown oil.

¹H NMR (CDCl₃): δ 1.72 (s,3H), 1.78 (s,3H), 2.17 (s,3H), 2.24 (s,3H), 2.99 (s,6H), 4.46 (d,2H), 5.5 (t,1H), 6.55 (s,1H), 6.66 (s,1H), 7.38 (s,1H).

5

EXAMPLE 2

Preparation of *N'*-[2,5-Dimethyl-4-[(4-methylpentyl)oxy]phenyl]-*N,N*-dimethylmethanimidamide

To a suspension of *N'*-(4-hydroxy-2,5-dimethylphenyl)-*N,N*-dimethylmethanimidamide (0.52 g, 2.7 mmol) in tetrahydrofuran (~10 mL) under nitrogen at room temperature was added 60% sodium hydride in mineral oil (120 mg, 3 mmol). After the addition, the mixture was stirred at room temperature for 30 minutes, and 1-bromo-4-methylpentane (0.55 g, 3.3 mmol) was added. The resulting reaction mixture was heated at reflux for 24 hours, cooled to room temperature and stirred at room temperature overnight. The reaction mixture was then poured into diethyl ether (100 mL). The organic layer was washed with 1N aqueous sodium hydroxide solution (3x100 mL), dried over MgSO₄ and filtered. The filtrate was concentrated to give the title compound (0.7 g), a compound of this invention, as an oil.

¹H NMR (CDCl₃): δ 0.91 (d,6H), 1.28-1.82 (m,5H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.89 (t,2H), 6.54 (s,1H), 6.63 (s,1H), 7.37 (s,1H).

20

EXAMPLE 3

Preparation of *N'*-[2,5-Dimethyl-4-[3-(trimethylsilyl)propoxy]phenyl]-*N,N*-dimethylmethanimidamide

To a suspension of *N'*-(4-hydroxy-2,5-dimethylphenyl)-*N,N*-dimethylmethanimidamide (0.52 g, 2.7 mmol) in *p*-dioxane (10 mL) under nitrogen at room temperature was added 60% sodium hydride in mineral oil (120 mg, 3 mmol). After the addition, the mixture was stirred at room temperature for 21 minutes, and (3-chloropropyl)trimethylsilane (0.5 g, 3.3 mmol) was added. The resulting reaction mixture was heated at reflux for 4 days and then cooled to room temperature. The reaction mixture was poured into diethyl ether (100 mL). The organic layer was washed with 1N aqueous sodium hydroxide solution (3x100 mL). The organic layer was then dried over MgSO₄ and filtered. The filtrate was concentrated and then dried in a vacuum oven at 90 °C overnight to give the title compound (0.16 g), a compound of this invention, as an oil.

¹H NMR (CDCl₃): δ 0.02 (t,9H), 0.6 (m,2H), 1.7-1.82 (m,2H), 2.17 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.87 (t,2H), 6.54 (s,1H), 6.62 (s,1H), 7.38 (s,1H).

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EXAMPLE 4**Preparation of *N'*-[4-[(1-Butylpentyl)oxy]-2,5-dimethylphenyl]-*N,N*-dimethylmethanimidamide****Step A: Preparation of 1-[(1-Butylpentyl)oxy]-2,5-dimethyl-4-nitrobenzene**

- 5 Diisopropyl azodicarboxylate (0.570 g, 2.82 mmol) was added to the solution of triphenylphosphine (0.739 g, 2.82 mmol) in tetrahydrofuran (15 mL) at 0 °C dropwise. The mixture was stirred at the 0 °C for additional 30 minutes. A mixture of 2,5-dimethyl-4-nitrophenol (0.315 g, 1.9 mmol) and 5-nonanol (0.288 g, 2 mmol) in tetrahydrofuran (10 mL) was added dropwise to the above cold solution. Then the reaction mixture was stirred
- 10 at 0 °C for 30 min and at room temperature for 1 hour. Tetrahydrofuran was removed under reduced pressure, and the residue was triturated with hexane (100 mL) and filtered. The precipitate was washed with hexane (50 mL). Hexane was removed under reduced pressure, and the residue was purified by column chromatography eluted with dichloromethane to give the title compound (0.4 g) as an oil.
- 15 ¹H NMR (CDCl₃): δ 0.9 (t,6 H), 1.2-1.4 (m,8 H), 1.6-1.7 (m,4H), 2.15 (s,3H), 2.6 (s,3H), 4.35 (m,H), 6.6 (s,1H), 7.9 (s,1H).

Step B: Preparation of 1-[(1-Butylpentyl)oxy]-2,5-dimethyl-4-benzenamine

- 1-[(1-Butylpentyl)oxy]-2,5-dimethyl-4-nitrobenzene (i.e. the product from Step A) (0.4 g, 1.39 mmol) was reduced by catalytic hydrogenation using palladium charcoal catalyst (10 wt %, 0.2 g) in ethanol (~20 mL) at 40 psi (276 KPa) hydrogen pressure above ambient
- 20 for 8 hours. The catalyst was removed by filtration, and the filtrate was concentrated under reduced pressure. The residue was purified by column chromatography eluted with dichloromethane to give the title compound (0.35 g) as an oil.
- 25 ¹H NMR (CDCl₃): δ 0.9 (t,6H), 1.2-1.4 (m,8H), 1.6-1.7 (m,4H), 2.15 (s,6H), 3.25 (m, 2H), 4.0 (m,1H), 6.42 (s,1H), 6.5 (s,1H).

Step C: Preparation of *N'*-[4-[(1-Butylpentyl)oxy]-2,5-dimethylphenyl]-*N,N*-dimethylmethanimidamide

- Dimethylformamide dimethyl acetal (~5 mL) was added to 1-[(1-butylpentyl)oxy]-2,5-dimethyl-4-benzenamine (i.e. the product from Step B) (350 mg) under argon, and the
- 30 mixture was heated to 100 °C for two hours. The reaction mixture was cooled to room temperature and partitioned between ether (50 mL) and water (50 mL). The organic layer was washed sequentially with water (50 mL) and brine, dried (Na₂SO₄), filtered and concentrated to give the title compound (300 mg), a compound of this invention, as a reddish oil.
- 35 ¹H NMR (CDCl₃): δ 0.9 (t,6 H), 1.2-1.4 (m,8H), 1.5-1.7 (m,4H), 2.15 (s,3H), 2.2 (s,3H), 3.0 (s,6H), 4.1 (m,H), 6.5 (s,1H), 6.6 (s,1H), 7.4 (s,1H).

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EXAMPLE 5**Preparation of *N'*-[5-Chloro-2-methyl-4-[3-(trimethylsilyl)propoxy]phenyl]-*N*-methylmethanimidamide****Step A: Preparation of [3-(2-Chloro-5-methyl-4-nitrophenoxy)propyl]trimethylsilane**

- 5 Diisopropyl azodicarboxylate (2.3 mL, 11.68 mmol), 3-trimethylsilylpropanol (1.41 g, 10.66 mmole), 2-chloro-5-methyl-4-nitrophenol (2.0 g, 10.64 mmol) and triphenylphosphine (3.24 g, 12.35 mmol) were added to tetrahydrofuran (55 mL) at -10 °C. The mixture was then warmed up to room temperature and stirred at room temperature overnight. Tetrahydrofuran was removed under reduced pressure, and the residue was purified by
- 10 column chromatography (silica gel; eluted with a solution of 5 % ethyl acetate in hexanes) to give the title compound (2.68 g) as a yellow solid, mp 66-68 °C.
- ¹H NMR (CDCl₃): δ 0.04 (s,9 H), 0.64 (m,2H), 1.86(m,2H), 2.64 (s,3H), 4.05 (t,2H), 6.76 (s,1H), 8.17 (s,1H).

Step B: Preparation of 5-Chloro-2-methyl-4-[3-(trimethylsilyl)propoxy]benzenamine

- 15 To a mixture of [3-(2-chloro-5-methyl-4-nitrophenoxy)propyl]trimethylsilane (i.e. the product from Step A) (3.5 g, 11.6 mmol) and methanol (16 mL) at room temperature was added concentrated hydrochloric acid (16 mL) and tin(II) chloride (6.64 g, 35.02 mmol) with stirring. The reaction mixture was heated to reflux for 4 hours. Dichloromethane (320 mL) was added to the reaction mixture after it was cooled down to room temperature. The
- 20 mixture was washed with 4 N sodium hydroxide aqueous solution (110 mL) followed by brine (3x320 mL). The organic layer was separated, dried over MgSO₄, and concentrated to give the title compound (2.97 g) as an oil.
- ¹H NMR (CDCl₃): δ 0.02 (s,9H), 0.61 (m,2H), 1.76 (m,2H), 2.13 (s,3H), 3.4 (br s,2H), 3.89 (t,2H), 6.69 (s,1H), 6.7 (s,1H).

- 25 **Step C: Preparation of *N'*-[5-Chloro-2-methyl-4-[3-(trimethylsilyl)propoxy]phenyl]-*N'*-cyanomethanimidamide**

- To a solution of *N*-cyanomethanimidic ethyl ester (1.21 g, 12.35 mmol) in ethanol (16 mL) at room temperature was added dropwise a solution of 5-chloro-2-methyl-4-[3-(trimethylsilyl)propoxy]benzenamine (i.e. the product from Step B) (2.93 g, 10.77 mmol) in
- 30 ethanol (16 mL). After the addition, the reaction mixture was stirred at room temperature overnight and was then concentrated under reduced pressure. The residue was triturated in a solution of 25 % ethyl acetate in hexanes, and the solid was collected by filtration to give the title compound (2.4 g) as an off-white solid, mp 143-144 °C.
- ¹H NMR (CDCl₃): δ 0.03 (s,9 H), 0.62 (m,2H), 1.82 (m,2H), 2.28 (m,3H), 3.96 (m,2H),
- 35 6.78-8.35(m,3H).

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Step D: Preparation of *N'*-[5-Chloro-2-methyl-4-[3-(trimethylsilyl)propoxy]phenyl]-*N*-ethyl-*N*-methylmethanimidamide

To a suspension of *N*-[5-chloro-2-methyl-4-[3-(trimethylsilyl)propoxy]phenyl]-*N'*-cyanomethanimidamide (i.e. the product from Step C) (174 mg, 0.54 mmol) in acetonitrile (4 mL) at room temperature was added *N*-ethylmethylamine (0.23 mL, 2.68 mmol) dropwise. After the addition, the reaction mixture was stirred at room temperature overnight. Ether (40 mL) was then added to the reaction mixture. The resulting mixture was washed with water (40 mL) and then brine (40 mL). The organic layer was separated, dried over MgSO₄, and concentrated to give the title compound (160 mg), a compound of the present invention, as an oil.

¹H NMR (CDCl₃): δ 0.02 (s, 9H), 0.6 (m, 2H), 1.2 (t, 3H), 1.8 (m, 2H), 2.23 (s, 3H), 2.98 (s, 3H), 3.35 (br s, 2H), 3.93 (t, 2H), 6.74 (s, 1H), 6.77 (s, 1H), 7.4 (s, 1H).

EXAMPLE 6

Preparation of *N'*-[5-Chloro-2-methyl-4-[3-(trimethylsilyl)propoxy]phenyl]-*N*-ethyl-*N*-methylthiourea

Step A: Preparation of [3-(2-Chloro-4-isothiocyanato-5-methylphenoxy)propyl]-trimethylsilane

To a solution of 5-chloro-2-methyl-4-[3-(trimethylsilyl)propoxy]benzenamine (i.e. the product of Example 5, Step B) (1.63 g, 6 mmol) in toluene (50 mL) at 25 °C was added diethylcarbonyl chloride (1.2 g, 7.8 mmol) followed by *N,N*-diisopropylethylamine (1.1 g, 9 mmol). The resulting homogeneous solution was heated to the reflux for 3 h. The solvent was evaporated, and the residue was chromatographed on flash silica gel using ethyl acetate/hexane (1:40) as eluent to give the title compound (1.19 g) as a pale yellow semi-solid.

¹H NMR (CDCl₃): δ 0.00 (s, 9H), 0.60 (m, 2H), 1.80 (m, 2H), 2.40 (s, 3H), 3.85 (t, 2H), 6.60 (s, 1H), 7.00 (s, 1H).

Step B: Preparation of *N'*-[5-Chloro-2-methyl-4-[3-(trimethylsilyl)propoxy]phenyl]-*N*-ethyl-*N*-methylthiourea

To a solution of [3-(2-chloro-4-isothiocyanato-5-methylphenoxy)propyl]-trimethylsilane (i.e. the product from Step A) (310 mg, 1 mmol) in tetrahydrofuran (10 mL) at 25 °C was added *N*-ethylmethylamine (1 g, 17 mmol). The reaction solution was stirred at 25 °C for 30 minutes. The solvent was then evaporated, and hexane was added to the residue to induce crystallization. The solid was collected by filtration and washed with a solution of ether/hexane (1:5) (20 mL) to give the title compound (255 mg), a compound of the present invention, as an off-white solid, mp 71-72 °C.

¹H NMR (CDCl₃): δ 0.00 (s, 9H), 0.60 (m, 2H), 1.25 (t, 3H), 1.80 (m, 2H), 2.20 (s, 3H), 3.20 (s, 3H), 3.85 (q, 2H), 3.90 (t, 2H), 6.70 (br s, 1H), 6.75 (s, 1H), 7.15 (s, 1H)

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EXAMPLE 7**Preparation of *N'*-[5-Chloro-2-(methylthio)-4-[3-(trimethylsilyl)propoxy]phenyl]-*N*-cyclopropyl-*N*-methylmethanimidamide****Step A: Preparation of [3-(2,5-Dichloro-4-nitrophenoxy)propyl]trimethylsilane**

5 Diisopropyl azodicarboxylate (10.4 mL, 53 mmol), 3-trimethylsilylpropanol (6.4 g, 48 mmol), 2,5-dichloro-4-nitrophenol (10.0 g, 48 mmol) and triphenylphosphine (12.6 g, 48 mmol) were added to tetrahydrofuran (100 mL) at -10 °C. The mixture was then warmed up to room temperature overnight. Tetrahydrofuran was removed under reduced pressure, and the residue was triturated with hexanes (~200 mL). The solid was filtered off. The
10 filtrate was then concentrated, and the residue was purified by silica gel column chromatography eluted with hexanes followed 2% ethyl acetate in hexanes to give the title compound (13.5 g) as a yellow solid, mp 45-48 °C.
¹H NMR (CDCl₃): δ 0.05 (s,9H), 0.65 (m,2H), 1.89(m,2H), 4.07 (t,2H), 7.00 (s,1H), 8.12 (s,1H).

Step B: Preparation of [3-[2-Chloro-5-(methylthio)-4-nitrophenoxy]propyl]trimethylsilane

To a solution of [3-(2,5-dichloro-4-nitrophenoxy)propyl]trimethylsilane (4.6 g, 14.3 mmol) (i.e. the product from Step A) in *N,N*-dimethylformamide (40 mL) was added sodium thiomethoxide (1.3 g, 18.6 mmol) at room temperature. The reaction mixture was heated to 100 °C for 2 days. The reaction mixture was then partitioned between ether (100
20 mL) and water (150 mL). The organic layer was washed with water (3x50 mL), separated, dried over MgSO₄, filtered and concentrated. The residue was purified by silica gel column chromatography using hexanes/butyl chloride (3:1) as eluent to give the title compound (2.7g) as an orange solid, mp 51-53 °C.
¹H NMR (CDCl₃): δ 0.05 (s,9H), 0.65 (m,2H), 1.89(m,2H), 2.49 (s,3H), 4.09 (t,2H), 6.69 (s,1H), 8.35 (s,1H).

Step C: Preparation of 5-Chloro-2-(methylthio)-4-[3-(trimethylsilyl)propoxy]benzenamine

To a solution of [3-[2-chloro-5-(methylthio)-4-nitrophenoxy]propyl]trimethylsilane (i.e. the product from Step B) (2.7 g, 8.91 mmol) in methanol (5 mL) and concentrated hydrochloric acid (5 mL) was added tin(II) chloride (5.1 g, 26.7 mmol). The reaction
30 mixture was heated to reflux for 4 hours. The reaction mixture was cooled to room temperature, and the methanol solvent was removed under reduced pressure. The reaction mixture was partitioned between dichloromethane (~50 mL) and 4 N aqueous sodium hydroxide solution (4x50 mL). The organic layer was separated, dried over MgSO₄, and concentrated to give the title compound (2.0 g) as a brown oil.
35 ¹H NMR (CDCl₃): δ 0.02 (s,9H), 0.61 (m,2H), 1.78 (m,2H), 2.35 (s,3H), 3.92 (t,2H), 4.04 (br s, 2H), 6.78 (s,1H), 6.98 (s,1H).

Step D: Preparation of *N*-[5-Chloro-2-(methylthio)-4-[3-(trimethylsilyl)propoxy]phenyl]-*N'*-cyanomethanimidamide

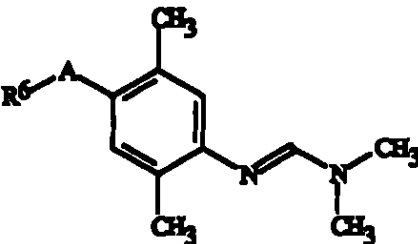
To a solution of *N*-cyanomethanimidic ethyl ester (0.84 g, 8.6 mmol) in ethanol (5 mL) at room temperature was added to a solution of 5-chloro-2-(methylthio)-4-[3-(trimethylsilyl)propoxy]benzenamine (i.e. the product from Step C) (2.0 g, 6.6 mmol) in ethanol (10 mL) dropwise. After the addition, the reaction mixture was stirred at room temperature for 2 days and then concentrated under reduced pressure. The residue was purified by silica gel column chromatography using ethyl acetate/hexanes (1:2) as eluent to give the title compound (1.8 g) as an orange solid, mp 94-96 °C.
¹H NMR (CDCl₃): δ 0.03 (s,9H), 0.62 (m,2H), 1.84 (m,2H), 2.39 (m,3H), 3.96 (t,2H), 6.97-8.37 (m,3H).

Step E: Preparation of *N'*-(5-Chloro-2-(methylthio)-4-[3-(trimethylsilyl)propoxy]phenyl)-*N*-cyclopropyl-*N*-methylmethanimidamide

To a suspension of *N*-[5-chloro-2-(methylthio)-4-[3-(trimethylsilyl)propoxy]phenyl]-*N'*-cyanomethanimidamide (i.e. the product from Step D) (200 mg, 0.56 mmol) in acetonitrile (5 mL) at room temperature was added dropwise a solution of *N*-cyclopropylmethylamine in ether (7.6 mL, 0.74 M, 5.6 mmol). After the addition, the reaction mixture was stirred at room temperature overnight. The reaction mixture was then concentrated under reduced pressure, and the residue was purified by silica gel column chromatography using ethyl acetate/hexanes (1:2) as eluent to give the title compound (120 mg), a compound of the present invention, as a tan solid, mp 62-64 C.
¹H NMR (CDCl₃): δ 0.02 (s,9H), 0.6-0.8 (m,6H), 1.82 (m,2H), 2.4 (s,3H), 2.7 (m,1H), 3.23 (s,3H), 3.96 (t,2H), 6.69 (s,1H), 6.79 (s,1H), 7.64 (s,1H).

By the procedures described herein together with methods known in the art, the following compounds of Tables 1 to 13 can be prepared. The following abbreviations are used in the Tables which follow: *t* means tertiary, *s* means secondary, *n* means normal, *i* means iso, *c* means cyclo, Pr means propyl, *i*-Pr means isopropyl, *c*-Pr means cyclopropyl, Bu means butyl, and CN means cyano.

TABLE 1

			
Δ	R ⁶	Δ	R ⁶
O	(CH ₂) ₄ CH ₃	S	(CH ₂) ₄ CH ₃
O	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅	S	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
O	(CH ₂) ₅ CH ₃	S	(CH ₂) ₅ CH ₃

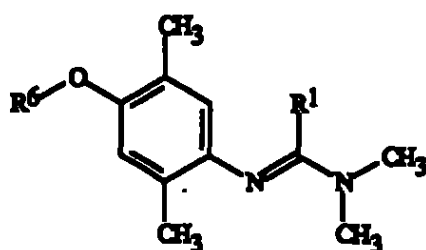
Δ	R^6
O	$(CH_2)_6CH_3$
O	$(CH_2)_3C(CH_3)_2Br$
O	$(CH_2)_7CH_3$
O	$(CH_2)_3CH(CH_3)_2$
O	$(CH_2)_3C(CH_3)_3$
O	$(CH_2)_3Si(CH_3)_3$
O	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
O	$(CH_2)_3C(=CH_2)CH(CH_3)_2$
O	$(CH_2)_3CH(CH_3)C_2H_5$
O	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$
O	$(CH_2)_2OC(CH_3)_3$
O	$(CH_2)_2SC(CH_3)_3$
O	$(CH_2)_2SCH(CH_3)_2$
O	$CH_2CH=CHC(CH_3)_3$
O	$CH_2CH=CHCH(CH_3)_2$
O	$(CH_2)_2S(=O)C(CH_3)_3$
O	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
O	$(CH_2)_2OCH(CH_3)_2$
O	$(CH_2)_3OC(CH_3)_3$
O	$(CH_2)_3P(=O)(CH_3)_2$
O	$CH_2C(=O)CH_2C(CH_3)_3$
O	$CH(CH_3)(CH_2)_3CH_3$
O	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
O	$CH(CH_3)CH_2CH_2C(CH_3)_3$
O	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
O	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
O	$CH(CH_2CH_2CH(CH_3)_2)_2$
O	$CH_2CH_2CH_2N(CH_3)_2$
O	$CH_2CH_2N(CH_3)C(CH_3)_3$
O	$CH_2CH_2N(CH_3)CH(CH_3)_2$
O	$CH_2CH=C(CH_3)_2$
O	$(CH_2)_3C(CH_3)_2OCH_3$
O	$(CH_2)_3C(CH_3)_2Cl$
O	$CH_2CH_2CH=C(CH_3)_2$
O	$(CH_2)_8CH_3$
O	$(CH_2)_9CH_3$
O	$(CH_2)_{11}CH_3$

Δ	R^6
S	$(CH_2)_6CH_3$
S	$(CH_2)_3C(CH_3)_2Br$
S	$(CH_2)_7CH_3$
S	$(CH_2)_3CH(CH_3)_2$
S	$(CH_2)_3C(CH_3)_3$
S	$(CH_2)_3Si(CH_3)_3$
S	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
S	$(CH_2)_3C(=CH_2)CH(CH_3)_2$
S	$(CH_2)_3CH(CH_3)C_2H_5$
S	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$
S	$(CH_2)_2OC(CH_3)_3$
S	$(CH_2)_2SC(CH_3)_3$
S	$(CH_2)_2SCH(CH_3)_2$
S	$CH_2CH=CHC(CH_3)_3$
S	$CH_2CH=CHCH(CH_3)_2$
S	$(CH_2)_2S(=O)C(CH_3)_3$
S	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
S	$(CH_2)_2OCH(CH_3)_2$
S	$(CH_2)_3OC(CH_3)_3$
S	$(CH_2)_3P(=O)(CH_3)_2$
S	$CH_2C(=O)CH_2C(CH_3)_3$
S	$CH(CH_3)(CH_2)_3CH_3$
S	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
S	$CH(CH_3)CH_2CH_2C(CH_3)_3$
S	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
S	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
S	$CH(CH_2CH_2CH(CH_3)_2)_2$
S	$CH_2CH_2CH_2N(CH_3)_2$
S	$CH_2CH_2N(CH_3)C(CH_3)_3$
S	$CH_2CH_2N(CH_3)CH(CH_3)_2$
S	$CH_2CH=C(CH_3)_2$
S	$(CH_2)_3C(CH_3)_2OCH_3$
S	$(CH_2)_3C(CH_3)_2Cl$
S	$CH_2CH_2CH=C(CH_3)_2$
S	$(CH_2)_8CH_3$
S	$(CH_2)_9CH_3$
S	$(CH_2)_{11}CH_3$

Δ	R^6
O	$C(=O)OCH_2C(CH_3)_3$
O	$(CH_2)_4CH(CH_3)_2$
O	$C(=O)OCH(C_2H_5)C(CH_3)_3$
O	$C(=O)OC(CH_3)_2C(CH_3)_3$
O	$C(=O)NHCH_2C(CH_3)_3$
O	$C(=O)N(CH_3)CH_2C(CH_3)_3$
O	$CH_2CH_2CH_2CH=C(CH_3)_2$
O	$C(=O)CH_2SC(CH_3)_3$
O	$(CH_2)_4Cl$
O	$(CH_2)_5Cl$
O	$(CH_2)_2CH(CH_3)(CH_2)_3CH(CH_3)_2$
O	$(S)-(CH_2)_2CH(CH_3)CH_2CH_2CH=C(CH_3)_2$
O	$(R)-(CH_2)_2CH(CH_3)CH_2CH_2CH=C(CH_3)_2$
O	$(CH_2)_2CH(CH_3)_2$
O	$(CH_2)_2C(CH_3)_3$
O	$CH_2C(=O)C(CH_3)_3$
O	$CH_2CH=C(CH_3)(CH_2)_2CH=C(CH_3)_2$
O	$CH_2(CH=C(CH_3)(CH_2)_2)_2CH=C(CH_3)_2$
O	$(CH_2)_3CH=CH_2$
O	$(CH_2)_4CH=CH_2$
O	$CH(C_2H_5)_2$
O	$CH(CH_2CH_2CH_3)_2$
O	$CH(CH_2CH_2CH_2CH_3)_2$
O	$CH(CH_2CH_2CH_3)CH_2CH_2CH_2CH_3$
O	$CH(CH_3)CH_2CH_2CH(CH_3)(C_2H_5)$
O	$CH(CH_2CH_2CH_2CH_2CH_3)_2$
O	$CH(CH_2CH_2CH_2CH_3)(CH_2)_5CH_3$
O	$CH(C_2H_5)CH_2CH_2C(=CH_2)CH_3$

Δ	R^6
S	$C(=O)OCH_2C(CH_3)_3$
S	$(CH_2)_4CH(CH_3)_2$
S	$C(=O)OCH(C_2H_5)C(CH_3)_3$
S	$C(=O)OC(CH_3)_2C(CH_3)_3$
S	$C(=O)NHCH_2C(CH_3)_3$
S	$C(=O)N(CH_3)CH_2C(CH_3)_3$
S	$CH_2CH_2CH_2CH=C(CH_3)_2$
S	$C(=O)CH_2SC(CH_3)_3$
S	$(CH_2)_4Cl$
S	$(CH_2)_5Cl$
S	$(CH_2)_2CH(CH_3)(CH_2)_3CH(CH_3)_2$
S	$(S)-(CH_2)_2CH(CH_3)CH_2CH_2CH=C(CH_3)_2$
S	$(R)-(CH_2)_2CH(CH_3)CH_2CH_2CH=C(CH_3)_2$
S	$(CH_2)_2CH(CH_3)_2$
S	$(CH_2)_2C(CH_3)_3$
S	$CH_2C(=O)C(CH_3)_3$
S	$CH_2CH=C(CH_3)(CH_2)_2CH=C(CH_3)_2$
S	$CH_2(CH=C(CH_3)(CH_2)_2)_2CH=C(CH_3)_2$
S	$(CH_2)_3CH=CH_2$
S	$(CH_2)_4CH=CH_2$
S	$CH(C_2H_5)_2$
S	$CH(CH_2CH_2CH_3)_2$
S	$CH(CH_2CH_2CH_2CH_3)_2$
S	$CH(CH_2CH_2CH_3)CH_2CH_2CH_2CH_3$
S	$CH(CH_3)CH_2CH_2CH(CH_3)(C_2H_5)$
S	$CH(CH_2CH_2CH_2CH_2CH_3)_2$
S	$CH(CH_2CH_2CH_2CH_3)(CH_2)_6CH_3$
S	$CH(C_2H_5)CH_2CH_2C(=CH_2)CH_3$

TABLE 2

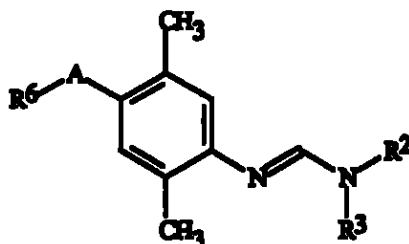


R ¹	R ⁶	R ¹	R ⁶
CH ₃	(CH ₂) ₄ CH ₃	OCH ₃	(CH ₂) ₄ CH ₃
CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅	OCH ₃	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
CH ₃	(CH ₂) ₅ CH ₃	OCH ₃	(CH ₂) ₅ CH ₃
CH ₃	(CH ₂) ₆ CH ₃	OCH ₃	(CH ₂) ₆ CH ₃
CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Br	OCH ₃	(CH ₂) ₃ C(CH ₃) ₂ Br
CH ₃	(CH ₂) ₇ CH ₃	OCH ₃	(CH ₂) ₇ CH ₃
CH ₃	(CH ₂) ₃ CH(CH ₃) ₂	OCH ₃	(CH ₂) ₃ CH(CH ₃) ₂
CH ₃	(CH ₂) ₃ C(CH ₃) ₃	OCH ₃	(CH ₂) ₃ C(CH ₃) ₃
CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	OCH ₃	(CH ₂) ₃ Si(CH ₃) ₃
CH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃	OCH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
CH ₃	(CH ₂) ₃ C(-CH ₂)CH(CH ₃) ₂	OCH ₃	(CH ₂) ₃ C(-CH ₂)CH(CH ₃) ₂
CH ₃	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅	OCH ₃	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
CH ₃	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃	OCH ₃	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
CH ₃	(CH ₂) ₂ OC(CH ₃) ₃	OCH ₃	(CH ₂) ₂ OC(CH ₃) ₃
CH ₃	(CH ₂) ₂ SC(CH ₃) ₃	OCH ₃	(CH ₂) ₂ SC(CH ₃) ₃
CH ₃	(CH ₂) ₂ SCH(CH ₃) ₂	OCH ₃	(CH ₂) ₂ SCH(CH ₃) ₂
CH ₃	CH ₂ CH=CHC(CH ₃) ₃	OCH ₃	CH ₂ CH=CHC(CH ₃) ₃
CH ₃	CH ₂ CH=CHCH(CH ₃) ₂	OCH ₃	CH ₂ CH=CHCH(CH ₃) ₂
CH ₃	(CH ₂) ₂ S(-O)C(CH ₃) ₃	OCH ₃	(CH ₂) ₂ S(-O)C(CH ₃) ₃
CH ₃	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃	OCH ₃	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
CH ₃	(CH ₂) ₂ OCH(CH ₃) ₂	OCH ₃	(CH ₂) ₂ OCH(CH ₃) ₂
CH ₃	(CH ₂) ₃ OC(CH ₃) ₃	OCH ₃	(CH ₂) ₃ OC(CH ₃) ₃
CH ₃	(CH ₂) ₃ P(-O)(CH ₃) ₂	OCH ₃	(CH ₂) ₃ P(-O)(CH ₃) ₂
CH ₃	CH ₂ C(-O)CH ₂ C(CH ₃) ₃	OCH ₃	CH ₂ C(-O)CH ₂ C(CH ₃) ₃
CH ₃	CH(CH ₃)(CH ₂) ₃ CH ₃	OCH ₃	CH(CH ₃)(CH ₂) ₃ CH ₃
CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂	OCH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃	OCH ₃	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂	OCH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂	OCH ₃	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂	OCH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂

R^1	R^6	R^1	R^6
CH_3	$CH_2CH_2CH_2N(CH_3)_2$	OCH_3	$CH_2CH_2CH_2N(CH_3)_2$
CH_3	$CH_2CH_2N(CH_3)C(CH_3)_3$	OCH_3	$CH_2CH_2N(CH_3)C(CH_3)_3$
CH_3	$CH_2CH_2N(CH_3)CH(CH_3)_2$	OCH_3	$CH_2CH_2N(CH_3)CH(CH_3)_2$
CH_3	$CH_2CH=C(CH_3)_2$	OCH_3	$CH_2CH=C(CH_3)_2$
CH_3	$(CH_2)_3C(CH_3)_2OCH_3$	OCH_3	$(CH_2)_3C(CH_3)_2OCH_3$
CH_3	$(CH_2)_3C(CH_3)_2Cl$	OCH_3	$(CH_2)_3C(CH_3)_2Cl$
CH_3	$CH_2CH_2CH=C(CH_3)_2$	OCH_3	$CH_2CH_2CH=C(CH_3)_2$
C_2H_5	$(CH_2)_4CH_3$	SCH_3	$(CH_2)_4CH_3$
C_2H_5	$(CH_2)_3C(CH_3)_2OC_2H_5$	SCH_3	$(CH_2)_3C(CH_3)_2OC_2H_5$
C_2H_5	$(CH_2)_5CH_3$	SCH_3	$(CH_2)_5CH_3$
C_2H_5	$(CH_2)_6CH_3$	SCH_3	$(CH_2)_6CH_3$
C_2H_5	$(CH_2)_3C(CH_3)_2Br$	SCH_3	$(CH_2)_3C(CH_3)_2Br$
C_2H_5	$(CH_2)_7CH_3$	SCH_3	$(CH_2)_7CH_3$
C_2H_5	$(CH_2)_3CH(CH_3)_2$	SCH_3	$(CH_2)_3CH(CH_3)_2$
C_2H_5	$(CH_2)_3C(CH_3)_3$	SCH_3	$(CH_2)_3C(CH_3)_3$
C_2H_5	$(CH_2)_3Si(CH_3)_3$	SCH_3	$(CH_2)_3Si(CH_3)_3$
C_2H_5	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$	SCH_3	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
C_2H_5	$(CH_2)_3C(-CH_2)CH(CH_3)_2$	SCH_3	$(CH_2)_3C(-CH_2)CH(CH_3)_2$
C_2H_5	$(CH_2)_3CH(CH_3)C_2H_5$	SCH_3	$(CH_2)_3CH(CH_3)C_2H_5$
C_2H_5	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$	SCH_3	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$
C_2H_5	$(CH_2)_2OC(CH_3)_3$	SCH_3	$(CH_2)_2OC(CH_3)_3$
C_2H_5	$(CH_2)_2SC(CH_3)_3$	SCH_3	$(CH_2)_2SC(CH_3)_3$
C_2H_5	$(CH_2)_2SCH(CH_3)_2$	SCH_3	$(CH_2)_2SCH(CH_3)_2$
C_2H_5	$CH_2CH=CHC(CH_3)_3$	SCH_3	$CH_2CH=CHC(CH_3)_3$
C_2H_5	$CH_2CH=CHCH(CH_3)_2$	SCH_3	$CH_2CH=CHCH(CH_3)_2$
C_2H_5	$(CH_2)_2S(-O)C(CH_3)_3$	SCH_3	$(CH_2)_2S(-O)C(CH_3)_3$
C_2H_5	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$	SCH_3	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
C_2H_5	$(CH_2)_2OCH(CH_3)_2$	SCH_3	$(CH_2)_2OCH(CH_3)_2$
C_2H_5	$(CH_2)_3OC(CH_3)_3$	SCH_3	$(CH_2)_3OC(CH_3)_3$
C_2H_5	$(CH_2)_3P(-O)(CH_3)_2$	SCH_3	$(CH_2)_3P(-O)(CH_3)_2$
C_2H_5	$CH_2C(=O)CH_2C(CH_3)_3$	SCH_3	$CH_2C(=O)CH_2C(CH_3)_3$
C_2H_5	$CH(CH_3)(CH_2)_3CH_3$	SCH_3	$CH(CH_3)(CH_2)_3CH_3$
C_2H_5	$CH(CH_3)CH_2CH_2CH(CH_3)_2$	SCH_3	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
C_2H_5	$CH(CH_3)CH_2CH_2C(CH_3)_3$	SCH_3	$CH(CH_3)CH_2CH_2C(CH_3)_3$
C_2H_5	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$	SCH_3	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
C_2H_5	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$	SCH_3	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
C_2H_5	$CH(CH_2CH_2CH(CH_3)_2)_2$	SCH_3	$CH(CH_2CH_2CH(CH_3)_2)_2$

R^1	R^6	R^1	R^6
C_2H_5	$CH_2CH_2CH_2N(CH_3)_2$	SCH_3	$CH_2CH_2CH_2N(CH_3)_2$
C_2H_5	$CH_2CH_2N(CH_3)C(CH_3)_3$	SCH_3	$CH_2CH_2N(CH_3)C(CH_3)_3$
C_2H_5	$CH_2CH_2N(CH_3)CH(CH_3)_2$	SCH_3	$CH_2CH_2N(CH_3)CH(CH_3)_2$
C_2H_5	$CH_2CH=C(CH_3)_2$	SCH_3	$CH_2CH=C(CH_3)_2$
C_2H_5	$(CH_2)_3C(CH_3)_2OCH_3$	SCH_3	$(CH_2)_3C(CH_3)_2OCH_3$
C_2H_5	$(CH_2)_3C(CH_3)_2Cl$	SCH_3	$(CH_2)_3C(CH_3)_2Cl$
C_2H_5	$CH_2CH_2CH=C(CH_3)_2$	SCH_3	$CH_2CH_2CH=C(CH_3)_2$

TABLE 3



A	R^2	R^3	R^6
O	CH_3	C_2H_5	$(CH_2)_4CH_3$
O	CH_3	C_2H_5	$(CH_2)_3C(CH_3)_2OC_2H_5$
O	CH_3	C_2H_5	$(CH_2)_5CH_3$
O	CH_3	C_2H_5	$(CH_2)_6CH_3$
O	CH_3	C_2H_5	$(CH_2)_3C(CH_3)_2Br$
O	CH_3	C_2H_5	$(CH_2)_7CH_3$
O	CH_3	C_2H_5	$(CH_2)_3CH(CH_3)_2$
O	CH_3	C_2H_5	$(CH_2)_3C(CH_3)_3$
O	CH_3	C_2H_5	$(CH_2)_3Si(CH_3)_3$
O	CH_3	C_2H_5	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
O	CH_3	C_2H_5	$(CH_2)_3C(-CH_2)CH(CH_3)_2$
O	CH_3	C_2H_5	$(CH_2)_3CH(CH_3)C_2H_5$
O	CH_3	C_2H_5	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$
O	CH_3	C_2H_5	$(CH_2)_2OC(CH_3)_3$
O	CH_3	C_2H_5	$(CH_2)_2SC(CH_3)_3$
O	CH_3	C_2H_5	$(CH_2)_2SCH(CH_3)_2$
O	CH_3	C_2H_5	$CH_2CH=CHC(CH_3)_3$
O	CH_3	C_2H_5	$CH_2CH=CHCH(CH_3)_2$
O	CH_3	C_2H_5	$(CH_2)_2S(-O)C(CH_3)_3$
O	CH_3	C_2H_5	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
	CH_3	C_2H_5	$(CH_2)_2OCH(CH_3)_2$

A	R ²	R ³	R ⁶
0	CH ₃	C ₂ H ₅	(CH ₂) ₃ OC(CH ₃) ₃
0	CH ₃	C ₂ H ₅	(CH ₂) ₃ P(-O)(CH ₃) ₂
0	CH ₃	C ₂ H ₅	CH ₂ C(-O)CH ₂ C(CH ₃) ₃
0	CH ₃	C ₂ H ₅	CH(CH ₃)(CH ₂) ₃ CH ₃
0	CH ₃	C ₂ H ₅	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
0	CH ₃	C ₂ H ₅	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
0	CH ₃	C ₂ H ₅	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
0	CH ₃	C ₂ H ₅	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
0	CH ₃	C ₂ H ₅	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂
0	CH ₃	C ₂ H ₅	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
0	CH ₃	C ₂ H ₅	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
0	CH ₃	C ₂ H ₅	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
0	CH ₃	C ₂ H ₅	CH ₂ CH=C(CH ₃) ₂
0	CH ₃	C ₂ H ₅	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
0	CH ₃	C ₂ H ₅	(CH ₂) ₃ C(CH ₃) ₂ Cl
0	CH ₃	C ₂ H ₅	CH ₂ CH ₂ CH=C(CH ₃) ₂
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₄ CH ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₅ CH ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₆ CH ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₃ C(CH ₃) ₂ Br
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₇ CH ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₃ CH(CH ₃) ₂
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₃ C(CH ₃) ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₃ Si(CH ₃) ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₃ C(-CH ₂)CH(CH ₃) ₂
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₂ OC(CH ₃) ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₂ SC(CH ₃) ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₂ SCH(CH ₃) ₂
0	C ₂ H ₅	C ₂ H ₅	CH ₂ CH=CHC(CH ₃) ₃
0	C ₂ H ₅	C ₂ H ₅	CH ₂ CH=CHCH(CH ₃) ₂
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₂ S(-O)C(CH ₃) ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₂ OCH(CH ₃) ₂

A	R ²	R ³	R ⁶
O	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₃ OC(CH ₃) ₃
O	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₃ P(=O)(CH ₃) ₂
O	C ₂ H ₅	C ₂ H ₅	CH ₂ C(=O)CH ₂ C(CH ₃) ₃
O	C ₂ H ₅	C ₂ H ₅	CH(CH ₃)(CH ₂) ₃ CH ₃
O	C ₂ H ₅	C ₂ H ₅	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
O	C ₂ H ₅	C ₂ H ₅	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
O	C ₂ H ₅	C ₂ H ₅	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
O	C ₂ H ₅	C ₂ H ₅	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
O	C ₂ H ₅	C ₂ H ₅	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂
O	C ₂ H ₅	C ₂ H ₅	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
O	C ₂ H ₅	C ₂ H ₅	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
O	C ₂ H ₅	C ₂ H ₅	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
O	C ₂ H ₅	C ₂ H ₅	CH ₂ CH=C(CH ₃) ₂
O	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
O	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₃ C(CH ₃) ₂ Cl
O	C ₂ H ₅	C ₂ H ₅	CH ₂ CH ₂ CH=C(CH ₃) ₂
NCH ₃	CH ₃	CH ₃	(CH ₂) ₄ CH ₃
NCH ₃	CH ₃	CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
NCH ₃	CH ₃	CH ₃	(CH ₂) ₅ CH ₃
NCH ₃	CH ₃	CH ₃	(CH ₂) ₆ CH ₃
NCH ₃	CH ₃	CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Br
NCH ₃	CH ₃	CH ₃	(CH ₂) ₇ CH ₃
NCH ₃	CH ₃	CH ₃	(CH ₂) ₃ CH(CH ₃) ₂
NCH ₃	CH ₃	CH ₃	(CH ₂) ₃ C(CH ₃) ₃
NCH ₃	CH ₃	CH ₃	(CH ₂) ₃ Si(CH ₃) ₃
NCH ₃	CH ₃	CH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
NCH ₃	CH ₃	CH ₃	(CH ₂) ₃ C(=CH ₂)CH(CH ₃) ₂
NCH ₃	CH ₃	CH ₃	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
NCH ₃	CH ₃	CH ₃	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
NCH ₃	CH ₃	CH ₃	(CH ₂) ₂ OC(CH ₃) ₃
NCH ₃	CH ₃	CH ₃	(CH ₂) ₂ SC(CH ₃) ₃
NCH ₃	CH ₃	CH ₃	(CH ₂) ₂ SCH(CH ₃) ₂
NCH ₃	CH ₃	CH ₃	CH ₂ CH=CHC(CH ₃) ₃
NCH ₃	CH ₃	CH ₃	CH ₂ CH=CHCH(CH ₃) ₂
NCH ₃	CH ₃	CH ₃	(CH ₂) ₂ S(=O)C(CH ₃) ₃
NCH ₃	CH ₃	CH ₃	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
NCH ₃	CH ₃	CH ₃	(CH ₂) ₂ OCH(CH ₃) ₂

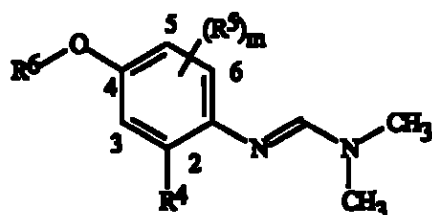
Δ	R^2	R^3	R^6
NCH ₃	CH ₃	CH ₃	(CH ₂) ₃ OC(CH ₃) ₃
NCH ₃	CH ₃	CH ₃	(CH ₂) ₃ P(-O)(CH ₃) ₂
NCH ₃	CH ₃	CH ₃	CH ₂ C(-O)CH ₂ C(CH ₃) ₃
NCH ₃	CH ₃	CH ₃	CH(CH ₃)(CH ₂) ₃ CH ₃
NCH ₃	CH ₃	CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
NCH ₃	CH ₃	CH ₃	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
NCH ₃	CH ₃	CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
NCH ₃	CH ₃	CH ₃	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
NCH ₃	CH ₃	CH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂
NCH ₃	CH ₃	CH ₃	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
NCH ₃	CH ₃	CH ₃	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
NCH ₃	CH ₃	CH ₃	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
NCH ₃	CH ₃	CH ₃	CH ₂ CH=C(CH ₃) ₂
NCH ₃	CH ₃	CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
NCH ₃	CH ₃	CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Cl
NCH ₃	CH ₃	CH ₃	CH ₂ CH ₂ CH=C(CH ₃) ₂
NH	CH ₃	CH ₃	(CH ₂) ₄ CH ₃
NH	CH ₃	CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
NH	CH ₃	CH ₃	(CH ₂) ₅ CH ₃
NH	CH ₃	CH ₃	(CH ₂) ₆ CH ₃
NH	CH ₃	CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Br
NH	CH ₃	CH ₃	(CH ₂) ₇ CH ₃
NH	CH ₃	CH ₃	(CH ₂) ₃ CH(CH ₃) ₂
NH	CH ₃	CH ₃	(CH ₂) ₃ C(CH ₃) ₃
NH	CH ₃	CH ₃	(CH ₂) ₃ Si(CH ₃) ₃
NH	CH ₃	CH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
NH	CH ₃	CH ₃	(CH ₂) ₃ C(-CH ₂)CH(CH ₃) ₂
NH	CH ₃	CH ₃	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
NH	CH ₃	CH ₃	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
NH	CH ₃	CH ₃	(CH ₂) ₂ OC(CH ₃) ₃
NH	CH ₃	CH ₃	(CH ₂) ₂ SC(CH ₃) ₃
NH	CH ₃	CH ₃	(CH ₂) ₂ SCH(CH ₃) ₂
NH	CH ₃	CH ₃	CH ₂ CH=CHC(CH ₃) ₃
NH	CH ₃	CH ₃	CH ₂ CH=CHCH(CH ₃) ₂
NH	CH ₃	CH ₃	(CH ₂) ₂ S(-O)C(CH ₃) ₃
NH	CH ₃	CH ₃	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
NH	CH ₃	CH ₃	(CH ₂) ₂ OCH(CH ₃) ₂

Δ	R^2	R^3	R^6
NH	CH ₃	CH ₃	(CH ₂) ₃ OC(CH ₃) ₃
NH	CH ₃	CH ₃	(CH ₂) ₃ P(-O)(CH ₃) ₂
NH	CH ₃	CH ₃	CH ₂ C(-O)CH ₂ C(CH ₃) ₃
NH	CH ₃	CH ₃	CH(CH ₃)(CH ₂) ₃ CH ₃
NH	CH ₃	CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
NH	CH ₃	CH ₃	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
NH	CH ₃	CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
NH	CH ₃	CH ₃	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
NH	CH ₃	CH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂
NH	CH ₃	CH ₃	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
NH	CH ₃	CH ₃	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
NH	CH ₃	CH ₃	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
NH	CH ₃	CH ₃	CH ₂ CH=C(CH ₃) ₂
NH	CH ₃	CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
NH	CH ₃	CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Cl
NH	CH ₃	CH ₃	CH ₂ CH ₂ CH=C(CH ₃) ₂
NH	CH ₃	CH ₃	(CH ₂) ₈ CH ₃
NH	CH ₃	CH ₃	(CH ₂) ₉ CH ₃
NH	CH ₃	CH ₃	(CH ₂) ₁₁ CH ₃
NH	CH ₃	CH ₃	(CH ₂) ₄ CH(CH ₃) ₂
NH	CH ₃	CH ₃	C(-O)OCH(C ₂ H ₅)C(CH ₃) ₃
NH	CH ₃	CH ₃	C(-O)OC(CH ₃) ₂ C(CH ₃) ₃
NH	CH ₃	CH ₃	CH ₂ CH ₂ CH ₂ CH=C(CH ₃) ₂
NH	CH ₃	CH ₃	C(-O)CH ₂ SC(CH ₃) ₃
NH	CH ₃	CH ₃	(CH ₂) ₄ Cl
NH	CH ₃	CH ₃	(CH ₂) ₅ Cl
NH	CH ₃	CH ₃	(CH ₂) ₂ CH(CH ₃)(CH ₂) ₃ CH(CH ₃) ₂
NH	CH ₃	CH ₃	(S)-(CH ₂) ₂ CH(CH ₃)CH ₂ CH ₂ CH=C(CH ₃) ₂
NH	CH ₃	CH ₃	(R)-(CH ₂) ₂ CH(CH ₃)CH ₂ CH ₂ CH=C(CH ₃) ₂
NH	CH ₃	CH ₃	(CH ₂) ₂ CH(CH ₃) ₂
NH	CH ₃	CH ₃	(CH ₂) ₂ C(CH ₃) ₃
NH	CH ₃	CH ₃	CH ₂ C(-O)C(CH ₃) ₃
NH	CH ₃	CH ₃	CH ₂ CH=C(CH ₃)(CH ₂) ₂ CH=C(CH ₃) ₂
NH	CH ₃	CH ₃	CH ₂ (CH=C(CH ₃)(CH ₂) ₂) ₂ CH=C(CH ₃) ₂
NH	CH ₃	CH ₃	(CH ₂) ₃ CH=CH ₂
NH	CH ₃	CH ₃	(CH ₂) ₄ CH=CH ₂
NH	CH ₃	CH ₃	CH(C ₂ H ₅) ₂

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Δ	R^2	R^3	R^6
NH	CH ₃	CH ₃	CH(CH ₂ CH ₂ CH ₃) ₂
NH	CH ₃	CH ₃	CH(CH ₂ CH ₂ CH ₂ CH ₃) ₂
NH	CH ₃	CH ₃	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH ₂ CH ₃
NH	CH ₃	CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃)(C ₂ H ₅)
NH	CH ₃	CH ₃	CH(CH ₂ CH ₂ CH ₂ CH ₂ CH ₃) ₂
NH	CH ₃	CH ₃	CH(CH ₂ CH ₂ CH ₂ CH ₃)(CH ₂) ₅ CH ₃
NH	CH ₃	CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ C(=CH ₂)CH ₃

TABLE 4



R^4	m	R^5	R^6
CH ₃	1	5-Cl	(CH ₂) ₄ CH ₃
CH ₃	1	5-Cl	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
CH ₃	1	5-Cl	(CH ₂) ₅ CH ₃
CH ₃	1	5-Cl	(CH ₂) ₆ CH ₃
CH ₃	1	5-Cl	(CH ₂) ₃ C(CH ₃) ₂ Br
CH ₃	1	5-Cl	(CH ₂) ₇ CH ₃
CH ₃	1	5-Cl	(CH ₂) ₃ CH(CH ₃) ₂
CH ₃	1	5-Cl	(CH ₂) ₃ C(CH ₃) ₃
CH ₃	1	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃
CH ₃	1	5-Cl	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
CH ₃	1	5-Cl	(CH ₂) ₃ C(=CH ₂)CH(CH ₃) ₂
CH ₃	1	5-Cl	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
CH ₃	1	5-Cl	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
CH ₃	1	5-Cl	(CH ₂) ₂ OC(CH ₃) ₃
CH ₃	1	5-Cl	(CH ₂) ₂ SC(CH ₃) ₃
CH ₃	1	5-Cl	(CH ₂) ₂ SCH(CH ₃) ₂
CH ₃	1	5-Cl	CH ₂ CH=CHC(CH ₃) ₃
CH ₃	1	5-Cl	CH ₂ CH=CHCH(CH ₃) ₂
CH ₃	1	5-Cl	(CH ₂) ₂ S(-O)C(CH ₃) ₃
CH ₃	1	5-Cl	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
CH ₃	1	5-Cl	(CH ₂) ₂ OCH(CH ₃) ₂
CH ₃	1	5-Cl	(CH ₂) ₃ OC(CH ₃) ₃

R^4	m	R^5	R^6
CH ₃	1	5-Cl	(CH ₂) ₃ P(=O)(CH ₃) ₂
CH ₃	1	5-Cl	CH ₂ C(=O)CH ₂ C(CH ₃) ₃
CH ₃	1	5-Cl	CH(CH ₃)(CH ₂) ₃ CH ₃
CH ₃	1	5-Cl	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	1	5-Cl	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
CH ₃	1	5-Cl	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	1	5-Cl	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	1	5-Cl	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂
CH ₃	1	5-Cl	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
CH ₃	1	5-Cl	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
CH ₃	1	5-Cl	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
CH ₃	1	5-Cl	CH ₂ CH=C(CH ₃) ₂
CH ₃	1	5-Cl	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
CH ₃	1	5-Cl	(CH ₂) ₃ C(CH ₃) ₂ Cl
CH ₃	1	5-Cl	CH ₂ CH ₂ CH=C(CH ₃) ₂
Cl	1	5-CH ₃	(CH ₂) ₄ CH ₃
Cl	1	5-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
Cl	1	5-CH ₃	(CH ₂) ₅ CH ₃
Cl	1	5-CH ₃	(CH ₂) ₆ CH ₃
Cl	1	5-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Br
Cl	1	5-CH ₃	(CH ₂) ₇ CH ₃
Cl	1	5-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂
Cl	1	5-CH ₃	(CH ₂) ₃ C(CH ₃) ₃
Cl	1	5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃
Cl	1	5-CH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
Cl	1	5-CH ₃	(CH ₂) ₃ C(=CH ₂)CH(CH ₃) ₂
Cl	1	5-CH ₃	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
Cl	1	5-CH ₃	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
Cl	1	5-CH ₃	(CH ₂) ₂ OC(CH ₃) ₃
Cl	1	5-CH ₃	(CH ₂) ₂ SC(CH ₃) ₃
Cl	1	5-CH ₃	(CH ₂) ₂ SCH(CH ₃) ₂
Cl	1	5-CH ₃	CH ₂ CH=CHC(CH ₃) ₃
Cl	1	5-CH ₃	CH ₂ CH=CHCH(CH ₃) ₂
Cl	1	5-CH ₃	(CH ₂) ₂ S(=O)C(CH ₃) ₃
Cl	1	5-CH ₃	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
Cl	1	5-CH ₃	(CH ₂) ₂ OCH(CH ₃) ₂
Cl	1	5-CH ₃	(CH ₂) ₃ OC(CH ₃) ₃

R^4	m	R^5	R^6
Cl	1	5-CH ₃	(CH ₂) ₃ P(-O)(CH ₃) ₂
Cl	1	5-CH ₃	CH ₂ C(-O)CH ₂ C(CH ₃) ₃
Cl	1	5-CH ₃	CH(CH ₃)(CH ₂) ₃ CH ₃
Cl	1	5-CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
Cl	1	5-CH ₃	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
Cl	1	5-CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
Cl	1	5-CH ₃	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
Cl	1	5-CH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂
Cl	1	5-CH ₃	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
Cl	1	5-CH ₃	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
Cl	1	5-CH ₃	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
Cl	1	5-CH ₃	CH ₂ CH=C(CH ₃) ₂
Cl	1	5-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
Cl	1	5-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Cl
Cl	1	5-CH ₃	CH ₂ CH ₂ CH=C(CH ₃) ₂
Cl	1	5-Cl	(CH ₂) ₄ CH ₃
Cl	1	5-Cl	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
Cl	1	5-Cl	(CH ₂) ₅ CH ₃
Cl	1	5-Cl	(CH ₂) ₆ CH ₃
Cl	1	5-Cl	(CH ₂) ₃ C(CH ₃) ₂ Br
Cl	1	5-Cl	(CH ₂) ₇ CH ₃
Cl	1	5-Cl	(CH ₂) ₃ CH(CH ₃) ₂
Cl	1	5-Cl	(CH ₂) ₃ C(CH ₃) ₃
Cl	1	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃
Cl	1	5-Cl	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
Cl	1	5-Cl	(CH ₂) ₃ C(-CH ₂)CH(CH ₃) ₂
Cl	1	5-Cl	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
Cl	1	5-Cl	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
Cl	1	5-Cl	(CH ₂) ₂ OC(CH ₃) ₃
Cl	1	5-Cl	(CH ₂) ₂ SC(CH ₃) ₃
Cl	1	5-Cl	(CH ₂) ₂ SCH(CH ₃) ₂
Cl	1	5-Cl	CH ₂ CH=CHC(CH ₃) ₃
Cl	1	5-Cl	CH ₂ CH=CHCH(CH ₃) ₂
Cl	1	5-Cl	(CH ₂) ₂ S(-O)C(CH ₃) ₃
Cl	1	5-Cl	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
Cl	1	5-Cl	(CH ₂) ₂ OCH(CH ₃) ₂
Cl	1	5-Cl	(CH ₂) ₃ OC(CH ₃) ₃

R^4	m	R^5	R^6
Cl	1	5-Cl	$(CH_2)_3P(=O)(CH_3)_2$
Cl	1	5-Cl	$CH_2C(=O)CH_2C(CH_3)_3$
Cl	1	5-Cl	$CH(CH_3)(CH_2)_3CH_3$
Cl	1	5-Cl	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
Cl	1	5-Cl	$CH(CH_3)CH_2CH_2C(CH_3)_3$
Cl	1	5-Cl	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
Cl	1	5-Cl	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
Cl	1	5-Cl	$CH(CH_2CH_2CH(CH_3)_2)_2$
Cl	1	5-Cl	$CH_2CH_2CH_2N(CH_3)_2$
Cl	1	5-Cl	$CH_2CH_2N(CH_3)C(CH_3)_3$
Cl	1	5-Cl	$CH_2CH_2N(CH_3)CH(CH_3)_2$
Cl	1	5-Cl	$CH_2CH=C(CH_3)_2$
Cl	1	5-Cl	$(CH_2)_3C(CH_3)_2OCH_3$
Cl	1	5-Cl	$(CH_2)_3C(CH_3)_2Cl$
Cl	1	5-Cl	$CH_2CH_2CH=C(CH_3)_2$
CH ₃	0	-	$(CH_2)_4CH_3$
CH ₃	0	-	$(CH_2)_3C(CH_3)_2OC_2H_5$
CH ₃	0	-	$(CH_2)_5CH_3$
CH ₃	0	-	$(CH_2)_6CH_3$
CH ₃	0	-	$(CH_2)_3C(CH_3)_2Br$
CH ₃	0	-	$(CH_2)_7CH_3$
CH ₃	0	-	$(CH_2)_3CH(CH_3)_2$
CH ₃	0	-	$(CH_2)_3C(CH_3)_3$
CH ₃	0	-	$(CH_2)_3Si(CH_3)_3$
CH ₃	0	-	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
CH ₃	0	-	$(CH_2)_3C(=CH_2)CH(CH_3)_2$
CH ₃	0	-	$(CH_2)_3CH(CH_3)C_2H_5$
CH ₃	0	-	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$
CH ₃	0	-	$(CH_2)_2OC(CH_3)_3$
CH ₃	0	-	$(CH_2)_2SC(CH_3)_3$
CH ₃	0	-	$(CH_2)_2SCH(CH_3)_2$
CH ₃	0	-	$CH_2CH=CHC(CH_3)_3$
CH ₃	0	-	$CH_2CH=CHCH(CH_3)_2$
CH ₃	0	-	$(CH_2)_2S(=O)C(CH_3)_3$
CH ₃	0	-	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
CH ₃	0	-	$(CH_2)_2OCH(CH_3)_2$
CH ₃	0	-	$(CH_2)_3OC(CH_3)_3$

R^4	m	R^5	R^6
CH ₃	0	-	(CH ₂) ₃ P(=O)(CH ₃) ₂
CH ₃	0	-	CH ₂ C(=O)CH ₂ C(CH ₃) ₃
CH ₃	0	-	CH(CH ₃)(CH ₂) ₃ CH ₃
CH ₃	0	-	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	0	-	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
CH ₃	0	-	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	0	-	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	0	-	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂
CH ₃	0	-	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
CH ₃	0	-	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
CH ₃	0	-	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
CH ₃	0	-	CH ₂ CH=C(CH ₃) ₂
CH ₃	0	-	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
CH ₃	0	-	(CH ₂) ₃ C(CH ₃) ₂ Cl
CH ₃	0	-	CH ₂ CH ₂ CH=C(CH ₃) ₂
CF ₃	1	S-CH ₃	(CH ₂) ₄ CH ₃
CF ₃	1	S-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
CF ₃	1	S-CH ₃	(CH ₂) ₅ CH ₃
CF ₃	1	S-CH ₃	(CH ₂) ₆ CH ₃
CF ₃	1	S-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Br
CF ₃	1	S-CH ₃	(CH ₂) ₇ CH ₃
CF ₃	1	S-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂
CF ₃	1	S-CH ₃	(CH ₂) ₃ C(CH ₃) ₃
CF ₃	1	S-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃
CF ₃	1	S-CH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
CF ₃	1	S-CH ₃	(CH ₂) ₃ C(-CH ₂)CH(CH ₃) ₂
CF ₃	1	S-CH ₃	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
CF ₃	1	S-CH ₃	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
CF ₃	1	S-CH ₃	(CH ₂) ₂ OC(CH ₃) ₃
CF ₃	1	S-CH ₃	(CH ₂) ₂ SC(CH ₃) ₃
CF ₃	1	S-CH ₃	(CH ₂) ₂ SCH(CH ₃) ₂
CF ₃	1	S-CH ₃	CH ₂ CH=CHC(CH ₃) ₃
CF ₃	1	S-CH ₃	CH ₂ CH=CHCH(CH ₃) ₂
CF ₃	1	S-CH ₃	(CH ₂) ₂ S(-O)C(CH ₃) ₃
CF ₃	1	S-CH ₃	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
CF ₃	1	S-CH ₃	(CH ₂) ₂ OCH(CH ₃) ₂
CF ₃	1	S-CH ₃	(CH ₂) ₃ OC(CH ₃) ₃

R^4	m	R^5	R^6
CF_3	1	5-CH ₃	$(CH_2)_3P(-O)(CH_3)_2$
CF_3	1	5-CH ₃	$CH_2C(-O)CH_2C(CH_3)_3$
CF_3	1	5-CH ₃	$CH(CH_3)(CH_2)_3CH_3$
CF_3	1	5-CH ₃	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
CF_3	1	5-CH ₃	$CH(CH_3)CH_2CH_2C(CH_3)_3$
CF_3	1	5-CH ₃	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
CF_3	1	5-CH ₃	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
CF_3	1	5-CH ₃	$CH(CH_2CH_2CH(CH_3)_2)_2$
CF_3	1	5-CH ₃	$CH_2CH_2CH_2N(CH_3)_2$
CF_3	1	5-CH ₃	$CH_2CH_2N(CH_3)C(CH_3)_3$
CF_3	1	5-CH ₃	$CH_2CH_2N(CH_3)CH(CH_3)_2$
CF_3	1	5-CH ₃	$CH_2CH-C(CH_3)_2$
CF_3	1	5-CH ₃	$(CH_2)_3C(CH_3)_2OCH_3$
CF_3	1	5-CH ₃	$(CH_2)_3C(CH_3)_2Cl$
CF_3	1	5-CH ₃	$CH_2CH_2CH-C(CH_3)_2$
CH_3	2	5-CH ₃ -6-Cl	$(CH_2)_4CH_3$
CH_3	2	5-CH ₃ -6-Cl	$(CH_2)_3C(CH_3)_2OC_2H_5$
CH_3	2	5-CH ₃ -6-Cl	$(CH_2)_5CH_3$
CH_3	2	5-CH ₃ -6-Cl	$(CH_2)_6CH_3$
CH_3	2	5-CH ₃ -6-Cl	$(CH_2)_3C(CH_3)_2Br$
CH_3	2	5-CH ₃ -6-Cl	$(CH_2)_7CH_3$
CH_3	2	5-CH ₃ -6-Cl	$(CH_2)_3CH(CH_3)_2$
CH_3	2	5-CH ₃ -6-Cl	$(CH_2)_3C(CH_3)_3$
CH_3	2	5-CH ₃ -6-Cl	$(CH_2)_3Si(CH_3)_3$
CH_3	2	5-CH ₃ -6-Cl	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
CH_3	2	5-CH ₃ -6-Cl	$(CH_2)_3C(-CH_2)CH(CH_3)_2$
CH_3	2	5-CH ₃ -6-Cl	$(CH_2)_3CH(CH_3)C_2H_5$
CH_3	2	5-CH ₃ -6-Cl	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$
CH_3	2	5-CH ₃ -6-Cl	$(CH_2)_2OC(CH_3)_3$
CH_3	2	5-CH ₃ -6-Cl	$(CH_2)_2SC(CH_3)_3$
CH_3	2	5-CH ₃ -6-Cl	$(CH_2)_2SCH(CH_3)_2$
CH_3	2	5-CH ₃ -6-Cl	$CH_2CH-CHC(CH_3)_3$
CH_3	2	5-CH ₃ -6-Cl	$CH_2CH-CHCH(CH_3)_2$
CH_3	2	5-CH ₃ -6-Cl	$(CH_2)_2S(-O)C(CH_3)_3$
CH_3	2	5-CH ₃ -6-Cl	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
CH_3	2	5-CH ₃ -6-Cl	$(CH_2)_2OCH(CH_3)_2$
CH_3	2	5-CH ₃ -6-Cl	$(CH_2)_3OC(CH_3)_3$

R^4	m	R^5	R^6
CH ₃	2	5-CH ₃ -6-Cl	(CH ₂) ₃ P(=O)(CH ₃) ₂
CH ₃	2	5-CH ₃ -6-Cl	CH ₂ C(=O)CH ₂ C(CH ₃) ₃
CH ₃	2	5-CH ₃ -6-Cl	CH(CH ₃)(CH ₂) ₃ CH ₃
CH ₃	2	5-CH ₃ -6-Cl	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	2	5-CH ₃ -6-Cl	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
CH ₃	2	5-CH ₃ -6-Cl	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	2	5-CH ₃ -6-Cl	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	2	5-CH ₃ -6-Cl	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂
CH ₃	2	5-CH ₃ -6-Cl	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
CH ₃	2	5-CH ₃ -6-Cl	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
CH ₃	2	5-CH ₃ -6-Cl	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
CH ₃	2	5-CH ₃ -6-Cl	CH ₂ CH=C(CH ₃) ₂
CH ₃	2	5-CH ₃ -6-Cl	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
CH ₃	2	5-CH ₃ -6-Cl	(CH ₂) ₃ C(CH ₃) ₂ Cl
CH ₃	2	5-CH ₃ -6-Cl	CH ₂ CH ₂ CH=C(CH ₃) ₂
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₄ CH ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₅ CH ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₆ CH ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Br
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₇ CH ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ C(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ C(=CH ₂)CH(CH ₃) ₂
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₂ OC(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₂ SC(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₂ SCH(CH ₃) ₂
CH ₃	2	3,5-di-CH ₃	CH ₂ CH=CHC(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	CH ₂ CH=CHCH(CH ₃) ₂
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₂ S(=O)C(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₂ OCH(CH ₃) ₂
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ OC(CH ₃) ₃

R^4	m	R^5	R^6
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ P(=O)(CH ₃) ₂
CH ₃	2	3,5-di-CH ₃	CH ₂ C(=O)CH ₂ C(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	CH(CH ₃)(CH ₂) ₃ CH ₃
CH ₃	2	3,5-di-CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	2	3,5-di-CH ₃	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	2	3,5-di-CH ₃	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	2	3,5-di-CH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂
CH ₃	2	3,5-di-CH ₃	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
CH ₃	2	3,5-di-CH ₃	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
CH ₃	2	3,5-di-CH ₃	CH ₂ CH-C(CH ₃) ₂
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Cl
CH ₃	2	3,5-di-CH ₃	CH ₂ CH ₂ CH-C(CH ₃) ₂
CH ₃	1	3-CH ₃	(CH ₂) ₄ CH ₃
CH ₃	1	3-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
CH ₃	1	3-CH ₃	(CH ₂) ₅ CH ₃
CH ₃	1	3-CH ₃	(CH ₂) ₆ CH ₃
CH ₃	1	3-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Br
CH ₃	1	3-CH ₃	(CH ₂) ₇ CH ₃
CH ₃	1	3-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂
CH ₃	1	3-CH ₃	(CH ₂) ₃ C(CH ₃) ₃
CH ₃	1	3-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃
CH ₃	1	3-CH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
CH ₃	1	3-CH ₃	(CH ₂) ₃ C(-CH ₂)CH(CH ₃) ₂
CH ₃	1	3-CH ₃	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
CH ₃	1	3-CH ₃	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
CH ₃	1	3-CH ₃	(CH ₂) ₂ OC(CH ₃) ₃
CH ₃	1	3-CH ₃	(CH ₂) ₂ SC(CH ₃) ₃
CH ₃	1	3-CH ₃	(CH ₂) ₂ SCH(CH ₃) ₂
CH ₃	1	3-CH ₃	CH ₂ CH=CHC(CH ₃) ₃
CH ₃	1	3-CH ₃	CH ₂ CH=CHCH(CH ₃) ₂
CH ₃	1	3-CH ₃	(CH ₂) ₂ S(-O)C(CH ₃) ₃
CH ₃	1	3-CH ₃	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
CH ₃	1	3-CH ₃	(CH ₂) ₂ OCH(CH ₃) ₂
CH ₃	1	3-CH ₃	(CH ₂) ₃ OC(CH ₃) ₃

R ⁴	m	R ⁵	R ⁶
CH ₃	1	3-CH ₃	(CH ₂) ₃ P(-O)(CH ₃) ₂
CH ₃	1	3-CH ₃	CH ₂ C(-O)CH ₂ C(CH ₃) ₃
CH ₃	1	3-CH ₃	CH(CH ₃)(CH ₂) ₃ CH ₃
CH ₃	1	3-CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	1	3-CH ₃	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
CH ₃	1	3-CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	1	3-CH ₃	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	1	3-CH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂
CH ₃	1	3-CH ₃	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
CH ₃	1	3-CH ₃	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
CH ₃	1	3-CH ₃	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
CH ₃	1	3-CH ₃	CH ₂ CH-C(CH ₃) ₂
CH ₃	1	3-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
CH ₃	1	3-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Cl
CH ₃	1	3-CH ₃	CH ₂ CH ₂ CH-C(CH ₃) ₂
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₄ CH ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₅ CH ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₆ CH ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Br
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₇ CH ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ C(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ C(-CH ₂)CH(CH ₃) ₂
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₂ OC(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₂ SC(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₂ SCH(CH ₃) ₂
CH ₃	3	3,6-di-Cl-5-CH ₃	CH ₂ CH=CHC(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	CH ₂ CH=CHCH(CH ₃) ₂
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₂ S(-O)C(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₂ OCH(CH ₃) ₂
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ OC(CH ₃) ₃

R^4	m	R^5	R^6
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ P(=O)(CH ₃) ₂
CH ₃	3	3,6-di-Cl-5-CH ₃	CH ₂ C(=O)CH ₂ C(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	CH(CH ₃)(CH ₂) ₃ CH ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	3	3,6-di-Cl-5-CH ₃	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	3	3,6-di-Cl-5-CH ₃	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	3	3,6-di-Cl-5-CH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂
CH ₃	3	3,6-di-Cl-5-CH ₃	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
CH ₃	3	3,6-di-Cl-5-CH ₃	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
CH ₃	3	3,6-di-Cl-5-CH ₃	CH ₂ CH=C(CH ₃) ₂
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Cl
CH ₃	3	3,6-di-Cl-5-CH ₃	CH ₂ CH ₂ CH=C(CH ₃) ₂
F	3	3,5,6-tri-F	(CH ₂) ₄ CH ₃
F	3	3,5,6-tri-F	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
F	3	3,5,6-tri-F	(CH ₂) ₅ CH ₃
F	3	3,5,6-tri-F	(CH ₂) ₆ CH ₃
F	3	3,5,6-tri-F	(CH ₂) ₃ C(CH ₃) ₂ Br
F	3	3,5,6-tri-F	(CH ₂) ₇ CH ₃
F	3	3,5,6-tri-F	(CH ₂) ₃ CH(CH ₃) ₂
F	3	3,5,6-tri-F	(CH ₂) ₃ C(CH ₃) ₃
F	3	3,5,6-tri-F	(CH ₂) ₃ Si(CH ₃) ₃
F	3	3,5,6-tri-F	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
F	3	3,5,6-tri-F	(CH ₂) ₃ C(=CH ₂)CH(CH ₃) ₂
F	3	3,5,6-tri-F	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
F	3	3,5,6-tri-F	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
F	3	3,5,6-tri-F	(CH ₂) ₂ OC(CH ₃) ₃
F	3	3,5,6-tri-F	(CH ₂) ₂ SC(CH ₃) ₃
F	3	3,5,6-tri-F	(CH ₂) ₂ SCH(CH ₃) ₂
F	3	3,5,6-tri-F	CH ₂ CH=CHC(CH ₃) ₃
F	3	3,5,6-tri-F	CH ₂ CH=CHCH(CH ₃) ₂
F	3	3,5,6-tri-F	(CH ₂) ₂ S(=O)C(CH ₃) ₃
F	3	3,5,6-tri-F	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
F	3	3,5,6-tri-F	(CH ₂) ₂ OCH(CH ₃) ₂
F	3	3,5,6-tri-F	(CH ₂) ₃ OC(CH ₃) ₃

R^4	m	R^5	R^6
F	3	3,5,6-tri-F	$(CH_2)_3P(=O)(CH_3)_2$
F	3	3,5,6-tri-F	$CH_2C(=O)CH_2C(CH_3)_3$
F	3	3,5,6-tri-F	$CH(CH_3)(CH_2)_3CH_3$
F	3	3,5,6-tri-F	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
F	3	3,5,6-tri-F	$CH(CH_3)CH_2CH_2C(CH_3)_3$
F	3	3,5,6-tri-F	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
F	3	3,5,6-tri-F	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
F	3	3,5,6-tri-F	$CH(CH_2CH_2CH(CH_3)_2)_2$
F	3	3,5,6-tri-F	$CH_2CH_2CH_2N(CH_3)_2$
F	3	3,5,6-tri-F	$CH_2CH_2N(CH_3)C(CH_3)_3$
F	3	3,5,6-tri-F	$CH_2CH_2N(CH_3)CH(CH_3)_2$
F	3	3,5,6-tri-F	$CH_2CH=C(CH_3)_2$
F	3	3,5,6-tri-F	$(CH_2)_3C(CH_3)_2OCH_3$
F	3	3,5,6-tri-F	$(CH_2)_3C(CH_3)_2Cl$
F	3	3,5,6-tri-F	$CH_2CH_2CH=C(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$(CH_2)_4CH_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3C(CH_3)_2OC_2H_5$
Cl	3	3,5,6-tri-Cl	$(CH_2)_5CH_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_6CH_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3C(CH_3)_2Br$
Cl	3	3,5,6-tri-Cl	$(CH_2)_7CH_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3CH(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3C(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3Si(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3C(=CH_2)CH(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3CH(CH_3)C_2H_5$
Cl	3	3,5,6-tri-Cl	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_2OC(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_2SC(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_2SCH(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$CH_2CH=CHC(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$CH_2CH=CHCH(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$(CH_2)_2S(=O)C(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_2OCH(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3OC(CH_3)_3$

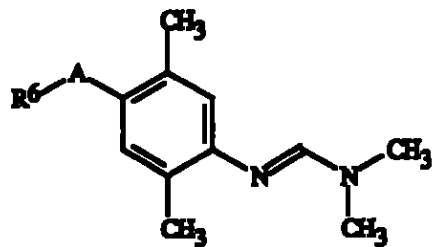
R^4	m	R^5	R^6
Cl	3	3,5,6-tri-Cl	$(CH_2)_3P(=O)(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$CH_2C(=O)CH_2C(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$CH(CH_3)(CH_2)_3CH_3$
Cl	3	3,5,6-tri-Cl	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$CH(CH_3)CH_2CH_2C(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$CH(CH_2CH_2CH(CH_3)_2)_2$
Cl	3	3,5,6-tri-Cl	$CH_2CH_2CH_2N(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$CH_2CH_2N(CH_3)C(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$CH_2CH_2N(CH_3)CH(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$CH_2CH=C(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3C(CH_3)_2OCH_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3C(CH_3)_2Cl$
Cl	3	3,5,6-tri-Cl	$CH_2CH_2CH=C(CH_3)_2$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_4CH_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_3C(CH_3)_2OC_2H_5$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_5CH_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_6CH_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_3C(CH_3)_2Br$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_7CH_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_3CH(CH_3)_2$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_3C(CH_3)_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_3Si(CH_3)_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_3C(-CH_2)CH(CH_3)_2$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_3CH(CH_3)C_2H_5$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_2OC(CH_3)_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_2SC(CH_3)_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_2SCH(CH_3)_2$
CH ₃	1	5-CH(CH ₃) ₂	$CH_2CH=CHC(CH_3)_3$
CH ₃	1	5-CH(CH ₃) ₂	$CH_2CH=CHCH(CH_3)_2$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_2S(-O)C(CH_3)_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_2OCH(CH_3)_2$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_3OC(CH_3)_3$

R^4	m	R^5	R^6
CH_3	1	$5-CH(CH_3)_2$	$(CH_2)_3P(=O)(CH_3)_2$
CH_3	1	$5-CH(CH_3)_2$	$CH_2C(=O)CH_2C(CH_3)_3$
CH_3	1	$5-CH(CH_3)_2$	$CH(CH_3)(CH_2)_3CH_3$
CH_3	1	$5-CH(CH_3)_2$	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
CH_3	1	$5-CH(CH_3)_2$	$CH(CH_3)CH_2CH_2C(CH_3)_3$
CH_3	1	$5-CH(CH_3)_2$	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
CH_3	1	$5-CH(CH_3)_2$	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
CH_3	1	$5-CH(CH_3)_2$	$CH(CH_2CH_2CH(CH_3)_2)_2$
CH_3	1	$5-CH(CH_3)_2$	$CH_2CH_2CH_2N(CH_3)_2$
CH_3	1	$5-CH(CH_3)_2$	$CH_2CH_2N(CH_3)C(CH_3)_3$
CH_3	1	$5-CH(CH_3)_2$	$CH_2CH_2N(CH_3)CH(CH_3)_2$
CH_3	1	$5-CH(CH_3)_2$	$CH_2CH=C(CH_3)_2$
CH_3	1	$5-CH(CH_3)_2$	$(CH_2)_3C(CH_3)_2OCH_3$
CH_3	1	$5-CH(CH_3)_2$	$(CH_2)_3C(CH_3)_2Cl$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_4CH_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3C(CH_3)_2OC_2H_5$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_5CH_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_6CH_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3C(CH_3)_2Br$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_7CH_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3CH(CH_3)_2$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3C(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3Si(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3C(=CH_2)CH(CH_3)_2$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3CH(CH_3)C_2H_5$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_2OC(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_2SC(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_2SCH(CH_3)_2$
CH_3	1	$5-C(CH_3)_3$	$CH_2CH=CHC(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$CH_2CH=CHCH(CH_3)_2$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_2S(=O)C(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_2OCH(CH_3)_2$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3OC(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3P(=O)(CH_3)_2$

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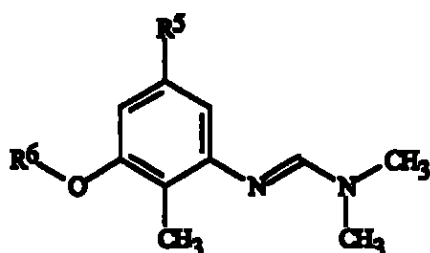
R^4	m	R^5	R^6
CH ₃	1	5-C(CH ₃) ₃	CH ₂ C(=O)CH ₂ C(CH ₃) ₃
CH ₃	1	5-C(CH ₃) ₃	CH(CH ₃)(CH ₂) ₃ CH ₃
CH ₃	1	5-C(CH ₃) ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	1	5-C(CH ₃) ₃	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
CH ₃	1	5-C(CH ₃) ₃	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	1	5-C(CH ₃) ₃	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	1	5-C(CH ₃) ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂
CH ₃	1	5-C(CH ₃) ₃	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
CH ₃	1	5-C(CH ₃) ₃	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
CH ₃	1	5-C(CH ₃) ₃	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
CH ₃	1	5-C(CH ₃) ₃	CH ₂ CH=C(CH ₃) ₂
CH ₃	1	5-C(CH ₃) ₃	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
CH ₃	1	5-C(CH ₃) ₃	(CH ₂) ₃ C(CH ₃) ₂ Cl

TABLE 5



Δ	R^6
NH	C(=O)CH ₂ SC(CH ₃) ₃
NH	C(=O)CH ₂ S(=O)C(CH ₃) ₃
NH	C(=O)CH ₂ S(=O) ₂ C(CH ₃) ₃
NH	C(=O)OCH ₂ C(CH ₃) ₃
NH	C(=O)NHCH ₂ C(CH ₃) ₃
NH	C(=O)N(CH ₃)CH ₂ C(CH ₃) ₃
NH	C(=O)OCH ₂ CH(CH ₃) ₂
NH	C(=O)NHCH ₂ CH(CH ₃) ₂
NH	C(=O)N(CH ₃)CH ₂ CH(CH ₃) ₂
O	C(CH ₃) ₂ CH ₂ CH ₂ CH(CH ₃) ₂
O	C(CH ₃)(CH ₂ CH ₂ CH ₂ CH ₃) ₂
O	C(CH ₃)(CH ₂ CH ₂ CH ₃) ₂

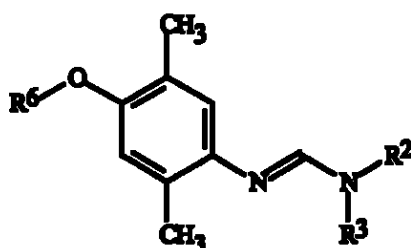
TABLE 6



R ⁵	R ⁶
5-CH ₃	(CH ₂) ₄ CH ₃
5-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
5-CH ₃	(CH ₂) ₅ CH ₃
5-CH ₃	(CH ₂) ₆ CH ₃
5-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Br
5-CH ₃	(CH ₂) ₇ CH ₃
5-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂
5-CH ₃	(CH ₂) ₃ C(CH ₃) ₃
5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃
5-CH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
5-CH ₃	(CH ₂) ₃ C(=CH ₂)CH(CH ₃) ₂
5-CH ₃	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
5-CH ₃	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
5-CH ₃	(CH ₂) ₂ OC(CH ₃) ₃
5-CH ₃	(CH ₂) ₂ SC(CH ₃) ₃
5-CH ₃	(CH ₂) ₂ SCH(CH ₃) ₂
5-CH ₃	CH ₂ CH=CHC(CH ₃) ₃
5-CH ₃	CH ₂ CH=CHCH(CH ₃) ₂
5-CH ₃	(CH ₂) ₂ S(=O)C(CH ₃) ₃
5-CH ₃	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
5-CH ₃	(CH ₂) ₂ OCH(CH ₃) ₂
5-CH ₃	(CH ₂) ₃ OC(CH ₃) ₃
5-CH ₃	(CH ₂) ₃ P(=O)(CH ₃) ₂
5-CH ₃	CH ₂ C(=O)CH ₂ C(CH ₃) ₃
5-CH ₃	CH(CH ₃)(CH ₂) ₃ CH ₃
5-CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
5-CH ₃	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
5-CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
5-CH ₃	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
5-CH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂

R^5	R^6
5-CH ₃	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
5-CH ₃	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
5-CH ₃	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
5-CH ₃	CH ₂ CH=C(CH ₃) ₂
5-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
5-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Cl
5-CH ₃	CH ₂ CH ₂ CH=C(CH ₃) ₂

TABLE 7



$R^2 + R^3$	R^6
-(CH ₂) ₄ -	(CH ₂) ₄ CH ₃
-(CH ₂) ₄ -	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
-(CH ₂) ₄ -	(CH ₂) ₅ CH ₃
-(CH ₂) ₄ -	(CH ₂) ₆ CH ₃
-(CH ₂) ₄ -	(CH ₂) ₃ C(CH ₃) ₂ Br
-(CH ₂) ₄ -	(CH ₂) ₇ CH ₃
-(CH ₂) ₄ -	(CH ₂) ₃ CH(CH ₃) ₂
-(CH ₂) ₄ -	(CH ₂) ₃ C(CH ₃) ₃
-(CH ₂) ₄ -	(CH ₂) ₃ Si(CH ₃) ₃
-(CH ₂) ₄ -	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
-(CH ₂) ₄ -	(CH ₂) ₃ C(-CH ₂)CH(CH ₃) ₂
-(CH ₂) ₄ -	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
-(CH ₂) ₄ -	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
-(CH ₂) ₄ -	(CH ₂) ₂ OC(CH ₃) ₃
-(CH ₂) ₄ -	(CH ₂) ₂ SC(CH ₃) ₃
-(CH ₂) ₄ -	(CH ₂) ₂ SCH(CH ₃) ₂
-(CH ₂) ₄ -	CH ₂ CH=CHC(CH ₃) ₃
-(CH ₂) ₄ -	CH ₂ CH=CHCH(CH ₃) ₂
-(CH ₂) ₄ -	(CH ₂) ₂ S(-O)C(CH ₃) ₃
-(CH ₂) ₄ -	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
-(CH ₂) ₄ -	(CH ₂) ₂ OCH(CH ₃) ₂

$R^2 + R^3$	R^6
-(CH ₂) ₄ -	(CH ₂) ₃ OC(CH ₃) ₃
-(CH ₂) ₄ -	(CH ₂) ₃ P(=O)(CH ₃) ₂
-(CH ₂) ₄ -	CH ₂ C(=O)CH ₂ C(CH ₃) ₃
-(CH ₂) ₄ -	CH(CH ₃)(CH ₂) ₃ CH ₃
-(CH ₂) ₄ -	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
-(CH ₂) ₄ -	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
-(CH ₂) ₄ -	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
-(CH ₂) ₄ -	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
-(CH ₂) ₄ -	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂
-(CH ₂) ₄ -	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
-(CH ₂) ₄ -	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
-(CH ₂) ₄ -	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
-(CH ₂) ₄ -	CH ₂ CH=C(CH ₃) ₂
-(CH ₂) ₄ -	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
-(CH ₂) ₄ -	(CH ₂) ₃ C(CH ₃) ₂ Cl
-(CH ₂) ₄ -	CH ₂ CH ₂ CH-C(CH ₃) ₂
-CH ₂ CH ₂ OCH ₂ CH ₂ -	(CH ₂) ₄ CH ₃
-CH ₂ CH ₂ OCH ₂ CH ₂ -	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
-CH ₂ CH ₂ OCH ₂ CH ₂ -	(CH ₂) ₅ CH ₃
-CH ₂ CH ₂ OCH ₂ CH ₂ -	(CH ₂) ₆ CH ₃
-CH ₂ CH ₂ OCH ₂ CH ₂ -	(CH ₂) ₃ C(CH ₃) ₂ Br
-CH ₂ CH ₂ OCH ₂ CH ₂ -	(CH ₂) ₇ CH ₃
-CH ₂ CH ₂ OCH ₂ CH ₂ -	(CH ₂) ₃ CH(CH ₃) ₂
-CH ₂ CH ₂ OCH ₂ CH ₂ -	(CH ₂) ₃ C(CH ₃) ₃
-CH ₂ CH ₂ OCH ₂ CH ₂ -	(CH ₂) ₃ Si(CH ₃) ₃
-CH ₂ CH ₂ OCH ₂ CH ₂ -	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
-CH ₂ CH ₂ OCH ₂ CH ₂ -	(CH ₂) ₃ C(=CH ₂)CH(CH ₃) ₂
-CH ₂ CH ₂ OCH ₂ CH ₂ -	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
-CH ₂ CH ₂ OCH ₂ CH ₂ -	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
-CH ₂ CH ₂ OCH ₂ CH ₂ -	(CH ₂) ₂ OC(CH ₃) ₃
-CH ₂ CH ₂ OCH ₂ CH ₂ -	(CH ₂) ₂ SC(CH ₃) ₃
-CH ₂ CH ₂ OCH ₂ CH ₂ -	(CH ₂) ₂ SCH(CH ₃) ₂
-CH ₂ CH ₂ OCH ₂ CH ₂ -	CH ₂ CH=CHC(CH ₃) ₃
-CH ₂ CH ₂ OCH ₂ CH ₂ -	CH ₂ CH=CHCH(CH ₃) ₂
-CH ₂ CH ₂ OCH ₂ CH ₂ -	(CH ₂) ₂ S(-O)C(CH ₃) ₃
-CH ₂ CH ₂ OCH ₂ CH ₂ -	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
-CH ₂ CH ₂ OCH ₂ CH ₂ -	(CH ₂) ₂ OCH(CH ₃) ₂

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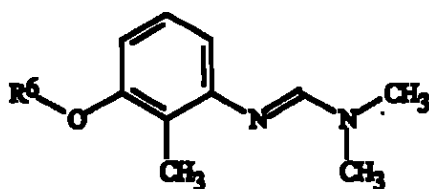
 $R^2 + R^3$

$-(CH_2)_5-$
 $-(CH_2)_5-$
 $-(CH_2)_5-$
 $-(CH_2)_5-$
 $-(CH_2)_5-$
 $-(CH_2)_5-$
 $-(CH_2)_5-$
 $-(CH_2)_5-$
 $-(CH_2)_5-$
 $-(CH_2)_5-$
 $-(CH_2)_5-$
 $-(CH_2)_5-$
 $-(CH_2)_5-$
 $-(CH_2)_5-$
 $-(CH_2)_5-$

 R^6

$(CH_2)_3OC(CH_3)_3$
 $(CH_2)_3P(-O)(CH_3)_2$
 $CH_2C(-O)CH_2C(CH_3)_3$
 $CH(CH_3)(CH_2)_3CH_3$
 $CH(CH_3)CH_2CH_2CH(CH_3)_2$
 $CH(CH_3)CH_2CH_2C(CH_3)_3$
 $CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
 $CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
 $CH(CH_2CH_2CH(CH_3)_2)_2$
 $CH_2CH_2CH_2N(CH_3)_2$
 $CH_2CH_2N(CH_3)C(CH_3)_3$
 $CH_2CH_2N(CH_3)CH(CH_3)_2$
 $CH_2CH=CH(CH_3)_2$
 $(CH_2)_3C(CH_3)_2OCH_3$
 $(CH_2)_3C(CH_3)_2Cl$
 $CH_2CH_2CH=CH(CH_3)_2$

TABLE 8

 R^6

$(CH_2)_4CH_3$
 $(CH_2)_3C(CH_3)_2OC_2H_5$
 $(CH_2)_5CH_3$
 $(CH_2)_6CH_3$
 $(CH_2)_3C(CH_3)_2Br$
 $(CH_2)_7CH_3$
 $(CH_2)_3CH(CH_3)_2$
 $(CH_2)_3C(CH_3)_3$
 $(CH_2)_3Si(CH_3)_3$
 $(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
 $(CH_2)_3C(-CH_2)CH(CH_3)_2$
 $(CH_2)_3CH(CH_3)C_2H_5$
 $(CH_2)_2OSi(CH_3)_2C(CH_3)_3$

 R^6

$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
 $(CH_2)_2OCH(CH_3)_2$
 $(CH_2)_3OC(CH_3)_3$
 $(CH_2)_3P(-O)(CH_3)_2$
 $CH_2C(-O)CH_2C(CH_3)_3$
 $CH(CH_3)(CH_2)_3CH_3$
 $CH(CH_3)CH_2CH_2CH(CH_3)_2$
 $CH(CH_3)CH_2CH_2C(CH_3)_3$
 $CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
 $CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
 $CH(CH_2CH_2CH(CH_3)_2)_2$
 $CH_2CH_2CH_2N(CH_3)_2$
 $CH_2CH_2N(CH_3)C(CH_3)_3$

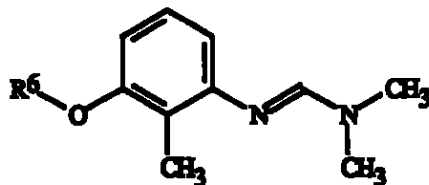
R² + R³

-(CH₂)₅-
 -(CH₂)₅-
 -(CH₂)₅-
 -(CH₂)₅-
 -(CH₂)₅-
 -(CH₂)₅-
 -(CH₂)₅-
 -(CH₂)₅-
 -(CH₂)₅-
 -(CH₂)₅-
 -(CH₂)₅-
 -(CH₂)₅-
 -(CH₂)₅-
 -(CH₂)₅-
 -(CH₂)₅-
 -(CH₂)₅-

R⁶

(CH₂)₃OC(CH₃)₃
 (CH₂)₃P(-O)(CH₃)₂
 CH₂C(-O)CH₂C(CH₃)₃
 CH(CH₃)(CH₂)₃CH₃
 CH(CH₃)CH₂CH₂CH(CH₃)₂
 CH(CH₃)CH₂CH₂C(CH₃)₃
 CH(C₂H₅)CH₂CH₂CH(CH₃)₂
 CH(CH₂CH₂CH₃)CH₂CH₂CH(CH₃)₂
 CH(CH₂CH₂CH(CH₃)₂)₂
 CH₂CH₂CH₂N(CH₃)₂
 CH₂CH₂N(CH₃)C(CH₃)₃
 CH₂CH₂N(CH₃)CH(CH₃)₂
 CH₂CH=C(CH₃)₂
 (CH₂)₃C(CH₃)₂OCH₃
 (CH₂)₃C(CH₃)₂Cl
 CH₂CH₂CH=C(CH₃)₂

TABLE 8



R⁶

(CH₂)₄CH₃
 (CH₂)₃C(CH₃)₂OC₂H₅
 (CH₂)₅CH₃
 (CH₂)₆CH₃
 (CH₂)₃C(CH₃)₂Br
 (CH₂)₇CH₃
 (CH₂)₃CH(CH₃)₂
 (CH₂)₃C(CH₃)₃
 (CH₂)₃Si(CH₃)₃
 (CH₂)₂CH(CH₃)CH₂C(CH₃)₃
 (CH₂)₃C(-CH₂)CH(CH₃)₂
 (CH₂)₃CH(CH₃)C₂H₅
 (CH₂)₂OSi(CH₃)₂C(CH₃)₃

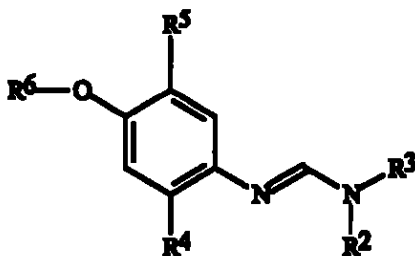
R⁶

(CH₂)₃OSi(CH₃)₂C(CH₃)₃
 (CH₂)₂OCH(CH₃)₂
 (CH₂)₃OC(CH₃)₃
 (CH₂)₃P(-O)(CH₃)₂
 CH₂C(-O)CH₂C(CH₃)₃
 CH(CH₃)(CH₂)₃CH₃
 CH(CH₃)CH₂CH₂CH(CH₃)₂
 CH(CH₃)CH₂CH₂C(CH₃)₃
 CH(C₂H₅)CH₂CH₂CH(CH₃)₂
 CH(CH₂CH₂CH₃)CH₂CH₂CH(CH₃)₂
 CH(CH₂CH₂CH(CH₃)₂)₂
 CH₂CH₂CH₂N(CH₃)₂
 CH₂CH₂N(CH₃)C(CH₃)₃

R^6
 $(CH_2)_2OC(CH_3)_3$
 $(CH_2)_2SC(CH_3)_3$
 $(CH_2)_2SCH(CH_3)_2$
 $CH_2CH=CHC(CH_3)_3$
 $CH_2CH=CHCH(CH_3)_2$
 $(CH_2)_2S(-O)C(CH_3)_3$

R^6
 $CH_2CH_2N(CH_3)CH(CH_3)_2$
 $CH_2CH=C(CH_3)_2$
 $(CH_2)_3C(CH_3)_2OCH_3$
 $(CH_2)_3C(CH_3)_2Cl$
 $CH_2CH_2CH=C(CH_3)_2$

TABLE 9



R^6	R^2	R^3	R^4	R^5
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	CH ₃	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	CH ₃	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	CH ₃	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH ₃	CH ₃	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	C ₂ H ₅	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	C ₂ H ₅	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	C ₂ H ₅	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH ₃	C ₂ H ₅	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	CH(CH ₃) ₂	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	CH(CH ₃) ₂	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	CH(CH ₃) ₂	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH ₃	CH(CH ₃) ₂	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	<i>o</i> -Pr	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	<i>o</i> -Pr	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	<i>o</i> -Pr	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH ₃	<i>o</i> -Pr	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2Si(CH_3)_3$	C ₂ H ₅	C ₂ H ₅	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2C(CH_3)_3$	C ₂ H ₅	C ₂ H ₅	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2CH(CH_3)_2$	C ₂ H ₅	C ₂ H ₅	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C ₂ H ₅	C ₂ H ₅	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	CH ₂ CH=CH ₂	CH ₃	C ₂ H ₅
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	CH ₂ CH=CH ₂	CH ₃	C ₂ H ₅

R^6	R^2	R^3	R^4	R^5
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	C_2H_5
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	C_2H_5
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	C_2H_5
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	C_2H_5
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2O\equiv CH$	CH_3	C_2H_5
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2O\equiv CH$	CH_3	C_2H_5
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	C_2H_5
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	C_2H_5
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	Br
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	Br
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	Br
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	Br
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	Br
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	Br
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$n\text{-Pr}$	CH_3	Br
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$n\text{-Pr}$	CH_3	Br
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$n\text{-Pr}$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$n\text{-Pr}$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	Br
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	Br
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	Br
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	Br
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	Br
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	Br
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2C\equiv CH$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	Br

R^6	R^2	R^3	R^4	R^5
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	CH_2F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	CH_2F
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	CH_2F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	CH_2F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	CH_2F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	CH_2F
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	CH_2F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	CH_2F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CH_2F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CH_2F
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	CH_2F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	CH_2F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$n\text{-Pr}$	CH_3	CH_2F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$n\text{-Pr}$	CH_3	CH_2F
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$n\text{-Pr}$	CH_3	CH_2F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$n\text{-Pr}$	CH_3	CH_2F
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	CH_2F
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	CH_2F
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	CH_2F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	CH_2F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	CH_2F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	CH_2F
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	CH_2F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	CH_2F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C=CH$	CH_3	CH_2F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C=CH$	CH_3	CH_2F
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2C=CH$	CH_3	CH_2F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C=CH$	CH_3	CH_2F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	CH_2F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	CH_2F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	CHF_2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	CHF_2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	CHF_2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	CHF_2

R^6	R^2	R^3	R^4	R^5
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CHF_2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CHF_2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	CHF_2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	CHF_2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>n</i> -Pr	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	CHF_2
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	CHF_2
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	CHF_2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	CHF_2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	CHF_2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	CHF_2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2C\equiv CH$	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	CHF_2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	CF_3
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	CF_3
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	CF_3
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	CF_3
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CF_3
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CF_3
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	CF_3

R^6	R^2	R^3	R^4	R^5
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	CF_3
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>n</i> -Pr	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	CF_3
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	CF_3
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	CF_3
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	CF_3
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2O=CH$	CH_3	CF_3
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2O=CH$	CH_3	CF_3
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2O=CH$	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2O=CH$	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	CF_3
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	CH_2Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	CH_2Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	CH_2Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	CH_2Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CH_2Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CH_2Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	CH_2Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	CH_2Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>n</i> -Pr	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	CH_2Cl
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	CH_2Cl
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	CH_2Cl

R^6	R^2	R^3	R^4	R^5
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	CH_2Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	CH_2Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2O=CH$	CH_3	CH_2Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2O=CH$	CH_3	CH_2Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2O=CH$	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2O=CH$	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	CH_2Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	CH_2Br
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	CH_2Br
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	CH_2Br
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	CH_2Br
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CH_2Br
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CH_2Br
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$n\text{-Pr}$	CH_3	CH_2Br
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$n\text{-Pr}$	CH_3	CH_2Br
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$n\text{-Pr}$	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$n\text{-Pr}$	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	CH_2Br
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	CH_2Br
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	CH_2Br
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	CH_2Br
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2O=CH$	CH_3	CH_2Br
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2O=CH$	CH_3	CH_2Br
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2O=CH$	CH_3	CH_2Br

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R^6	R^2	R^3	R^4	R^5
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2O=CH$	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	CH_2Br
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	C_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	C_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	C_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	C_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	C_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	C_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$n-Pr$	C_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$n-Pr$	C_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$n-Pr$	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$n-Pr$	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	C_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	C_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	C_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	C_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2O=CH$	C_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2O=CH$	C_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2O=CH$	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2O=CH$	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	C_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_2Br	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_2Br	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_2Br	Cl

R ⁶	R ²	R ³	R ⁴	R ⁵
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH(CH ₃) ₂	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	<i>n</i> -Pr	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	<i>n</i> -Pr	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	<i>n</i> -Pr	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	<i>n</i> -Pr	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	C ₂ H ₅	C ₂ H ₅	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C=CH	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C=CH	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ C=CH	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C=CH	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₂ Br	F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₂ Br	F
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₃	CH ₂ Br	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₃	CH ₂ Br	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₂ Br	F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₂ Br	F
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₂ Br	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	CH ₂ Br	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₂ Br	F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₂ Br	F
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH(CH ₃) ₂	CH ₂ Br	F

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R^6	R^2	R^3	R^4	R^5
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_2Br	F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_2Br	F
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>n</i> -Pr	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_2Br	F
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_2Br	F
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_2Br	F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_2Br	F
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2O=CH$	CH_2Br	F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2O=CH$	CH_2Br	F
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2O=CH$	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2O=CH$	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_2Br	F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	C_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	C_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	C_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	C_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>n</i> -Pr	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	C_2H_5	F

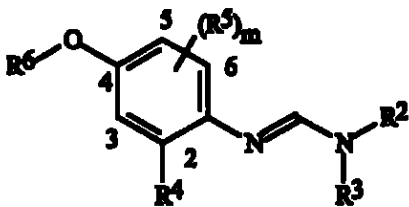
R^6	R^2	R^3	R^4	R^5
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	C_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2O=CH$	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2O=CH$	C_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2O=CH$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2O=CH$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_2SCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_2SCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_2SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_2SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_2SCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_2SCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_2SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_2SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_2SCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_2SCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_2SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_2SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_2SCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_2SCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	CH_2SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>n</i> -Pr	CH_2SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_2SCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_2SCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_2SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_2SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_2SCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_2SCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_2SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_2SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2O=CH$	CH_2SCH_3	Cl

R^6	R^2	R^3	R^4	R^5
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2O=CH$	CH_2SCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2O=CH$	CH_2SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2O=CH$	CH_2SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_2SCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_2SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_2OCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_2OCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_2OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_2OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_2OCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_2OCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_2OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_2OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_2OCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_2OCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_2OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_2OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$o\text{-Pr}$	CH_2OCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$o\text{-Pr}$	CH_2OCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$o\text{-Pr}$	CH_2OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$o\text{-Pr}$	CH_2OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_2OCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_2OCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_2OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_2OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_2OCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_2OCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_2OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_2OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2O=CH$	CH_2OCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2O=CH$	CH_2OCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2O=CH$	CH_2OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2O=CH$	CH_2OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_2OCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_2OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	CN
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	CN

R^6	R^2	R^3	R^4	R^5
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	CN
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	CN
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CN
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CN
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$n\text{-Pr}$	CH_3	CN
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$n\text{-Pr}$	CH_3	CN
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$n\text{-Pr}$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$n\text{-Pr}$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	CN
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	CN
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	CN
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	CN
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2O=CH$	CH_3	CN
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2O=CH$	CH_3	CN
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2O=CH$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2O=CH$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	CN
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	CHO
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	CHO
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	CHO
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	CHO
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CHO

R ⁶	R ²	R ³	R ⁴	R ⁵
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	C ₂ H ₅	C ₂ H ₅	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C≡CH	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C≡CH	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ C≡CH	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C≡CH	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₂ Br	C≡N

TABLE 10



R ⁶	R ²	R ³	R ⁴	R ⁵	m
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₃	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₃	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH(CH ₃) ₂	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	<i>o</i> -Pr	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	<i>o</i> -Pr	CH ₃	5,6-di-Cl	2

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>o</i> -Pr	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2C\equiv CH$	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	CH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	CH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_3$	CH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	CH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	CH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_2CH_3$	CH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	CH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>o</i> -Pr	CH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	5-Cl	1

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2$	CH_3	$CH_2C\equiv CH$	CH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	CH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	$S-Cl$	1
$CH(CH_3)CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$n-Pr$	CH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$n-Pr$	CH_3	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$n-Pr$	CH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$n-Pr$	CH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	CH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	CH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_3$	CH_3	$S-F$	1

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	CH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	CH_3	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	CH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_2CH_3$	CH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	CH_3	S-i-Pr	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	CH_3	S-i-Pr	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_3$	CH_3	S-i-Pr	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_2CH_3$	CH_3	S-i-Pr	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	S-i-Pr	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	S-i-Pr	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	S-i-Pr	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	S-i-Pr	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	S-i-Pr	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	S-i-Pr	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	S-i-Pr	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	S-i-Pr	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	c-Pr	CH_3	S-i-Pr	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	c-Pr	CH_3	S-i-Pr	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	c-Pr	CH_3	S-i-Pr	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	c-Pr	CH_3	S-i-Pr	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	S-i-Pr	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	S-i-Pr	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	S-i-Pr	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	S-i-Pr	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	S-i-Pr	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	S-i-Pr	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	S-i-Pr	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	S-i-Pr	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	S-i-Pr	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	S-i-Pr	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2C\equiv CH$	CH_3	S-i-Pr	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	CH_3	S-i-Pr	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	S-i-Pr	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	S-i-Pr	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	$SCCH_3$	S-Cl	1

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	SCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	SCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	SCH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	SCH_3	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	SCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	SCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	SCH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	SCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	SCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	SCH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	SCH_3	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	SCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>n</i> -Pr	SCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	SCH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	SCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	SCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SCH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	SCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	SCH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	SCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	SCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	SCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_3$	SCH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	SCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	SCH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	SCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_2CH_3$	SCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	SCH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	SCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	OCH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	OCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	OCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	OCH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	OCH_3	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	OCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	OCH_3	5-Cl	1

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	OCH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	OCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	OCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	α -Pr	OCH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	α -Pr	OCH_3	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	α -Pr	OCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	α -Pr	OCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	OCH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	OCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	OCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OCH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	OCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	OCH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	OCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	OCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	OCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_3$	OCH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	OCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	OCH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	OCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_2CH_3$	OCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	OCH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	OCH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	α -Pr	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	α -Pr	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	α -Pr	OC_2H_5	5-Cl	1

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>n</i> -Pr	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C=CH$	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C=CH$	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C=CH$	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_3$	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_2CH_3$	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	OC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	SCH_3	5-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	SCH_3	5-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	SCH_3	5-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	SCH_3	5-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	SCH_3	5-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	SCH_3	5-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	SCH_3	5-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	SCH_3	5-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	SCH_3	5-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	SCH_3	5-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	SCH_3	5-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	SCH_3	5-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	SCH_3	5-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>n</i> -Pr	SCH_3	5-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	SCH_3	5-F	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	SCH_3	5-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	SCH_3	5-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SCH_3	5-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SCH_3	5-F	1

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	SCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	SCH_3	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	SCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	SCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	SCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_3$	SCH_3	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	SCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	SCH_3	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	SCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_2CH_3$	SCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	SCH_3	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	SCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	OCH_3	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	OCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	OCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	OCH_3	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	OCH_3	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	OCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	OCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	OCH_3	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	OCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	OCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	OCH_3	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	OCH_3	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	OCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>n</i> -Pr	OCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	OCH_3	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	OCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	OCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OCH_3	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	OCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	OCH_3	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	OCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	OCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	OCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_3$	OCH_3	S-F	1

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	OCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	OCH_3	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	OCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_2CH_3$	OCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	OCH_3	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	OCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	OC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	OC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	OC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	OC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	OC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	OC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	OC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	OC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	OC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	OC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$n\text{-Pr}$	OC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$n\text{-Pr}$	OC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$n\text{-Pr}$	OC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$n\text{-Pr}$	OC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	OC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	OC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	OC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	OC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	OC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	OC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	OC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	OC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_3$	OC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	OC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	OC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	OC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_2CH_3$	OC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	OC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	OC_2H_5	S-F	1

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>n</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_3$	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_2CH_3$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	SC_2H_5	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	SC_2H_5	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	SC_2H_5	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	SC_2H_5	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	SC_2H_5	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	SC_2H_5	S-Cl	1

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>n</i> -Pr	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_3$	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_2CH_3$	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	SC_2H_5	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>n</i> -Pr	CH_3	5,6-di- CH_3	2

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2C\equiv CH$	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	5,6-di- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	Cl	5- CH_3	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	Cl	5- CH_3	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	Cl	5- CH_3	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	Cl	5- CH_3	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	Cl	5- CH_3	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	Cl	5- CH_3	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	Cl	5- CH_3	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	Cl	5- CH_3	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	Cl	5- CH_3	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	Cl	5- CH_3	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	Cl	5- CH_3	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>n</i> -Pr	Cl	5- CH_3	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	Cl	5- CH_3	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	Cl	5- CH_3	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	Cl	5- CH_3	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	Cl	5- CH_3	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	Cl	5- CH_3	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	Cl	5- CH_3	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	Cl	5- CH_3	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	Cl	5- CH_3	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	Cl	5- CH_3	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	Cl	5- CH_3	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2C\equiv CH$	Cl	5- CH_3	1

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH ₃	$CH_2C=CH$	Cl	5-CH ₃	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	CH_2CH_2F	Cl	5-CH ₃	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	CH_2CH_2F	Cl	5-CH ₃	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	C_2H_5	Cl	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	C_2H_5	Cl	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	C_2H_5	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH ₃	C_2H_5	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	$CH(CH_3)_2$	Cl	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	$CH(CH_3)_2$	Cl	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	$CH(CH_3)_2$	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH ₃	$CH(CH_3)_2$	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	<i>o</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	<i>o</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	<i>o</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH ₃	<i>o</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	Cl	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	Cl	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	$CH_2CH=CH_2$	Cl	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	$CH_2CH=CH_2$	Cl	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	$CH_2CH=CH_2$	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH ₃	$CH_2CH=CH_2$	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	$CH_2C=CH$	Cl	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	$CH_2C=CH$	Cl	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	$CH_2C=CH$	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH ₃	$CH_2C=CH$	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	CH_2CH_2F	Cl	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	CH_2CH_2F	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	C_2H_5	CH ₃	5-CH ₃ -6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	C_2H_5	CH ₃	5-CH ₃ -6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	C_2H_5	CH ₃	5-CH ₃ -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH ₃	C_2H_5	CH ₃	5-CH ₃ -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	$CH(CH_3)_2$	CH ₃	5-CH ₃ -6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	$CH(CH_3)_2$	CH ₃	5-CH ₃ -6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	$CH(CH_3)_2$	CH ₃	5-CH ₃ -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH ₃	$CH(CH_3)_2$	CH ₃	5-CH ₃ -6-Cl	2

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>o</i> -Pr	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2O=CH$	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2O=CH$	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2O=CH$	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2O=CH$	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	Cl	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	Cl	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	Cl	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	Cl	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	5- CH_3 -6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	5- CH_3 -6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	5- CH_3 -6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	5- CH_3 -6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	5- CH_3 -6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	5- CH_3 -6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	5- CH_3 -6-Br	2

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PCT/US03/13371

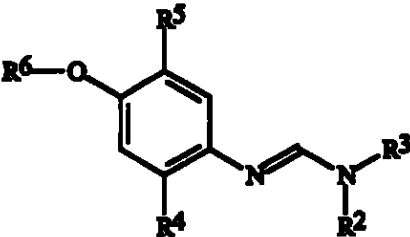
R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>o</i> -Pr	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2C\equiv CH$	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	5-CH ₃ -6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	5-Cl-6-Br	2

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>n</i> -Pr	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2O=CH$	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2O=CH$	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2O=CH$	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2O=CH$	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>n</i> -Pr	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5-F-6-Cl	2

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2C\equiv CH$	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$n\text{-Pr}$	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$n\text{-Pr}$	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$n\text{-Pr}$	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$n\text{-Pr}$	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2C\equiv CH$	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	CH_3	5-F-6-Br	2

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	5-F-6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	5-F-6-Br	2

TABLE 11



R^6	R^2+R^3	R^4	R^5
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	CH_3
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	CH_3
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	CH_3	CH_3
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	CH_3	CH_3
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	CH_3	CH_3
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	CH_3	CH_3
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	CH_3	CH_3
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	CH_3	CH_3
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH-CHCH_2-$	CH_3	CH_3
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH-CHCH_2-$	CH_3	CH_3
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH-CHCH_2-$	CH_3	CH_3
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH-CHCH_2-$	CH_3	CH_3
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	CH_3
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	CH_3
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	CH_3	CH_3
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	CH_3	CH_3
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	CH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	CH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	CH_3	Cl

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R^6	R^2+R^3	R^4	R^5
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH=CHCH_2-$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH=CHCH_2-$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	CH_3	Br
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	CH_3	Br
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_3	Br
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_3	Br
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH=CHCH_2-$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH=CHCH_2-$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_3	<i>i</i> -Pr
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_3	<i>i</i> -Pr
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	CH_3	<i>i</i> -Pr
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	CH_3	<i>i</i> -Pr
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	<i>i</i> -Pr
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	<i>i</i> -Pr
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	CH_3	<i>i</i> -Pr
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	CH_3	<i>i</i> -Pr

R^6	R^2+R^3	R^4	R^5
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	CH_3	<i>i</i> -Pr
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	CH_3	<i>i</i> -Pr
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	CH_3	<i>i</i> -Pr
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	CH_3	<i>i</i> -Pr
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_3	<i>i</i> -Pr
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_3	<i>i</i> -Pr
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH=CHCH_2-$	CH_3	<i>i</i> -Pr
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH=CHCH_2-$	CH_3	<i>i</i> -Pr
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	<i>i</i> -Pr
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	<i>i</i> -Pr
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	CH_3	<i>i</i> -Pr
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	CH_3	<i>i</i> -Pr
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_3	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	CH_3	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	CH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	CH_3	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	CH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	CH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	CH_3	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	CH_3	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	CH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_3	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH=CHCH_2-$	CH_3	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH=CHCH_2-$	CH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	CH_3	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	CH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	OCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	OCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	OCH_3	Cl

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R^6	R^2+R^3	R^4	R^5
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	OCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	OCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	OCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH-CHCH_2-$	OCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH-CHCH_2-$	OCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH-CHCH_2-$	OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH-CHCH_2-$	OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	OCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	OCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	OC_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	OC_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	OC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	OC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH-CHCH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH-CHCH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH-CHCH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH-CHCH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	OC_2H_5	Cl

R^6	R^2+R^3	R^4	R^5
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	$SCCH_3$	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	$SCCH_3$	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	$SCCH_3$	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	$SCCH_3$	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	$SCCH_3$	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	$SCCH_3$	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	$SCCH_3$	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	$SCCH_3$	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	$SCCH_3$	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	$SCCH_3$	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	$SCCH_3$	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	$SCCH_3$	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH=CHCH_2-$	$SCCH_3$	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH=CHCH_2-$	$SCCH_3$	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH=CHCH_2-$	$SCCH_3$	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH=CHCH_2-$	$SCCH_3$	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	$SCCH_3$	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	$SCCH_3$	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	$SCCH_3$	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	$SCCH_3$	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	SC_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	SC_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	SC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	SC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH=CHCH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH=CHCH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH=CHCH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH=CHCH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	SC_2H_5	Cl

R^6	R^2+R^3	R^4	R^5
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	C_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	C_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	C_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	C_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	C_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	C_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH-CHCH_2-$	C_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH-CHCH_2-$	C_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH-CHCH_2-$	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH-CHCH_2-$	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	C_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	C_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	C_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	OCH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	OCH_3	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	OCH_3	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	OCH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	OCH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	OCH_3	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	OCH_3	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	OCH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	OCH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	OCH_3	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	OCH_3	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	OCH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH-CHCH_2-$	OCH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH-CHCH_2-$	OCH_3	F

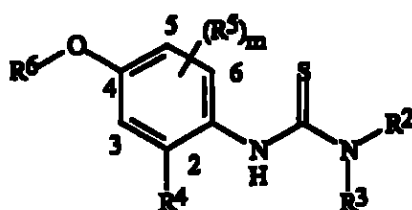
R^6	R^2+R^3	R^4	R^5
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH-CHCH_2-$	OCH_3	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH-CHCH_2-$	OCH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	OCH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	OCH_3	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	OCH_3	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	OCH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	OC_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	OC_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	OC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	OC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH-CHCH_2-$	OC_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH-CHCH_2-$	OC_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH-CHCH_2-$	OC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH-CHCH_2-$	OC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	SCH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	SCH_3	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	SCH_3	F

R^6	R^2+R^3	R^4	R^5
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	SCH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH=CHCH_2-$	SCH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH=CHCH_2-$	SCH_3	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH=CHCH_2-$	SCH_3	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH=CHCH_2-$	SCH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	SC_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	SC_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	SC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	SC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH=CHCH_2-$	SC_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH=CHCH_2-$	SC_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH=CHCH_2-$	SC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH=CHCH_2-$	SC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	C_2H_5	F

R^6	R^2+R^3	R^4	R^5
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	C_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH-CHCH_2-$	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH-CHCH_2-$	C_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH-CHCH_2-$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH-CHCH_2-$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	CH_3	CN
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	CH_3	CN
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH-CHCH_2-$	CH_3	CN
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH-CHCH_2-$	CH_3	CN
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH-CHCH_2-$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH-CHCH_2-$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	CHO

R^6	R^2+R^3	R^4	R^5
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	CH_3	CHO
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	CH_3	CHO
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_3	CHO
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_3	CHO
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH=CHCH_2-$	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH=CHCH_2-$	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	CH_2Br	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	CH_2Br	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH=CHCH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH=CHCH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	CH_2Br	Cl

TABLE 12



R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>i</i> -Pr	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>i</i> -Pr	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>i</i> -Pr	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Bu	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Bu	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Bu	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	$5-CH_3$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	$5-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	$5-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	$5-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	$5-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	$5-Cl$	1

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>i</i> -Pr	CH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>i</i> -Pr	CH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>i</i> -Pr	CH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	CH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	CH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Bu	CH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Bu	CH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Bu	CH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	OCH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	OCH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	OCH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	OCH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	OCH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	OCH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>i</i> -Pr	OCH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>i</i> -Pr	OCH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>i</i> -Pr	OCH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	OCH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	OCH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	OCH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	OCH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	OCH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	OCH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Bu	OCH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Bu	OCH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Bu	OCH_3	S-Cl	1

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	$CH_2CH=CH_2$	OCH ₃	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	$CH_2CH=CH_2$	OCH ₃	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	$CH_2CH=CH_2$	OCH ₃	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	C ₂ H ₅	C ₂ H ₅	OCH ₃	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	C ₂ H ₅	C ₂ H ₅	OCH ₃	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	C ₂ H ₅	C ₂ H ₅	OCH ₃	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	CH ₃	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	CH ₃	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	CH ₃	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	C ₂ H ₅	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	C ₂ H ₅	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	C ₂ H ₅	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	i-Pr	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	i-Pr	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	i-Pr	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	c-Pr	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	c-Pr	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	c-Pr	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	n-Pr	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	n-Pr	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	n-Pr	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	n-Bu	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	n-Bu	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	n-Bu	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	$CH_2CH=CH_2$	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	$CH_2CH=CH_2$	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	$CH_2CH=CH_2$	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	C ₂ H ₅	C ₂ H ₅	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	C ₂ H ₅	C ₂ H ₅	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	C ₂ H ₅	C ₂ H ₅	OC ₂ H ₅	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	CH ₃	SCH ₃	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	CH ₃	SCH ₃	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	CH ₃	SCH ₃	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	C ₂ H ₅	SCH ₃	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	C ₂ H ₅	SCH ₃	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	C ₂ H ₅	SCH ₃	5-Cl	1

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	<i>i</i> -Pr	SCH ₃	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	<i>i</i> -Pr	SCH ₃	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	<i>i</i> -Pr	SCH ₃	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	<i>o</i> -Pr	SCH ₃	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	<i>o</i> -Pr	SCH ₃	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	<i>o</i> -Pr	SCH ₃	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	<i>n</i> -Pr	SCH ₃	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	<i>n</i> -Pr	SCH ₃	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	<i>n</i> -Pr	SCH ₃	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	<i>n</i> -Bu	SCH ₃	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	<i>n</i> -Bu	SCH ₃	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	<i>n</i> -Bu	SCH ₃	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	CH ₂ CH=CH ₂	SCH ₃	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	CH ₂ CH=CH ₂	SCH ₃	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	CH ₂ CH=CH ₂	SCH ₃	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	C ₂ H ₅	C ₂ H ₅	SCH ₃	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	C ₂ H ₅	C ₂ H ₅	SCH ₃	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	C ₂ H ₅	C ₂ H ₅	SCH ₃	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	CH ₃	SC ₂ H ₅	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	CH ₃	SC ₂ H ₅	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	CH ₃	SC ₂ H ₅	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	C ₂ H ₅	SC ₂ H ₅	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	C ₂ H ₅	SC ₂ H ₅	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	C ₂ H ₅	SC ₂ H ₅	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	<i>i</i> -Pr	SC ₂ H ₅	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	<i>i</i> -Pr	SC ₂ H ₅	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	<i>i</i> -Pr	SC ₂ H ₅	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	<i>o</i> -Pr	SC ₂ H ₅	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	<i>o</i> -Pr	SC ₂ H ₅	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	<i>o</i> -Pr	SC ₂ H ₅	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	<i>n</i> -Pr	SC ₂ H ₅	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	<i>n</i> -Pr	SC ₂ H ₅	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	<i>n</i> -Pr	SC ₂ H ₅	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	<i>n</i> -Bu	SC ₂ H ₅	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	<i>n</i> -Bu	SC ₂ H ₅	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	<i>n</i> -Bu	SC ₂ H ₅	S-Cl	1

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R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	OCH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	OCH_3	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	OCH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	OCH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	OCH_3	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	OCH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>i</i> -Pr	OCH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>i</i> -Pr	OCH_3	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>i</i> -Pr	OCH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	OCH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	OCH_3	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	OCH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	OCH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	OCH_3	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	OCH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Bu	OCH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Bu	OCH_3	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Bu	OCH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OCH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OCH_3	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	OCH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	OCH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	OCH_3	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	OCH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	OC_2H_5	$S-F$	1

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	<i>i</i> -Pr	OC ₂ H ₅	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	<i>i</i> -Pr	OC ₂ H ₅	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	<i>i</i> -Pr	OC ₂ H ₅	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	<i>o</i> -Pr	OC ₂ H ₅	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	<i>o</i> -Pr	OC ₂ H ₅	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	<i>o</i> -Pr	OC ₂ H ₅	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	<i>n</i> -Pr	OC ₂ H ₅	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	<i>n</i> -Pr	OC ₂ H ₅	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	<i>n</i> -Pr	OC ₂ H ₅	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	<i>n</i> -Bu	OC ₂ H ₅	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	<i>n</i> -Bu	OC ₂ H ₅	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	<i>n</i> -Bu	OC ₂ H ₅	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	CH ₂ CH=CH ₂	OC ₂ H ₅	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	CH ₂ CH=CH ₂	OC ₂ H ₅	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	CH ₂ CH=CH ₂	OC ₂ H ₅	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	C ₂ H ₅	C ₂ H ₅	OC ₂ H ₅	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	C ₂ H ₅	C ₂ H ₅	OC ₂ H ₅	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	C ₂ H ₅	C ₂ H ₅	OC ₂ H ₅	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	CH ₃	SCH ₃	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	CH ₃	SCH ₃	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	CH ₃	SCH ₃	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	C ₂ H ₅	SCH ₃	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	C ₂ H ₅	SCH ₃	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	C ₂ H ₅	SCH ₃	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	<i>i</i> -Pr	SCH ₃	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	<i>i</i> -Pr	SCH ₃	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	<i>i</i> -Pr	SCH ₃	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	<i>o</i> -Pr	SCH ₃	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	<i>o</i> -Pr	SCH ₃	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	<i>o</i> -Pr	SCH ₃	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	<i>n</i> -Pr	SCH ₃	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	<i>n</i> -Pr	SCH ₃	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	<i>n</i> -Pr	SCH ₃	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	<i>n</i> -Bu	SCH ₃	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	<i>n</i> -Bu	SCH ₃	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	<i>n</i> -Bu	SCH ₃	S-F	1

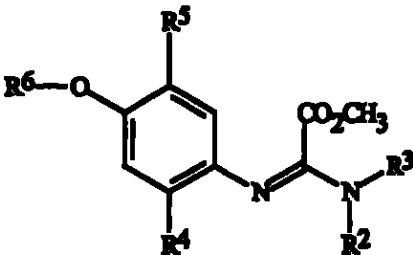
R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	$SCCH_3$	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	$SCCH_3$	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	$SCCH_3$	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	$SCCH_3$	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	$SCCH_3$	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	$SCCH_3$	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	SC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>i</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>i</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>i</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>c</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>c</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>c</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Bu	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Bu	SC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Bu	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	Cl	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	Cl	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	Cl	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	Cl	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	Cl	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	Cl	S-Cl	1

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>i</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>i</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>i</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Bu	Cl	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Bu	Cl	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Bu	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	Cl	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	Cl	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	Cl	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	Cl	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>i</i> -Pr	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>i</i> -Pr	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>i</i> -Pr	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Bu	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Bu	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Bu	CH_3	3,5-di-Cl	2

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>i</i> -Pr	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>i</i> -Pr	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>i</i> -Pr	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Bu	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Bu	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Bu	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	Cl	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	Cl	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	Cl	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	Cl	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	Cl	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	Cl	3,5-di-Cl	2

R ⁶	R ²	R ³	R ⁴	R ⁵	m
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	<i>i</i> -Pr	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	<i>i</i> -Pr	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	<i>i</i> -Pr	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	<i>o</i> -Pr	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	<i>o</i> -Pr	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	<i>o</i> -Pr	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	<i>n</i> -Pr	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	<i>n</i> -Pr	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	<i>n</i> -Pr	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	<i>n</i> -Bu	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	<i>n</i> -Bu	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	<i>n</i> -Bu	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	C ₂ H ₅	C ₂ H ₅	Cl	3,5-di-Cl	2

TABLE 13



R ⁶	R ²	R ³	R ⁴	R ⁵
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₃	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₃	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₃	Cl

R^6	R^2	R^3	R^4	R^5
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2C\equiv CH$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	Cl

Formulation/Utility

Compounds of this invention will generally be used as a formulation or composition with an agriculturally suitable carrier comprising at least one of a liquid diluent, a solid diluent or a surfactant. Accordingly, compositions are provided which comprise, in addition to a fungicidally effective amount of the active compound(s), at least one additional component selected from the group consisting surfactants, solid diluents and liquid diluents. The formulation or composition ingredients are selected to be consistent with the physical properties of the active ingredient, mode of application and environmental factors such as soil type, moisture and temperature. Useful formulations include liquids such as solutions (including emulsifiable concentrates), suspensions, emulsions (including microemulsions and/or suspoemulsions) and the like which optionally can be thickened into gels. Useful formulations further include solids such as dusts, powders, granules, pellets, tablets, films, and the like which can be water-dispersible ("wettable") or water-soluble. Active ingredient can be (micro)encapsulated and further formed into a suspension or solid formulation; alternatively the entire formulation of active ingredient can be encapsulated (or "overcoated"). Encapsulation can control or delay release of the active ingredient.

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Sprayable formulations can be extended in suitable media and used at spray volumes from about one to several hundred liters per hectare. High-strength compositions are primarily used as intermediates for further formulation.

5 The formulations will typically contain effective amounts of active ingredient, diluent and/or surfactant within the following approximate ranges which add up to 100 percent by weight.

	Weight Percent		
	Active Ingredient	Diluent	Surfactant
Water-Dispersible and Water-soluble Granules, Tablets and Powders.	5-90	0-94	1-15
Suspensions, Emulsions, Solutions (including Emulsifiable Concentrates)	5-50	40-95	0-15
Dusts	1-25	70-99	0-5
Granules and Pellets	0.01-99	5-99.99	0-15
High Strength Compositions	90-99	0-10	0-2

Typical solid diluents are described in Watkins, et al., *Handbook of Insecticide Dust Diluents and Carriers*, 2nd Ed., Dorland Books, Caldwell, New Jersey. Typical liquid diluents are described in Marsden, *Solvents Guide*, 2nd Ed., Interscience, New York, 1950. 10 *McCutcheon's Detergents and Emulsifiers Annual*, Allured Publ. Corp., Ridgewood, New Jersey, as well as Sisely and Wood, *Encyclopedia of Surface Active Agents*, Chemical Publ. Co., Inc., New York, 1964, list surfactants and recommended uses. All formulations can contain minor amounts of additives to reduce foam, caking, corrosion, microbiological growth and the like, or thickeners to increase viscosity.

15 Surfactants include, for example, polyethoxylated alcohols, polyethoxylated alkylphenols, polyethoxylated sorbitan fatty acid esters, dialkyl sulfosuccinates, alkyl sulfates, alkylbenzene sulfonates, organosilicones, *N,N*-dialkyltaurates, lignin sulfonates, naphthalene sulfonate formaldehyde condensates, polycarboxylates, and polyoxyethylene/polyoxypropylene block copolymers. Solid diluents include, for example, 20 clays such as bentonite, montmorillonite, attapulgite and kaolin, starch, sugar, silica, talc, diatomaceous earth, urea, calcium carbonate, sodium carbonate and bicarbonate, and sodium sulfate. Liquid diluents include, for example, water, *N,N*-dimethylformamide, dimethyl sulfoxide, *N*-alkylpyrrolidone, ethylene glycol, polypropylene glycol, paraffins, alkylbenzenes, alkylnaphthalenes, oils of olive, castor, linseed, tung, sesame, corn, peanut, 25 cotton-seed, soybean, rape-seed and coconut, fatty acid esters, ketones such as cyclohexanone, 2-heptanone, isophorone and 4-hydroxy-4-methyl-2-pentanone, and alcohols such as methanol, cyclohexanol, decanol and tetrahydrofurfuryl alcohol.

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Solutions, including emulsifiable concentrates, can be prepared by simply mixing the ingredients. Dusts and powders can be prepared by blending and, usually, grinding as in a hammer mill or fluid-energy mill. Suspensions are usually prepared by wet-milling; see, for example, U.S. 3,060,084. Granules and pellets can be prepared by spraying the active material upon preformed granular carriers or by agglomeration techniques. See Browning, "Agglomeration", *Chemical Engineering*, December 4, 1967, pp 147-48, *Perry's Chemical Engineer's Handbook*, 4th Ed., McGraw-Hill, New York, 1963, pages 8-57 and following, and WO 91/13546. Pellets can be prepared as described in U.S. 4,172,714. Water-dispersible and water-soluble granules can be prepared as taught in U.S. 4,144,050, U.S. 3,920,442 and DE 3,246,493. Tablets can be prepared as taught in U.S. 5,180,587, U.S. 5,232,701 and U.S. 5,208,030. Films can be prepared as taught in GB 2,095,558 and U.S. 3,299,566.

For further information regarding the art of formulation, see T. S. Woods, "The Formulator's Toolbox - Product Forms for Modern Agriculture" in *Pesticide Chemistry and Bioscience, The Food-Environment Challenge*, T. Brooks and T. R. Roberts, Eds., Proceedings of the 9th International Congress on Pesticide Chemistry, The Royal Society of Chemistry, Cambridge, 1999, pp. 120-133. See also U.S. 3,235,361, Col. 6, line 16 through Col. 7, line 19 and Examples 10-41; U.S. 3,309,192, Col. 5, line 43 through Col. 7, line 62 and Examples 8, 12, 15, 39, 41, 52, 53, 58, 132, 138-140, 162-164, 166, 167 and 169-182; U.S. 2,891,855, Col. 3, line 66 through Col. 5, line 17 and Examples 1-4; Klingman, *Weed Control as a Science*, John Wiley and Sons, Inc., New York, 1961, pp 81-96; and Hance et al., *Weed Control Handbook*, 8th Ed., Blackwell Scientific Publications, Oxford, 1989.

In the following Examples, all percentages are by weight and all formulations are prepared in conventional ways. Compound numbers refer to compounds in Index Table A.

Example A

Wettable Powder

Compound 13	65.0%
dodecylphenol polyethylene glycol ether	2.0%
sodium ligninsulfonate	4.0%
sodium silicoaluminate	6.0%
montmorillonite (calcined)	23.0%.

Example B

Granule

Compound 13	10.0%
attapulgate granules (low volatile matter, 0.71/0.30 mm; U.S.S. No. 25-50 sieves)	90.0%.

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000123Example CExtruded Pellet

	Compound 13	25.0%
	anhydrous sodium sulfate	10.0%
5	crude calcium ligninsulfonate	5.0%
	sodium alkyl naphthalenesulfonate	1.0%
	calcium/magnesium bentonite	59.0%

Example DEmulsifiable Concentrate

10	Compound 13	20.0%
	blend of oil soluble sulfonates and polyoxyethylene ethers	10.0%
	isophorone	70.0%

The compounds of this invention are useful as plant disease control agents. The present invention therefore further comprises a method for controlling plant diseases caused by fungal plant pathogens comprising applying to the plant or portion thereof to be protected, or to the plant seed or seedling to be protected, an effective amount of a compound of the invention or a fungicidal composition containing said compound. The compounds and compositions of this invention provide control of diseases caused by a broad spectrum of fungal plant pathogens in the Basidiomycete, Ascomycete, Oomycete and Deuteromycete classes. They are effective in controlling a broad spectrum of plant diseases, particularly foliar pathogens of ornamental, vegetable, field, cereal, and fruit crops. These pathogens include *Plasmopara viticola*, *Phytophthora infestans*, *Peronospora tabacina*, *Pseudoperonospora cubensis*, *Pythium aphanidermatum*, *Alternaria brassicae*, *Septoria nodorum*, *Septoria tritici*, *Cercosporidium personatum*, *Cercospora arachidicola*, *Pseudocercospora herpotrichoides*, *Cercospora beticola*, *Botrytis cinerea*, *Monilinia fructicola*, *Pyricularia oryzae*, *Podosphaera leucotricha*, *Venturia inaequalis*, *Erysiphe graminis*, *Uncinula necator*, *Puccinia recondita*, *Puccinia graminis*, *Hemileia vastatrix*, *Puccinia striiformis*, *Puccinia arachidis*, *Rhizoctonia solani*, *Sphaerotheca fuliginea*, *Fusarium oxysporum*, *Verticillium dahliae*, *Pythium aphanidermatum*, *Phytophthora megasperma*, *Sclerotinia sclerotiorum*, *Sclerotium rolfsii*, *Erysiphe polygoni*, *Pyrenophora teres*, *Gaeumannomyces graminis*, *Rhynchosporium secalis*, *Fusarium roseum*, *Bremia lactucae* and other genera and species closely related to these pathogens.

Compounds of this invention can also be mixed with one or more other insecticides, fungicides, nematocides, bactericides, acaricides, growth regulators, chemosterilants, semiochemicals, repellents, attractants, pheromones, feeding stimulants or other biologically active compounds to form a multi-component pesticide giving an even broader spectrum of agricultural protection. Examples of such agricultural protectants with which compounds of

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this invention can be formulated are: insecticides such as abamectin, acephate,
 azinphos-methyl, bifenthrin, buprofezin, carbofuran, chlorfensapyr, chlorpyrifos,
 chlorpyrifos-methyl, cyfluthrin, beta-cyfluthrin, cyhalothrin, lambda-cyhalothrin,
 deltamethrin, diafenthiuron, diazinon, diflubenzuron, dimethoate, esfenvalerate, fenoxycarb,
 5 fenpropathrin, fenvalerate, fipronil, flucythrinate, tau-fluvalinate, fonophos, imidacloprid,
 indoxacarb, isofenphos, malathion, metaldehyde, methamidophos, methidathion, methomyl,
 methoprene, methoxychlor, monocrotophos, oxamyl, parathion, parathion-methyl,
 permethrin, phorate, phosalone, phosmet, phosphamidon, pirimicarb, profenofos, rotenone,
 sulprofos, tebufenozide, tefluthrin, terbufos, tetrachlorvinphos, thiodicarb, tralomethrin,
 10 trichlorfon and triflumuron; fungicides such as acibenzolar, azoxystrobin, binomial,
 blasticidin-S, Bordeaux mixture (Tribasic copper sulfate), boscalid/nicobifen,
 bromuconazole, buthiobate, carpropamid (KTU 3616), captafol, captan, carbendazim,
 chloroneb, chlorothalonil, clotrimazole, copper oxychloride, copper salts, cymoxanil,
 cyproconazole, cyprodinil (CGA 219417), (S)-3,5-dichloro-N-(3-chloro-1-ethyl-1-methyl-2-
 15 oxopropyl)-4-methylbenzamide (RH 7281), diclocymet (S-2900), diclomezine, dicloran,
 difenoconazole, (S)-3,5-dihydro-5-methyl-2-(methylthio)-5-phenyl-3-(phenylamino)-4H-
 imidazol-4-one (RP 407213), dimethomorph, dimoxystrobin (SSF-126), diniconazole,
 diniconazole-M, dodina, econazole, edifenphos, epoxiconazole (BAS 480F), famoxadone,
 fenarimol, fenbuconazole, fencaramid (SZX0722), fenpiclonil, fenpropidin, fenpropimorph,
 20 fentin acetate, fentin hydroxide, fluazinam, fludioxonil, flumetover (RPA 403397),
 fluquinconazole, flusilazole, flutolanil, flutriafol, folpet, fosetyl-aluminum, furalaxyl,
 furametapyr (S-82658), hexaconazole, imazalil,
 6-iodo-3-propyl-2-propyloxy-4(3H)-quinazolinone, ipconazole, iprobenfos, iprodione,
 isoconazole, isoprothiolane, kasugamycin, kresoxim-methyl, mancozeb, maneb, mefenoxam,
 25 mepronil, metalaxyl, metconazole, metominostrobin/fenominostrobin (SSF-126),
 miconazole, myclobutanil, neo-asozin (ferric methanearsonate), nuarimol, oxadixyl,
 penconazole, pencycuron, picoxystrobin, probenazole, prochloraz, propamocarb,
 propiconazole, pyraclostrobin, pyrifenoxy, pyrimethanil, prochloraz, pyrifenoxy, pyroquilon,
 quinoxifen, spiroxamine, sulfur, tebuconazole, tetraconazole, thiabendazole, thifluzamide,
 30 thiophanate-methyl, thiram, triadimefon, triadimenol, triarimol, tricyclazole, trifloxystrobin,
 triforine, triticonazole, uniconazole, validamycin and vinclozolin; nematocides such as
 aldoxycarb and fenamiphos; bactericides such as streptomycin; acaricides such as amitraz,
 chinomethionat, chlorobenzilate, cyhexatin, dicofol, dienochlor, etoxazole, fenazaquin,
 fenbutatin oxide, fenpropathrin, fenpyroximate, hexythiazox, propargite, pyridaben and
 35 tebufenpyrad; and biological agents such as *Bacillus thuringiensis*, *Bacillus thuringiensis*
 delta endotoxin, baculovirus, and entomopathogenic bacteria, virus and fungi. The weight
 ratios of these various mixing partners to compounds of this invention typically are between

100:1 and 1:100, preferably between 30:1 and 1:30, more preferably between 10:1 and 1:10, and most preferably between 4:1 and 1:4.

Compounds such as Compound 1 of this invention are considered to inhibit C24 transmethylease in the ergosterol biosynthesis pathway. In certain instances, combinations with other fungicides having a similar spectrum of control but a different mode of action will be particularly advantageous for resistance management (especially if the other fungicide also has a similar spectrum of control). Examples of other fungicides having different mode of actions include compounds acting at the *bc*₁ complex of the fungal mitochondrial respiratory electron transfer site, compounds acting at the demethylase enzyme of the sterol biosynthesis pathway, morpholine and piperidine compounds that act on the sterol biosynthesis pathway and pyrimidinone fungicides.

The *bc*₁ Complex Fungicides

Strobilurin fungicides such as azoxystrobin, kresoxim-methyl, metominostrobin/fenominostrobin (SSF-126), picoxystrobin, pyraclostrobin and trifloxystrobin are known to have a fungicidal mode of action which inhibits the *bc*₁ complex in the mitochondrial respiration chain (*Angew. Chem. Int. Ed.*, 1999, 38, 1328-1349). Methyl (*E*)-2-[[6-(2-cyanophenoxy)-4-pyrimidinyl]oxy]- α -(methoxyimino)benzeneacetate (also known as azoxystrobin) is described as a *bc*₁ complex inhibitor in *Biochemical Society Transactions* 1993, 22, 68S. Methyl (*E*)- α -(methoxyimino)-2-[(2-methylphenoxy)methyl]benzeneacetate (also known as kresoxim-methyl) is described as a *bc*₁ complex inhibitor in *Biochemical Society Transactions* 1993, 22, 64S. (*E*)-2-[(2,5-Dimethylphenoxy)methyl]- α -(methoxyimino)-*N*-methylbenzeneacetamide is described as a *bc*₁ complex inhibitor in *Biochemistry and Cell Biology* 1995, 85(3), 306-311. Other compounds that inhibit the *bc*₁ complex in the mitochondrial respiration chain include famoxadone and fenamidone.

The *bc*₁ complex is sometimes referred to by other names in the biochemical literature, including complex III of the electron transfer chain, and ubihydroquinone:cytochrome c oxidoreductase. It is uniquely identified by the Enzyme Commission number EC1.10.2.2. The *bc*₁ complex is described in, for example, *J. Biol. Chem.* 1989, 264, 14543-38; *Methods Enzymol.* 1986, 126, 253-71; and references cited therein.

The Sterol Biosynthesis Inhibitor Fungicides

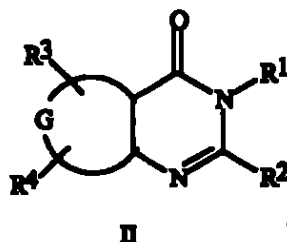
The class of sterol biosynthesis inhibitors includes DMI and non-DMI compounds, that control fungi by inhibiting enzymes in the sterol biosynthesis pathway. DMI fungicides have a common site of action within the fungal sterol biosynthesis pathway; that is, an inhibition of demethylation at position 14 of lanosterol or 24-methylene dihydrolanosterol, which are precursors to sterols in fungi. Compounds acting at this site are often referred to as demethylase inhibitors, DMI fungicides, or DMIs. The demethylase enzyme is sometimes referred to by other names in the biochemical literature, including cytochrome P-450

(14DM). The demethylase enzyme is described in, for example, *J. Biol. Chem.* 1992, 267, 13175-79 and references cited therein. DMI fungicides fall into several classes: azoles (including triazoles and imidazoles), pyrimidines, piperazines and pyridines. The triazoles includes bromuconazole, cyproconazole, difenoconazole, diniconazole, epoxiconazole, fenbuconazole, fluquinconazole, flusilazole, flutriafol, hexaconazole, ipconazole, metconazole, penconazole, propiconazole, tebuconazole, tetraconazole, triadimefon, triadimenol, triticonazole and uniconazole. The imidazoles include clotrimazole, econazole, imazalil, isoconazole, miconazole and prochloraz. The pyrimidines include fenarimol, nuarimol and triarimol. The piperazines include triforine. The pyridines include buthiobate and pyrifenoxy. Biochemical investigations have shown that all of the above mentioned fungicides are DMI fungicides as described by K. H. Kuck, et al. in *Modern Selective Fungicides - Properties, Applications and Mechanisms of Action*, Lyr, H., Ed.; Gustav Fischer Verlag: New York, 1995, 205-258.

The DMI fungicides have been grouped together to distinguish them from other sterol biosynthesis inhibitors, such as the morpholine and piperidine fungicides. The morpholines and piperidines are also sterol biosynthesis inhibitors but have been shown to inhibit other steps in the sterol biosynthesis pathway. The morpholines include aldimorph, dodemorph, fenpropimorph, tridemorph and trimorphamide. The piperidines include fenpropidin. Biochemical investigations have shown that all of the above mentioned morpholine and piperidine fungicides are sterol biosynthesis inhibitor fungicides as described by K. H. Kuck, et al. in *Modern Selective Fungicides - Properties, Applications and Mechanisms of Action*, Lyr, H., Ed.; Gustav Fischer Verlag: New York, 1995, 185-204.

Pyrimidinone Fungicides

Pyrimidinone fungicides include compounds of Formula II



wherein

G is a fused phenyl, thiophene or pyridine ring;

R¹ is C₁-C₆ alkyl;

R² is C₁-C₆ alkyl or C₁-C₆ alkoxy;

R³ is halogen; and

R⁴ is hydrogen or halogen.

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Pyrimidinone fungicides are described in International Patent Application WO94/26722, U.S. Patent No. 6,066,638, U.S. Patent No. 6,245,770, U.S. Patent No. 6,262,058 and U.S. Patent No. 6,277,858.

Of note are pyrimidinone fungicides selected from the group:

- 5 6-bromo-3-propyl-2-propyloxy-4(3*H*)-quinazolinone,
 6,8-diiodo-3-propyl-2-propyloxy-4(3*H*)-quinazolinone,
 6-iodo-3-propyl-2-propyloxy-4(3*H*)-quinazolinone,
 6-chloro-2-propoxy-3-propylthieno[2,3-*d*]pyrimidin-4(3*H*)-one,
 6-bromo-2-propoxy-3-propylthieno[2,3-*d*]pyrimidin-4(3*H*)-one,
10 7-bromo-2-propoxy-3-propylthieno[3,2-*d*]pyrimidin-4(3*H*)-one,
 6-bromo-2-propoxy-3-propylpyrido[2,3-*d*]pyrimidin-4(3*H*)-one,
 6,7-dibromo-2-propoxy-3-propylthieno[3,2-*d*]pyrimidin-4(3*H*)-one, and
 3-(cyclopropylmethyl)-6-iodo-2-(propylthio)pyrido[2,3-*d*]pyrimidin-4(3*H*)-one.

- Of note are combinations of compounds of Formula I (e.g. Compound 13) with
15 azoxystrobin, kesoxim-methyl, trifloxystrobin, pyraclostrobin, picoxystrobin, dimoxystrobin
 (SSF-129), metominostrobin/ fenominostrobin (SSF-126), carbendazim, chlorothalonil,
 quinoxifen, metrafenone, cyflufenamid, fenpropidine, fenpropimorph, bromuconazole,
 cyproconazole, difenoconazole, epoxiconazole, fenbuconazole, flusilazole, hexaconazole,
 ipconazole, metconazole, penconazole, propiconazole, proquinazid, tebuconazole,
20 triticonazole, prochloraz, boscalid/nicobifen.

- Preferred for better control of plant diseases caused by fungal plant pathogens (e.g.,
lower use rate or broader spectrum of plant pathogens controlled) or resistance management
are mixtures of a compound of this invention with a fungicide selected from the group:
25 azoxystrobin, kesoxim-methyl, trifloxystrobin, pyraclostrobin, picoxystrobin, dimoxystrobin
 (SSF-129), metominostrobin/ fenominostrobin (SSF-126), quinoxifen, metrafenone,
 cyflufenamid, fenpropidine, fenpropimorph, cyproconazole, epoxiconazole, flusilazole,
 metconazole, propiconazole, proquinazid, tebuconazole, triticonazole.

- Specifically preferred mixtures (compound numbers refer to compounds in Index
Tables A) are selected from the group: combinations of Compound 11, Compounds 13,
30 Compound 17 or Compound 27 with azoxystrobin, combinations of Compound 11,
 Compound 13, Compound 17 or Compound 27 with kesoxim-methyl, combinations of
 Compound 11, Compound 13, Compound 17 or Compound 27 with trifloxystrobin,
 combinations of Compound 11, Compound 13, Compound 17 or Compound 27 with
 pyraclostrobin, combinations of Compound 11, Compound 13, Compound 17 or Compound
35 27 with picoxystrobin, combinations of Compound 11, Compound 13, Compound 17 or
 Compound 27 with dimoxystrobin (SSF-129), combinations of Compound 11, Compound
 13, Compound 17 or Compound 27 with metominostrobin/ fenominostrobin (SSF-126),
 combinations of Compound 11, Compound 13, Compound 17 or Compound 27 with

quinoxifen, combinations of Compound 11, Compound 13, Compound 17 or Compound 27 with metrafenone, combinations of Compound 11, Compound 13, Compound 17 or Compound 27 with cyflufenamid, combinations of Compound 11, Compound 13, Compound 17 or Compound 27 with fenpropidine, combinations of Compound 11, Compound 13, Compound 17 or Compound 27 with fenpropimorph, combinations of Compound 11, Compound 13, Compound 17 or Compound 27 with cyproconazole, combinations of Compound 11, Compound 13, Compound 17 or Compound 27 with epoxiconazole, combinations of Compound 11, Compound 13, Compound 17 or Compound 27 with flusilazole, combinations of Compound 11, Compound 13, Compound 17 or Compound 27 with metconazole, combinations of Compound 11, Compound 13, Compound 17 or Compound 27 with propiconazole, combinations of Compound 11, Compound 13, Compound 17 or Compound 27 with proquinazid, combinations of Compound 11, Compound 13, Compound 17 or Compound 27 with tebuconazole, combinations of Compound 11, Compound 13, Compound 17 or Compound 27 with triticonazole.

Also specifically preferred mixtures (compound numbers refer to compounds in Index Tables B) are selected from the group: combinations of Compound 54 with azoxystrobin, combinations of Compound 54 with kesoxim-methyl, combinations of Compound 54 with trifloxystrobin, combinations of Compound 54 with pyraclostrobin, combinations of Compound 54 with picoxystrobin, combinations of Compound 54 with dimoxystrobin (SSF-129), combinations of Compound 54 with metominostrobin/ fenominostrobin (SSF-126), combinations of Compound 54 with quinoxifen, combinations of Compound 54 with metrafenone, combinations of Compound 54 with cyflufenamid, combinations of Compound 54 with fenpropidine, combinations of Compound 54 with fenpropimorph, combinations of Compound 54 with cyproconazole, combinations of Compound 54 with epoxiconazole, combinations of Compound 54 with flusilazole, combinations of Compound 54 with metconazole, combinations of Compound 54 with propiconazole, combinations of Compound 54 with proquinazid, combinations of Compound 54 with tebuconazole, combinations of Compound 54 with triticonazole.

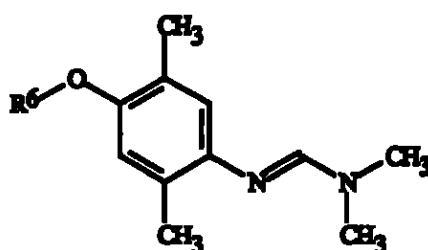
Plant disease control is ordinarily accomplished by applying an effective amount of a compound of this invention either pre- or post-infection, to the portion of the plant to be protected such as the roots, stems, foliage, fruit, seeds, tubers or bulbs, or to the media (soil or sand) in which the plants to be protected are growing. The compounds can also be applied to the seed to protect the seed and seedling.

Rates of application for these compounds can be influenced by many factors of the environment and should be determined under actual use conditions. Foliage can normally be protected when treated at a rate of from less than 1 g/ha to 5,000 g/ha of active ingredient. Seed and seedlings can normally be protected when seed is treated at a rate of from 0.1 to 10 g per kilogram of seed.

5 The following TESTS demonstrate the control efficacy of compounds of this invention on specific pathogens. The pathogen control protection afforded by the compounds is not limited, however, to these species. See Index Tables A-E for compound descriptions. The following abbreviations are used in the Index Tables which follow: *t* means tertiary, *s* means secondary, *n* means normal, *i* means iso, *c* means cyclo, Pr means propyl, *i*-Pr means isopropyl, *c*-Pr means cyclopropyl, Bu means butyl, CN means cyano, and "Ex." stands for "Example" and is followed by a number indicating in which example the compound is prepared.

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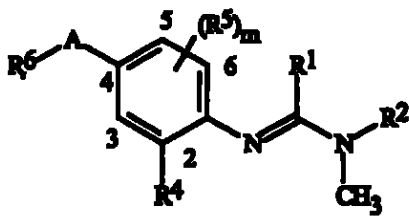
INDEX TABLE A



Compound	R ⁶	m.p. (°C.)
1 (Ex. 1)	CH ₂ CH-C(CH ₃) ₂	•
2	CH ₂ CH-C(CH ₃)(CH ₂) ₂ CH-C(CH ₃) ₂	•
3	CH ₂ (CH-C(CH ₃)(CH ₂) ₂) ₂ CH-C(CH ₃) ₂	•
4	CH ₂ C(-O)C(CH ₃) ₃	•
5	(CH ₂) ₄ CH-CH ₂	•
6	(CH ₂) ₃ CH-CH ₂	•
7	(CH ₂) ₄ C(OCH ₃) ₃	•
8	(CH ₂) ₂ CH(CH ₃) ₂	•
9	(CH ₂) ₃ C(-CH ₂)CH(CH ₃) ₂	•
10	(CH ₂) ₂ CH(CH ₃)(CH ₂) ₃ CH(CH ₃) ₂	•
11	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃	•
12	(CH ₂) ₂ C(CH ₃) ₃	•
13 (Ex. 2)	(CH ₂) ₃ CH(CH ₃) ₂	•
14	(S)-(CH ₂) ₂ CH(CH ₃)CH ₂ CH ₂ CH-C(CH ₃) ₂	•
15	(R)-(CH ₂) ₂ CH(CH ₃)CH ₂ CH ₂ CH-C(CH ₃) ₂	•
16	(CH ₂) ₃ CH ₂ Cl	•
17	(CH ₂) ₄ CH ₂ Cl	•
18	CH(CH ₃)(CH ₂) ₃ CH ₃	•
19	(CH ₂) ₄ CH ₃	•
20	(CH ₂) ₅ CH ₃	•

Compound	R ⁶	m.p. (°C.)
21	(CH ₂) ₅ CH ₃	•
22	(CH ₂) ₇ CH ₃	•
23	(CH ₂) ₈ CH ₃	•
24	(CH ₂) ₉ CH ₃	•
25	(CH ₂) ₁₁ CH ₃	53-54°
26 (Ex. 3)	(CH ₂) ₃ Si(CH ₃) ₃	•
27	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃	•
28 (Ex. 4)	CH(CH ₂ CH ₂ CH ₂ CH ₃) ₂	•
29	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH ₂ CH ₃	•
30	CH(CH ₂ CH ₂ CH ₂ CH ₂ CH ₃) ₂	•
31	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂	•
32	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂	•
33	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂	•
34	CH(C ₂ H ₅) ₂	•
35	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂	•
36	CH(CH ₂ CH ₂ CH ₃) ₂	•
37	CH(CH ₂ CH ₂ CH ₂ CH ₃)(CH ₂) ₅ CH ₃	•
38	CH ₂ C(=CH ₂)CH ₂ Si(CH ₃) ₃	•
39	CH ₂ CH ₂ CH=CH(CH ₃) ₂	•
40	CH ₂ CH=CHC(CH ₃) ₃	•
41	CH ₂ CH ₂ OC(CH ₃) ₃	•
42	(CH ₂) ₃ C(Cl)C(CH ₃) ₂	•
43	(CH ₂) ₃ C(CH ₃) ₂ (OCH ₃)	•
44	(CH ₂) ₃ C(CH ₃) ₂ (OC ₂ H ₅)	•
45	(CH ₂) ₃ C(CH ₃) ₂ OH	•
46	(CH ₂) ₃ C(Cl)(CH ₃)(CH(CH ₃) ₂)	•
47	(CH ₂) ₄ C(CH ₃) ₂ (CN)	•
48	(CH ₂) ₄ CH(CH ₃) ₂	•
49	(CH ₂) ₃ CH(CH ₃)(CH(CH ₃) ₂)	•
50	(CH ₂) ₃ C(CH ₃) ₃	•
51	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	•
52	(CH ₂) ₃ Si(CH ₃) ₂ (CH ₂ CH ₂ CH ₃)	•
53	(CH ₂) ₃ Si(CH ₃)(C ₂ H ₅) ₂	•

INDEX TABLE B



Compound	m	A	R ¹	R ²	R ⁴	R ⁵	R ⁶	m.p. (°C.)
54 (Ex. 5)	1	O	H	C ₂ H ₅	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	*
55	2	O	H	CH ₃	Cl	3,5-di-Cl	(CH ₂) ₃ Si(CH ₃) ₃	*
56	1	O	H	CH ₂ CH=CH 2	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	*
57	1	O	H	C ₂ H ₅	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	*
58	1	O	H	n-Pr	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	*
59	1	O	H	C ₂ H ₅	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₃	*
60	1	O	H	n-Pr	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₃	*
61	1	O	H	c-Pr	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	*
62	1	O	H	n-Bu	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₃	*
63	1	O	H	i-Pr	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₃	*
64	1	O	H	CH ₂ CH=CH 2	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₃	*
65	1	O	H	c-Pr	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	*
66	1	O	H	C ₂ H ₅	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	*
67	1	O	H	n-Pr	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	*
68	1	O	H	n-Bu	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	*
69	1	O	H	i-Pr	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	*
70	1	O	H	CH ₂ CH=CH 2	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	*
71	1	O	H	c-Pr	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	*
72	1	O	H	c-Pr	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₃	*
73	1	O	H	n-Bu	CH ₃	5-i-Pr	(CH ₂) ₃ Si(CH ₃) ₃	*
74	1	O	H	i-Pr	CH ₃	5-i-Pr	(CH ₂) ₃ Si(CH ₃) ₃	*
75	1	O	H	n-Pr	CH ₃	5-i-Pr	(CH ₂) ₃ Si(CH ₃) ₃	*
76	1	O	H	C ₂ H ₅	CH ₃	5-i-Pr	(CH ₂) ₃ Si(CH ₃) ₃	*
96	1	O	CH ₃	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂	*
97	1	O	CH ₃	CH ₃	CH ₃	5-CH ₃	CH(n-Pr)(CH ₂) ₂ CH(CH ₃) ₂	*

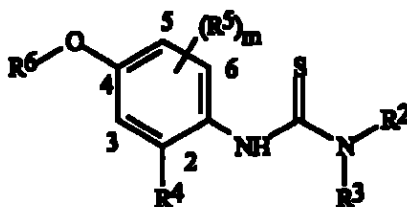
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Compound no.	m	Δ	R ¹	R ²	R ⁴	R ⁵	R ⁶	m.p. (°C.)
98	1	O	CH ₃	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃	*
99	1	O	CH ₃	CH ₃	CH ₃	5-CH ₃	CH((CH ₂) ₄ CH ₃) ₂	*
100	1	O	CH ₃	CH ₃	CH ₃	5-CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂	*
101	1	O	CH ₃	CH ₃	CH ₃	5-CH ₃	CH(n-Pr) ₂	*
102	1	O	CH ₃	CH ₃	CH ₃	5-CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂	*
103	1	O	CH ₃	CH ₃	CH ₃	5-CH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂	*
104	1	O	CH ₃	CH ₃	CH ₃	5-CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ C(-CH ₂)C H ₃	*
105	1	S	H	CH ₃	CH ₃	5-CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂	*
110	1	O	CH ₃	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₂	*
111	1	O	CH ₃	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₂	*
115	2	O	H	CH ₃	CH ₃	3,5-di-Cl	(CH ₂) ₃ CH(CH ₃) ₂	*
116	2	O	CH ₃	CH ₃	CH ₃	3,5-di-Cl	(CH ₂) ₃ CH(CH ₃) ₂	*
126	1	O	H	CH ₃	Cl	5-Cl	(CH ₂) ₃ CH(CH ₃) ₂	*
128	1	O	CO ₂ C H ₃	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	*
129	1	O	CO ₂ C H ₃	C ₂ H ₅	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	*
130	1	O	CO ₂ C H ₃	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	*
131	1	O	CO ₂ C H ₃	C ₂ H ₅	CH ₃	5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	*
132	1	O	H	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂	*
140	2	O	H	C ₂ H ₅	CH ₃	3-Cl-5- CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	*
141	1	S	H	CH ₃	CH ₃	5-CH ₃	CH(n-Pr)(n-Bu)	*
142	1	S	CH ₃	CH ₃	CH ₃	5-CH ₃	CH(n-Pr)(n-Bu)	*
143	1	S	CH ₃	CH ₃	CH ₃	5-CH ₃	CH(n-Bu) ₂	*
144	1	N H	CH ₃	CH ₃	CH ₃	5-CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂	*
145	1	N H	H	CH ₃	CH ₃	5-CH ₃	CH((CH ₂) ₄ CH ₃) ₂	*
146	1	N H	H	CH ₃	CH ₃	5-CH ₃	CH(n-Pr)(n-Bu)	*
147	1	N	H	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃	*

Compound	m	Δ	R^1	R^2	R^4	R^5	R^6	m.p. (°C.)
		H						
148	1	N H	H	CH ₃	CH ₃	5-CH ₃	CH(<i>n</i> -Pr)(CH ₂) ₂ CH(CH ₃) ₂	•
149	1	N H	H	CH ₃	CH ₃	5-CH ₃	CH(C ₂ H ₅)(CH) ₂ CH(CH ₃) ₂	•
150	1	N H	H	CH ₃	CH ₃	5-CH ₃	CH(<i>n</i> -Bu) ₂	•
151	1	N H	H	CH ₃	CH ₃	5-CH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂	•
152	1	N H	H	CH ₃	CH ₃	5-CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ C(=CH ₂)C H ₃	•
153	1	N H	H	CH ₃	CH ₃	5-CH ₃	CH ₂ CH ₂ S(<i>i</i> -Bu)	•
154	1	N H	H	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂	•
155	1	S	H	CH ₃	CH ₃	5-CH ₃	CH(<i>n</i> -Bu) ₂	•
156	1	S	H	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂	•
157	1	S	H	CH ₃	CH ₃	5-CH ₃	CH(<i>n</i> -Pr) ₂	•
158	1	S	H	CH ₃	CH ₃	5-CH ₃	CH ₂ CH(CH ₃)CH ₂ C(<i>i</i> -Bu)	•
159	1	S	H	CH ₃	CH ₃	5-CH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂	•
160	1	S	H	CH ₃	CH ₃	5-CH ₃	(CH(<i>n</i> -Pr))(<i>n</i> -Bu)	•
161	1	S	H	CH ₃	CH ₃	5-CH ₃	CH(C ₂ H ₅)CH ₂ C(=CH ₂)CH ₃	•
162	1	S	H	CH ₃	CH ₃	5-CH ₃	CH ₂ (C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂	•
171	2	O	CH ₃	CH ₃	CH ₃	3,5-di-Cl	(CH ₂) ₃ Si(CH ₃) ₃	160- 162
172	1	O	H	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	55-58
173	1	O	CH ₃	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	•
174	1	N H	H	CH ₃	CH ₃	5-CH ₃	C(O)CH ₂ S(O)(<i>i</i> -Bu)	•
175	1	O	H	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ C(CH ₃) ₃	•
176	1	O	H	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ C(CH ₃) ₃	•
182	2	O	H	C ₂ H ₅	CH ₃	3,5-di-Cl	(CH ₂) ₃ Si(CH ₃) ₃	•
189	1	N H	H	CH ₃	CH ₃	5-CH ₃	C(O)NHCH ₂ CH(CH ₃) ₂	147- 149
190	1	N	H	CH ₃	CH ₃	5-CH ₃	C(O)NHCH ₂ C(CH ₃) ₃	180-

Compound	m	Δ	R^1	R^2	R^4	R^5	R^6	m.p. (°C.)
		H						182
193	1	N H	H	CH ₃	CH ₃	5-CH ₃	C(O)N(CH ₃)CH ₂ C(CH ₃) ₃	158- 160
196	1	O	H	C ₂ H ₅	CH ₃	5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	*
197	1	O	H	C ₂ H ₅	CH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₃	*
198	1	O	H	C ₂ H ₅	CH ₃	5-Cl	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂	*
199	1	O	H	C ₂ H ₅	CH ₃	5-CH ₃	(CH ₂) ₃ C(CH ₃) ₃	*
200	2	O	H	C ₂ H ₅	CH ₃	3-Cl-5- CH ₃	(CH ₂) ₃ CH(CH ₃) ₂	*
201	2	O	H	C ₂ H ₅	CH ₃	3-Cl-5- CH ₃	(CH ₂) ₃ C(CH ₃) ₃	*
202	1	O	H	C ₂ H ₅	OCH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₃	*
203	1	O	H	C ₂ H ₅	SCH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₃	*
204	1	O	H	<i>c</i> -Pr	SCH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₃	62-64
205	1	O	H	<i>i</i> -Pr	SCH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₃	*
206	1	O	H	<i>n</i> -Pr	SCH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₃	*
207	1	O	H	CHO=CH	CH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₃	*
208	2	O	H	C ₂ H ₅	CH ₃	5-Cl-6-Br	(CH ₂) ₃ CH(CH ₃) ₃	*

INDEX TABLE C

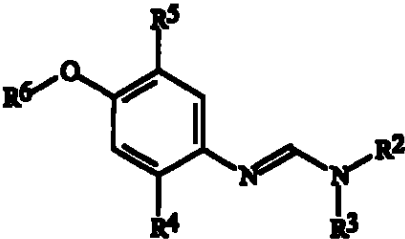


Compound	m	R^2	R^3	R^4	R^5	R^6	m.p. (°C.)
77	1	C ₂ H ₅	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	94-95
78	1	<i>n</i> -Pr	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	*
79	1	C ₂ H ₅	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ Si(CH ₃)(C ₂ H ₅) ₂	81-82
80	2	C ₂ H ₅	CH ₃	Cl	3,5-diCl	(CH ₂) ₃ Si(CH ₃) ₃	94-97
81	2	<i>n</i> -Pr	CH ₃	Cl	3,5-diCl	(CH ₂) ₃ Si(CH ₃) ₃	121-123
82	2	<i>i</i> -Pr	CH ₃	Cl	3,5-diCl	(CH ₂) ₃ Si(CH ₃) ₃	118-119
83	2	CH ₂ CH=CH ₂	CH ₃	Cl	3,5-diCl	(CH ₂) ₃ Si(CH ₃) ₃	64-65
84	1	C ₂ H ₅	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	*

Compound	n	R ²	R ³	R ⁴	R ⁵	R ⁶	m.p. (°C.)
85	1	CH ₂ CH=CH ₂	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	*
86	1	CH ₂ CH=CH ₂	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	*
87	1	C ₂ H ₅	CH ₃	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₃	*
88	1	n-Pr	CH ₃	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₃	*
89	1	n-Bu	CH ₃	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₃	*
90	1	i-Pr	CH ₃	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₃	*
91	1	n-Bu	CH ₃	CH ₃	5-i-Pr	(CH ₂) ₃ Si(CH ₃) ₃	*
92	1	i-Pr	CH ₃	CH ₃	5-i-Pr	(CH ₂) ₃ Si(CH ₃) ₃	*
93	1	n-Pr	CH ₃	CH ₃	5-i-Pr	(CH ₂) ₃ Si(CH ₃) ₃	*
94	1	C ₂ H ₅	CH ₃	CH ₃	5-i-Pr	(CH ₂) ₃ Si(CH ₃) ₃	*
106	1	C ₂ H ₅	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂	*
107	1	CH ₃	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂	*
108	1	C ₂ H ₅	C ₂ H ₅	CH ₃	5-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂	*
112	1	CH ₃	C ₂ H ₅	CH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₂	138-140
113	1	C ₂ H ₅	C ₂ H ₅	CH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₂	191-192
114	1	C ₂ H ₅	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₂	58-60
117	2	C ₂ H ₅	C ₂ H ₅	CH ₃	3,5-di-Cl	(CH ₂) ₃ CH(CH ₃) ₂	112-114
118	2	C ₂ H ₅	CH ₃	CH ₃	3,5-di-Cl	(CH ₂) ₃ CH(CH ₃) ₂	68-70
119	2	CH ₃	CH ₃	CH ₃	3,5-di-Cl	(CH ₂) ₃ CH(CH ₃) ₂	136-138
120	1	C ₂ H ₅	C ₂ H ₅	CH ₃	5-Cl	(CH ₂) ₃ C(CH ₃) ₃	118-120
121	2	CH ₃	CH ₃	CH ₃	3,5-di-Cl	(CH ₂) ₃ C(CH ₃) ₃	150-152
122	2	C ₂ H ₅	CH ₃	CH ₃	3,5-di-Cl	(CH ₂) ₃ C(CH ₃) ₃	122-124
123	1	CH ₃	CH ₃	Cl	5-Cl	(CH ₂) ₃ CH(CH ₃) ₂	128-130
124	1	C ₂ H ₅	CH ₃	Cl	5-Cl	(CH ₂) ₃ CH(CH ₃) ₂	70-72
125	1	C ₂ H ₅	C ₂ H ₅	Cl	5-Cl	(CH ₂) ₃ CH(CH ₃) ₂	90-92
127	1	i-Pr	C ₂ H ₅	Cl	5-Cl	(CH ₂) ₃ CH(CH ₃) ₂	*
133	2	CH ₃	CH ₃	CH ₃	3-Cl-5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	128-130
134	2	C ₂ H ₅	CH ₃	CH ₃	3-Cl-5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	110-112
136	2	CH ₃	CH ₃	CH ₃	3-Cl-5-CH ₃	(CH ₂) ₃ CH(CH ₃) ₃	136-138
137	2	C ₂ H ₅	CH ₃	CH ₃	3-Cl-5-CH ₃	(CH ₂) ₃ CH(CH ₃) ₃	*
138	2	CH ₃	CH ₃	CH ₃	3-Cl-5-CH ₃	(CH ₂) ₃ C(CH ₃) ₃	148-150
139	2	C ₂ H ₅	CH ₃	CH ₃	3-Cl-5-CH ₃	(CH ₂) ₃ C(CH ₃) ₃	120-123
163	1	C ₂ H ₅	C ₂ H ₅	CH ₃	5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	*
164	1	C ₂ H ₅	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	*
165	1	CH ₃	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₂ O(<i>n</i> -Bu)	*

Compound	m	R ²	R ³	R ⁴	R ⁵	R ⁶	m.p. (°C.)
167	1	CH ₃	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	*
168	1	CH ₃	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	98-99
169 (Ex. 6)	1	C ₂ H ₅	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	71-72
170	1	C ₂ H ₅	C ₂ H ₅	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	62-63
177	1	C ₂ H ₅	C ₂ H ₅	CH ₃	5-Cl	(CH ₂) ₃ C(CH ₃) ₃	*
178	1	C ₂ H ₅	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ C(CH ₃) ₃	88-90
179	2	C ₂ H ₅	C ₂ H ₅	CH ₃	3,5-di-Cl	(CH ₂) ₃ Si(CH ₃) ₃	90-101
180	2	CH ₃	CH ₃	CH ₃	3,5-di-Cl	(CH ₂) ₃ Si(CH ₃) ₃	89-90
181	2	C ₂ H ₅	CH ₃	CH ₃	3,5-di-Cl	(CH ₂) ₃ Si(CH ₃) ₃	79-82
183	1	CH ₃	CH ₃	Cl	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	75-78
184	1	C ₂ H ₅	CH ₃	Cl	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	85-88
185	1	C ₂ H ₅	C ₂ H ₅	Cl	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	91-92
186	1	CH ₃	CH ₃	Cl	5-Cl	(CH ₂) ₃ C(CH ₃) ₃	106-108
187	1	C ₂ H ₅	CH ₃	Cl	5-Cl	(CH ₂) ₃ C(CH ₃) ₃	86-87
188	1	C ₂ H ₅	C ₂ H ₅	Cl	5-Cl	(CH ₂) ₃ C(CH ₃) ₃	88-89
191	1	C ₂ H ₅	C ₂ H ₅	CH ₃	5-CH ₃	(CH ₂) ₃ C(CH ₃) ₃	*
192	1	CH ₃	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ C(CH ₃) ₃	102-104
194	1	C ₂ H ₅	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ C(CH ₃) ₃	82-84

INDEX TABLE D



Compound	R ² +R ³	R ⁴	R ⁵	R ⁶	m.p. (°C.)
95	(CH ₂) ₄	CH ₃	Cl	(CH ₂) ₃ Si(CH ₃) ₃	*
209	(CH ₂) ₃	CH ₃	Cl	(CH ₂) ₃ Si(CH ₃) ₃	*

*See Index Table F for ¹H NMR data.

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INDEX TABLE E

Compd No.	¹ H NMR Data (CDCl ₃ solution unless indicated otherwise) ^a
1	δ 1.72 (s,3H), 1.78 (s,3H), 2.17 (s,3H), 2.24 (s,3H), 2.99 (s,6H), 4.46 (d,2H), 5.5 (t,1H), 6.55 (s,1H), 6.66 (s,1H), 7.38 (s,1H).

Compd No.	¹ H NMR Data (CDCl ₃ solution unless indicated otherwise) ^a
2	δ 1.6-1.8 (m,9H), 1.9-2.5 (m,10H), 2.98(s,6H), 4.46(d,2H), 5.1 (m,1H), 5.5 (m,1H), 6.54 (s,1H), 6.66 (s,1H), 7.38 (s,1H).
3	δ 1.6-2.4 (m,26H), 2.99 (s,6H), 4.5(d,2H), 5-5.2 (m,2H), 5.5 (m,1H), 6.54 (s,1H), 6.66 (s,1H), 7.38 (s,1H).
4	δ 1.25 (s,9H), 2.21(s,3H), 2.23 (s,3H), 2.99 (s,6H), 4.79 (s,2H), 6.50 (s,1H), 6.55 (s,1H), 7.37 (s,1H).
5	δ 1.5-2.3 (m,12H), 2.98(s,6H), 3.92 (t,2H), 4.95-5.1 (m,2H), 5.7-5.9 (m,1H), 6.54 (s,1H), 6.63 (s,1H), 7.37 (s,1H).
6	δ 1.8-1.92 (m,2H), 2.17-2.3 (m,8H), 2.98 (s,6H), 3.92 (t,2H), 4.97-5.13 (m,2H), 5.8-5.95 (m,1H), 5.55 (s,1H), 6.64 (s,1H), 7.37 (s,1H).
7	δ 1.6-2.04 (m,6H), 2.17 (s,3H), 2.22 (s,3H), 2.99 (s,6H), 3.26 (s,9H), 3.97 (t,2H), 6.54 (s,1H), 6.64 (s,1H), 7.38 (s,1H).
8	δ 0.96 (d,6H), 1.67 (q,2H), 1.87 (m,1H), 2.15 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.93 (t, 2H), 6.54 (s,1H), 6.64 (s,1H), 7.37 (s,1H).
9	δ 1.04 (d,6H), 1.8-2.35 (m,11H), 2.98 (s,6H), 3.93 (t,2H), 4.72 (d,1H), 4.98 (d,1H), 6.55 (s,1H), 6.64 (s,1H), 7.38 (s,1H).
10	δ 0.87 (d,6H), 0.94 (d,3H), 1.1-1.9 (m,10H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.93 (m,2H), 6.54 (s,1H), 6.63 (s,1H), 7.38 (s,1H).
11	δ 0.91 (s,9H), 0.98 (d,3H), 1.05-1.35 (m,2H), 1.5-1.9 (m,3H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.92 (t,3H), 6.54 (s,1H), 6.62 (s,1H), 7.38 (s,1H).
12	δ 0.99 (s,9H), 1.72 (t,2H), 2.15 (s,3H), 2.24 (s,3H), 2.98 (s,6H), 3.96 (t,2H), 6.54 (s,1H), 6.63 (s,1H), 7.38 (s,1H).
13	δ 0.91 (d,6H), 1.28-1.82 (m,5H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.89 (t,2H), 6.54 (s,1H), 6.63 (s,1H), 7.37 (s,1H).
14	δ 0.95 (d,3H), 1.18-2.1 (m,13H), 2.15 (s,3H), 2.23 (s,3H), 2.97 (s,6H), 3.93 (m,2H), 5.1 (t,1H), 6.54 (s,1H), 6.63 (s,1H), 7.37 (s,1H).
15	δ 0.95 (d,3H), 1.18-2.1 (m,13H), 2.15 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.94 (m,2H), 5.1 (t,1H), 6.54 (s,1H), 6.63 (s,1H), 7.37 (s,1H).
16	δ 1.9-2.1 (m,4H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.63 (t,2H), 3.95 (t,2H), 6.55 (s,1H), 6.62 (s,1H), 7.37 (s,1H).
17	δ 1.6-2 (m,6H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.57 (t,2H), 3.92 (t,2H), 6.54 (s,1H), 6.62 (s,1H), 7.37 (s,1H).
18	δ 0.91 (m,3H), 1.2-1.8 (m,9H), 2.15 (s,3H), 2.22 (s,3H), 2.98 (s,6H), 4.21 (m,1H), 6.53 (s,1H), 6.64 (s,1H), 7.39 (s,1H).

Compd No.	¹ H NMR Data (CDCl ₃ solution unless indicated otherwise) ^a
19	δ 0.93 (t,3H), 1.3-1.55 (m,4H), 1.7-1.82 (m,2H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.9 (t,2H), 6.54 (s,1H), 6.63 (s,1H), 7.37 (s,1H).
20	δ 0.9 (t,3H), 1.3-1.56 (m,6H), 1.7-1.82 (m,2H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.9 (t,2H), 6.55 (s,1H), 6.63 (s,1H), 7.38 (s,1H).
21	δ 0.89 (t,3H), 1.2-1.6 (m,8H), 1.7-1.82 (m,2H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.9 (t,2H), 6.54 (s,1H), 6.64 (s,1H), 7.37 (s,1H).
22	δ 0.89 (t,3H), 1.2-1.56 (m,10H), 1.7-1.82 (m,2H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.9 (t,2H), 6.54 (s,1H), 6.63 (s,1H), 7.38 (s,1H).
23	δ 0.88 (t,3H), 1.2-1.56 (m,12H), 1.7-1.82 (m,2H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.9 (t,2H), 6.54 (s,1H), 6.63 (s,1H), 7.37 (s,1H).
24	δ 0.88 (t,3H), 1.2-1.56 (m,14H), 1.7-1.82 (m,2H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.9 (t,2H), 6.54 (s,1H), 6.63 (s,1H), 7.37 (s,1H).
25	δ 0.88 (t,3H), 1.2-1.82 (m,20H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.9 (t,2H), 6.54 (s,1H), 6.63 (s,1H), 7.37 (s,1H).
26	δ 0.02 (t,9H), 0.6 (m,2H), 1.7-1.82 (m,2H), 2.17 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.87 (t,2H), 6.54 (s,1H), 6.62 (s,1H), 7.38 (s,1H).
27	δ 0.05 (s,6H), 0.9 (s,9H), 1.97 (m,2H), 2.15 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.82 (t,2H), 4.0 (t,2H), 6.54 (s,1H), 6.64 (s,1H), 7.37 (s,1H).
28	δ 0.9 (t,6H), 1.2-1.4 (m,8H), 1.5-1.7 (m,4H), 2.15 (s,3H), 2.2 (s,3H), 3.0 (s,6H), 4.1 (m,1H), 6.5 (s,1H), 6.6 (s,1H), 7.4 (s,1H).
29	δ 0.9 (t,6H), 1.2-1.4 (m,6H), 1.5-1.7 (m,4H), 2.15 (s,3H), 2.25 (s,3H), 3.0 (s,6H), 4.05-4.2 (m,1H), 6.5 (s,1H), 6.6 (s,1H), 7.4 (s,1H).
30	δ 0.9 (m,6H), 1.2-1.4 (m,12 H), 1.5-1.7 (m,4H), 2.1 (s,3H), 2.2 (s,3H), 3.0 (s,6H), 4.05-4.2 (m,1H), 6.45 (s,1H), 6.6 (s,1H), 7.35 (s, H).
31	δ 0.8 (d,6 H), 0.9(t,3H), 1.2-1.4 (m,2H), 1.5-1.7 (m,4H), 2.1 (s,3H), 2.2 (s,3H), 3.0 (s,6H), 3.95-4.1 (m,1H), 6.5 (s,1H), 6.6 (s,1H), 7.4 (s,1H).
32	δ 0.8 (d,6H), 1.2(d,3H), 1.4-1.6 (m,2H), 1.6-1.75 (m,2H), 2.15 (s,3H), 2.2 (s,3H), 2.95 (s,6H), 4.10-4.2 (m,1H), 6.5 (s,1H), 6.6 (s,1H), 7.4 (s,1H).
33	δ 0.8 (d,6H), 0.9(t,3H), 1.2-1.4 (m,6H), 1.5-1.7 (m,4H), 2.15 (s,3H), 2.25 (s,3H), 3.0 (s,6H), 4.05-4.2 (m,1H), 6.5 (s,1H), 6.6 (s,1H), 7.4 (s,1H).
34	δ 0.9 (t,6H), 1.55-1.75 (m,4H), 2.1 (s,3H), 2.2 (s,3H), 2.95 (s,6H), 3.95-4.1 (m,1H), 6.5 (s,1H), 6.6 (s,1H), 7.4 (s,1H).

Compd No.	¹ H NMR Data (CDCl ₃ solution unless indicated otherwise) ^a
35	δ 0.85 (d,6H), 0.95(d,6H), 1.2-1.4 (m,4H), 1.5-1.8 (m,6H), 2.1 (s,3H), 2.2 (s,3H), 2.95 (s,6H), 3.8-3.95 (m,1H), 6.5 (s, 1H), 6.6 (s,1H), 7.4 (s,1H).
36	δ 0.8-0.9 (t,6H), 1.3-1.5 (m,4H), 1.5-1.65 (m,4H), 2.15 (s,3H), 2.25 (s,3H), 3.0 (s,6H), 4.05-4.2 (m,1H), 6.5 (s,1H), 6.6 (s,1H), 7.4 (s,1H).
37	δ 0.8-0.9 (q,6H), 1.2-1.4 (m,14 H), 1.5-1.7 (m,4H), 2.1(s,3H), 2.2(s,3H), 2.95 (s,6H), 4.05-4.1 (m,1H), 6.5 (s,1H), 6.6 (s,1H), 7.4 (s,1H).
38	δ 0.06 (s,9H), 1.64 (s,2H), 2.20 (s,3H), 2.24 (s,3H), 2.98 (s,6H), 4.31 (s,2H), 4.75 (s,1H), 5.03 (s,1H), 6.55 (s,1H), 6.61 (s,1H), 7.38 (s,1H).
39	δ 1.66 (s,3H), 1.72 (s,3H), 2.16 (s,3H), 2.22 (s,3H), 2.45 (q,2H), 2.98 (s,6H), 3.88 (t,2H), 5.23 (t,1H), 6.54 (s,1H), 6.63 (s,1H), 7.37 (s,1H).
40	δ 1.04 (s,9H), 2.18 (s,3H), 2.22 (s,3H), 2.98 (s,6H), 4.43 (d,2H), 5.6 (m,1H), 5.8 (d,1H), 6.54 (s,1H), 6.65 (s,1H), 7.38 (s,1H).
41	δ 1.22 (s,9H), 2.16 (s,3H), 2.22 (s,3H), 2.98 (s,6H), 3.69 (t, 2H), 4.02 (t,2H), 6.53 (s,1H), 6.66 (s,1H), 7.37 (s,1H).
42	δ 1.62 (s,6H), 1.96 (m,4H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.94 (t,2H), 6.55 (s,1H), 6.62 (s,1H), 7.37 (s,1H).
43	δ 1.18 (s,6H), 1.6-1.9 (m,4H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.2 (s,3H), 3.9 (t,2H), 6.54 (s,1H), 6.62 (s,1H), 7.37 (s,1H).
44	δ 1.15-1.25 (m,9H), 1.6-1.9 (m,4H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.4 (q,2H), 3.9 (t,2H), 6.54 (s,1H), 6.62 (s,1H), 7.37 (s,1H).
45	δ 1.26 (s, 6H), 1.6-1.97 (m, 4H), 2.16 (s, 3H), 2.23 (s, 3H), 2.98 (s, 6H), 3.94 (t, 2H), 6.57 (s, 1H), 6.63 (s, 1H), 7.37 (s, 1H).
46	δ 1-1.1 (m,6H), 1.51 (s,3H), 1.6-2.1 (m,4H), 2.16 (s,3H), 2.23 (s,3H), 2.99 (s, 6H), 3.94 (m,2H), 6.55 (s,1H), 6.61 (s,1H), 7.37 (s,1H).
47	δ 1.2-2 (m,12H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.2 (s,3H), 3.94 (t,2H), 6.55 (s,1H), 6.62 (s,1H), 7.37 (s,1H).
48	δ 0.88 (d,6H), 1.2-1.9 (m,7H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.9 (t,2H), 6.54 (s,1H), 6.63 (s,1H), 7.37 (s,1H).
49	δ 0.8-2 (m,15H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.9 (t,2H), 6.54 (s,1H), 6.63 (s,1H), 7.37 (s,1H).
50	δ 0.92 (s,9H), 1.34 (m,2H), 1.74 (m,2H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.88 (t,2H), 6.54 (s,1H), 6.62 (s,1H), 7.37 (s,1H).
51	δ 0.01 (s,6H), 0.46-0.7 (m,4H), 0.93 (t,3H), 1.7-1.87 (m,2H), 2.18 (s,3H), 2.24 (s,3H), 3.0 (s,6H), 3.88 (t,2H), 6.56 (s,1H), 6.64 (s,1H), 7.39 (s,1H).

Compd No.	¹ H NMR Data (CDCl ₃ solution unless indicated otherwise) ^a
52	δ 0.01 (s,6H), 0.46-0.7 (m,4H), 0.97 (t,3H), 1.27-1.4 (m,2H), 1.7-1.87 (m,2H), 2.18 (s,3H), 2.24 (s,3H), 2.99 (s,6H), 3.87 (t,2H), 6.56 (s,1H), 6.63 (s,1H), 7.38 (s,1H).
53	δ 0.00 (s,3H), 0.46-0.7 (m,6H), 0.93 (t,6H), 1.7-1.87 (m,2H), 2.21 (s,3H), 2.27 (s,3H), 3.0 (s,6H), 3.9 (t,2H), 6.59 (s,1H), 6.66 (s,1H), 7.42 (s,1H).
54	δ 0.02 (s,9H), 0.6 (m,2H), 1.2 (t,3H), 1.8 (m,2H), 2.23 (s,3H), 2.98 (s,3H), 3.35 (br s,2H), 3.93 (t,2H), 6.74 (s,1H), 6.77 (s,1H), 7.4 (s,1H).
55	δ 0.03 (s,9H), 0.6 (m,2H), 1.83 (m,2H), 3.05 (s,6H), 3.92 (t,2H), 6.82 (s,1H), 7.41 (s,1H).
56	δ 0.02 (s,9H), 0.6 (m,2H), 1.8 (m,2H), 2.23 (s,3H), 2.96 (s,3H), 3.75-3.97 (m,4H), 5.23 (m,2H), 5.83 (m,1H), 6.74 (s,1H), 6.77 (s,1H), 7.42 (s,1H).
57	δ 0.00 (s,6H), 0.46-0.65 (m,4H), 0.95 (t,3H), 1.21 (t,3H), 1.82 (m,2H), 2.24 (s,3H), 2.99 (s,3H), 3.37 (br s,2H), 3.94 (t,2H), 6.75 (s,1H), 6.78 (s,1H), 7.4 (s,1H).
58	δ 0.02 (s,9H), 0.6 (m,2H), 0.92 (t,3H), 1.61 (m,2H), 1.8 (m,2H), 2.22 (s,3H), 2.98 (s,3H), 3.22 (br s, 2H), 3.92 (t,2H), 6.74 (s,1H), 6.76 (s,1H), 7.4 (s,1H).
59	δ 0.02 (s,9H), 0.6 (m,2H), 1.2 (t,3H), 1.79 (m,2H), 2.21 (s,3H), 2.98 (s,3H), 3.35 (br s,2H), 3.94 (t,2H), 6.55 (d,1H), 6.77 (d,1H), 7.4 (s,1H).
60	δ 0.02 (s,9H), 0.6 (m,2H), 0.92 (t,3H), 1.61 (m,2H), 1.79 (m,2H), 2.2 (s,3H), 2.98 (s,3H), 3.21 (br s,2H), 3.93 (t,2H), 6.55 (d,1H), 6.77 (d,1H), 7.4 (s,1H).
61	δ 0.02 (s,9H), 0.6 (m,2H), 0.72 (m,4H), 1.8 (m,2H), 2.22 (s,3H), 2.65 (m,1H), 3.01 (s,3H), 3.93 (t,2H), 6.74 (s,1H), 6.77 (s,1H), 7.58 (s,1H).
62	δ 0.01 (s,9H), 0.6 (m,2H), 0.95 (t,3H), 1.34 (m,2H), 1.57 (m,2H), 1.78 (m,2H), 2.2 (s,3H), 2.98 (s,3H), 3.24 (br s,2H), 3.93 (t,2H), 6.55 (d,1H), 6.77 (d, 1H), 7.39 (s,1H).
63	δ 0.01 (s,9H), 0.6 (m,2H), 1.23 (d,6H), 1.79 (m,2H), 2.21 (s,3H), 2.9 (s,3H), 3.64 (br s,1H), 3.93 (t,2H), 6.55 (d,1H), 6.77 (d,1H), 7.43 (s,1H).
64	δ 0.01 (s,9H), 0.6 (m,2H), 1.79 (m,2H), 2.2 (s,3H), 2.96 (s,3H), 3.9-4.0 (m,4H), 5.21(m,2H), 5.81(m,1H), 6.55 (d,1H), 6.77 (d,1H), 7.42 (s,1H).

Compd No.	¹ H NMR Data (CDCl ₃ solution unless indicated otherwise) ^a
65	δ -0.01 (s,6H), 0.47-0.8 (m,8H), 0.94 (t,3H), 1.8 (m,2H), 2.22 (s,3H), 2.65 (m,1H), 3.01 (s,3H), 3.93 (t,2H), 6.74 (s,1H), 6.77 (s,1H), 7.59 (s,1H).
66	δ -0.02 (s,6H), 0.45-0.63 (m,4H), 0.93 (t,3H), 1.2 (t,3H), 1.78 (m,2H), 2.21 (s,3H), 2.98 (s,3H), 3.37 (br s,2H), 3.93 (t,2H), 6.55 (d,1H), 6.77 (d,1H), 7.4 (s,1H).
67	δ -0.02 (s,6H), 0.45-0.63 (m,4H), 0.9-1 (m,6H), 1.61 (m,2H), 1.78 (m,2H), 2.2 (s,3H), 2.98 (s,3H), 3.2 (br s,2H), 3.93 (t,2H), 6.52 (d,1H), 6.77 (d,1H), 7.4 (s,1H).
68	δ -0.02 (s,6H), 0.45-0.63 (m,4H), 0.9-1 (m,6H), 1.31 (m,2H), 1.57 (m,2H), 1.78 (m,2H), 2.2 (s,3H), 2.98 (s,3H), 3.25 (br s,2H), 3.93 (t,2H), 6.52 (d,1H), 6.77 (d,1H), 7.4 (s,1H).
69	δ -0.02 (s,6H), 0.45-0.63 (m,4H), 0.96 (t,3H), 1.23 (d,6H), 1.78 (m,2H), 2.21 (s,3H), 2.89 (s,3H), 3.65 (br s,1H), 3.93 (t,2H), 6.55 (d,1H), 6.77 (d,1H), 7.45 (s,1H).
70	δ -0.01 (s,6H), 0.45-0.63 (m,4H), 0.94 (t,3H), 1.78 (m,2H), 2.21 (s,3H), 2.97 (s,3H), 3.9-4.0 (m,4H), 5.21(m,2H), 5.81(m,1H), 6.57 (d,1H), 6.78 (d,1H), 7.43 (s,1H).
71	δ -0.02 (s,6H), 0.45-0.8 (m,8H), 0.94 (t,3H), 1.78 (m,2H), 2.2 (s,3H), 2.67 (m, 1H), 2.98 (s,3H), 3.93 (t,2H), 6.55 (d,1H), 6.77 (d,1H), 7.58 (s,1H).
72	δ 0.01 (s,9H), 0.59 (m,2H), 0.72 (m,4H), 1.79 (m,2H), 2.2 (s,3H), 2.65 (m,1H), 3.01 (s,3H), 3.93 (t,2H), 6.55 (d,1H), 6.77 (d,1H), 7.58 (s,1H).
73	δ 0.00 (s,9H), 0.6 (m,2H), 0.93 (t,3H), 1.19 (d,6H), 1.3 (m,2H), 1.55 (m,2H), 1.75 (m,2H), 2.2 (s,3H), 2.95 (s,3H), 3.3 (m,3H), 3.85 (t,2H), 6.55 (s,1H), 6.65 (s,1H), 7.4 (s,1H).
74	δ 0.01 (s,9H), 0.6 (m,2H), 1.22 (m,12H), 1.8 (m,2H), 2.2 (s,3H), 2.86 (s,3H), 3.3 (m,1H), 3.87 (t,2H), 6.58 (s,1H), 6.62 (s,1H), 7.45 (s,1H).
75	δ 0.00 (s,9H), 0.6 (m,2H), 0.9 (t,3H), 1.2 (d,6H), 1.55-1.8 (m,4H), 2.19 (s,3H), 2.96 (s,3H), 3.2 (m,3H), 3.85(t,2H), 6.57 (s,1H), 6.62 (s,1H), 7.37 (s,1H).
76	δ 0.00 (s,9H), 0.6 (m,2H), 1.2 (m,9H), 1.7 (m,2H), 2.2 (s,3H), 2.96 (s,3H), 3.3 (m,3H), 3.85 (t,2H), 6.57 (s,1H), 6.62 (s,1H), 7.4 (s,1H).
78	δ 0.01 (s,6H), 0.46-0.67 (m,4H), 0.9-1.0 (m,6H), 1.67-1.82 (m,4H), 2.17 (s,3H), 2.22 (s,3H), 3.27 (s,3H), 3.75 (t,2H), 3.9 (t,2H), 6.64 (s,1H), 6.7 (s,1H), 6.95 (s,1H).

Compd No.	¹ H NMR Data (CDCl ₃ solution unless indicated otherwise) ^a
84	δ 0.00 (s,6H), 0.46-0.67 (m,4H), 0.94 (t,3H), 1.29 (t,3H), 1.77-1.9 (m,2H), 2.23 (s,3H), 3.26 (s,3H), 3.87 (q,2H), 3.96 (t,2H), 6.65 (s,1H), 6.76 (s,1H), 7.19 (s,1H).
85	δ 0.03 (s,9H), 0.6 (m,2H), 1.82 (m,2H), 2.21 (s,3H), 3.33 (s,3H), 3.96 (t,2H), 4.4 (d,2H), 5.3 (m,2H), 5.9 (m,1H), 6.75 (m,2H), 7.2 (s,1H).
86	δ 0.04 (s,9H), 0.6 (m,2H), 1.78 (m,2H), 2.18 (s,3H), 2.21 (s,3H), 3.33 (s,3H), 3.9 (t,2H), 4.4 (d,2H), 5.3 (m,2H), 5.9 (m,1H), 6.64 (s,1H), 6.79 (s,1H), 6.94 (s,1H).
87	δ 0.02 (s,9H), 0.6 (m,2H), 1.28 (t,3H), 1.8 (m,2H), 2.2 (s,3H), 3.25 (s,3H), 3.86 (q,2H), 3.94 (t,2H), 6.65 (s,1H), 6.77 (d,1H), 6.95 (d,1H).
88	δ 0.02 (s,9H), 0.6 (m,2H), 0.97 (t,3H), 1.67-1.82 (m,4H), 2.19 (s,3H), 3.27 (s,3H), 3.74 (t,2H), 3.94 (t,2H), 6.69 (s,1H), 6.79 (d,1H), 6.97 (d,1H).
89	δ 0.02 (s,9H), 0.6 (m,2H), 0.97 (t,3H), 1.39 (m,2H), 1.62-1.82 (m,4H), 2.2 (s,3H), 3.27 (s,3H), 3.77 (t,2H), 3.96 (t,2H), 6.65 (s,1H), 6.79 (d,1H), 6.97 (d,1H).
90	δ 0.02 (s,9H), 0.6 (m,2H), 1.22 (d,6H), 1.8 (m,2H), 2.2 (s,3H), 3.01 (s,3H), 3.96 (t,2H), 5.44 (m,1H), 6.65 (s,1H), 6.79 (d,1H), 6.95 (d,1H).
91	δ 0.00 (s,9H), 0.6 (m,2H), 0.97 (t,3H), 1.18 (d,6H), 1.4 (m,2H), 1.6-1.8 (m,4H), 2.2 (s,3H), 3.21 (m,4H), 3.7 (m,2H), 3.87 (t,2H), 6.63 (s,1H), 6.7 (s,1H), 6.93 (s,1H).
92	δ 0.01 (s,9H), 0.6 (m,2H), 1.2 (m,12H), 1.8 (m,2H), 2.2 (s,3H), 2.91 (s,3H), 3.3 (m,1H), 3.87 (t,2H), 5.4 (m,1H), 6.63 (s,1H), 6.7 (s,1H), 6.91 (s,1H).
93	δ 0.00 (s,9H), 0.6 (m,2H), 0.97 (t,3H), 1.18 (d,6H), 1.8 (m,4H), 2.19 (s,3H), 3.22 (m,4H), 3.7 (m,2H), 3.87 (m,2H), 6.63 (s,1H), 6.7 (s,1H), 6.94 (s,1H).
94	δ: 0.03 (s,9H), 0.6 (m,2H), 1.18 (d,6H), 1.25 (t,3H), 1.7 (m,2H), 2.2 (s,3H), 3.2-3.3 (m,4H), 3.87 (m,4H), 6.57 (s,1H), 6.7 (s,1H), 6.9 (s,1H).
95	δ 0.02 (s,9H), 0.6 (m,2H), 1.8 (m,2H), 1.94 (m,4H), 2.24 (s,3H), 3.48 (m,4H), 3.93 (t,2H), 6.73 (s,1H), 6.77 (s,1H), 7.6 (s,1H).
96	δ 0.95 (d,6H), 1.25-1.4 (m,2H), 1.5-1.7 (m,3H), 2.0 (s,3H), 2.15 (s,3H), 3.0 (s,6H), 6.4 (s,1H), 6.6 (s,1H).
97	δ 0.8-0.95 (m,9H), 1.15-1.65 (m,9H), 1.75 (s,3H), 2.0 (s,3H), 2.10 (s,3H), 3.0 (s,6H), 4.4 (m,1H), 6.35 (s,1H), 6.6 (s,1H).

Compd No.	¹ H NMR Data (CDCl ₃ solution unless indicated otherwise) ^a
98	δ 0.9 (s,9H), 1.0 (d,3H), 1.0-1.6 (m,5H), 1.75 (s,3H), 2.0 (s,3H), 2.15 (s,3H), 3.0 (s,6H), 6.4 (s,1H), 6.6 (s,1H).
99	δ 0.9 (t,6H), 1.3-1.7 (m,16H), 1.8 (s,3H), 2.0 (s,3H), 2.2 (s,3H), 3.05 (s,6H), 4.1 (m,1H), 6.35 (s,1H), 6.65 (s,1H).
100	δ 0.8-1.0 (m,10H), 1.2-1.7 (m,6H), 1.8 (s,3H), 2.0 (s,3H), 2.15 (s,3H), 3.0 (s,6H), 4.05 (m,1H), 6.35 (s,1H), 6.6 (s,1H).
101	δ 0.9 (t,6H), 1.4-1.7 (m,8H), 1.8 (s,3H), 2.0 (s,3H), 2.15 (s,3H), 3.05 (s,6H), 4.1 (m,1H), 6.4 (s,1H), 6.6 (s,1H).
102	δ 0.9 (t,6H), 1.25 (d,3H), 1.3-1.7 (m,5H), 1.8 (s,3H), 2.0 (s,3H), 2.15 (s,3H), 3.05 (s,6H), 4.15 (m,1H), 6.4 (s,1H), 6.6 (s,1H).
103	δ 0.9 (d,12H), 1.2-1.7 (m,10H), 1.8 (s,3H), 2.0 (s,3H), 2.15 (s,3H), 3.0 (s,6H), 4.1 (m,1H), 6.4 (s,1H), 6.6 (s,1H).
104	δ 0.9-1.0 (m,3H), 1.25 (m,3H), 1.5-1.7 (m,6H), 1.8 (s,3H), 2.0 (s,3H), 2.15 (s,3H), 3.0 (s,6H), 4.1 (m,1H), 4.7 (d,2H), 6.4 (s,1H), 6.6 (s,1H).
105	δ 0.9 (d,6H), 1.2 (d,2H), 1.25 (m,2H), 1.4-1.6 (m,4H), 2.2 (s,3H), 2.37 (s,3H), 6.6 (s,1H), 7.15 (s,1H), 7.4 (s,1H).
106	δ 0.95 (d,6H), 1.28 (t,2H), 1.35 (m,1H), 1.6 (m,2H), 1.8 (m,2H), 2.18 (s,3H), 2.1 (s,3H), 3.22 (s,3H), 3.88 (q,2H), 3.92 (t,2H), 6.6 (s,1H), 6.9 (s,1H).
108	δ 0.9 (d,6H), 1.2-1.4 (t & m,8H), 1.6 (m,2H), 1.75 (m,2H), 2.15 (s,3H), 2.2 (s,3H), 3.7 (q,4H), 3.9 (t,2H), 6.6 (s,1H), 6.9 (s,1H).
110	δ 0.9 (d,6H), 1.05 (m,2H), 1.4 (m,1H), 1.7 (m,2H), 1.8 (s,3H), 2.0 (s,3H), 3.0 (s,6H), 3.95 (t,2H), 6.65 (s,1H), 6.75 (s,1H).
111	δ 0.9 (d,6H), 1.35 (m,2H), 1.65 (m,2H), 1.7 (m,2H), 2.25 (s,3H), 3.0 (s,6H), 3.95 (s,6H), 6.65 (s,1H), 7.3 (s,1H).
115	δ 0.9 (d,6H), 1.4 (t,2H), 1.6 (m,1H), 1.8 (m,2H), 2.3 (s,3H), 3.0 (s,6H), 3.9 (t,2H), 6.7 (s,1H), 7.2 (s,1H).
116	δ 0.95 (d,6H), 1.3-1.5 (m,2H), 1.5-1.7 (m,2H), 1.8 (s,3H), 1.8-1.95 (m,1H), 2.2 (s,3H), 3.0 (s,6H), 4.8 (t,2H), 6.8 (s,1H).
126	δ 0.95 (d,6H), 1.3 (t,2H), 1.6 (m,1H), 1.8 (m,2H), 3.0 (s,6H), 3.9 (t,2H), 6.9 (s,1H), 7.4 (s,1H).
127	δ 0.9 (d,6H), 1.2 (d,6H), 1.3 (m,2H), 1.6 (m,1H), 1.8 (m,2H), 3.05 (s,3H), 3.95 (t,2H), 5.40 (m,1H), 6.8 (s,1H), 6.9 (s,1H), 7.80 (s,1H).
128	δ 0.00 (s,9H), 0.62 (m,2H), 2.1 (s,3H), 3.00 (s,6H), 3.55 (s,3H), 3.85 (t,2H), 6.4 (s,1H), 6.6 (s,1H).

Compd No.	¹ H NMR Data (CDCl ₃ solution unless indicated otherwise) ^a
129	δ 0.0 (s,9H), 0.6 (m,2H), 1.2 (t,2H), 1.8 (m,2H), 2.08 (s,3H), 2.93 (s,3H), 3.3 (q,2H), 3.52 (s,3H), 3.8 (t,2H), 6.652 (s,1H), 6.66 (s,1H).
130	δ 0.0 (s,9H), 0.6 (m,2H), 1.8 (m,2H), 2.1 (s,3H), 3.0 (s,6H), 3.6 (t,2H), 6.8 (d,2H).
131	δ 0.00 (s,9H), 0.62 (m,2H), 1.2 (t,3H), 1.8 (s,3H), 2.1 (s,6H), 3.00 (s,3H), 3.3 (q,2H), 3.5 (s,3H), 3.9 (t,2H), 6.45 (s,1H), 6.6 (s,1H).
132	δ 0.89 (d,6H), 1.34 (m,2H), 1.587 (m,1H), 1.8 (m,2H), 2.2 (s,3H), 2.26 (s,3H), 2.96 (s,6H), 3.78 (t,2H), 6.43 (s,1H), 7.3 (s,1H).
135	δ 0.89 (s,9H), 1.35 (m,2H), 1.8 (m,2H), 2.2 (s,3H), 2.25 (s,3H), 3.0 (s,6H), 3.8 (t,2H), 6.45 (s,1H), 7.3 (s,1H).
137	δ 0.95 (d,6H), 1.3 (t,3H), 1.4 (m,2H), 1.6 (m,1H), 1.85 (m,2H), 2.3 (s,6H), 3.35 (s,3H), 3.9 (m,4H), 6.7 (s,1H), 6.95 (s,1H).
140	δ 0.0 (s,9H), 0.5-0.65 (m,2H), 1.2 (t,3H), 1.6-1.85 (m,2H), 2.2 (s,3H), 2.25 (s,3H), 2.95 (s,3H), 3.3 (br s,2H), 3.75 (t,2H), 6.4 (s,1H), 7.3 (s,1H).
141	δ 0.9 (m,6H), 1.2-1.25 (m,6H), 1.4-1.5 (m,4H), 2.2 (s,3H), 2.3 (s,3H), 2.9 (m,1H), 3.0 (s,6H), 6.6 (s,1H), 7.15 (s,1H), 7.2 (s,1H).
142	δ 0.9 (m,6H), 1.2-1.7 (m,10H), 1.75 (s,3H), 1.95 (s,3H), 2.1 (s,3H), 3.0 (s,6H), 4.1 (m,1H), 6.45 (s,1H), 6.6 (s,1H).
143	δ 0.9 (m,6H), 1.2-1.5 (m,8H), 1.6 (m,4H), 1.8 (s,3H), 2.0 (s,3H), 2.1 (s,3H), 3.0 (s,6H), 4.1 (m,1H), 6.4 (s,1H), 6.7 (s,1H).
144	δ 0.8-0.9 (m,6H), 1.1 (d,3H), 1.2-1.6 (m,5H), 2.05 (s,3H), 2.2 (s,3H), 2.95 (s,6H), 3.4 (m,1H), 6.4 (s,1H), 7.4 (s,1H).
145	δ 0.8-0.9 (m,6H), 1.1-1.5 (m,16H), 1.2-1.6 (m,5H), 2.0 (s,3H), 2.2 (s,3H), 2.9 (s,6H), 3.3 (m,1H), 6.4 (s,1H), 6.45 (s,1H), 7.4 (s,1H).
146	δ 0.9 (m,6H), 1.25-1.5 (m,8H), 2.0 (s,3H), 2.2 (s,3H), 3.0 (s,6H), 3.35 (m,1H), 6.4 (s,1H), 6.45 (s,1H), 7.4 (s,1H).
147	δ 0.85 (s,9H), 0.95 (d,3H), 1.2 (m,2H), 1.45 (m,1H), 1.6 (m,2H), 2.0 (s,3H), 2.2 (s,3H), 3.0 (s,6H), 3.1 (m,1H), 6.4 (s,1H), 6.5 (s,1H), 7.2 (s,1H).
148	δ 0.8-0.9 (m,9H), 1.2-1.3 (m,6H), 1.4-1.5 (m,5H), 2.0 (s,3H), 2.2 (s,3H), 3.0 (s,6H), 3.3 (m,1H), 6.4 (s,1H), 6.5 (s,1H), 7.4 (s,1H).
149	δ 0.8-0.9 (m,9H), 1.15-1.3 (m,2H), 1.4-1.6 (m,5H), 2.0 (s,3H), 2.2 (s,3H), 2.95 (s,6H), 3.2 (m,1H), 6.4 (s,1H), 6.5 (s,1H), 7.4 (s,1H).
150	δ 0.8-0.9 (m,6H), 1.2-1.4 (m,8H), 1.4-1.5 (m,4H), 2.0 (s,3H), 2.2 (s,3H), 2.95 (s,6H), 3.3 (m,1H), 6.35 (s,1H), 6.45 (s,1H), 7.35 (s,1H).

Compd No.	¹ H NMR Data (CDCl ₃ solution unless indicated otherwise) ^a
151	δ 0.8-0.9 (m, 12H), 1.1-1.3 (m, 4H), 1.4-1.5 (m, 6H), 2.0 (s, 3H), 2.2 (s, 3H), 2.95 (s, 6H), 3.25 (m, 1H), 6.35 (s, 1H), 6.45 (s, 1H), 7.35 (s, 1H).
152	δ 0.9 (m, 3H), 1.4-1.7 (m, 6H), 1.7 (m, 3H), 2.1 (s, 3H), 2.2 (s, 3H), 3.0 (s, 6H), 3.3 (m, 1H), 4.7 (d, 2H), 6.4 (s, 1H), 6.55 (s, 1H), 7.4 (s, 1H).
153	δ 1.3 (s, 9H), 2.1 (s, 3H), 2.2 (s, 3H), 2.8 (t, 2H), 2.95 (s, 6H), 3.3 (t, 2H), 6.4 (s, 1H), 6.5 (s, 1H), 7.4 (s, 1H).
154	δ 0.9 (dd, 6H), 1.2-1.3 (m, 2H), 1.5-1.7 (m, 3H), 2.05 (s, 3H), 2.2 (s, 3H), 2.95 (s, 6H), 3.05 (m, 2H), 6.45 (s, 1H), 6.5 (s, 1H), 7.35 (s, 1H).
155	δ 0.95 (t, 6H), 1.3-1.7 (m, 12H), 2.25 (s, 3H), 2.4 (s, 3H), 2.9 (m, 1H), 3.0 (s, 6H), 6.6 (s, 1H), 7.2 (s, 1H), 7.4 (s, 1H).
156	δ 0.9 (d, 6H), 1.4 (m, 2H), 1.6 (m, 2H), 2.2 (s, 3H), 2.4 (s, 3H), 2.8 (t, 2H), 3.0 (s, 6H), 6.6 (s, 1H), 7.1 (s, 1H), 7.4 (s, 1H).
157	δ 0.95 (t, 6H), 1.2-1.6 (m, 10H), 2.25 (s, 3H), 2.4 (s, 3H), 2.9 (m, 1H), 3.0 (s, 6H), 6.6 (s, 1H), 7.2 (s, 1H), 7.4 (s, 1H).
158	δ 0.85 (s, 9H), 0.95 (d, 3H), 1.4 (m, 2H), 2.25 (s, 3H), 2.4 (s, 3H), 2.8 (m, 2H), 3.0 (s, 6H), 6.55 (s, 1H), 7.05 (s, 1H), 7.4 (s, 1H).
159	δ 0.85 (d, 12 H), 1.25-1.6 (m, 10H), 2.25 (s, 3H), 2.40 (s, 3H), 2.95 (m, 1H), 3.05 (s, 6H), 6.60 (s, 1H), 7.20 (s, 1H), 7.45 (s, 1H).
160	δ 0.9 (t, 6H), 1.25 - 1.6 (m, 10H), 2.2 (s, 3H), 2.35 (s, 3H), 2.9 (m, 1H), 3.0 (s, 6H), 6.5 (s, 1H), 7.25 (s, 1H), 7.4 (s, 1H).
161	δ 0.9 (t, 3H), 1.0 (m, 2H), 1.6 (s, 3H), 2.25 (s, 3H), 2.4 (s, 3H), 3.05 (s, 6H), 3.1 (m, 1H), 4.7 (m, 2H), 6.55 (s, 1H), 7.20 (s, 1H), 7.45 (s, 1H).
162	δ 0.9 (d, 6H), 1.0 (t, 3H), 1.3-1.7 (m, 5H), 2.20 (s, 3H), 2.4 (s, 3H), 2.9 (m, 1H), 3.0 (s, 6H), 6.6 (s, 1H), 7.20 (s, 1H), 7.45 (s, 1H).
163	δ 0.00 (s, 9H), 0.60 (m, 2H), 1.30 (t, 6H), 1.75 (m, 2H), 2.15 (s, 3H), 2.3 (s, 3H), 3.45 (q, 4H), 3.85 (t, 2H), 6.65 (s, 1H), 6.90 (s, 1H), 7.35 (s, 1H).
165	δ 1.25 (s, 9H), 2.15 (s, 3H), 2.25 (s, 3H), 2.8 (s, 3H), 3.5 (s, 6H), 3.65 (m, 2H), 3.95 (m, 2H), 6.65 (s, 1H), 6.85 (s, 1H).
167	δ 0.00 (s, 9H), 0.60 (m, 2H), 1.65 (m, 2H), 2.15 (s, 3H), 2.25 (s, 3H), 3.3 (s, 6H), 3.85 (t, 2H), 6.62 (s, 1H), 6.75 (br s, 1H), 6.9 (s, 1H).
173	δ 0.00 (s, 9H), 0.62 (m, 2H), 1.72 (s, 3H), 1.8 (m, 2H), 1.96 (s, 3H), 3.05 (s, 6H), 3.88 (t, 2H), 6.62 (s, 1H), 6.73 (s, 1H).
174	δ 1.40 (s, 9H), 2.32 (s, 3H), 2.35 (s, 3H), 3.00 (s, 6H), 3.55 (s, 2H), 6.60 (s, 1H), 7.38 (s, 1H), 7.60 (s, 1H), 8.70 (br s, 1H).
175	δ 0.80 (s, 9H), 1.20-1.40 (m, 4H), 1.8 (s, 3H), 3.0 (s, 6H), 3.9 (t, 2H), 6.60 (s, 1H), 6.70 (s, 1H), 7.25 (s, 1H).

Compd No.	¹ H NMR Data (CDCl ₃ solution unless indicated otherwise) ^a
176	δ 0.80 (s,9H), 1.30 (m,2H), 1.5 (m,2H), 1.8 (s,3H), 2.0 (s,3H), 3.0 (s,6H), 3.95 (t,2H), 6.60 (s,1H), 6.70 (s,1H).
177	δ 0.90 (s,9H), 1.25 (m,2H), 1.45 (t,6H), 1.80 (m,2H) 2.20, (s,3H), 3.80 (q,4H), 3.95 (t,2H), 6.40 (br s,1H), 6.50 (s,1H), 7.20 (s,1H)
182	δ 0.00 (s,9H), 0.60 (m,2H), 1.80 (m,2H), 2.15 (s,3H), 2.95 (s,6H), 3.85 (t,2H), 6.65 (s,1H), 7.4 (s,1H).
191	δ 0.92 (s,9H), 1.26-1.35 (m,8H), 1.75 (m,2H), 2.15 (s,3H), 2.2 (s,3H), 3.75 (q,4H), 3.9 (t,2H), 6.6 (s,1H), 6.7 (s,1H), 6.9 (s,1H).
196	δ 0.00 (s,9H), 0.6 (m,2H), 1.15 (t,3H), 1.7 (m,2H), 2.13 (s,3H), 2.19 (s,3H), 2.93 (s,3H), 3.3 (m,2H), 3.83 (t,2H), 6.5 (s,1H), 6.59 (s,1H), 7.36 (br s,1H),
197	δ 0.9 (d,6H), 1.15 (t,3H), 1.3 - 1.45 (m,2H), 1.5-1.7 (m,1H), 1.7-1.9 (m,2H), 2.2 (s,3H), 2.9 (s,3H), 3.3 (m,2H), 3.9 (t,2H), 6.7 (s,1H), 6.8 (s,1H), 7.4 (br s,1H).
198	δ 0.95 (d,6H), 1.15 (t,3H), 1.25 (d,3H), 1.35 (m,2H), 1.55 (m,2H), 1.7 (m,1H), 2.1 (s,3H), 2.9 (s,3H), 3.3 (br s,2H), 4.2 (m,1H), 6.7 (s,1H), 7.4 (s,1H).
199	δ 0.9 (d,9H), 1.18 (t,3H), 1.3 (m,2H), 1.7 (m,2H), 2.17 (s,3H), 2.2 (s,3H), 2.95 (s,3H), 3.3 (br m,2H), 3.85 (t,2H), 6.5 (s,1H), 6.6 (s,1H), 7.3 (s,1H).
200	δ 0.9 (d,6H), 1.18 (t,2H), 1.3 (m,2H), 1.55 (m,1H), 1.78 (m,2H), 2.2 (s,3H), 2.26 (s,3H), 2.94 (s,3H), 3.3 (br m,2H), 3.78 (t,2H), 6.4 (s,1H), 7.3 (s,1H).
201	δ 0.9 (d,9H), 1.18 (t,3H), 1.3 (m,2H), 1.7 (m,2H), 2.2 (s,3H), 2.26 (s,3H), 2.94 (s,3H), 3.3 (br m,2H), 3.78 (t,2H), 6.4 (s,1H), 7.3 (s,1H).
202	δ 0.02 (s,9H), 0.62 (m,2H), 1.2 (t,3H), 1.82 (m,2H), 3 (s,3H), 3.2-3.6 (m, 2H), 3.82 (s,3H), 3.95 (t,2H), 6.51 (s, 1H), 6.79 (s, 1H), 7.47 (br, 1H).
203	δ 0.02 (s,9H), 0.62 (m,2H), 1.22 (t,3H), 1.82 (m,2H), 2.4 (s,3H), 3.01 (s,3H), 3.2-3.6 (m, 2H), 3.96 (t,2H), 6.69 (s, 1H), 6.79 (s, 1H), 7.3-7.53 (br, 1H).
205	δ 0.02 (s,9H), 0.65 (m,2H), 1.24 (d,6H), 1.82 (m,2H), 2.4 (s,3H), 2.94 (br s,3H), 3.64 (m,1H), 3.96(t,2H), 6.69 (s,1H), 6.79 (s,1H), 7.6 (s,1H).
206	δ 0.02 (s,9H), 0.62 (m,2H), 0.92 (t,3H), 1.62 (m,2H), 1.82 (m,2H), 2.4 (s,3H), 3.02 (s,3H), 3.1-3.5 (m, 2H), 3.96 (t,2H), 6.69 (s, 1H), 6.79 (s, 1H), 7.45 (br s, 1H).

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Compd No.	¹ H NMR Data (CDCl ₃ solution unless indicated otherwise) ^a
207	δ 0.02 (s,9H), 0.62 (m,2H), 1.82 (m,2H), 2.23 (s,3H), 2.27 (s,1H), 3.04 (s,3H), 3.93 (t,2H), 4.17 (br s, 2H), 6.74 (s, 1H), 6.78 (s, 1H), 7.4 (s, 1H).
208	δ 0.02 (s,9H), 0.61 (m,2H), 1.23 (t,3H), 1.8 (m,2H), 2.16 (s,3H), 3.01 (s,3H), 3.1-3.6 (m, 2H), 3.93 (t,2H), 6.72 (s, 1H), 7.22 (br s, 1H).
209	δ 0.02 (s,9H), 0.6 (m,2H), 1.8 (m,2H), 2.23 (s,3H), 2.43 (m,2H), 3.93 (t,2H), 4.3 (t, 4H), 6.72 (s, 1H), 6.75 (s, 1H), 7.31 (s, 1H).

^a ¹H NMR data are in ppm downfield from tetramethylsilane. Couplings are designated by (s)-singlet, (d)-doublet, (t)-triplet, (q)-quartet, (m)-multiplet, (dd)-doublet of doublets, (dt)-doublet of triplets, (br s)-broad singlet.

BIOLOGICAL EXAMPLES OF THE INVENTION

5 General protocol for preparing test suspensions: Test compounds were first dissolved in acetone in an amount equal to 3% of the final volume and then suspended at the desired concentration (in ppm) in acetone and purified water (50/50 mix) containing 250 ppm of the surfactant Trem[®] 014 (polyhydric alcohol esters). The resulting test suspensions were then used in the following tests. Spraying a 200 ppm test suspension to the point of run-off on the
10 test plants was the equivalent of a rate of 500 g/ha.

TEST A

15 The test suspension was sprayed to the point of run-off on wheat seedlings. The following day the seedlings were inoculated with a spore dust of *Erysiphe graminis* f. sp. *tritici*, (the causal agent of wheat powdery mildew) and incubated in a growth chamber at 20 °C for 7 days, after which disease ratings were made.

TEST B

20 The test suspension was sprayed to the point of run-off on wheat seedlings. The following day the seedlings were inoculated with a spore suspension of *Puccinia recondita* (the causal agent of wheat leaf rust) and incubated in a saturated atmosphere at 20 °C for 24 h, and then moved to a growth chamber at 20°C for 6 days, after which disease ratings were made.

TEST C

25 The test suspension was sprayed to the point of run-off on wheat seedlings. The following day the seedlings were inoculated with a spore suspension of *Septoria nodorum* (the causal agent of *Septoria* glume blotch) and incubated in a saturated atmosphere at 20 °C for 48 h, and then moved to a growth chamber at 20 °C for 9 days, after which disease ratings were made.

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Results for Tests A-C are given in Table A. In the table, a rating of 100 indicates 100% disease control and a rating of 0 indicates no disease control (relative to the controls). A dash (-) indicates no test results.

Table A

Compd No.	Test A	Test B	Test C
1	32	100	92
2	95	100	36
3	0	87	0
4	0	92	0
5	0	100	89
6	0	100	60
7	0	0	0
8	97	100	98
9	98	100	97
10	97	100	0
11	97	100	100
12	97	100	80
13	97	100	100
14	90	100	0
15	94	100	0
16	88	100	97
17	92	100	100
18	98	100	98
19	96	100	100
20	96	100	99
21	98	100	96
22	98	100	88
23	97	98	13
24	86	23	0
25	0	90	0
26	98	100	100
27	99	100	100
28	0	97	0
29	99	100	58
30	0	100	0
31	93	100	53
32	97	100	95

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Compd No.	Test A	Test B	Test C
33	95	100	0
34	96	100	0
35	95	100	100
36	88	100	0
37	-	-	-
38	96	100	20
39	0	100	94
40	97	100	100
41	79	99	47
42	96	99	63
43	96	100	93
44	99	100	99
45	0	80	0
46	97	100	97
47	29	99	80
48	99	100	96
49	99	99	83
50	99	67	100
51	96	100	100
52	100	100	99
53	100	100	99
54	100	100	100
55	0	19	0
56	100	100	100
57	100	100	100
58	100	100	100
59	100	100	100
60	100	100	100
61	100	100	100
62	100	100	100
63	100	100	100
64	100	100	100
65	100	100	96
66	-	-	-
67	-	-	-
68	-	-	-

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Cmpd No.	Test A	Test B	Test C
69	-	-	-
70	-	-	-
71	-	-	-
72	-	-	-
73	99	61	66
74	100	100	100
75	100	100	100
76	100	100	100
77	100	100	100
78	0	98	100
79	0	99	100
83	0	9	0
84	100	100	100
85	100	99	100
86	100	99	100
87	-	-	-
88	-	-	-
89	-	-	-
90	-	-	-
91	0	26	0
92	100	100	100
93	99	100	99
94	99	100	100
95	100	100	100
96	0	100	100
97	0	45	85
98	0	60	94
99	0	9	0
100	0	86	76
101	100	100	100
102	21	95	89
103	31	0	0
104	0	23	0
105	97	100	98
106	100	100	100
107	60	99	99

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Compd No.	Test A	Test B	Test C
108	87	89	96
110	42	97	99
111	99	100	100
112	95	99	99
113	91	99	100
114	99	100	100
115	85	85	100
116	87	92	100
117	29	37	60
118	99	100	78
119	0	64	78
120	91	8	0
121	49	85	67
122	99	100	0
123	54	46	100
124	98	98	100
125	96	97	100
126	95	40	100
127	0	99	100
128	98	95	73
129	100	100	67
130	100	97	0
131	67	100	96
132	98	100	97
133	99	85	53
134	100	100	81
135	100	100	92
136	95	91	84
137	100	100	84
138	98	74	60
139	100	100	99
140	100	100	100
141	0	99	100
142	0	0	53
143	0	0	80
147	0	0	53

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Compd No.	Test A	Test B	Test C
148	0	0	47
150	0	0	47
151	0	0	60
154	0	0	47
155	0	23	95
156	93	100	100
157	0	96	99
158	61	98	56
159	94	100	47
160	0	55	0
161	72	100	53
162	21	99	67
163	32	100	73
164	100	100	100
165	0	28	0
167	99	99	100
168	99	100	100
169	99	100	100
170	99	100	99
172	100	100	100
173	32	90	99
175	97	100	100
176	43	99	100
177	96	100	100
178	100	100	100
179	20	23	0
180	75	58	0
181	100	100	67
182	98	79	67
183	99	85	90
184	100	99	78
185	99	98	63
186	94	9	0
187	100	99	78
188	100	79	90
189	0	9	0

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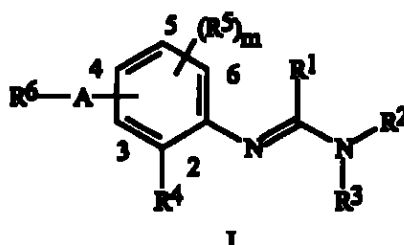
PCT/US03/13371

Compd No.	Test A	Test B	Test C
190	0	68	0
191	63	99	91
192	99	100	100
193	0	23	0
194	99	100	100
196	100	100	100
197	100	100	100
198	100	100	100
199	100	100	100
200	100	100	100
201	100	100	100

CLAIMS

What is claimed is:

1. A compound of Formula I and or an agriculturally suitable salt thereof,



5 wherein:

R^1 is H, OH, SH, SO_3H , CN, $-OR^7$ or $-SR^7$; C_1-C_{10} alkyl, C_2-C_{10} alkenyl, C_2-C_5 alkoxy carbonyl, C_2-C_{10} alkynyl, a C_3-C_6 carbocycle or a 3-, 4-, 5- or 6-membered heterocycle, each optionally substituted; provided that when R^1 is a heterocycle containing nitrogen as a ring member, it is not attached to the remainder of Formula I through said nitrogen ring member;

R^2 is H, CN, $-OR^7$, or $-SR^7$; C_1-C_{10} alkyl, C_2-C_{10} alkenyl, C_2-C_{10} alkynyl, C_3-C_6 carbocycle, a 3-, 4-, 5- or 6-membered heterocycle or C_2-C_{10} alkyl carbonyl, each optionally substituted;

R^3 is H; C_1-C_{10} alkyl, C_2-C_{10} alkenyl, C_2-C_{10} alkynyl, a C_3-C_6 carbocycle, a 3-, 4-, 5- or 6-membered heterocycle or C_2-C_{10} alkyl carbonyl, each optionally substituted; or

R^2 and R^3 are taken together with their interconnecting nitrogen to form a heterocyclic ring containing 3 to 7 atoms, said ring consisting of said interconnecting nitrogen atom, carbon and optionally one or two additional atoms selected from the group consisting of nitrogen, sulfur and oxygen, and said ring being optionally substituted with one or more R^9 ;

R^4 and each R^5 are each independently C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_6 cycloalkyl, C_1-C_6 haloalkyl, C_2-C_6 haloalkenyl, C_2-C_6 haloalkynyl, C_3-C_6 halocycloalkyl, halogen, CN, CHO, CO_2H , $CONH_2$, SF_5 , C_1-C_4 alkoxy, C_1-C_4 haloalkoxy, C_1-C_4 alkylthio, C_1-C_4 alkylsulfinyl, C_1-C_4 alkylsulfonyl, C_1-C_4 haloalkylthio, C_1-C_4 haloalkylsulfinyl, C_1-C_4 haloalkylsulfonyl, C_1-C_4 alkylamino, C_2-C_8 dialkylamino, C_3-C_6 cycloalkylamino, C_2-C_6 alkyl carbonyl, C_2-C_6 alkoxy carbonyl, C_2-C_6 alkylaminocarbonyl, C_3-C_8 dialkylaminocarbonyl or C_3-C_6 trialkylsilyl;

R^6 is C_3-C_{21} alkyl, C_3-C_{21} alkenyl, C_3-C_{21} alkynyl, C_4-C_9 alkoxy carbonyl, C_4-C_6 alkylaminocarbonyl, C_3-C_{10} dialkylaminocarbonyl or C_3-C_{12} trialkylsilyl, each optionally substituted; or R^6 is C_1-C_4 alkyl or C_2-C_9 alkyl carbonyl, each substituted with one or more R^{12} ;

A is a direct bond, O, S(O)_n or NR¹⁰;

each R⁷ is independently C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, a C₃-C₆ carbocycle or a 3-, 4-, 5- or 6-membered heterocycle, each optionally substituted;

each R⁹ is independently halogen, CN, NO₂, C₁-C₄ alkoxy, C₁-C₄ alkyl, C₁-C₄ haloalkoxy or C₁-C₄ alkylthio;

R¹⁰ is H, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₁-C₄ alkylsulfonyl, C₁-C₄ haloalkylsulfonyl, C₂-C₆ alkylcarbonyl, C₂-C₆ alkoxy carbonyl, C₂-C₆ alkylaminocarbonyl, C₃-C₈ dialkylaminocarbonyl or C₃-C₆ trialkylsilyl;

each R¹² is independently CO₂H, CONH₂, NO₂, C₁-C₆ haloalkoxy, C₂-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl, C₁-C₆ haloalkylthio, C₁-C₆ haloalkylsulfinyl, C₁-C₆ haloalkylsulfonyl, C₁-C₆ alkylamino, C₂-C₈ dialkylamino, C₂-C₆ alkylcarbonyl, C₂-C₆ alkoxy carbonyl, C₃-C₉ alkoxyalkylcarbonyl, C₂-C₆ alkylaminocarbonyl, C₃-C₁₀ alkylaminoalkylcarbonyl, C₃-C₈ dialkylaminocarbonyl, C₄-C₈ dialkylaminoalkylcarbonyl, C₃-C₉ alkylthioalkylcarbonyl, C₃-C₉ halotrialkylsilyl, C₄-C₉ alkoxytrialkylsilyl, C₃-C₉ trialkylsilyl or C₃-C₉ trialkylsilyloxy;

n is 0, 1 or 2; and

m is 0, 1, 2 or 3.

2. A compound of Claim 1 wherein:

R¹ is H, SH, SO₃H, CN, -OR⁷ or -SR⁷; C₁-C₁₀ alkyl, C₂-C₁₀ alkenyl or C₂-C₁₀ alkynyl, each optionally substituted with one or more R⁸; or a C₃-C₆ carbocycle or a 3-, 4-, 5- or 6-membered heterocycle, each optionally substituted with one or more R⁹;

R² is H, CN, -OR⁷ or -SR⁷; C₁-C₁₀ alkyl, C₂-C₁₀ alkenyl, C₂-C₁₀ alkynyl or C₂-C₁₀ alkylcarbonyl, each optionally substituted with one or more R⁸; or a C₃-C₆ carbocycle or a 3-, 4-, 5- or 6-membered heterocycle, each optionally substituted with one or more R⁹;

R³ is H; C₁-C₁₀ alkyl, C₂-C₁₀ alkenyl, C₂-C₁₀ alkynyl or C₂-C₁₀ alkylcarbonyl, each optionally substituted with one or more R⁸; or a C₃-C₆ carbocycle or a 3-, 4-, 5- or 6-membered heterocycle, each optionally substituted with one or more R⁹; or

R² and R³ are taken together with their interconnecting nitrogen to form a heterocyclic ring containing 3 to 7 atoms, said ring consisting of said interconnecting nitrogen atom, carbon and optionally one or two additional atoms selected from the group consisting of nitrogen, sulfur and oxygen, and said ring being optionally substituted with one or more R⁹;

R⁶ is C₅-C₂₁ alkyl, C₅-C₂₁ alkenyl, C₅-C₂₁ alkynyl, C₄-C₉ alkoxy carbonyl, C₄-C₆ alkylaminocarbonyl, C₃-C₁₀ dialkylaminocarbonyl or C₃-C₁₂ trialkylsilyl, each

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optionally substituted with one or more R^{11} ; or R^6 is C_1 - C_4 alkyl or C_2 - C_9 alkylcarbonyl, each substituted with one or more R^{12} ;
 each R^7 is independently C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, each optionally substituted with one or more R^8 ; or a C_3 - C_6 carbocycle or a 3-, 4-, 5- or
 5 6-membered heterocycle, each optionally substituted with one or more R^9 ;
 each R^8 is independently halogen, CN, NO_2 , C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy or C_1 - C_4 alkylthio; and
 each R^{11} is independently halogen, CO_2H , $CONH_2$, NO_2 , hydroxy, C_1 - C_6 alkoxy, C_1 - C_6 haloalkoxy, C_2 - C_6 alkylthio, C_1 - C_6 alkylsulfinyl, C_1 - C_6 alkylsulfonyl,
 10 C_1 - C_6 haloalkylthio, C_1 - C_6 haloalkylsulfinyl, C_1 - C_6 haloalkylsulfonyl, C_1 - C_6 alkylamino, C_2 - C_8 dialkylamino, C_2 - C_6 alkylcarbonyl, C_2 - C_6 alkoxycarbonyl, C_3 - C_9 alkoxyalkylcarbonyl, C_2 - C_6 alkylaminocarbonyl, C_4 - C_{10} alkylaminoalkylcarbonyl, C_3 - C_8 dialkylaminocarbonyl, C_4 - C_8 dialkylaminoalkylcarbonyl, C_3 - C_9 alkylthioalkylcarbonyl, C_2 - C_8 dialkylphosphoryl, C_2 - C_8 dialkylphosphinyl, C_3 - C_9 trialkylsilyl or C_3 - C_9 trialkylsilyloxy.

3. A compound of Claim 2 wherein

R^1 is H, SH or C_1 - C_{10} alkyl,

R^2 is H, CN, $-OR^7$ or $-SR^7$; C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl, C_2 - C_{10} alkynyl, each
 20 optionally substituted with one or more R^8 ; or phenyl optionally substituted with 1 to 3 R^9 ;

R^3 is H; C_1 - C_{10} alkyl, C_2 - C_{10} alkenyl or C_2 - C_{10} alkynyl, each optionally substituted with one or more R^8 ; or phenyl optionally substituted with 1 to 3 R^9 ; or

R^2 and R^3 are taken together with their interconnecting nitrogen to form a heterocyclic
 25 ring containing 3 to 7 atoms, said ring consisting of said interconnecting nitrogen atom, carbon and optionally one or two additional atoms selected from the group consisting of nitrogen, sulfur and oxygen, and said ring being optionally substituted with one or more R^9 ;

R^4 and R^5 are each independently C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_1 - C_6 haloalkyl, halogen, CO_2H , $CONH_2$, C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy, C_1 - C_4 alkylthio, C_1 - C_4 alkylsulfinyl, C_1 - C_4 alkylsulfonyl, C_1 - C_4 haloalkylthio, C_1 - C_4 haloalkylsulfinyl, C_1 - C_4 haloalkylsulfonyl, C_2 - C_6 alkylcarbonyl, C_2 - C_6 alkoxycarbonyl, C_1 - C_6 alkylaminocarbonyl, CN, CHO or C_3 - C_8 dialkylaminocarbonyl;

R^6 is C_5 - C_{15} alkyl, C_5 - C_{15} alkenyl or C_5 - C_{15} alkynyl, each optionally substituted with one or more R^{11} ; or R^6 is C_1 - C_4 alkyl substituted with one or more R^{12} ;

each R^7 is independently C_1 - C_6 alkyl, optionally substituted with one or more R^8 ;

A is a direct bond, O or $S(O)_n$; and

m is 0, 1 or 2.

4. A compound of Claim 3 wherein

A is attached to the remainder of Formula I at the 4 position of the benzene ring.

5. A compound of Claim 4 wherein

R² and R³ are each independently H or C₁-C₁₀ alkyl; or

R² and R³ are taken together with their interconnecting nitrogen to form a heterocyclic ring containing 3 to 7 atoms, said ring consisting of said interconnecting nitrogen atom, carbon and optionally one or two additional atoms selected from the group consisting of nitrogen, sulfur and oxygen, and said ring being optionally substituted with one or more R⁹;

R⁴ and R⁵ are each independently halogen, CN, CHO, C₁-C₆ alkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, C₁-C₄ alkylthio, C₁-C₄ alkylsulfinyl, C₁-C₄ haloalkylthio, C₁-C₄ haloalkylsulfinyl or C₁-C₆ haloalkyl;

One R⁵ is attached to the remainder of Formula I at the 5 position of the benzene ring and an optional second R⁵ is attached at the 6 position of the benzene ring; and m is 1 or 2.

6. A compound of Claim 5 wherein

R¹ is H; and

R⁶ is C₆-C₁₅ alkyl wherein at least one of the fourth and fifth carbon from A has one or no hydrogen attached or C₃-C₁₅ 2-alkenyl wherein the fourth or fifth carbon from A has one or no hydrogen attached.

7. A compound of Claim 5 wherein

R¹ is H; and

R⁶ is C₁-C₄ alkyl substituted with one or more substituents selected from the group consisting of C₂-C₆ alkylthio, C₁-C₆ alkylsulfinyl, C₂-C₆ alkoxy carbonyl, C₂-C₈ dialkylamino, C₂-C₆ alkyl carbonyl, C₃-C₉ alkoxyalkyl carbonyl, C₂-C₆ alkylaminocarbonyl, C₃-C₈ dialkylaminocarbonyl, C₃-C₉ trialkylsilyl, C₃-C₉ halo trialkylsilyl, C₄-C₉ alkoxy trialkylsilyl or C₃-C₉ trialkylsilyloxy.

8. A fungicidal composition comprising a fungicidally effective amount of a compound of Claim 1 and at least one additional component selected from the group consisting of surfactants, solid diluents and liquid diluents.

9. A fungicidal composition comprising a mixture of a compound of Claim 1 and at least one other fungicide having a different mode of action.

10. A method for controlling plant diseases caused by fungal plant pathogens comprising applying to the plant or portion thereof, or to the plant seed or seedling, a fungicidally effective amount of a compound of Claim 1.

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 03/13371

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07C257/10 C07C257/12 C07C335/16 C07C335/18 C07C335/20
A01N37/52 A01N47/28 A01N47/40

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07C A01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 177 106 A (CREGER PAUL L) 5 January 1993 (1993-01-05) Column 2, l. 36-52 and column 8, l. 45-65 ---	1-5
X	WO 00 06555 A (AMERICAN HOME PROD) 10 February 2000 (2000-02-10) page 6; claims 1,7; example 4 ---	1-5
Y	US 3 284 289 A (HANS AEBI ET AL) 8 November 1966 (1966-11-08) column 2, line 8 - line 20; claim 1; examples 3-6; table 1 --- -/--	1-10



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

22 August 2003

Date of mailing of the international search report

04/09/2003

Name and mailing address of the ISA

European Patent Office, P.O. Box 6016 Patentplan 2
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Fax (+31-70) 340-8016

Authorized officer

Rufet, J

INTERNATIONAL SEARCH REPORT

International Application No.
PCT/US 03/13371

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 20 29 298 A (FARBENFABRIKEN BAYER AG) 23 December 1971 (1971-12-23) page 4, l. 32-34; claims 1, 2	1-5
Y	page 45, l. 20 to page 46, l. 16; pages 24, 31, 32; claims 1, 2 & US 4 018 814 A 19 April 1977 (1977-04-19) cited in the application	1-10
Y	DE 21 13 978 A (HOECHST AG) 12 October 1972 (1972-10-12) the whole document	1-10
Y	DE 22 59 221 A (CIBA GEIGY AG) 20 June 1973 (1973-06-20) the whole document	1-10
Y	WO 00 46184 A (HOECHST SCHERING AGREVO GMBH ;ATHERALL JOHN FREDERICK (GB); HOUGH) 10 August 2000 (2000-08-10) cited in the application claims 1,16,21,22; table 1	1-10
Y	DE 27 55 549 A (CIBA GEIGY AG) 22 June 1978 (1978-06-22) page 6, line 4-38; example 7; table 1	1-10

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 1-10 all partially

Present claims 1-10 relate to an extremely large number of possible compounds/compositions and uses thereof. Support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT is to be found, however, for only a very small proportion of the compounds claimed. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Consequently, the search has been carried out for those parts of the claims which appear to be supported and disclosed, namely those parts relating to the compounds of formula (I) of claim 1 with the following limitations:

- R1 is H, SH, Methyl and C2-C5 alkoxy carbonyl;
- R2, R3 are independently H, C1-C10 alkyl, C2-C10 alkenyl, C2-C10 alkynyl, cyclopropyl or R2 and R3 taken together are -CH₂CH₂nCH₂- wherein n is 0 to 5;
- R4 to R10, R12 according to their respective definitions given in claim 1; R11 according to claim 2.

It is stressed that expressions like "carbocycle", "membered heterocycle", "optionally substituted", "heterocyclic ring containing 3 to 7 atoms....and optionally one or two additional atoms" etc.. present in the claims are speculative, embracing a great variety of structural possibilities not yet explored by the Applicant, the effect of which cannot be foreseen having regard to the problem to be solved. Such expressions render a complete search impossible.

It is also pointed out that the search as limited above includes the compounds of examples 1-7 and of index tables A-D as far as these compounds are comprised by the scope of claim 1. Consequently compounds 16, 17, 41 and 165 have not been covered by the limited search.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 03/13371**Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)**

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 1-10 all partially
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 03/13371

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 03/13371

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 03/13371

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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TÍTULO

COMPUESTOS DE AMIDINILFENILO Y SU USO COMO FUNGICIDAS

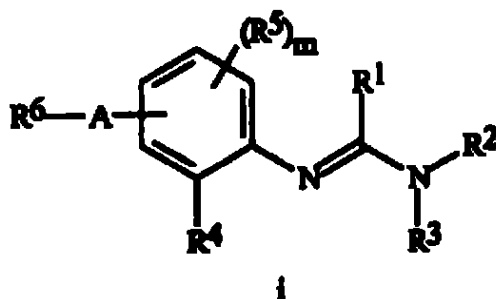
CAMPO DE LA INVENCION

La invención se relaciona con ciertas amidinas, sus sales agrícolas adecuadas y composiciones, y métodos de uso como fungicidas.

ANTECEDENTES DE LA INVENCION

El control de enfermedades de plantas originadas por patógenos fungosos de plantas es extremadamente importante para lograr alta eficiencia del cultivo. Los daños de las enfermedades de plantas a cultivos ornamentales, vegetales, de campo, de cereales, de frutas pueden originar reducción significativa de la productividad y dar como resultado de esta forma un incremento en los costos al consumidor. Muchos productos están comercialmente disponibles para estos propósitos. Continúa la necesidad de nuevos compuestos que sean más efectivos, menos costosos, menos tóxicos, ambientalmente más seguros y/o tengan diferentes modos de acción.

La WO 00/46184 describe ciertas fenilamidinas de fórmula i como fungicidas



En donde,

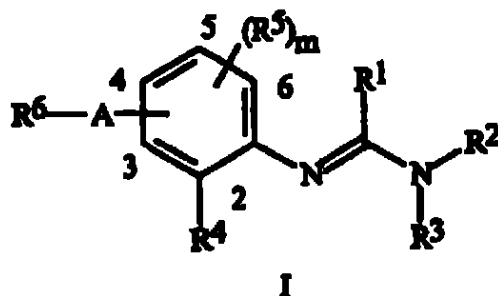
A y R¹ hasta R⁵ son como se definió aquí; y
R⁶ es carbociclilo o heterociclilo opcionalmente sustituido.

Varios compuestos aminidilfenilo también se describen en la Patente U.S. No. 3,284,289, Patente U.S. No. 3,993,469, Patente U.S. No. 4,018,814, Patente U.S. No. 4,154,755, Patente U.S. No. 4,208,411, Patente U.S. No. 4,209,319 y Patente U.S. No. 5,219,868.

RESUMEN DE LA INVENCION

Esta invención está dirigida a compuestos de fórmula I (que incluyen todos los geométricos, tautoméricos y

estereoisómeros) y las sales agrícolaemente adecuadas de estos, las composiciones agrícolas que los contienen y su uso como fungicidas:



En donde

R^1 es H, OH, SH, SO_3H , CN, $-OR^7$ o $-SR^7$; alquilo C_1-C_{10} , alquenilo C_2-C_{10} , alcoxycarbonilo C_2-C_5 , alquinilo C_2-C_{10} , un carbociclo C_3-C_6 o un heterociclo de 3-, 4-, 5- o 6- miembros, cada uno opcionalmente sustituido; con la condición de que cuando R^1 es un heterociclo que contiene nitrógeno como miembro del anillo, este no está unido al resto de la Fórmula I hasta dicho miembro del anillo de nitrógeno;

R^2 es H, CN, $-OR^7$, o $-SR^7$; alquilo C_1-C_{10} , alquenilo C_2-C_{10} , alquinilo C_2-C_{10} , carbociclo C_3-C_6 , un heterociclo de 3-, 4-, 5- o 6- miembros o alquilcarbonilo C_2-C_{10} , cada uno opcionalmente sustituido;

R³ es H; alquilo C₁-C₁₀, alquenilo C₂-C₁₀, alquinilo C₂-C₁₀, un carbociclo C₃-C₆, un heterociclo de 3-, 4-, 5- o 6-miembros o alquilcarbonilo C₂-C₁₀, cada uno opcionalmente sustituido; o

R² y R³ son tomados juntos con su nitrógeno interconectante para formar un anillo heterocíclico que contiene 3 a 7 átomos, dicho anillo consiste de dicho átomo de hidrógeno interconectante, carbono y opcionalmente uno o dos átomos adicionales seleccionados del grupo que consiste de nitrógeno, azufre y oxígeno, y dicho anillo es opcionalmente sustituido con uno o más R⁹;

R⁴ y cada R⁵ son cada uno independientemente alquilo C₁-C₆, alquenilo C₂-C₆, alquinilo C₂-C₆, cicloalquilo C₃-C₆, haloalquilo C₁-C₆, haloalquenilo C₂-C₆, haloalquinilo C₂-C₆, halocicloalquilo C₃-C₆, halógeno, CN, CHO, CO₂H, CONH₂, SF₅, alcoxi C₁-C₄, haloalcoxi C₁-C₄, alquiltio C₁-C₄, alquilsulfinilo C₁-C₄, alquilsulfonilo C₁-C₄, haloalquiltio C₁-C₄, haloalquilsulfinilo C₁-C₄, haloalquilsulfonilo C₁-C₄, alquilamino C₁-C₄, dialquilamino C₂-C₈, cicloalquilamino C₃-C₆,

alquilcarbonilo C₂-C₆, alcoxycarbonilo C₂-C₆,
alquilaminocarbonilo C₂-C₆, dialquilaminocarbonilo C₃-C₈ o
trialquilsililo C₃-C₆;

R⁶ es alquilo C₅-C₂₁, alquenilo C₅-C₂₁, alquinilo C₅-C₂₁,
alcoxycarbonilo C₄-C₉, alquilaminocarbonilo C₄-C₆,
dialquilaminocarbonilo C₃-C₁₀ o trialquilsililo C₃-C₁₂,
cada uno opcionalmente sustituido; o R⁶ es alquilo C₁-C₄ o
alquilcarbonilo C₂-C₉, cada uno sustituido con uno o más
R¹²;

A es un enlace directo, O, S(O)_n o NR¹⁰;

cada R⁷ es independientemente alquilo C₁-C₆, alquenilo C₂-
C₆, alquinilo C₂-C₆, un carbociclo C₃-C₆ o un heterociclo
de 3-, 4-, 5- o 6- miembros, cada uno opcionalmente
sustituido;

cada R⁹ es independientemente halógeno, CN, NO₂, alcoxi
C₁-C₄, alquilo C₁-C₄, haloalcoxi C₁-C₄ o alquiltio C₁-C₄;

R¹⁰ es H, alquilo C₁-C₆, alquenilo C₂-C₆, alquinilo C₂-C₆,
alquilsulfonilo C₁-C₄, haloalquilsulfonilo C₁-C₄,
alquilcarbonilo C₂-C₆, alcoxycarbonilo C₂-C₆,

alquilaminocarbonilo C₂-C₆, dialquilaminocarbonilo C₃-C₈ o trialquilsililo C₃-C₆;

cada R¹² es independientemente CO₂H, CONH₂, NO₂, haloalcoxi C₁-C₆, alquiltio C₂-C₆, alquilsulfinilo C₁-C₆, alquilsulfonilo C₁-C₆, haloalquiltio C₁-C₆, haloalquilsulfinilo C₁-C₆, haloalquilsulfonilo C₁-C₆, alquilamino C₁-C₆, dialquilamino C₂-C₈, alquilcarbonilo C₂-C₆, alcoxycarbonilo C₂-C₆, alcoxialquilcarbonilo C₃-C₉, alquilaminocarbonilo C₂-C₆, alquilaminoalquilcarbonilo C₃-C₁₀, dialquilaminocarbonilo C₃-C₈, dialquilaminoalquilcarbonilo C₄-C₈, alquiltioalquilcarbonilo C₃-C₉, trialquilsililo C₃-C₉, halotrialquilsililo C₃-C₉, alcoxitrialquilsililo C₄-C₉ o trialquilsililoxi C₃-C₉;

n es 0, 1 o 2; y

m es 0, 1, 2 o 3.

DETALLES DE LA INVENCIÓN

Los compuestos de Fórmula I como se ilustraron anteriormente también se pueden describir como compuestos de fórmula (R⁵)_m-(R⁶A)-2-(R⁴)-1-[N=C(R¹)N(R²)(R³)]benzeno,

en donde R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , A, m son como se definió anteriormente.

En las anteriores citas, el término "alquilo", utilizado sólo o en palabras compuestas tales como "alquiltio" o "haloalquilo" incluye alquilo de cadena recta o ramificada, tales como, metilo, etilo, n-propilo, i-propilo, o los isómeros diferentes butilo, pentilo o hexil. "Alquenilo" incluye alquenos de cadena recta o ramificada tales como etenilo, 1-propenilo, 2-propenilo, y los isómeros diferentes butenilo, pentenilo y hexenil. "Alquenilo" también incluye polienos tales como 1,2-propadienilo y 2,4-hexadienilo. "Alquinilo" incluyen alquinos de cadena recta o ramificada tales como etinilo, 1-propinilo, 2-propinilo y los isómeros diferentes butinilo, pentinilo hexinilo. "Alquinilo" también puede incluir porciones comprendidas de enlaces triples múltiples tales como 2,5-hexadinilo. "Alcoxi" incluye, por ejemplo, metoxi, etoxi, n-propiloxi, isopropiloxi y los isómeros diferentes butoxi, pentoxi y hexiloxi. "Alcoxialquilo" denota alcoxi sustitución sobre alquilo. Ejemplos de "alcoxialquilo" incluye CH_3OCH_2 , $\text{CH}_3\text{OCH}_2\text{CH}_2$, $\text{CH}_3\text{CH}_2\text{OCH}_2$, $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{OCH}_2$ y $\text{CH}_3\text{CH}_2\text{OCH}_2\text{CH}_2$. "Alcoxialcoxi" denota sustitución alcoxi sobre alcoxi. "Alquiltio"

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incluye porciones alquiltio ramificadas o de cadena recta tales como metiltio, etiltio, y diferentes isómeros propiltio, butiltio, pentiltio y hexiltio. "Alquiltioalquilo" denota sustitución alquiltio sobre alquilo. Ejemplos de "alquiltioalquilo" incluye CH_3SCH_2 , $\text{CH}_3\text{SCH}_2\text{CH}_2$, $\text{CH}_3\text{CH}_2\text{SCH}_2$, $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{SCH}_2$ y $\text{CH}_3\text{CH}_2\text{SCH}_2\text{CH}_2$. "alquiltioalcoxi" denota sustitución alquiltio sobre alcoxi. "Alquilsulfinilo" incluye ambos enantiómeros de un grupo alquilsulfinilo. Ejemplos de "alquilsulfinilo" incluyen $\text{CH}_3\text{S}(\text{O})$, $\text{CH}_3\text{CH}_2\text{S}(\text{O})$, $\text{CH}_3\text{CH}_2\text{CH}_2\text{S}(\text{O})$, $(\text{CH}_3)_2\text{CHS}(\text{O})$ y los isómeros diferentes butilsulfinilo, pentilsulfinilo y hexilsulfinilo. Ejemplos de "alquilsulfonilo" incluyen $\text{CH}_3\text{S}(\text{O})_2$, $\text{CH}_3\text{CH}_2\text{S}(\text{O})_2$, $\text{CH}_3\text{CH}_2\text{CH}_2\text{S}(\text{O})_2$, $(\text{CH}_3)_2\text{CHS}(\text{O})_2$ y los diferentes isómeros butilsulfonilo, pentilsulfonilo y hexilsulfonilo. "Alquilamino", "dialquilamino", y similares, son definidos análogamente a los ejemplos anteriores.

El término "carbociclo" incluye "sistema de anillo carbocíclico aromático", que denota carbociclos completamente aromáticos y carbociclos en los cuales al menos un anillo de un sistema de anillo policíclico es aromático (donde aromático indica que se satisface la regla Huckel), y "sistema de anillo carbocíclico no

aromático", que denota carbociclos completamente saturados así como también carbociclos parcialmente o completamente insaturados donde la regla Huckel no se satisface por ninguno de los anillos en el sistema de anillo. "Cicloalquilo" incluye, por ejemplo, ciclopropilo, ciclobutilo, ciclopentilo, y ciclohexilo.

El término "hetero" en relación con los anillos se refiere a un anillo en el cual al menos un átomo del anillo no es carbono y que puede contener 1 a 4 heteroátomos independientemente seleccionados del grupo que consiste de nitrógeno, oxígeno y azufre, con la condición de que cada anillo no contiene más de 4 nitrógenos, ni más de 2 oxígenos y no más de 2 azufres. "Heterociclo" incluye "sistema de anillo heterocíclico aromático", que denota heterociclos completamente aromáticos y heterociclos y en los cuales al menos un anillo de un sistema de anillo policíclico es aromático (donde aromático indica que la regla Huckel se satisface), y "sistema de anillo heterocíclico no aromático", que denota heterociclos completamente saturados así como también heterociclos parcialmente o completamente insaturados donde la regla Huckel no se satisface por ninguno de los anillos del sistema de

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anillo. Los sistemas de anillo heterocíclico pueden estar unidos a través de cualquier carbono disponible o nitrógeno por reemplazo de un hidrógeno sobre dicho carbono o nitrógeno.

El término "halógeno", solo o en palabras compuestas tales como "haloalquilo", incluye fluor, cloro, bromo o yodo. Adicionalmente, cuando se utiliza en palabras compuestas tales como "haloalquilo", dicho alquilo puede ser parcialmente o completamente sustituido con átomos de halógeno que pueden ser iguales o diferentes. Ejemplos de "haloalquilo" incluyen F_3C , $ClCH_2$, CF_3CH_2 y CF_3CCl_2 . Los términos "haloalquenilo", "haloalquinilo", "haloalcoxi", "haloalquiltio", y similares, se definen análogamente al término "haloalquilo". Ejemplos de "haloalquenilo" incluyen $(Cl)_2C=CHCH_2$ y $CF_3CH_2CH=CHCH_2$. Ejemplos de "haloalquinilo" incluyen $HC=CCHCl$, $CF_3C=C$, $CCl_3C=C$ y $FCH_2C=CCH_2$. Ejemplos de "haloalcoxi" incluye CF_3O , CCl_3CH_2O , $HCF_2CH_2CH_2O$ y CF_3CH_2O . Ejemplos de "haloalquiltio" incluyen CCl_3S , CF_3S , CCl_3CH_2S y $ClCH_2CH_2CH_2S$. Ejemplos de "haloalquilsulfinilo" incluyen $CF_3S(O)$, $CCl_3S(O)$, $CF_3CH_2S(O)$ y $CF_3CF_2S(O)$. Ejemplos de

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"haloalquilsulfonilo" incluyen $\text{CF}_3\text{S}(\text{O})_2$, $\text{CCl}_3\text{S}(\text{O})_2$, $\text{CF}_3\text{CH}_2\text{S}(\text{O})_2$ y $\text{CF}_3\text{CF}_2\text{S}(\text{O})_2$.

"Trialquilsililo" incluye 3 radicales alquilo de cadena ramificada y/o cadena recta unidos y ligados a través de un átomo de silicio tal como trimetilsililo, trietilsililo y t-butil-dimetilsililo.

"Halotrialquilsililo" denota al menos que uno de tres radicales alquilo es parcialmente o completamente sustituido con átomos de halógeno que pueden ser iguales o diferentes. "Alcoxitrialquilsililo" denota que al menos uno de tres radicales alquilo es sustituido con uno o más radicales alcoxi que pueden ser iguales o diferentes. "Trialquilsililoxi" denota una porción trialquilsililo unida a través de oxígeno.

Ejemplos de "alquilcarbonilo" incluye $\text{C}(\text{O})\text{CH}_3$, $\text{C}(\text{O})\text{CH}_2\text{CH}_2\text{CH}_3$ y $\text{C}(\text{O})\text{CH}(\text{CH}_3)_2$. Ejemplos de "alcoxicarbonilo" incluyen $\text{CH}_3\text{OC}(=\text{O})$, $\text{CH}_3\text{CH}_2\text{OC}(=\text{O})$, $\text{CH}_3\text{CH}_2\text{CH}_2\text{OC}(=\text{O})$, $(\text{CH}_3)_2\text{CHOC}(=\text{O})$ y los isómeros diferentes butoxi- o pentoxycarbonilo. Ejemplos de "alquilaminocarbonilo" incluye $\text{CH}_3\text{NHC}(=\text{O})$, $\text{CH}_3\text{CH}_2\text{NHC}(=\text{O})$, $\text{CH}_3\text{CH}_2\text{CH}_2\text{NHC}(=\text{O})$, $(\text{CH}_3)_2\text{CHNHC}(=\text{O})$ y los isómeros diferentes butilamino- o pentilaminocarbonilo. Ejemplos de

"dialquilaminocarbonilo" incluyen $(\text{CH}_3)_2\text{NC}(=\text{O})$, $(\text{CH}_3\text{CH}_2)_2\text{NC}(=\text{O})$, $\text{CH}_3\text{CH}_2(\text{CH}_3)\text{NC}(=\text{O})$, $\text{CH}_3\text{CH}_2\text{CH}_2(\text{CH}_3)\text{NC}(=\text{O})$ y $(\text{CH}_3)_2\text{CHN}(\text{CH}_3)\text{C}(=\text{O})$. Ejemplos de "alcoxialquilcarbonilo" incluyen $\text{CH}_3\text{OCH}_2\text{C}(=\text{O})$, $\text{CH}_3\text{OCH}_2\text{CH}_2\text{C}(=\text{O})$, $\text{CH}_3\text{CH}_2\text{OCH}_2\text{C}(=\text{O})$, $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{OCH}_2\text{C}(=\text{O})$ y $\text{CH}_3\text{CH}_2\text{OCH}_2\text{CH}_2\text{C}(=\text{O})$. Ejemplos de "alquiltioalquilcarbonilo" incluye $\text{CH}_3\text{SCH}_2\text{C}(=\text{O})$, $\text{CH}_3\text{SCH}_2\text{CH}_2\text{C}(=\text{O})$, $\text{CH}_3\text{CH}_2\text{SCH}_2\text{C}(=\text{O})$, $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{SCH}_2\text{C}(=\text{O})$ y $\text{CH}_3\text{CH}_2\text{SCH}_2\text{CH}_2\text{C}(=\text{O})$. Ejemplos de "alquilaminoalquilcarbonilo" incluyen $\text{CH}_3\text{NHCH}_2\text{C}(=\text{O})$, $\text{CH}_3\text{NHCH}_2\text{CH}_2\text{C}(=\text{O})$, $\text{CH}_3\text{CH}_2\text{NHCH}_2\text{C}(=\text{O})$, $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{NHCH}_2\text{C}(=\text{O})$ y $\text{CH}_3\text{CH}_2\text{NHCH}_2\text{CH}_2\text{C}(=\text{O})$.

El número total de átomos de carbono en un grupo sustituido se indica mediante el prefijo "C_i-C_j" donde i y j son números de 1 a 21. Por ejemplo, alquilsulfonilo C₁-C₃ designa metilsulfonilo hasta propilsulfonilo; alcoxialquilo C₂ designa CH_3OCH_2 ; alcoxialquilo C₃ designa, por ejemplo, $\text{CH}_3\text{CH}(\text{OCH}_3)$, $\text{CH}_3\text{OCH}_2\text{CH}_2$ o $\text{CH}_3\text{CH}_2\text{OCH}_2$; y alcoxialquilo C₄ designa los varios isómeros de un grupo alquilo sustituido con un grupo alcoxi que contiene un total de cuatro átomos de carbono, ejemplos incluyen $\text{CH}_3\text{CH}_2\text{CH}_2\text{OCH}_2$ y $\text{CH}_3\text{CH}_2\text{OCH}_2\text{CH}_2$. En las anteriores citas, cuando un compuesto de Fórmula I está comprendido de uno o más anillos heterocíclicos, todos los sustituyentes

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están unidos a estos anillos a través de cualquier carbono o nitrógeno disponible al reemplazar un hidrógeno sobre dicho carbono o nitrógeno.

Cuando un compuesto se sustituye con un sustituyente que lleva un subíndice que indica el número que dichos sustituyentes pueden exceder 1, dichos sustituyentes (cuando ellos exceden 1) son independientemente seleccionados del grupo de sustituyentes definido. Adicionalmente, cuando el subíndice indica un rango, por ejemplo $(R)_{i-j}$, entonces el número de sustituyentes se puede seleccionar de los enteros entre i y j inclusive.

Cuando un grupo contiene un sustituyente que puede ser hidrógeno por ejemplo R^1 o R^2 , entonces, cuando este sustituyente es tomado como hidrógeno, se reconoce que este es equivalente a dicho grupo siendo no sustituido.

Los compuestos de esta invención pueden existir como uno o más estereoisómeros. Los varios estereoisómeros incluyen enantiómeros, diastereómeros, atropisómeros e isómeros geométricos. Un experto en la técnica apreciará que un estereoisómero puede ser activo y/o exhibir efectos benéficos cuando se enriquecen con relación al

otro u otros estereoisómeros o cuando se separan del o los otros estereoisómeros. Adicionalmente, el experto sabe que tan separados, enriquecidos, y/o selectivamente preparar dichos estereoisómeros. De acuerdo con esto, la presente invención comprende compuestos seleccionados de Fórmula I, N-óxidos y sales agrícolas adecuadas de estos. Los compuestos de la invención pueden estar presentes como una mezcla de estereoisómeros, estereoisómeros individuales, o como una forma ópticamente activa.

Un experto en la técnica apreciará que ningún heterociclo que contiene nitrógeno puede formar N-óxidos en razón a que el nitrógeno requiere un par solo disponible para oxidación al óxido; un experto en la técnica reconocerá aquellos heterociclos que contienen nitrógeno que pueden formar N-óxidos. Un experto en la técnica también reconocerá que las aminas terciarias pueden formar N-óxidos. Los métodos sintéticos para la preparación de N-óxidos de heterociclos y aminas terciarias son muy bien conocidos por un experto en la técnica que incluye la oxidación de heterociclos y aminas terciarias con peroxi ácidos tales como ácido peracético y ácido m-cloroperbenzoico (MCPBA), peróxido de hidrógeno, alquil

hidroperóxidos tales como t-butil hidroperóxido, perborato de sodio, y dioxiranos tales como dimetildioxirano. Estos métodos para la preparación de N-óxidos se han descrito extensivamente y revisado en la literatura, ver por ejemplo: T.L. Gilchrist en *Comprehensive Organic Syntesis*, vol. 7, pp 748-750, S. V. Ley, Ed., Pergamon Press; M. Tisler y B. Stanovnik en *Comprehensive Heterocyclic Chemistry*, vol. 3, pp 18-20, A. J. Boulton y A. McKillop, Eds., Pergamon Press; M. R. Grimmett y B. R. T. Keene en *Advances in Heterocyclic Chemistry*, vol. 43, pp 149-161, A. R. Katritzky, Ed., Academic Press; M. Tisler y B. Stanovnik en *Advances in Heterocyclic Chemistry*, vol. 9, pp 285-291, A. R. Katritzky y A. J. Boulton, Eds., Academic Press; y G. W. H. Cheeseman y E. S. G. Werstiuk en *Advances in Heterocyclic Chemistry*, vol. 22, pp 390-392, A. R. Katritzky y A. J. Boulton, Eds., Academic Press.

Las sales de los compuestos de la invención incluyen sales de adición ácida con ácidos inorgánicos u orgánicos tales como ácido hidrobromico, clorhídrico, nítrico, fosfórico, azufreico, acético, butírico, fumárico, láctico, maleico, malónico, oxálico, propiónico, salicílico, tartárico, 4-toluenesulfónico o valérico. Las

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sales de los compuestos de la invención también incluyen aquellos formados con bases orgánicas (por ejemplo, piridina, amonio, o trietilamina) o bases inorgánicas (por ejemplo, hidruros, hidróxidos, o carbonatos de sodio, potasio, litio, calcio, magnesio o bario) cuando el compuesto contiene un grupo ácido tal como ácidocarboxílico o fenol.

De notar son los compuestos de Fórmula I en donde

R^1 es H, OH, SH, SO_3H , CN, $-OR^7$ o $-SR^7$; alquilo C_1-C_{10} , alquenilo C_2-C_{10} , alquinilo C_2-C_{10} , un carbociclo C_3-C_6 o un heterociclo de 3-, 4-, 5- o 6- miembros, cada uno opcionalmente sustituido; con la condición de que cuando R^1 es un nitrógeno que contiene heterociclo como un miembro del anillo, este no está unido al resto de la Fórmula I a través de dicho miembro del anillo de nitrógeno;

R^4 y cada R^5 son cada uno independientemente alquilo C_1-C_6 , alquenilo C_2-C_6 , alquinilo C_2-C_6 , cicloalquilo C_3-C_6 , haloalquilo C_1-C_6 , haloalquenilo C_2-C_6 , haloalquinilo C_2-C_6 , halocicloalquilo C_3-C_6 , halógeno, CO_2H , $CONH_2$, SF_5 , alcoxi C_1-C_4 , haloalcoxi C_1-C_4 , alquiltio C_1-C_4 ,

alquilsulfinilo C₁-C₄, alquilsulfonilo C₁-C₄,
haloalquiltio C₁-C₄, haloalquilsulfinilo C₁-C₄,
haloalquilsulfonilo C₁-C₄, alquilamino C₁-C₄,
dialquilamino C₂-C₈, cicloalquilamino C₃-C₆,
alquilcarbonilo C₂-C₆, alcoxicarbonilo C₂-C₆,
alquilaminocarbonilo C₂-C₆, dialquilaminocarbonilo C₃-C₈ o
trialquilsililo C₃-C₆; y

cada R¹² es independientemente CO₂H, CONH₂, NO₂, haloalcoxi
C₁-C₆, alquiltio C₂-C₆, alquilsulfinilo C₁-C₆,
alquilsulfonilo C₁-C₆, haloalquiltio C₁-C₆,
haloalquilsulfinilo C₁-C₆, haloalquilsulfonilo C₁-C₆,
alquilamino C₁-C₆, dialquilamino C₂-C₈, alquilcarbonilo C₂-
C₆, alcoxicarbonilo C₂-C₆, alcoxialquilcarbonilo C₃-C₉,
alquilaminocarbonilo C₂-C₆, alquilaminoalquilcarbonilo C₄-
C₁₀, dialquilaminocarbonilo C₃-C₈,
dialquilaminoalquilcarbonilo C₃-C₈,
alquiltioalquilcarbonilo C₃-C₉, trialquilsililo C₃-C₉ o
trialquilsililoxi C₃-C₉.

Los compuestos preferidos por razones de costos,
facilidad de síntesis y/o eficacia biológica son:

Preferido 1. Compuestos de Fórmula I anteriores, y las sales agrícolasmente adecuadas de estos, en donde

R^1 es H, SH, SO_3H , CN, $-OR^7$ o $-SR^7$; alquilo C_1-C_{10} , alquenilo C_2-C_{10} o alquinilo C_2-C_{10} , cada uno opcionalmente sustituido con uno o más R^8 ; o un carbociclo C_3-C_6 o un heterociclo de 3-, 4-, 5- o 6- miembros, cada uno opcionalmente sustituido con uno o más R^8 ;

R^2 es H, CN, $-OR^7$ o $-SR^7$; alquilo C_1-C_{10} , alquenilo C_2-C_{10} , alquinilo C_2-C_{10} o alquilcarbonilo C_2-C_{10} , cada uno opcionalmente sustituido con uno o más R^8 ; o un carbociclo C_3-C_6 o un heterociclo de 3-, 4-, 5- o 6- miembros, cada uno opcionalmente sustituido con uno o más R^8 ;

R^3 es H; alquilo C_1-C_{10} , alquenilo C_2-C_{10} , alquinilo C_2-C_{10} o alquilcarbonilo C_2-C_{10} , cada uno opcionalmente sustituido con uno o más R^8 ; o un carbociclo C_3-C_6 o un heterociclo de 3-, 4-, 5- o 6- miembros, cada uno opcionalmente sustituido con uno o más R^8 ; o

R^2 y R^3 son tomados juntos con su nitrógeno interconectante para formar un anillo heterocíclico que

contiene 3 a 6 átomos, dicho anillo consiste de dicho átomo de nitrógeno interconectante, carbono y opcionalmente uno o dos átomos adicionales seleccionados del grupo que consiste de nitrógeno, azufre y oxígeno, y dicho anillo es opcionalmente sustituido con uno o más R^9 ;

R^6 es alquilo C_5-C_{21} , alquenilo C_5-C_{21} , alquinilo C_5-C_{21} , alcoxicarbonilo C_4-C_9 , alquilaminocarbonilo C_4-C_6 , dialquilaminocarbonil C_3-C_{10} o trialquilsililo C_3-C_{12} , cada uno opcionalmente sustituido con uno o más R^{11} ; o R^6 es alquil C_1-C_4 o alquilcarbonilo C_2-C_9 , cada uno sustituido con uno o más R^{12} ;

cada R^7 es independientemente alquilo C_1-C_6 , alquenilo C_2-C_6 , alquinilo C_2-C_6 , cada uno opcionalmente sustituido con uno o más R^8 ; o un carbociclo C_3-C_6 o un heterociclo de 3-, 4-, 5- o 6- miembros, cada uno opcionalmente sustituido con uno o más R^9 ;

cada R^8 es independientemente halógeno, CN, NO_2 , alcoxi C_1-C_4 , haloalcoxi C_1-C_4 o alquiltio C_1-C_4 ; y

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cada R^{11} es independientemente halógeno, CO_2H , $CONH_2$, NO_2 , hidroxilo, alcoxi C_1-C_6 , haloalcoxi C_1-C_6 , alquiltio C_2-C_6 , alquilsulfinilo C_1-C_6 , alquilsulfonilo C_1-C_6 , haloalquiltio C_1-C_6 , haloalquilsulfinilo C_1-C_6 , haloalquilsulfonilo C_1-C_6 , alquilamino C_1-C_6 , dialquilamino C_2-C_8 , alquilcarbonilo C_2-C_6 , alcoxycarbonilo C_2-C_6 , alcoxialquilcarbonilo C_3-C_9 , alquilaminocarbonilo C_2-C_6 , alquilaminoalquilcarbonilo C_4-C_{10} , dialquilaminocarbonilo C_3-C_8 , dialquilaminoalquilcarbonilo C_4-C_8 , alquiltioalquilcarbonilo C_3-C_9 , dialquiltiofosforilo C_2-C_8 , dialquiltiofosfinilo C_2-C_8 , trialquilsililo C_3-C_9 o trialquilsililoxi C_3-C_9 .

De notar son los compuestos de Preferido 1 en donde

R^2 es H, CN, $-OR^7$ o $-SR^7$; alquilo C_1-C_{10} , alquenilo C_2-C_{10} , alquinilo C_2-C_{10} o alquilcarbonilo C_2-C_{10} , cada uno opcionalmente sustituido con uno o más R^8 ; o un carbociclo C_3-C_6 o un heterociclo de 3-, 4-, 5- o 6-miembros, cada uno opcionalmente sustituido con uno o más R^9 ;

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R^3 es H; alquilo C_1-C_{10} , alquenilo C_2-C_{10} , alquinilo C_2-C_{10} o alquilcarbonilo C_2-C_{10} , cada uno opcionalmente sustituido con uno o más R^8 ; o un carbociclo C_3-C_6 o un heterociclo de 3-, 4-, 5- o 6- miembros, cada uno opcionalmente sustituidos con uno o más R^9 ;

R^4 y cada R^5 son cada uno independientemente alquilo C_1-C_6 , alquenilo C_2-C_6 , alquinilo C_2-C_6 , cicloalquilo C_3-C_6 , haloalquilo C_1-C_6 , haloalquenilo C_2-C_6 , haloalquinilo C_2-C_6 , halocicloalquilo C_3-C_6 , halógeno, CO_2H , $CONH_2$, SF_5 , alcoxi C_1-C_4 , haloalcoxi C_1-C_4 , alquiltio C_1-C_4 , alquilsulfinilo C_1-C_4 , alquilsulfonilo C_1-C_4 , haloalquiltio C_1-C_4 , haloalquilsulfinilo C_1-C_4 , haloalquilsulfonilo C_1-C_4 , alquilamino C_1-C_4 , dialquilamino C_2-C_8 , cicloalquilamino C_3-C_6 , alquilcarbonilo C_2-C_6 , alcoxicarbonilo C_2-C_6 , alquilaminocarbonilo C_2-C_6 , dialquilaminocarbonilo C_3-C_8 o trialquilsililo C_3-C_6 ; y

cada R^{12} es independientemente CO_2H , $CONH_2$, NO_2 , haloalcoxi C_1-C_6 , alquiltio C_2-C_6 , alquilsulfinilo C_1-C_6 , alquilsulfonilo C_1-C_6 , haloalquiltio C_1-C_6 , haloalquilsulfinilo C_1-C_6 , haloalquilsulfonilo C_1-C_6 , alquilamino C_1-C_6 , dialquilamino C_2-C_6 , alquilcarbonilo C_2-

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C₆, alcoxycarbonilo C₂-C₆, alcoxialquilcarbonilo C₃-C₉,
alquilaminocarbonilo C₂-C₆, alquilaminoalquilcarbonilo C₄-
C₁₀, dialquilaminocarbonilo C₃-C₈,
dialquilaminoalquilcarbonilo C₃-C₈,
alquiltioalquilcarbonilo C₃-C₉, trialquilsililo C₃-C₉ o
trialquilsililoxi C₃-C₉.

Preferido 2. Los compuestos del Preferido 1 en donde

R² es H, CN, -OR⁷ o -SR⁷; alquilo C₁-C₁₀, alquenilo C₂-C₁₀,
alquinilo C₂-C₁₀, cada uno opcionalmente sustituido con
uno o más R⁸; o fenilo opcionalmente sustituido con t 1 a
3 R⁹;

R³ es H; alquilo C₁-C₁₀, alquenilo C₂-C₁₀ o alquinilo C₂-
C₁₀, cada uno opcionalmente sustituido con uno o más R⁸; o
fenilo opcionalmente sustituido con 1 a 3 R⁹; o

R² y R³ son tomados juntos con su nitrógeno
interconectante para formar un anillo heterocíclico que
contiene 3 a 6 átomos, dicho anillo consiste de dicho
átomo de nitrógeno interconectante, carbono y
opcionalmente un átomo adicional seleccionado del grupo

que consiste de nitrógeno, azufre y oxígeno, y dicho anillo es opcionalmente sustituido con uno o más R^9 ;

R^4 y R^5 son cada uno independientemente alquilo C_1-C_6 , alquenilo C_2-C_6 , alquinilo C_2-C_6 , haloalquilo C_1-C_6 , halógeno, CO_2H , $CONH_2$, alcoxi C_1-C_4 , haloalcoxi C_1-C_4 , alquiltio C_1-C_4 , alquilsulfinilo C_1-C_4 , alquilsulfonilo C_1-C_4 , haloalquiltio C_1-C_4 , haloalquilsulfinilo C_1-C_4 , haloalquilsulfonilo C_1-C_4 , alquilcarbonilo C_1-C_6 , alcoxycarbonilo C_2-C_6 , alquilaminocarbonilo C_2-C_6 , CN , CHO o dialquilaminocarbonilo C_3-C_8 ;

R^6 es alquilo C_5-C_{15} , alquenilo C_5-C_{15} o alquinilo C_5-C_{15} , cada uno opcionalmente sustituido con uno o más R^{11} ; o R^6 es alquilo C_1-C_4 sustituido con uno o más R^{12} ;

cada R^7 es independientemente alquilo C_1-C_6 , opcionalmente sustituido con uno o más R^8 ;

A es un enlace directo, O o $S(O)_n$; y

m es 0, 1 o 2.

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Preferido 2a. El compuesto del Preferido 2 en donde R^1 es H, SH o alquilo C_1-C_{10} . De notar son los compuestos del Preferido 2 en donde

R^1 y R^2 son cada uno independientemente H, CN, $-OR^7$ o $-SR^7$; alquilo C_1-C_{10} , alquenilo C_2-C_{10} , alquinilo C_2-C_{10} , cada uno opcionalmente sustituido con uno o más R^8 ; o fenilo opcionalmente sustituido con 1 a 3 R^9 ;

R^3 es H; alquilo C_1-C_{10} , alquenilo C_2-C_{10} o alquinilo C_2-C_{10} , cada uno opcionalmente sustituido con uno o más R^8 ; o fenilo opcionalmente sustituido con 1 a 3 R^9 ;

R^4 y R^5 son cada uno independientemente C_1-C_6 alquilo, alquenilo C_2-C_6 , alquinilo C_2-C_6 , haloalquilo C_1-C_6 , halógeno, CO_2H , $CONH_2$, alcoxi C_1-C_4 , haloalcoxi C_1-C_4 , alquiltio C_1-C_4 , alquilsulfinilo C_1-C_4 , alquilsulfonilo C_1-C_4 , haloalquiltio C_1-C_4 , haloalquilsulfinilo C_1-C_4 , haloalquilsulfonilo C_1-C_4 , alquilcarbonilo C_1-C_6 , alcóxicarbonilo C_1-C_6 , alquilaminocarbonilo C_1-C_6 o dialquilaminocarbonilo C_2-C_8 ; y cada R^{12} es independientemente CO_2H , $CONH_2$, NO_2 , haloalcoxi C_1-C_6 , alquiltio C_2-C_6 , alquilsulfinilo C_1-C_6 , alquilsulfonilo C_1-C_6 , haloalquiltio C_1-C_6 , haloalquilsulfinilo C_1-C_6 ,

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haloalquilsulfonilo C₁-C₆, alquilamino C₁-C₆,
dialquilamino C₂-C₈, alquilcarbonilo C₂-C₆,
alcoxycarbonilo C₂-C₆, alcoxialquilcarbonilo C₃-C₉,
alquilaminocarbonilo C₂-C₆, alquilaminoalquilcarbonilo C₄-
C₁₀, dialquilaminocarbonilo C₃-C₈,
dialquilaminoalquilcarbonilo C₃-C₈,
alquiltioalquilcarbonilo C₃-C₉, trialquilsilil C₃-C₉ o
trialquilsililoxi C₃-C₉.

Preferido 3. Los compuestos del Preferido 2 en donde

A está unido al resto de la Fórmula I en la posición 4 del anillo de benzeno.

Preferido 3a. Los compuestos del Preferido 3 en donde R¹ es H, SH o alquilo C₁-C₁₀.

De notar son los compuestos del Preferido 3 en donde

R¹ y R² son cada uno independientemente H, CN, -OR⁷ o -SR⁷; alquilo C₁-C₁₀, alquenilo C₂-C₁₀, alquinilo C₂-C₁₀, cada uno opcionalmente sustituido con uno o más R⁸; o fenilo opcionalmente sustituido con 1 a 3 R⁹;

R³ es H; alquilo C₁-C₁₀, alquenilo C₂-C₁₀ o alquinilo C₂-C₁₀, cada uno opcionalmente sustituido con uno o más R⁸; o fenilo opcionalmente sustituidos con 1 a 3 R⁹;

R⁴ y R⁵ son cada uno independientemente alquilo C₁-C₆, alquenilo C₂-C₆, alquinilo C₂-C₆, haloalquilo C₁-C₆, halógeno, CO₂H, CONH₂, alcoxi C₁-C₄, haloalcoxi C₁-C₄, alquiltio C₁-C₄, alquilsulfinilo C₁-C₄, alquilsulfonilo C₁-C₄, haloalquiltio C₁-C₄, haloalquilsulfinilo C₁-C₄, haloalquilsulfonilo C₁-C₄, alquilcarbonilo C₁-C₆, alcoxicarbonilo C₁-C₆, alquilaminocarbonilo C₁-C₆ o dialquilaminocarbonilo C₂-C₈; y

cada R¹² es independientemente CO₂H, CONH₂, NO₂, haloalcoxi C₁-C₆, alquiltio C₂-C₆, alquilsulfinilo C₁-C₆, alquilsulfonilo C₁-C₆, haloalquiltio C₁-C₆, haloalquilsulfinilo C₁-C₆, haloalquilsulfonilo C₁-C₆, alquilamino C₁-C₆, dialquilamino C₂-C₈, alquilcarbonilo C₂-C₆, alcoxicarbonilo C₂-C₆, alcoxialquilcarbonilo C₃-C₉, alquilaminocarbonilo C₂-C₆, alquilaminoalquilcarbonilo C₄-C₁₀, dialquilaminocarbonilo C₃-C₈, dialquilaminoalquilcarbonilo C₃-C₈, alquiltioalquilcarbonilo C₃-C₉, trialquilsililo C₃-C₉ o trialquilsililoxi C₃-C₉.

Preferido 4. Los compuestos del Preferido 3 en donde

R^1 es H, SH o alquilo C_1-C_{10} ;

R^2 y R^3 son cada uno independientemente H o alquil C_1-C_{10} ;

o

R^2 y R^3 son tomados juntos con su nitrógeno interconectante para formar un anillo heterocíclico que contiene 3 a 6 átomos, dicho anillo consiste de dicho átomo de nitrógeno interconectante, carbono y opcionalmente un átomo adicional seleccionado del grupo que consiste de nitrógeno, azufre y oxígeno, y dicho anillo es opcionalmente sustituido con uno o más R^9 ;

R^4 y R^5 son cada uno independientemente halógeno, CN, CHO, alquilo C_1-C_6 , alcoxi C_1-C_4 , haloalcoxi C_1-C_4 , alquiltio C_1-C_4 , alquilsulfinilo C_1-C_4 , haloalquiltio C_1-C_4 , haloalquilsulfinilo C_1-C_4 o haloalquilo C_1-C_6 ;

Un R^5 está unido al resto de la Fórmula I de la posición 5 del anillo de benceno y un segundo R^5 opcional está unido en la posición 6 del anillo de benceno; y

m es 1 o 2.

Preferido 4a. Los compuestos del Preferido 4 en donde

R^1 , R^2 y R^3 son cada uno independientemente H o alquilo C_1-C_{10} ;

R^4 y R^5 son cada uno independientemente, halógeno, alquilo C_1-C_6 o haloalquilo C_1-C_6 ;

R^5 está unido al resto de la Fórmula I en la posición 5 del anillo de benceno;

cada R^{12} es independientemente CO_2H , $CONH_2$, NO_2 , haloalcoxi C_1-C_6 , alquiltio C_2-C_6 , alquilsulfinilo C_1-C_6 , alquilsulfonilo C_1-C_6 , haloalquiltio C_1-C_6 , haloalquilsulfinilo C_1-C_6 , haloalquilsulfonilo C_1-C_6 , alquilamino C_1-C_6 , dialquilamino C_2-C_8 , alquilcarbonilo C_2-C_6 , alcoxycarbonilo C_2-C_6 , alcoxialquilcarbonilo C_3-C_9 , alquilaminocarbonilo C_2-C_6 , alquilaminoalquilcarbonilo C_4-C_{10} , dialquilaminocarbonilo C_3-C_8 , dialquilaminoalquilcarbonilo C_3-C_8 ,

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alquiltioalquilcarbonilo C_3-C_9 , trialquilsililo C_3-C_9 o trialquilsililoxi C_3-C_9 ; y

m es 1.

De notar son los compuestos de Fórmula I (que incluyen pero no están limitados a los compuestos del Preferido 1, Preferido 2, Preferido 2a, Preferido 3, Preferido 3a, Preferido 4 y Preferido 4a) en donde R^6 es alquilo, opcionalmente sustituido con halógeno o alcoxi C_1-C_6 . También de notar son los compuestos de Fórmula I (que incluyen pero no están limitados a los compuestos del Preferido 1, Preferido 2, Preferido 2a, Preferido 3, Preferido 3a, Preferido 4 y Preferido 4a) en donde R^6 es alquenilo, opcionalmente sustituido con halógeno. Ejemplos incluyen compuestos en donde R^6 es seleccionado del grupo que consiste de (a) las porciones alquilo ramificadas

$CH(CH_3)(CH_2)_3CH_3$,	$CH(CH_3)(CH_2)_4CH_3$,
$CH(CH_3)(CH_2)_5CH_3$,	$CH(CH_3)(CH_2)_6CH_3$,
$CH(CH_3)(CH_2)_7CH_3$,	$CH(CH_3)(CH_2)_8CH_3$,
$CH(CH_3)(CH_2)_9CH_3$,	$CH(C_2H_5)(CH_2)_3CH_3$,
$CH(C_2H_5)(CH_2)_4CH_3$,	$CH_2CH(CH_3)(CH_2)_2CH_3$,
$CH_2CH(CH_3)(CH_2)_3CH_3$,	$CH_2CH(CH_3)(CH_2)_4CH_3$,
$CH_2CH(C_2H_5)(CH_2)_2CH_3$,	$CH_2CH(C_2H_5)(CH_2)_3CH_3$,
$CH_2CH_2CH_2CH_3$,	$(CH_2)_2CH(CH_3)(CH_2)_3CH(CH_3)_2$,
$(CH_2)_2CH(CH_3)(CH_2)_4CH_3$,	$(CH_2)_2CH(CH_3)(CH_2)_5CH_3$,
$CH_2C(CH_3)_3$,	$(CH_2)_2CH(CH_3)(CH_2)_3C(CH_3)_3$,
$(CH_2)_2C(CH_3)_3$,	$(CH_2)_3C(CH_3)_3$,
$(CH_2)_3C(CH_3)_3$,	$(CH_2)_3C(C_2H_5)_3$,
$(CH_2)_3CH(C_2H_5)_3$,	$(CH_2)_3CH(CH_3)_2$,

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$(CH_2)_4CH(CH_3)_2$, $(CH_2)_5CH(CH_3)_2$, $CH(CH_2CH_2CH_2CH_3)_2$,
 $CH(CH_2CH_2CH_3)(CH_2)_3CH_3$, $CH(CH_2CH_2CH_2CH_2CH_3)_2$,
 $CH(C_2H_5)CH_2CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_2CH(CH_3)_2$,
 $CH(CH_3)CH_2CH_2C(CH_3)_3$, $CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$,
 $CH(CH_2CH_2CH(CH_3)_2)_2$, $CH(CH_2CH_2CH_3)_2$ y
 $CH(CH_2CH_2CH_2CH_3)(CH_2)SCH_3$, (b) las porciones alquilo
lineales $(CH_2)_4CH_3$, $(CH_2)_5CH_3$, $(CH_2)_6CH_3$, $(CH_2)_7CH_3$,
 $(CH_2)_8CH_3$, $(CH_2)_9CH_3$, $(CH_2)_{10}CH_3$, (c) las porciones
alqueno ramificadas $(CH_2)_2CH=C(CH_3)_2$, $(CH_2)_5C(CH_3)=CH_2$,
 $(CH_2)_6C(CH_3)=CH_2$, $(CH_2)_7C(CH_3)=CH_2$, $CH_2CH=C(CH_3)_2$,
 $CH_2CH=C(CH_3)(CH_2)_2CH=C(CH_3)_2$,
 $CH_2(CH=C(CH_3)(CH_2)_2)_2CH=C(CH_3)_2$, $(CH_2)_3C(=CH_2)CH(CH_3)_2$,
 $CH_2CH=CHCH(CH_3)_2$, $CH_2CH=CHCH_2CH(CH_3)_2$, $CH_2CH=CHC(CH_3)_3$ y
 $CH_2CH=CHCH_2C(CH_3)_3$ y (d) las porciones alqueno lineales
 $(CH_2)_3CH=CH_2$, $(CH_2)_4CH=CH_2$, $(CH_2)_5CH=CH_2$, $(CH_2)_6CH=CH_2$,
 $(CH_2)_7CH=CH_2$, $(CH_2)_8CH=CH_2$ y $(CH_2)_9CH=CH_2$. Ejemplos
adicionales incluyen tales compuestos en donde R^6 es
seleccionado de dichas porciones alquilo y alqueno (a),
(b), (c) y (d) en donde al menos se ha reemplazado un
hidrógeno por halógeno (por ejemplo, los compuestos en
donde R^6 es seleccionado de dichas porciones alquilo en
donde un grupo CH_3 ha sido reemplazado por un grupo CF_3 ; y
los compuestos en donde R^6 es seleccionado de dichas
porciones alqueno en donde un grupo $=CH_2$ ha sido

reemplazado por un grupo $=CF_2$). Los ejemplos también incluyen tales compuestos en donde R^6 es seleccionado de dichas porciones alquilo (a) y (b) en donde al menos un hidrógeno ha sido reemplazado por OCH_3 , OC_2H_5 , $OCH(CH_3)_2$ o $OC(CH_3)_3$.

De nota particular son los compuestos de Fórmula I (que incluyen pero no están limitados a compuestos del Preferido 1, Preferido 2, Preferido 2a, Preferido 3, Preferido 3a, Preferido 4 y Preferido 4a) en donde R^6 es seleccionado del grupo que consiste de $(CH_2)_3C(CH_3)_2OCH_3$, $(CH_2)_3C(CH_3)_2OC_2H_5$, $(CH_2)_3C(CH_3)_2OCH(CH_3)_2$, $(CH_2)_3C(CH_3)_2OC(CH_3)_3$, $(CH_2)_3C(CH_3)_2F$, $(CH_2)_3C(CH_3)_2Cl$ y $(CH_2)_3C(CH_3)_2Br$.

Preferido 5. Los compuestos del Preferido 4 en donde

R^1 es H; y

R^6 es alquilo C_6-C_{15} en donde al menos uno del cuarto y quinto carbono de A tiene o no un hidrógeno unido o 2-alquenilo C_5-C_{15} en donde el cuarto o quinto carbono de A tiene uno o ningún hidrógeno unido (en otras palabras, R^6 es ramificado en el cuarto y/o el quinto carbono).

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Preferido 5a. Los compuestos del Preferido 5 en donde R^2 , R^3 , R^4 y R^5 son cada uno metilo y m es 1.

Preferido 5b. Los compuestos del Preferido 5 en donde R^2 y R^3 son cada uno independientemente metilo o etilo.

De notar son los compuestos de Fórmula I (que incluyen pero no están limitados a los compuestos del Preferido 1, Preferido 2, Preferido 2a, Preferido 3, Preferido 3a, Preferido 4, Preferido 4a, Preferido 5, Preferido 5a y Preferido 5b) en donde R^6 es seleccionado del grupo que consiste de (a) las porciones alquilo $(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$, $(CH_2)_3CH(CH_3)_2$, $CH(C_2H_5)CH_2CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_2CH(CH_3)_2$, $CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$ y $CH(CH_2CH_2CH(CH_3)_2)_2$ y (b) las porciones alqueno $CH_2CH=CHCH(CH_3)_2$, $CH_2CH=CHCH_2CH(CH_3)_2$, $CH_2CH=CHC(CH_3)_3$ y $CH_2CH=CHCH_2C(CH_3)_3$. También de notar son los compuestos de Fórmula I (que incluyen pero no están limitados a los compuestos del Preferido 1, Preferido 2, Preferido 2a, Preferido 3, Preferido 3a, Preferido 4, Preferido 4a, Preferido 5, Preferido 5a y Preferido 5b) en donde R^6 es $(CH_2)_3C(CH_3)_3$ o $CH(CH_3)CH_2CH_2C(CH_3)_3$,

Preferido 6. Los compuestos del Preferido 4 en donde

R¹ es H; y

R⁶ es alquilo C₁-C₄ sustituido con uno o más sustituyentes seleccionados del grupo que consiste de alquiltio C₂-C₆, alquilsulfinilo C₁-C₆, alcoxicarbonilo C₂-C₆, dialquilamino C₂-C₆, alquilcarbonilo C₂-C₆, alcoxialquilcarbonilo C₃-C₉, alquilaminocarbonilo C₂-C₆, dialquilaminocarbonilo C₃-C₉, C₃-C₉ trialquilsililo, halotrialquilsililo C₃-C₉, alcoxitrialquilsililo C₄-C₉ o trialquilsililoxi C₃-C₉.

Preferido 6a. Los compuestos del Preferido 6 en donde R², R³, R⁴ y R⁵ son cada uno metilo; y

R⁶ es alquilo C₁-C₄ sustituido con uno o más sustituyentes seleccionado del grupo que consiste de alquiltio C₂-C₆, alquilsulfinilo C₁-C₆, alcoxicarbonilo C₂-C₆, dialquilamino C₂-C₆, alquilcarbonilo C₂-C₆, alcoxialquilcarbonilo C₃-C₉, alquilaminocarbonilo C₂-C₆, dialquilaminocarbonilo C₃-C₉, trialquilsililo C₃-C₉ o trialquilsililoxi C₃-C₉.

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Preferido 6b. Los compuestos del Preferido 6 en donde R^2 y R^3 son cada uno metilo o etilo.

De notar son los compuestos de Fórmula I (que incluyen pero no están limitado a los compuestos del Preferido 1, Preferido 2, Preferido 2a, Preferido 3, Preferido 3a, Preferido 4, Preferido 4a, Preferido 5, Preferido 5a, Preferido 5b, Preferido 6, Preferido 6a y Preferido 6b) en donde R^6 es alquiltrialquilsililo. También de notar son los compuestos de Fórmula I (que incluyen pero no están limitados a compuestos del Preferido 1, Preferido 2, Preferido 2a, Preferido 3, Preferido 3a, Preferido 4, Preferido 4a, Preferido 5, Preferido 5a, Preferido 5b, Preferido 6, Preferido 6a y Preferido 6b) en donde R^6 es alquiltrialquilsililoxi. Ejemplos incluyen compuestos en donde R^6 es seleccionado del grupo que consiste de (e) las porciones alquiltrialquilsililo $\text{CH}_2\text{Si}(\text{CH}_3)_3$, $\text{CH}_2\text{CH}_2\text{Si}(\text{CH}_3)_3$, $\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{CH}_3)_3$, $\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{CH}_3)_3$, $\text{CH}_2\text{Si}(\text{C}_2\text{H}_5)_3$, $\text{CH}_2\text{CH}_2\text{Si}(\text{C}_2\text{H}_5)_3$, $\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{CH}_3)_2(\text{C}_2\text{H}_5)$, $\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{C}_2\text{H}_5)_3$, $\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{C}_2\text{H}_5)_3$, $\text{CH}_2\text{Si}(\text{CH}(\text{CH}_3)_2)_3$, $\text{CH}_2\text{CH}_2\text{Si}(\text{CH}(\text{CH}_3)_2)_3$, $\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{CH}(\text{CH}_3)_2)_3$, $\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{CH}(\text{CH}_3)_2)_3$, $\text{CH}_2\text{Si}(\text{CH}_3)_2\text{C}(\text{CH}_3)_3$, $\text{CH}_2\text{CH}_2\text{Si}(\text{CH}_3)_2\text{C}(\text{CH}_3)_3$, $\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{CH}_3)_2\text{C}(\text{CH}_3)_3$ y $\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{CH}_3)_2\text{C}(\text{CH}_3)_3$ y (f) las porciones

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alquiltrialquilsililoxi $\text{CH}_2\text{OSi}(\text{CH}_3)_3$, $\text{CH}_2\text{CH}_2\text{OSi}(\text{CH}_3)_3$,
 $\text{CH}_2\text{CH}_2\text{CH}_2\text{OSi}(\text{CH}_3)_3$, $\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{OSi}(\text{CH}_3)_3$, $\text{CH}_2\text{OSi}(\text{C}_2\text{H}_5)_3$,
 $\text{CH}_2\text{CH}_2\text{OSi}(\text{C}_2\text{H}_5)_3$, $\text{CH}_2\text{CH}_2\text{CH}_2\text{OSi}(\text{C}_2\text{H}_5)_3$, $\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{OSi}(\text{C}_2\text{H}_5)_3$,
 $\text{CH}_2\text{OSi}(\text{CH}(\text{CH}_3)_2)_3$, $\text{CH}_2\text{CH}_2\text{OSi}(\text{CH}(\text{CH}_3)_2)_3$,
 $\text{CH}_2\text{CH}_2\text{CH}_2\text{OSi}(\text{CH}(\text{CH}_3)_2)_3$, $\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{OSi}(\text{CH}(\text{CH}_3)_2)_3$,
 $\text{CH}_2\text{OSi}(\text{CH}_3)_2\text{C}(\text{CH}_3)_3$, $\text{CH}_2\text{CH}_2\text{OSi}(\text{CH}_3)_2\text{C}(\text{CH}_3)_3$,
 $\text{CH}_2\text{CH}_2\text{CH}_2\text{OSi}(\text{CH}_3)_2\text{C}(\text{CH}_3)_3$ y $\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{OSi}(\text{CH}_3)_2\text{C}(\text{CH}_3)_3$.

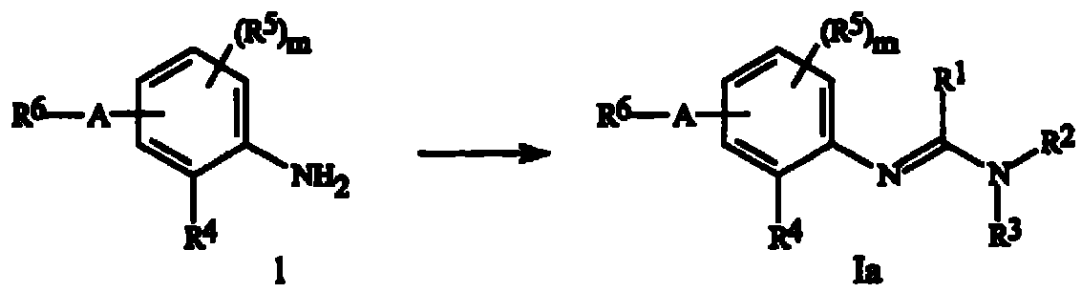
Esta invención también se relaciona con composiciones fungicidas que comprenden cantidades fungicidamente efectivas de los compuestos de la invención y al menos un componente adicional seleccionado del grupo que consiste de tensoactivos, diluyentes sólidos y diluyentes líquidos. Las composiciones preferidas de la presente invención son aquellas que comprenden los compuestos anteriores preferidos.

Esta invención también se relaciona con un método para controlar enfermedades de plantas originadas por patógenos fungosos de plantas que comprenden aplicar a la planta una porción de éste, o a la semilla de la planta o a la plantula, una cantidad fungicidamente efectiva de los compuestos de la invención (por ejemplo, como una composición descrita aquí). Los métodos preferidos de uso

son aquellos que involucran los compuestos anteriores preferidos.

Los compuestos de Fórmula I se pueden preparar por uno o más de los siguientes métodos y las variaciones son descritas en los Esquemas 1-9. Las definiciones de R^1 a R^{12} , A, m y n en los compuestos de Fórmula 1-13 de adelante son como se definió anteriormente en el resumen de la invención y los detalles de la invención a menos que se establezca otra cosa. Los compuestos de Fórmulas Ia-Ig son varios subconjuntos de los compuestos de Fórmula I, y todos los sustituyentes para las Fórmulas Ia-Ig son como se definió anteriormente para la Fórmula I a menos que se establezca otra cosa.

Como se ilustró en el Esquema 1, los compuestos de Fórmula Ia se pueden preparar de anilinas de Fórmula 1. Existe una variedad de métodos para esta transformación. Los siguientes cuatro métodos son especialmente útiles.

Esquema 1

en donde R^1 es H; alquilo $\text{C}_1\text{-C}_{10}$, alquenilo $\text{C}_2\text{-C}_{10}$, alquinilo $\text{C}_2\text{-C}_{10}$, alcoxycarbonilo $\text{C}_2\text{-C}_5$, un carbociclo $\text{C}_3\text{-C}_6$ o heterociclo $\text{C}_3\text{-C}_6$.

Método 1: Tratamiento de una anilina de Fórmula 1 con un acetal de fórmula $\text{R}^2\text{R}^3\text{NC}(\text{R}^1)(\text{OR}^{13})_2$, en donde R^{13} es un alquilo. Para una referencia guía a este método ver, Toste et al, *Synth. Commun.* **1994**, 24 (11), 1617-1624.

Método 2: Tratamiento de una anilina de Fórmula 1 con una amida de fórmula $\text{R}^1\text{C}(=\text{O})\text{NR}^2\text{R}^3$ en la presencia de un reactivo halogenante tal como, pero no limitado a, POCl_3 o SOCl_2 . Para referencia guía a este método ver, Bergman et al, *Tetrahedron*, **1990**, 46 (17), 6058-6112.

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Método 3: Tratamiento de una anilina de Fórmula 1 con un ortoéster de fórmula $R^1C(OR^{13})_3$, en donde R^{13} es alquilo, para formar a aminoéster correspondiente seguido por el calentamiento de iminoéter con una amina de fórmula HNR^2R^3 . Para referencia guía a este método ver, Pissiotas et al, US 4209319.

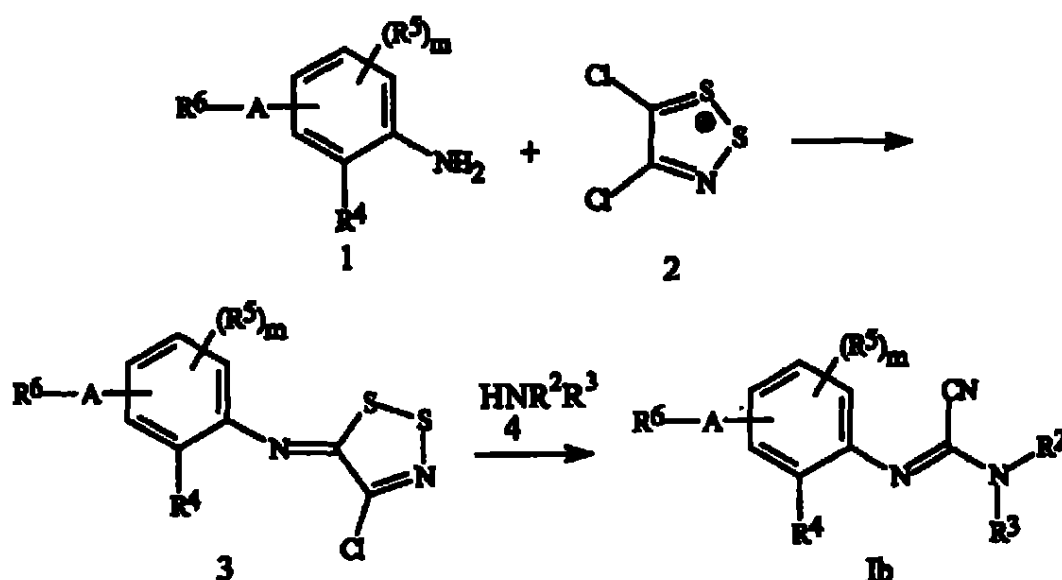
Método 4: Tratamiento de una anilina de Fórmula 1 con fósgeno para formar una isocianato seguido por la reacción del isocianato con una amida de fórmula $R^1C(=O)NR^2R^3$. Para una referencia guía a este método ver, Charles et al, WO 00/46184.

Método 5: Tratamiento de una anilina de Fórmula 1 con $C_2H_5OCH=NCN$ para formar una N-cianoamidina seguido por la reacción de te N-cianoamidina con una amina de fórmula HNR^2R^3 . Para referencia guía a este método ver, Charles et al, WO 00/46184.

Los compuestos de Fórmula Ib, pueden ser preparados mediante el método subrayado en el Esquema 2. El tratamiento de un compuesto de Fórmula 1 con 4,5-dicloro-1,2,3-ditiazolio cloruro (Fórmula 2) affords logra el correspondiente 4-cloro-5-(fenilimino)-5H-1,2,3-ditiazol

(Fórmula 3). La reacción de dicho ditiazol con una amina de Fórmula 4 en un solvente orgánico adecuado tal como, pero no limitado a, diclorometano a temperatura ambiente suministra el compuesto de Fórmula Ib. Para referencia guía a este método ver, Lee et al, *J. Org. Chem.*, 1993, 58 (25), 7001-7008.

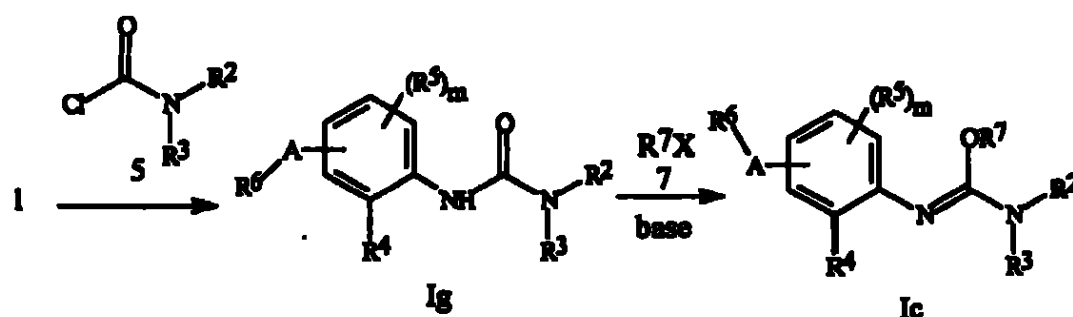
Esquema 2



Los compuestos de Fórmula Ic, pueden ser preparados mediante el método subrayado en el Esquema 3. La reacción de una anilina de Fórmula 1 con un cloruro de carbamoilo de Fórmula 5 suministra la úrea de Fórmula Ig. La úrea de Fórmula Ig es entonces O-alkilada para formar el

compuesto de Fórmula Ic mediante contacto con un agente alquilante de Fórmula 7 (R^7X) en la presencia de una base. En el agente alquilante de Fórmula 7, X es un grupo saliente de reacción nucleofílica como halógeno (por ejemplo, Br, I), $OS(O)_2CH_3$ (metanosulfonato), $OS(O)_2CF_3$, $OS(O)_2Ph-p-CH_3$ (p-toluenosulfonato), y similares. Las bases adecuadas pueden ser, por ejemplo pero no limitadas a, carbonato de potasio (K_2CO_3) u óxido de plata (Ag_2O). Para referencia guía a este método ver, Curtis et al, Aust. J. Chem., 1988, 41 (4), 585-595.

Esquema 3



en donde X es un grupo saliente.

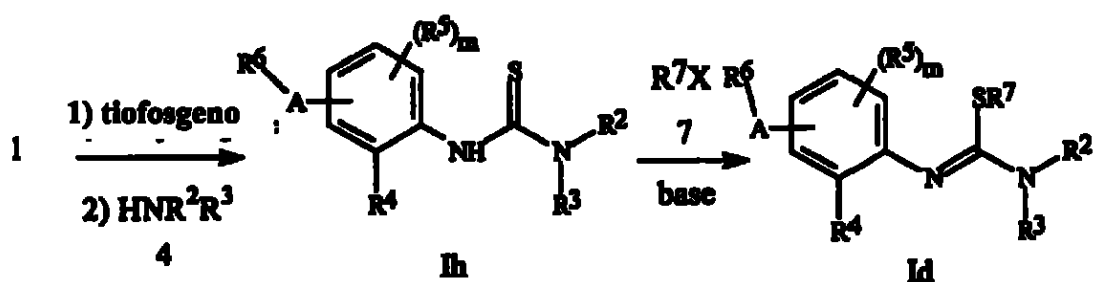
Compuestos de Fórmula Id, pueden ser preparados mediante el método subrayado en el Esquema 4. El tratamiento de

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una anilina de Fórmula 1 con tiofosgeno (o su equivalente) suministra el correspondiente isotiocianato. El isotiocianato es luego hecho reaccionar con una amina de Fórmula 4 para lograr la tioúrea de Fórmula Ih. La tioúrea de Fórmula Ih es luego alquilatada para dar el compuesto de Fórmula Id mediante contacto con un agente alquilatante de Fórmula 7 (R^7X). Las bases adecuadas pueden ser, por ejemplo pero no limitadas a, hidróxido de potasio. Para una referencia guía a este método ver, Filop et al, *Tetrahedron*, 1985, 41 (24), 5981-5988.

Esquema 4



en donde X es grupo saliente.

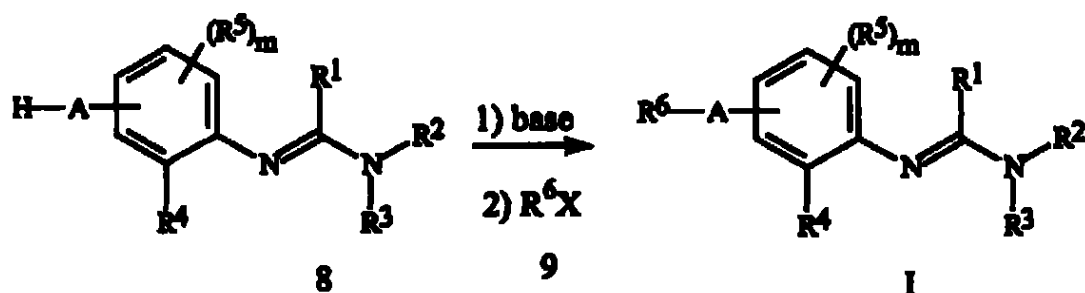
De notar es que los grupos R^2 y R^3 en los compuestos de Fórmula I se pueden convertir a otros grupos R^2 y R^3 como se definió anteriormente, mediante tratamiento con una

amina apropiada o mediante acilación o alquilación cuando R^2 o R^3 es hidrógeno.

Como se ilustró en el Esquema 5, un compuesto de Fórmula I también puede ser preparado mediante alquilación de un compuesto de Fórmula 8 con un agente alquilatante de Fórmula 9 en la presencia de una base. Los compuestos de Fórmula 8 son compuestos conocidos o pueden ser preparados mediante procedimientos de la literatura (*J. Med. Chem.*, 1984, 27 (12), 1705-10; EP 94052 y WO 00/46184). En el agente alquilatante de Fórmula 9, X es un grupo saliente de reacción nucleofílica como se definió anteriormente para la Fórmula 7. La reacción es conducida en la presencia de al menos un equivalente de una base, preferiblemente de 1 a 2 equivalentes. Las bases adecuadas incluyen bases inorgánicas, tales como hidruros de metales alcalinos (tales como de litio, sodio o potasio), carbonatos e hidróxidos, y bases orgánicas, tales como trietilamina, diisopropiletetilamina y 1,8-diazabicyclo-[5.4.0]undec-7-eno. La reacción es generalmente conducida en un solvente, el cual puede comprender solventes aromáticos tales como benceno y tolueno, éteres tales como tetrahidrofurano y dietil éter, y solventes aproticos polares tales como

acetonitrilo, *N,N*-dimetilformamida, y similares. La reacción es generalmente conducida entre aproximadamente -20 y 150° C, y preferiblemente entre 20 y 140° C. El tiempo de reacción puede variar desde 1 hora a 7 días. El compuesto de Fórmula I se puede aislar mediante técnicas convencionales tales como extracción. Los detalles experimentales adicionales para el método del Esquema 5 son ilustrados en el Ejemplo 1.

Esquema 5

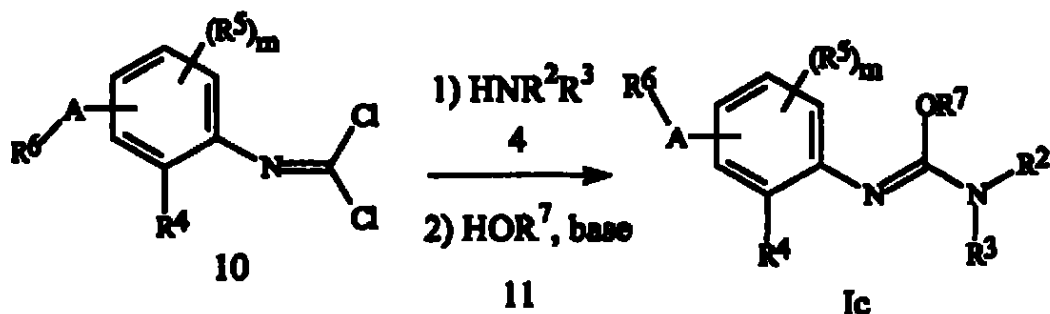


en donde A es O, S o NR¹⁰; y X es un grupo saliente de reacción nucleofílica.

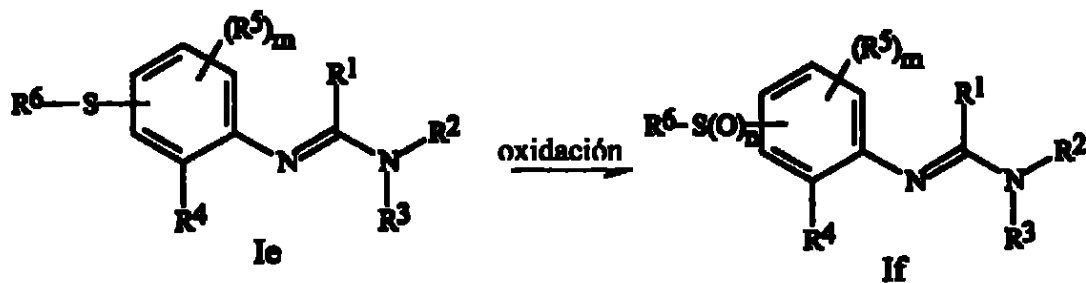
Además, la afinación reductiva de un compuesto de Fórmula 8, en donde A es NH, en la presencia de un aldehído o una cetona también puede suministrar el compuesto de Fórmula I, en donde R⁶ es un grupo alquilo opcionalmente

sustituido. Las condiciones de reacción para la afinación reductiva son enseñadas en *J. Med. Chem.*, 1984, 17 (12), 1705-1710, y las referencias citadas allí.

Como una alternativa al método ilustrado en el Esquema 3, el compuesto de Fórmula Ic también se puede preparar mediante el método subrayado en el Esquema 6. Calentar un dicloruro de fenil isocianuro de Fórmula 10 con una amina de Fórmula 4 suministra el correspondiente imidoilo intermedio. El tratamiento del imidoilo intermedio con un alcohol de Fórmula 11 en la presencia de una base inerte tal como, pero no limitado a, trietilamina, da el compuesto de Fórmula Ic. Para referencias a este método ver, Filop et al, *Izv. Akad. Nauk SSSR, Ser. Khim.*, 1989, (11), 2596-2601, y las referencias citadas allí. El dicloruro de fenil isocianuro de la Fórmula puede ser preparado mediante procedimientos de la literatura (*J. Chem. Soc., Perkin Trans. 1*, 1987, (5), 1069-1076; *Tetrahedron Lett.*, 1982, 23 (35), 3539-3542; *Chem. Ber.*, 1987, 120 (3), 421-424).

Esquema 6

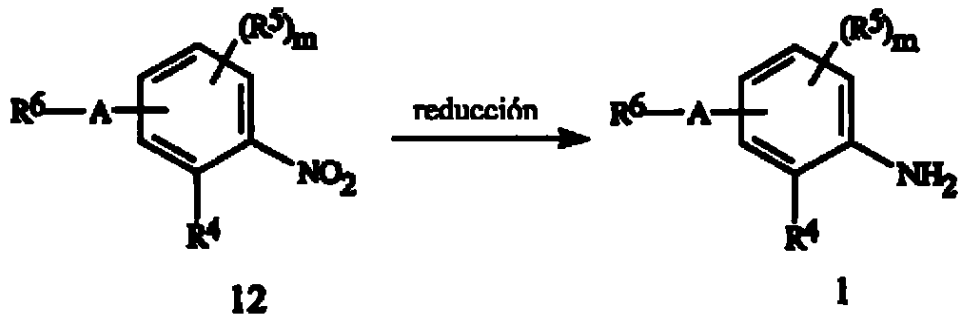
Los compuestos de Fórmula If pueden ser preparados mediante oxidación de compuestos de Fórmula 1e como se ilustró en el Esquema 7. El agente oxidante puede ser ácido peracético, peróxido de hidrógeno, permanganato de potasio, periodato de sodio o ácido 3-cloroperoxibenzoico. El sovente puede ser, por ejemplo pero no está limitado a, diclorometano, ácido acético o agua. Las condiciones detalladas para este método se pueden encontrar en *J Med. Chem.*, 1996, 39 (26), 5072-5082, *J. Med. Chem.*, 1983, 26 (1), 107-110, y las referencias citadas allí.

Esquema 7

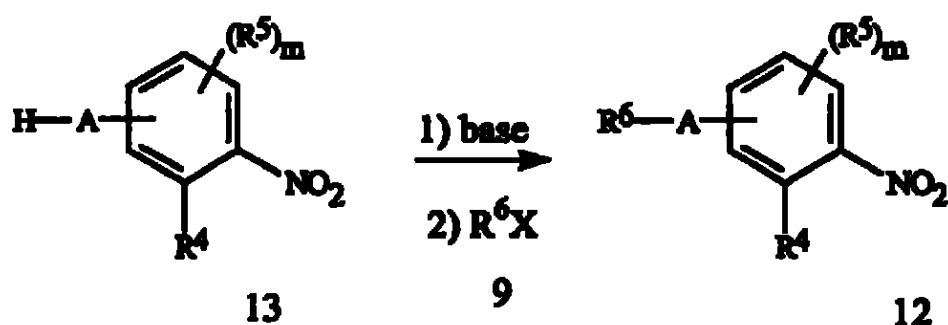
en donde n es 1 o 2.

Los compuestos de Fórmula 1 pueden ser preparados mediante reducción del grupo nitro en los compuestos de Fórmula 12. Existen muchos métodos para esta reacción de reducción. Los métodos preferidos incluyen reducción de cloruro estañoso en ácido clorhídrico concentrado (*J. Med. Chem.*, 1984, 24 (12), 1705-1710) y reducción de polvo de hierro en una solución de ácido acético y agua (*J. Org Chem.*, 2001, 66 (13), 4563-4575).

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Esquema 8

Como se ilustró en el Esquema 9, los compuestos de Fórmula 12 pueden ser preparados mediante alquilación de los compuestos de Fórmula 13 con un agente alquilante de Fórmula 9 en la presencia de una base. Las condiciones de reacción para esta alquilación ya son descritas para la conversión de los compuestos de Fórmula 8 a los compuestos de Fórmula 1 en el Esquema 5. Los compuestos de Fórmula 13 son compuestos conocidos o se pueden preparar mediante procedimientos de la (Can. J. Chem., 1984, 62(8), 1446-51; Aust. J. Chem., 1991, 44(1), 151-6).

Esquema 9

en donde A es O, S o NR^{10} ; y X es un grupo saliente de reacción nucleofílica.

Alternativamente, los compuestos de Fórmula 12, en donde A es O, S o NR^{10} y R^6 es un grupo alquilo opcionalmente sustituidos, también se pueden preparar de los compuestos de Fórmula 13 hasta una reacción Mitsunobu, que involucra la reacción de un compuesto de Fórmula 13 con el alcohol apropiado R^6OH . Las condiciones de reacción generales de la reacción Mitsunobu están bien documentadas en la literatura. Para una revisión de la reacción Mitsunobu ver Hughes, *Org. React.*, 1992, 42, 335-656 y las referencias citadas allí.

Los compuestos de Fórmula 12, en donde A es un enlace directo, están disponibles por una variedad de métodos conocidos. Un experto en la técnica puede preparar los compuestos de Fórmula 12 mediante métodos extensivamente descritos en la literatura; ver por ejemplo: *Synth. Commun.*, 2001, 31(14), 2113-2117; *Synth. Commun.*, 1999, 29(12), 2169-2174; *J. Chem. Res., Synop.*, 1998, (8), 410, 1701-1714; *J. Chem. Soc., Perkin Trans. L*, 1998, (12), 1903-1912; *Synthesis*, 1982 (10), 836-9; *J. Org. Chem.*, 1977, 42(24), 3907-9.

Se reconoce que algunos reactivos y condiciones de reacción descritas anteriormente para preparar compuestos de Fórmula I pueden no ser compatibles con ciertas funcionalidades presentes en los intermedios. En estos casos, la incorporación de secuencias de protección/desprotección o interconversiones de grupo funcional en la síntesis ayudará a obtener los productos deseados. El uso y escogencia de los grupos protectores serán evidentes para un experto en síntesis química (ver, por ejemplo, Greene, T.W.; Wuts, P.G.M. *Protective Groups in Organic Synthesis*, 2nd ed.; Wiley: New York, 1991). Un experto en la técnica reconocerá que, en algunos casos, después de la introducción de un reactivo dado como se

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describe en cualquier esquema individual, puede ser necesario desarrollar etapas sintéticas de rutina adicionales no descritas en detalle para completar la síntesis de los compuestos de Fórmula I. Un experto en la técnica también reconocerá que puede ser necesario desarrollar una combinación de las etapas ilustradas en los esquemas anteriores en un orden diferente de aquel implicado por la secuencia particular presentada para preparar los compuestos de Fórmula I.

Un experto en la técnica también reconocerá que los compuestos de Fórmula I y los intermedios descritos aquí pueden ser sometidos a varias reacciones electrofílicas, nucleofílicas, de radicales, organometálicas, de oxidación, y reducción para agregar sustituyentes o modificar sustituyentes existentes.

Sin elaboración adicional, se cree que un experto en la técnica utilizando la descripción precedente puede utilizar la presente invención en su más completa extensión. Los siguientes Ejemplos son, por lo tanto, constituidos como simple ilustración, y no limitación de la descripción de ninguna manera. Los porcentajes son en peso excepto para las mezclas de solvente cromatográficas

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o donde se indique de otra manera. Las partes y porcentajes para las mezclas de solvente cromatográficas son en volumen a menos que se indique otra cosa. El espectro ^1H RMN son reportados en ppm hacia abajo desde tetrametilsilano; s = singlete, d = doblete, t = triplete, q = cuarteto, m = multiplete, dd = doblete de dobletes, dt = doblete de tripletes, br s = singlete amplio.

EJEMPLO 1

Preparación de N' [2,5-dimetil-4-[(3-metil-2-butenil)-oxi]fenil]-N,N-dimetilmetanimidamida

El compuesto del título se preparó de N'-(4-hidroxi-2,5-dimetilfenil)-N,N-dimetilmetanimidamida (preparado como se describió en WO00/46184). A una suspensión de N'-(4-hidroxi-2,5-dimetilfenil)-N,N-dimetilmetanimidamida (0,77 g, 4 mmol) en tetrahidrofurano (34 mL) bajo nitrógeno a temperatura ambiente se agregó 60% de hidruro de sodio en aceite mineral (170 mg, 4,25 mmol). La mezcla fue entonces agitada a temperatura ambiente durante aproximadamente 45 minutos seguida por la adición de 4-bromo-2-metil-2-buteno (0,72 g, 4,8 mmol). La mezcla de reacción resultante se agitó a temperatura ambiente

durante 2 días y luego se vertió en dietil éter (250 mL). La capa orgánica entonces se lavó con una solución de hidróxido de sodio acuoso 1N (2X200 mL). La capa orgánica entonces se secó sobre MgSO_4 y se filtró. El filtrado se concentró para dar el compuesto del título (1,02 g), un compuesto de la presente invención, como un aceite café.

^1H RMN (CDCl_3): δ 1,72 (s, 3H), 1,78 (s, 3H), 2,17 (s, 3H), 2,24 (s, 3H), 2,99 (s, 6H), 4,46 (d, 2H), 5,5 (t, 1H), 6,55 (s, 1H), 6,66 (s, 1H), 7,38 (s, 1H).

EJEMPLO 2

Preparación de N'-[2,5-dimetil-4-[(4-metilpentil)oxi]-Fenil]-N,N-dimetilmetanimidamida

A una suspensión de N'-(4-hidroxi-2,5-dimetilfenil)-N,N-dimetil-metanimidamida (0,52 g, 2,7 mmol) en tetrahidrofurano (~10 mL) bajo nitrógeno a temperatura ambiente se agregó hidruro de sodio al 60% en aceite mineral (120 mg, 3 mmol). Después de la adición, la mezcla se agitó a temperatura ambiente durante 30 minutos, y se agregó 1-bromo-4-metilpentano (0,55 g, 3,3 mmol). La mezcla de reacción resultante se calentó hasta

reflujo durante 24 horas, se enfrió a temperatura ambiente y se agitó a temperatura ambiente durante la noche. La mezcla de reacción entonces se vertió en dietil éter (100 mL). La capa orgánica se lavó con solución de hidróxido de sodio acuoso (3X100 mL), se secó sobre MgSO_4 y se filtró. El filtrado se concentró para dar el compuesto del título (0,7 g), un compuesto de esta invención, como un aceite.

^1H RMN (CDCl_3): δ 0,91 (d, 6H), 1,28-1,82 (m, 5H), 2,16 (s, 3H), 2,23 (s, 3H), 2,98 (s, 6H), 3,89 (t, 2H), 6,54 (s, 1H), 6,63 (s, 1H), 7,37 (s, 1H).

EJEMPLO 3

Preparación de N'-(2,5-Dimetil-4-[3-(trimetilsilil)propoxi]fenil)-N,N-dimetilmetanimidamida

A una suspensión de N'-(4-hidroxi-2,5-dimetilfenil)-N,N-dimetilmetanimidamida (0,52 g, 2,7 mmol) en p-dioxano (10 mL) bajo nitrógeno a temperatura ambiente se agregó hidruro de sodio al 60% en aceite mineral (120 mg, 3 mmol). Después de la adición, la mezcla se agitó a temperatura ambiente durante 21 minutos, y se agregó (3-

cloropropil)trimetilsilano (0,5 g, 3,3 mmol). La mezcla de reacción resultante se calentó hasta reflujo durante 4 días y luego se enfrió a temperatura ambiente. La mezcla de reacción se vertió en dietil éter (100 mL). La capa orgánica se lavó con solución de hidróxido de sodio acuoso (3X100 mL). La capa orgánica entonces se secó sobre MgSO_4 y se filtró. El filtrado se concentró y luego se secó en un horno de vacío a 90 °C durante la noche para dar el compuesto del título (0,16 g), un compuesto de esta invención, como un aceite.

^1H RMN (CDCl_3): δ 0,02 (t, 9H), 0,6 (m, 2H), 1,7-1,82 (m, 2H), 2,17 (s, 3H), 2,23 (s, 3H), 2,98 (s, 6H), 3,87 (t, 2H), 6,54 (s, 1H), 6,62 (s, 1H), 7,38 (s, 1H).

EJEMPLO 4

Preparación de N'-[4-[(1-butilpentil)oxi]-2,5-dimetilfenil]-N,N-dimetilmetanimidamida

Etapas A: Preparación de 1-[(1-butilpentil)oxi]-2,5-dimetil-4-nitrobenzeno

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Diisopropil azodicarboxilato (0,570 g, 2,82 mmol) se agregó a la solución de trifenilfosfina (0,739 g, 2,82 mmol) en tetrahidrofurano (15 mL) a 0° C gota a gota. La mezcla se agitó a 0° C durante 30 minutos adicionales. Una mezcla de 2,5-dimetil-4-nitrofenol (0,315 g, 1,9 mmol) y 5-nonanol (0,288 g, 2 mmol) en tetrahidrofurano (10 mL) se agregó gota a gota a la solución fría de arriba. Luego la mezcla de reacción se agitó a 0° C durante 30 min y a temperatura ambiente durante 1 hora. El tetrahidrofurano se removi6 bajo presión reducida, y el residuo se tritur6 con hexano (100 mL) y se filtr6. El precipitado se lav6 con hexano (50 mL). El hexano se removi6 bajo presión reducida, y el residuo se purific6 mediante cromatografía de columna eluida con diclorometano para dar el compuesto del título (0,4 g) como un aceite.

¹H RMN (CDCl₃): δ 0,9 (t, 6 H), 1,2-1,4 (m, 8 H), 1,6-1,7 (m, 4H), 2,15 (s, 3H), 2,6 (s, 3H), 4,35 (m, H), 6,6 (s, 1H), 7,9 (s, 1H).

Etapas B: Preparación de 1-[(1-butilpentil)oxi]-2,5-dimetil-4-benzenamina

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1-[(1-butilpentil)oxi]-2,5-dimetil-4-nitrobenzeno (es decir el producto de la etapa A) (0,4 g, 1,39 mmol) se redujo mediante hidrogenación catalítica utilizando catalizador de carboncillo de paladio (10 wt %, 0.2 g) en etanol (~20 mL) a 40 psi (276 KPa) de presión de hidrógeno sobre ambiente durante 8 horas. El catalizador se removió mediante filtración, y el filtrado se concentró bajo presión reducida. El residuo purificó mediante cromatografía de columna eluida con diclorometano para dar el compuesto del título (0,35 g) como un aceite.

^1H RMN (CDCl_3): δ 0,9 (t, 6H), 1,2-1,4 (m, 8H), 1,6-1,7 (m, 4H), 2,15 (s, 6H), 3,25 (m, 2H), 4,0 (m, 1H), 6,42 (s, 1H), 6,5 (s, 1H).

Etapas C: Preparación de N'-[4-[(1-butilpentil)oxi]-2,5-dimetilfenil]-N,N dimetilmetanimidamida

dimetilformamida dimetil acetal (~5 mL) se agregó a 1-[(1-butilpentil)oxi]-2,5-dimetil-4-benzenamina (es decir el producto de la etapa B) (350 mg) bajo argón, y la

mezcla se calentó a 100° C durante dos horas. La mezcla de reacción se enfrió a temperatura ambiente y se particionó entre éter (50 mL) y agua (50 mL). La capa orgánica se lavó secuencialmente con agua (50 mL) y salmuera, se secó (Na₂SO₄), se filtró y se concentró para dar el compuesto del título (300 mg), un compuesto de esta invención, como un aceite rojizo.

¹H RMN (CDCl₃): δ 0,9 (t, 6 H), 1,2-1,4 (m, 8H), 1,5-1,7 (m, 4H), 2,15 (s, 3H), 2,2 (s, 3H), 3,0 (s, 6H), 4,1 (m, H), 6,5 (s, 1H), 6,6 (s, 1H), 7,4 (s, 1H).

EJEMPLO 5

Preparación de N'-[5-CLORO-2-metil-4-[3-(trimetilsilil)propoxi]fenil]-N-etil-N-metilmetanimidamida

Etapas A: Preparación de [3-(2-cloro-5-metil-4-nitrofenoxi)propil]trimetilsilano

Azodicarboxilato diisopropilo (2,3 mL, 11,68 mmol), 3-trimetilsililpropanol (1,41 g, 10,66 mmol), 2-cloro-5-metil-4-nitrofenol (2,0 g, 10,64 mmol) y trifenilfosfina

(3,24 g, 12,35 mmol) se agregaron a tetrahidrofurano (55 mL) a -10° C. La mezcla entonces se calentó a temperatura ambiente y se agitó a temperatura ambiente durante la noche. El tetrahidrofurano se removió bajo presión reducida, y el residuo se purificó mediante cromatografía de columna (silica gel; eluida con una solución de acetato de etilo al 5% en hexanos) para dar el compuesto del título (2,68 g) como un sólido amarillo, mp $66-68^{\circ}$ C.

^1H RMN (CDCl_3): δ 0,04 (s, 9H), 0,64 (m, 2H), 1,86 (m, 2H), 2,64 (s, 3H), 4,05 (t, 2H), 6,76 (s, 1H), 8,17 (s, 1H).

Etapas B: Preparación de 5-cloro-2-metil-4-[3-(trimetilsilil)propoxi]benzenamina

A una mezcla de [3-(2-cloro-5-metil-4-nitrofenoxi)propil] trimetilsilano (es decir el producto de la Etapa A) (3,5 g, 11,6 mmol) y metanol (16 mL) a temperatura ambiente se agregó ácido clorhídrico concentrado (16 mL) y cloruro de estaño (II) (6,64 g, 35,02 mmol) con agitación. La mezcla de reacción se calentó hasta reflujo durante 4 horas. Se agregó diclorometano (320 mL) a la mezcla de reacción

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después se enfrió a temperatura ambiente. La mezcla se lavó con una solución acuosa de hidróxido de sodio 4N (110 mL) seguido por salmuera (3x320 mL). La capa orgánica se separó, se secó sobre MgSO_4 , y se concentró para dar el compuesto del título (2.97 g) como un aceite.

^1H RMN (CDCl_3): δ 0,02 (s, 9H), 0,61 (m, 2H), 1,76 (m, 2H), 2,13 (s, 3H), 3,4 (br s, 2H), 3,89 (t, 2H), 6,69 (s, 1H), 6,7 (s, 1H).

Etapa C: Preparación de N-[5-cloro-2-metil-4-[3-(trimetilsilil)propoxi]fenil]-N'-cianometanimidamida

A una solución de etil éster N-cianometanimidico (1,21 g, 12,35 mmol) en etanol (16 mL) a temperatura ambiente se agregó gota a gota una solución de 5-cloro-2-metil-4-[3-(trimetilsilil)propoxi]benzenamina (es decir el producto de la Etapa B) (2,93 g, 10,77 mmol) en etanol (16 mL). Después de la adición, la mezcla de reacción se agitó a temperatura ambiente durante la noche y entonces se concentró bajo presión reducida. El residuo se trituroó en una solución de acetato de etilo al 25 % en hexanos, y el sólido se recolectó mediante filtración para dar el

compuesto del título (2,4 g) como un sólido blanco apagado, mp 143-144° C.

¹H RMN (CDCl₃): δ 0,03 (s, 9H), 0,62 (m, 2H), 1,82 (m, 2H), 2,28 (m, 3H), 3,96 (m, 2H), 6,78-8,35 (m, 3H).

Etapas D: Preparación de N'-[5-cloro-2-metil-4-[3-(trimetilsil)propoxi]fenil]-N-etil-N-metilmetanimidamida

A una suspensión de N-[5-cloro-2-metil-4-[3-(trimetilsilil]propoxi]fenil]-N'-cianometanimidamida (es decir el producto de la Etapa C) (174 mg, 0,54 mmol) en acetonitrilo (4 mL) a temperatura ambiente se agregó gota a gota N-etilmetilamina (0,23 mL, 2,68 mmol). Después de la adición, la mezcla de reacción se agitó a temperatura ambiente durante la noche. El éter (40 mL) entonces se agregó a la mezcla de reacción. La mezcla resultante se lavó con agua (40 mL) y luego salmuera (40 mL). La capa orgánica se separó, se secó sobre MgSO₄, y se concentró para dar el compuesto del título (160 mg), un compuesto de la presente invención, como un aceite.

^1H RMN (CDCl_3): δ 0,02 (s, 9H), 0,6 (m, 2H), 1,2 (t, 3H), 1,8 (m, 2H), 2,23 (s, 3H), 2,98 (s, 3H), 3,35 (br s, 2H), 3,93 (t, 2H), 6,74 (s, 1H), 6,77 (s, 1H), 7,4 (s, 1H).

EJEMPLO 6

Preparación de N'-[5-cloro-2-metil-4- [(trimetilsilil)propoxi]fenil]-N-etil-N-metiltioúrea

Etapas A: Preparación de [3-(2-cloro-4-isotiocianato-5- metilfenoxi)propil]-trimetilsilano

A una solución de 5-cloro-2-metil-4-[3-(trimetilsilil)propoxi]benzenamina (es decir el producto del Ejemplo 5, Etapa B) (1,63 g, 6 mmol) en tolueno (50 mL) a 25° C se agregó cloruro dietilcarbamil (1,2 g, 7,8 mmol) seguido por N,N-diisopropiletilamina (1,1 g, 9 mmol). La solución homogénea resultante se calentó hasta reflujo durante 3 h. El solvente se evaporó, y al residuo se le hizo cromatografía flash sobre sílica gel utilizando acetato de etilo/hexano (1:40) como eluyente para dar el compuesto del título (1,19 g) como un semi-sólido amarillo pálido.

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^1H RMN (CDCl_3): δ 0,00 (s, 9H), 0,60 (m, 2H), 1,80 (m, 2H) 2,40 (s, 3H), 3,85 (t, 2H), 6,60 (s, 1H), 7,00 (s, 1H).

Etapas B: Preparación de N'-[5-Cloro-2-metil-4-[3-(trimetilsilil)propoxi]fenil]-N-etil-N-Metiltioúrea

A una solución de [3-(2-cloro-4-isotiocianato-5-metilfenoxi)propil]-trimetilsilano (es decir el producto de la Etapa A) (310 mg, 1 mmol) en tetrahidrofurano (10 mL) a 25° C se agregó N-etilmetilamina (1 g, 17 mmol). La solución de reacción se agitó a 25° C durante 30 minutos. El solvente entonces se evaporó, y el hexano se agregó al residuo para inducir cristalización. El sólido se recolectó mediante filtración y se lavó con una solución de éter/hexano (1:5) (20 mL) para dar el compuesto del título (255 mg), un compuesto de la presente invención, como un sólido blanco apagado, mp 71-72° C.

^1H RMN (CDCl_3): δ 0,00 (s, 9H), 0,60 (m, 2H), 1,25 (t, 3H), 1,80 (m, 2H) 2,20, (s, 3H), 3,20 (s, 3H), 3,85 (q, 2H), 3,90 (t, 2H), 6.70 (br s, 1H), 6,75 (s, 1H), 7,15 (s, 1H)

EJEMPLO 7

Preparación de N'-[5-cloro-2-(metiltio)-4-[3-
(trimetilsilil)propoxi]fenil]-N-ciclopropil-N-
metilmetanimidamida

EtapA A: Preparación de [3-(2,5-dicloro-4-nitrofenoxi)
propil]trimetilsilano

Diisopropil azodicarboxilato (10,4 mL, 53 mmol), 3-trimetilsililpropanol (6,4 g, 48 mmol), 2,5-dicloro-4-nitrofenol (10,0 g, 48 mmol) y trifenilfosfina (12,6 g, 48 mmol) se agregó tetrahidrofurano (100 mL) a -10° C. La mezcla entonces se calentó a temperatura ambiente durante la noche. El tetrahidrofurano se removi6 bajo presión reducida, y el residuo se tritur6 con hexanos (~200 mL). El sólido se filtr6. El filtrado entonces se concentr6, y el residuo se purific6 mediante cromatografía de columna de silica gel eluida con hexanos seguido de acetato de etiloal 2% en hexanos para dar el compuesto del título (13,5 g) como un sólido amarillo, mp 45-48° C.

¹H RMN (CDCl₃): δ 0,05 (s, 9H), 0,65 (m, 2H), 1,89 (m, 2H), 4,07 (t, 2H), 7,00 (s, 1H), 8,12 (s, 1H).

Etapa B: Preparación de [3-[2-cloro-5-(metilito)-4-nitrofenoxi]propil]trimetilsilano

A una solución de [3-(2,5-dicloro-4-nitrofenoxi)propil]trimetilsilano (4,6 g, 14,3 mmol) (es decir el producto de la Etapa A) en N,N-dimetilformamida (40 mL) se agregó tiometóxido de sodio (1,3 g, 18,6 mmol) a temperatura ambiente. La mezcla de reacción se calentó a 100° C durante 2 días. La mezcla de reacción entonces se particionó entre éter (100 mL) y agua (150 mL). La capa orgánica se lavó con agua (3X50 mL), se separó, se secó sobre MgSO₄, se filtró y se concentró. El residuo purificó mediante Cromatografía de columna de silica gel utilizando cloruro de hexanos/butilo (3:1) como eluyente para dar el compuesto del título (2,7 g) como un sólido anaranjado, mp 51-53° C.

¹H RMN (CDCl₃): δ 0,05 (s, 9H), 0,65 (m, 2H), 1,89 (m, 2H), 2,49 (s, 3H), 4,09 (t, 2H), 6,69 (s, 1H), 8,35 (s, 1H).

Etapa C: Preparación de 5-cloro-2-(metiltio)-4-[3-(trimetilsilil)propoxi]benzenamina

A una solución de [3-[2-cloro-5-(metiltio)-4-nitrofenoxi]propil]trimetilsilano (es decir el producto de la Etapa B) (2,7 g, 8,91 mmol) en metanol (5 mL) y ácido clorhídrico concentrado (5 mL) se agregó cloruro de estaño (II) (5,1 g, 26,7 mmol). La mezcla de reacción se calentó hasta reflujo durante 4 horas. La mezcla de reacción se enfrió a temperatura ambiente, y el solvente de metanol se removi6 bajo presión reducida. La mezcla de reacción se particion6 entre diclorometano (~50 mL) y solución de hidróxido de sodio acuoso 4N (4X50 mL). La capa orgánica se separ6, se sec6 sobre MgSO₄, y se concentr6 para dar el compuesto del título (2,0 g) como un aceite café.

¹H RMN (CDCl₃): δ 0,02 (s, 9H), 0,61 (m, 2H), 1,78 (m, 2H), 2,35 (s, 3H), 3,92 (t, 2H), 4,04 (br s, 2H), 6,78 (s, 1H), 6,98 (s, 1H).

Etapa D: Preparación de N-[5-Cloro-2-(metiltio)-4-[3-(trimetilsilil)propoxi]fenil]-N'-Cianometanimidamida

A una solución de etil éster N-cianometanimidico (0,84 g, 8,6 mmol) en etanol (5 mL) a temperatura ambiente se agregó gota a gota a una solución de 5-cloro-2-(metiltio)-4-[3-(trimetilsilil)propoxi]benzenamina (es decir el producto de la Etapa C) (2,0 g, 6,6 mmol) en etanol (10 mL). Después de la adición, la mezcla de reacción se agitó a temperatura ambiente durante 2 días y luego se concentró bajo presión reducida. El residuo purificó mediante cromatografía de columna de silica gel utilizando acetato de etilo/hexanos (1:2) como eluyente para dar el compuesto del título (1,8 g) como un sólido anaranjado, mp 94-96° C.

¹H RMN (CDCl₃): δ 0,03 (s, 9H), 0,62 (m, 2H), 1,84 (m, 2H), 2,39 (m, 3H), 3,96 (t, 2H), 6,97-8,37 (m, 3H).

Etapa E: Preparación de N'-[5-Cloro-2-(metiltio)-4-[3-(trimetilsilil)propoxi]fenil]-N-ciclopropil-N-metilmetanimidamida

A una suspensión de N-[5-cloro-2-(metiltio)-4-[3-(trimetilsilil)propoxi]fenil]-N-cianometanimidamida (es

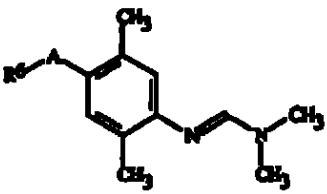
decir el producto de la Etapa D) (200 mg, 0,56 mmol) en acetonitrilo (5 mL) a temperatura ambiente se agregó gota a gota una solución de N-ciclopropilmetilamina en éter (7,6 mL, 0,74 M, 5,6 mmol). Después de la adición, la mezcla de reacción se agitó a temperatura ambiente durante la noche. La mezcla de reacción entonces se concentró bajo presión reducida, y el residuo se purificó mediante cromatografía de columna de sílica gel utilizando acetato de etilo/hexanos (1:2) como eluyente para dar el compuesto del título (120 mg), un compuesto de la presente invención, como un sólido marrón, mp 62-64° C.

¹H RMN (CDCl₃): δ 0,02 (s, 9H), 0,6-0,8 (m, 6H), 1,82 (m, 2H), 2,4 (s, 3H), 2,7 (m, 1H), 3,23 (s, 3H), 3,96 (t, 2H), 6,69 (s, 1H), 6,79 (s, 1H), 7,64 (s, 1H).

Mediante los procedimientos descritos aquí junto con los métodos conocidos en la técnica, se pueden preparar los siguientes compuestos de las Tablas 1 a 13. Las siguientes abreviaciones son utilizadas en las Tablas que siguen: t significa terciario, s significa secundario, n significa normal, i significa iso, c significa ciclo, Pr

significa propilo, *i*-Pr significa isopropilo, *c*-Pr significa ciclopropilo, Bu significa butilo, y CN significa ciano.

TABLA 1



Δ	R^6	Δ	R^6
O	$(CH_2)_4CH_3$	S	$(CH_2)_4CH_3$
O	$(CH_2)_3C(CH_3)_2OC_2H_5$	S	$(CH_2)_3C(CH_3)_2OC_2H_5$
O	$(CH_2)_5CH_3$	S	$(CH_2)_5CH_3$

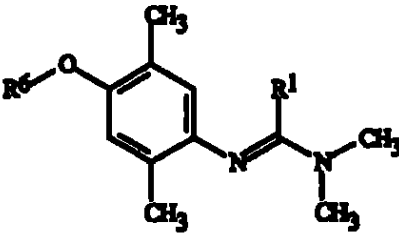
A	R ⁶	A	R ⁶
O	(CH ₂) ₆ CH ₃	S	(CH ₂) ₆ CH ₃
O	(CH ₂) ₃ C(CH ₃) ₂ Br	S	(CH ₂) ₃ C(CH ₃) ₂ Br
O	(CH ₂) ₇ CH ₃	S	(CH ₂) ₇ CH ₃
O	(CH ₂) ₃ CH(CH ₃) ₂	S	(CH ₂) ₃ CH(CH ₃) ₂
O	(CH ₂) ₃ C(CH ₃) ₃	S	(CH ₂) ₃ C(CH ₃) ₃
O	(CH ₂) ₃ Si(CH ₃) ₃	S	(CH ₂) ₃ Si(CH ₃) ₃
O	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃	S	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
O	(CH ₂) ₃ C(-CH ₂)CH(CH ₃) ₂	S	(CH ₂) ₃ C(-CH ₂)CH(CH ₃) ₂
O	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅	S	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
O	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃	S	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
O	(CH ₂) ₂ OC(CH ₃) ₃	S	(CH ₂) ₂ OC(CH ₃) ₃
O	(CH ₂) ₂ SO(CH ₃) ₃	S	(CH ₂) ₂ SO(CH ₃) ₃
O	(CH ₂) ₂ SCH(CH ₃) ₂	S	(CH ₂) ₂ SCH(CH ₃) ₂
O	CH ₂ CH=CHC(CH ₃) ₃	S	CH ₂ CH=CHC(CH ₃) ₃
O	CH ₂ CH=CHCH(CH ₃) ₂	S	CH ₂ CH=CHCH(CH ₃) ₂
O	(CH ₂) ₂ S(-O)C(CH ₃) ₃	S	(CH ₂) ₂ S(-O)C(CH ₃) ₃
O	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃	S	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
O	(CH ₂) ₂ OCH(CH ₃) ₂	S	(CH ₂) ₂ OCH(CH ₃) ₂
O	(CH ₂) ₃ OC(CH ₃) ₃	S	(CH ₂) ₃ OC(CH ₃) ₃
O	(CH ₂) ₃ P(-O)(CH ₃) ₂	S	(CH ₂) ₃ P(-O)(CH ₃) ₂
O	CH ₂ C(-O)CH ₂ C(CH ₃) ₃	S	CH ₂ C(-O)CH ₂ C(CH ₃) ₃
O	CH(CH ₃)(CH ₂) ₃ CH ₃	S	CH(CH ₃)(CH ₂) ₃ CH ₃
O	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂	S	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
O	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃	S	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
O	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂	S	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
O	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂	S	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
O	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂	S	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂
O	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂	S	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
O	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃	S	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
O	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂	S	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
O	CH ₂ CH=C(CH ₃) ₂	S	CH ₂ CH=C(CH ₃) ₂
O	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃	S	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
O	(CH ₂) ₃ C(CH ₃) ₂ Cl	S	(CH ₂) ₃ C(CH ₃) ₂ Cl
O	CH ₂ CH ₂ CH=C(CH ₃) ₂	S	CH ₂ CH ₂ CH=C(CH ₃) ₂
O	(CH ₂) ₈ CH ₃	S	(CH ₂) ₈ CH ₃
O	(CH ₂) ₉ CH ₃	S	(CH ₂) ₉ CH ₃
O	(CH ₂) ₁₁ CH ₃	S	(CH ₂) ₁₁ CH ₃

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Δ	R^6
O	$C(=O)OCH_2C(CH_3)_3$
O	$(CH_2)_4CH(CH_3)_2$
O	$C(=O)OCH(C_2H_5)C(CH_3)_3$
O	$C(=O)OC(CH_3)_2C(CH_3)_3$
O	$C(=O)NHCH_2C(CH_3)_3$
O	$C(=O)N(CH_3)CH_2C(CH_3)_3$
O	$CH_2CH_2CH_2CH-C(CH_3)_2$
O	$C(=O)CH_2SC(CH_3)_3$
O	$(CH_2)_4Cl$
O	$(CH_2)_5Cl$
O	$(CH_2)_2CH(CH_3)(CH_2)_3CH(CH_3)_2$
O	$(S)-(CH_2)_2CH(CH_3)CH_2CH_2CH-C(CH_3)_2$
O	$(R)-(CH_2)_2CH(CH_3)CH_2CH_2CH-C(CH_3)_2$
O	$(CH_2)_2CH(CH_3)_2$
O	$(CH_2)_2C(CH_3)_3$
O	$CH_2C(=O)C(CH_3)_3$
O	$CH_2CH-C(CH_3)(CH_2)_2CH-C(CH_3)_2$
O	$CH_2(CH-C(CH_3)(CH_2)_2)_2CH-C(CH_3)_2$
O	$(CH_2)_3CH-CH_2$
O	$(CH_2)_4CH-CH_2$
O	$CH(C_2H_5)_2$
O	$CH(CH_2CH_2CH_3)_2$
O	$CH(CH_2CH_2CH_2CH_3)_2$
O	$CH(CH_2CH_2CH_3)CH_2CH_2CH_2CH_3$
O	$CH(CH_3)CH_2CH_2CH(CH_3)(C_2H_5)$
O	$CH(CH_2CH_2CH_2CH_2CH_3)_2$
O	$CH(CH_2CH_2CH_2CH_3)(CH_2)_5CH_3$
O	$CH(C_2H_5)CH_2CH_2C(=CH_2)CH_3$

Δ	R^6
S	$C(=O)OCH_2C(CH_3)_3$
S	$(CH_2)_4CH(CH_3)_2$
S	$C(=O)OCH(C_2H_5)C(CH_3)_3$
S	$C(=O)OC(CH_3)_2C(CH_3)_3$
S	$C(=O)NHCH_2C(CH_3)_3$
S	$C(=O)N(CH_3)CH_2C(CH_3)_3$
S	$CH_2CH_2CH_2CH-C(CH_3)_2$
S	$C(=O)CH_2SC(CH_3)_3$
S	$(CH_2)_4Cl$
S	$(CH_2)_5Cl$
S	$(CH_2)_2CH(CH_3)(CH_2)_3CH(CH_3)_2$
S	$(S)-(CH_2)_2CH(CH_3)CH_2CH_2CH-C(CH_3)_2$
S	$(R)-(CH_2)_2CH(CH_3)CH_2CH_2CH-C(CH_3)_2$
S	$(CH_2)_2CH(CH_3)_2$
S	$(CH_2)_2C(CH_3)_3$
S	$CH_2C(=O)C(CH_3)_3$
S	$CH_2CH-C(CH_3)(CH_2)_2CH-C(CH_3)_2$
S	$CH_2(CH-C(CH_3)(CH_2)_2)_2CH-C(CH_3)_2$
S	$(CH_2)_3CH-CH_2$
S	$(CH_2)_4CH-CH_2$
S	$CH(C_2H_5)_2$
S	$CH(CH_2CH_2CH_3)_2$
S	$CH(CH_2CH_2CH_2CH_3)_2$
S	$CH(CH_2CH_2CH_3)CH_2CH_2CH_2CH_3$
S	$CH(CH_3)CH_2CH_2CH(CH_3)(C_2H_5)$
S	$CH(CH_2CH_2CH_2CH_2CH_3)_2$
S	$CH(CH_2CH_2CH_2CH_3)(CH_2)_5CH_3$
S	$CH(C_2H_5)CH_2CH_2C(=CH_2)CH_3$

TABLA 2

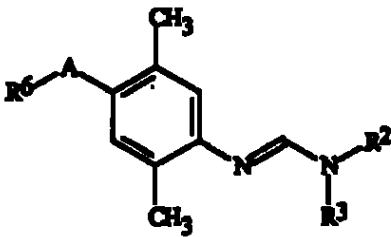


R ¹	R ⁶	R ¹	R ⁶
CH ₃	(CH ₂) ₄ CH ₃	OCH ₃	(CH ₂) ₄ CH ₃
CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅	OCH ₃	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
CH ₃	(CH ₂) ₅ CH ₃	OCH ₃	(CH ₂) ₅ CH ₃
CH ₃	(CH ₂) ₆ CH ₃	OCH ₃	(CH ₂) ₆ CH ₃
CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Br	OCH ₃	(CH ₂) ₃ C(CH ₃) ₂ Br
CH ₃	(CH ₂) ₇ CH ₃	OCH ₃	(CH ₂) ₇ CH ₃
CH ₃	(CH ₂) ₃ CH(CH ₃) ₂	OCH ₃	(CH ₂) ₃ CH(CH ₃) ₂
CH ₃	(CH ₂) ₃ C(CH ₃) ₃	OCH ₃	(CH ₂) ₃ C(CH ₃) ₃
CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	OCH ₃	(CH ₂) ₃ Si(CH ₃) ₃
CH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃	OCH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
CH ₃	(CH ₂) ₃ C(-CH ₂)CH(CH ₃) ₂	OCH ₃	(CH ₂) ₃ C(-CH ₂)CH(CH ₃) ₂
CH ₃	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅	OCH ₃	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
CH ₃	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃	OCH ₃	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
CH ₃	(CH ₂) ₂ OC(CH ₃) ₃	OCH ₃	(CH ₂) ₂ OC(CH ₃) ₃
CH ₃	(CH ₂) ₂ SC(CH ₃) ₃	OCH ₃	(CH ₂) ₂ SC(CH ₃) ₃
CH ₃	(CH ₂) ₂ SCH(CH ₃) ₂	OCH ₃	(CH ₂) ₂ SCH(CH ₃) ₂
CH ₃	CH ₂ CH=CHC(CH ₃) ₃	OCH ₃	CH ₂ CH=CHC(CH ₃) ₃
CH ₃	CH ₂ CH=CHCH(CH ₃) ₂	OCH ₃	CH ₂ CH=CHCH(CH ₃) ₂
CH ₃	(CH ₂) ₂ S(-O)C(CH ₃) ₃	OCH ₃	(CH ₂) ₂ S(-O)C(CH ₃) ₃
CH ₃	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃	OCH ₃	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
CH ₃	(CH ₂) ₂ OCH(CH ₃) ₂	OCH ₃	(CH ₂) ₂ OCH(CH ₃) ₂
CH ₃	(CH ₂) ₃ OC(CH ₃) ₃	OCH ₃	(CH ₂) ₃ OC(CH ₃) ₃
CH ₃	(CH ₂) ₃ P(-O)(CH ₃) ₂	OCH ₃	(CH ₂) ₃ P(-O)(CH ₃) ₂
CH ₃	CH ₂ C(-O)CH ₂ C(CH ₃) ₃	OCH ₃	CH ₂ C(-O)CH ₂ C(CH ₃) ₃
CH ₃	CH(CH ₃)(CH ₂) ₃ CH ₃	OCH ₃	CH(CH ₃)(CH ₂) ₃ CH ₃
CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂	OCH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃	OCH ₃	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂	OCH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂	OCH ₃	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂	OCH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂

R^1	R^6	R^1	R^6
CH_3	$CH_2CH_2CH_2N(CH_3)_2$	OCH_3	$CH_2CH_2CH_2N(CH_3)_2$
CH_3	$CH_2CH_2N(CH_3)C(CH_3)_3$	OCH_3	$CH_2CH_2N(CH_3)C(CH_3)_3$
CH_3	$CH_2CH_2N(CH_3)CH(CH_3)_2$	OCH_3	$CH_2CH_2N(CH_3)CH(CH_3)_2$
CH_3	$CH_2CH=C(CH_3)_2$	OCH_3	$CH_2CH=C(CH_3)_2$
CH_3	$(CH_2)_3C(CH_3)_2OCH_3$	OCH_3	$(CH_2)_3C(CH_3)_2OCH_3$
CH_3	$(CH_2)_3C(CH_3)_2Cl$	OCH_3	$(CH_2)_3C(CH_3)_2Cl$
CH_3	$CH_2CH_2CH=C(CH_3)_2$	OCH_3	$CH_2CH_2CH=C(CH_3)_2$
C_2H_5	$(CH_2)_4CH_3$	SCH_3	$(CH_2)_4CH_3$
C_2H_5	$(CH_2)_3C(CH_3)_2OC_2H_5$	SCH_3	$(CH_2)_3C(CH_3)_2OC_2H_5$
C_2H_5	$(CH_2)_5CH_3$	SCH_3	$(CH_2)_5CH_3$
C_2H_5	$(CH_2)_6CH_3$	SCH_3	$(CH_2)_6CH_3$
C_2H_5	$(CH_2)_3C(CH_3)_2Br$	SCH_3	$(CH_2)_3C(CH_3)_2Br$
C_2H_5	$(CH_2)_7CH_3$	SCH_3	$(CH_2)_7CH_3$
C_2H_5	$(CH_2)_3CH(CH_3)_2$	SCH_3	$(CH_2)_3CH(CH_3)_2$
C_2H_5	$(CH_2)_3C(CH_3)_3$	SCH_3	$(CH_2)_3C(CH_3)_3$
C_2H_5	$(CH_2)_3Si(CH_3)_3$	SCH_3	$(CH_2)_3Si(CH_3)_3$
C_2H_5	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$	SCH_3	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
C_2H_5	$(CH_2)_3C(-CH_2)CH(CH_3)_2$	SCH_3	$(CH_2)_3C(-CH_2)CH(CH_3)_2$
C_2H_5	$(CH_2)_3CH(CH_3)C_2H_5$	SCH_3	$(CH_2)_3CH(CH_3)C_2H_5$
C_2H_5	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$	SCH_3	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$
C_2H_5	$(CH_2)_2OC(CH_3)_3$	SCH_3	$(CH_2)_2OC(CH_3)_3$
C_2H_5	$(CH_2)_2SC(CH_3)_3$	SCH_3	$(CH_2)_2SC(CH_3)_3$
C_2H_5	$(CH_2)_2SCH(CH_3)_2$	SCH_3	$(CH_2)_2SCH(CH_3)_2$
C_2H_5	$CH_2CH=CHC(CH_3)_3$	SCH_3	$CH_2CH=CHC(CH_3)_3$
C_2H_5	$CH_2CH=CHCH(CH_3)_2$	SCH_3	$CH_2CH=CHCH(CH_3)_2$
C_2H_5	$(CH_2)_2S(-O)C(CH_3)_3$	SCH_3	$(CH_2)_2S(-O)C(CH_3)_3$
C_2H_5	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$	SCH_3	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
C_2H_5	$(CH_2)_2OCH(CH_3)_2$	SCH_3	$(CH_2)_2OCH(CH_3)_2$
C_2H_5	$(CH_2)_3OC(CH_3)_3$	SCH_3	$(CH_2)_3OC(CH_3)_3$
C_2H_5	$(CH_2)_3P(-O)(CH_3)_2$	SCH_3	$(CH_2)_3P(-O)(CH_3)_2$
C_2H_5	$CH_2C(-O)CH_2C(CH_3)_3$	SCH_3	$CH_2C(-O)CH_2C(CH_3)_3$
C_2H_5	$CH(CH_3)(CH_2)_3CH_3$	SCH_3	$CH(CH_3)(CH_2)_3CH_3$
C_2H_5	$CH(CH_3)CH_2CH_2CH(CH_3)_2$	SCH_3	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
C_2H_5	$CH(CH_3)CH_2CH_2C(CH_3)_3$	SCH_3	$CH(CH_3)CH_2CH_2C(CH_3)_3$
C_2H_5	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$	SCH_3	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
C_2H_5	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$	SCH_3	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
C_2H_5	$CH(CH_2CH_2CH(CH_3)_2)_2$	SCH_3	$CH(CH_2CH_2CH(CH_3)_2)_2$

R ¹	R ⁶	R ¹	R ⁶
C ₂ H ₅	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂	SC ₂ H ₅	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
C ₂ H ₅	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃	SC ₂ H ₅	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
C ₂ H ₅	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂	SC ₂ H ₅	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
C ₂ H ₅	CH ₂ CH=C(CH ₃) ₂	SC ₂ H ₅	CH ₂ CH=C(CH ₃) ₂
C ₂ H ₅	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃	SC ₂ H ₅	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
C ₂ H ₅	(CH ₂) ₃ C(CH ₃) ₂ Cl	SC ₂ H ₅	(CH ₂) ₃ C(CH ₃) ₂ Cl
C ₂ H ₅	CH ₂ CH ₂ CH=C(CH ₃) ₂	SC ₂ H ₅	CH ₂ CH ₂ CH=C(CH ₃) ₂

TABLE 3



A	R ²	R ³	R ⁶
0	CH ₃	C ₂ H ₅	(CH ₂) ₄ CH ₃
0	CH ₃	C ₂ H ₅	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
0	CH ₃	C ₂ H ₅	(CH ₂) ₅ CH ₃
0	CH ₃	C ₂ H ₅	(CH ₂) ₆ CH ₃
0	CH ₃	C ₂ H ₅	(CH ₂) ₃ C(CH ₃) ₂ Br
0	CH ₃	C ₂ H ₅	(CH ₂) ₇ CH ₃
0	CH ₃	C ₂ H ₅	(CH ₂) ₃ CH(CH ₃) ₂
0	CH ₃	C ₂ H ₅	(CH ₂) ₃ C(CH ₃) ₃
0	CH ₃	C ₂ H ₅	(CH ₂) ₃ Si(CH ₃) ₃
0	CH ₃	C ₂ H ₅	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
0	CH ₃	C ₂ H ₅	(CH ₂) ₃ C(-CH ₂)CH(CH ₃) ₂
0	CH ₃	C ₂ H ₅	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
0	CH ₃	C ₂ H ₅	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
0	CH ₃	C ₂ H ₅	(CH ₂) ₂ OC(CH ₃) ₃
0	CH ₃	C ₂ H ₅	(CH ₂) ₂ SC(CH ₃) ₃
0	CH ₃	C ₂ H ₅	(CH ₂) ₂ SCH(CH ₃) ₂
0	CH ₃	C ₂ H ₅	CH ₂ CH=CHC(CH ₃) ₃
0	CH ₃	C ₂ H ₅	CH ₂ CH=CHCH(CH ₃) ₂
0	CH ₃	C ₂ H ₅	(CH ₂) ₂ S(-O)C(CH ₃) ₃
0	CH ₃	C ₂ H ₅	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
0	CH ₃	C ₂ H ₅	(CH ₂) ₂ OCH(CH ₃) ₂

Δ	R^2	R^3	R^6
0	CH ₃	C ₂ H ₅	(CH ₂) ₃ OC(CH ₃) ₃
0	CH ₃	C ₂ H ₅	(CH ₂) ₃ P(=O)(CH ₃) ₂
0	CH ₃	C ₂ H ₅	CH ₂ C(=O)CH ₂ C(CH ₃) ₃
0	CH ₃	C ₂ H ₅	CH(CH ₃)(CH ₂) ₃ CH ₃
0	CH ₃	C ₂ H ₅	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
0	CH ₃	C ₂ H ₅	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
0	CH ₃	C ₂ H ₅	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
0	CH ₃	C ₂ H ₅	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
0	CH ₃	C ₂ H ₅	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂
0	CH ₃	C ₂ H ₅	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
0	CH ₃	C ₂ H ₅	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
0	CH ₃	C ₂ H ₅	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
0	CH ₃	C ₂ H ₅	CH ₂ CH=C(CH ₃) ₂
0	CH ₃	C ₂ H ₅	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
0	CH ₃	C ₂ H ₅	(CH ₂) ₃ C(CH ₃) ₂ Cl
0	CH ₃	C ₂ H ₅	CH ₂ CH ₂ CH=C(CH ₃) ₂
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₄ CH ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₅ CH ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₆ CH ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₃ C(CH ₃) ₂ Br
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₇ CH ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₃ CH(CH ₃) ₂
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₃ C(CH ₃) ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₃ Si(CH ₃) ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₃ C(=CH ₂)CH(CH ₃) ₂
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₂ OC(CH ₃) ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₂ SC(CH ₃) ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₂ SCH(CH ₃) ₂
0	C ₂ H ₅	C ₂ H ₅	CH ₂ CH=CHC(CH ₃) ₃
0	C ₂ H ₅	C ₂ H ₅	CH ₂ CH=CHCH(CH ₃) ₂
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₂ S(=O)C(CH ₃) ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
0	C ₂ H ₅	C ₂ H ₅	(CH ₂) ₂ OCH(CH ₃) ₂

Δ	R^2	R^3	R^6
O	C_2H_5	C_2H_5	$(CH_2)_3OC(CH_3)_3$
O	C_2H_5	C_2H_5	$(CH_2)_3P(-O)(CH_3)_2$
O	C_2H_5	C_2H_5	$CH_2C(-O)CH_2C(CH_3)_3$
O	C_2H_5	C_2H_5	$CH(CH_3)(CH_2)_3CH_3$
O	C_2H_5	C_2H_5	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
O	C_2H_5	C_2H_5	$CH(CH_3)CH_2CH_2C(CH_3)_3$
O	C_2H_5	C_2H_5	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
O	C_2H_5	C_2H_5	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
O	C_2H_5	C_2H_5	$CH(CH_2CH_2CH(CH_3)_2)_2$
O	C_2H_5	C_2H_5	$CH_2CH_2CH_2N(CH_3)_2$
O	C_2H_5	C_2H_5	$CH_2CH_2N(CH_3)C(CH_3)_3$
O	C_2H_5	C_2H_5	$CH_2CH_2N(CH_3)CH(CH_3)_2$
O	C_2H_5	C_2H_5	$CH_2CH=C(CH_3)_2$
O	C_2H_5	C_2H_5	$(CH_2)_3C(CH_3)_2OCH_3$
O	C_2H_5	C_2H_5	$(CH_2)_3C(CH_3)_2Cl$
O	C_2H_5	C_2H_5	$CH_2CH_2CH=C(CH_3)_2$
NCH_3	CH_3	CH_3	$(CH_2)_4CH_3$
NCH_3	CH_3	CH_3	$(CH_2)_3C(CH_3)_2OC_2H_5$
NCH_3	CH_3	CH_3	$(CH_2)_5CH_3$
NCH_3	CH_3	CH_3	$(CH_2)_6CH_3$
NCH_3	CH_3	CH_3	$(CH_2)_3C(CH_3)_2Br$
NCH_3	CH_3	CH_3	$(CH_2)_7CH_3$
NCH_3	CH_3	CH_3	$(CH_2)_3CH(CH_3)_2$
NCH_3	CH_3	CH_3	$(CH_2)_3C(CH_3)_3$
NCH_3	CH_3	CH_3	$(CH_2)_3Si(CH_3)_3$
NCH_3	CH_3	CH_3	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
NCH_3	CH_3	CH_3	$(CH_2)_3C(-CH_2)CH(CH_3)_2$
NCH_3	CH_3	CH_3	$(CH_2)_3CH(CH_3)C_2H_5$
NCH_3	CH_3	CH_3	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$
NCH_3	CH_3	CH_3	$(CH_2)_2OC(CH_3)_3$
NCH_3	CH_3	CH_3	$(CH_2)_2SC(CH_3)_3$
NCH_3	CH_3	CH_3	$(CH_2)_2SCH(CH_3)_2$
NCH_3	CH_3	CH_3	$CH_2CH=CHC(CH_3)_3$
NCH_3	CH_3	CH_3	$CH_2CH=CHCH(CH_3)_2$
NCH_3	CH_3	CH_3	$(CH_2)_2S(-O)C(CH_3)_3$
NCH_3	CH_3	CH_3	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
NCH_3	CH_3	CH_3	$(CH_2)_2OCH(CH_3)_2$

Δ	R^2	R^3	R^6
NCH ₃	CH ₃	CH ₃	(CH ₂) ₃ OC(CH ₃) ₃
NCH ₃	CH ₃	CH ₃	(CH ₂) ₃ P(=O)(CH ₃) ₂
NCH ₃	CH ₃	CH ₃	CH ₂ C(=O)CH ₂ C(CH ₃) ₃
NCH ₃	CH ₃	CH ₃	CH(CH ₃)(CH ₂) ₃ CH ₃
NCH ₃	CH ₃	CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
NCH ₃	CH ₃	CH ₃	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
NCH ₃	CH ₃	CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
NCH ₃	CH ₃	CH ₃	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
NCH ₃	CH ₃	CH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂
NCH ₃	CH ₃	CH ₃	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
NCH ₃	CH ₃	CH ₃	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
NCH ₃	CH ₃	CH ₃	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
NCH ₃	CH ₃	CH ₃	CH ₂ CH=C(CH ₃) ₂
NCH ₃	CH ₃	CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
NCH ₃	CH ₃	CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Cl
NCH ₃	CH ₃	CH ₃	CH ₂ CH ₂ CH=C(CH ₃) ₂
NH	CH ₃	CH ₃	(CH ₂) ₄ CH ₃
NH	CH ₃	CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
NH	CH ₃	CH ₃	(CH ₂) ₅ CH ₃
NH	CH ₃	CH ₃	(CH ₂) ₆ CH ₃
NH	CH ₃	CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Br
NH	CH ₃	CH ₃	(CH ₂) ₇ CH ₃
NH	CH ₃	CH ₃	(CH ₂) ₃ CH(CH ₃) ₂
NH	CH ₃	CH ₃	(CH ₂) ₃ C(CH ₃) ₃
NH	CH ₃	CH ₃	(CH ₂) ₃ Si(CH ₃) ₃
NH	CH ₃	CH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
NH	CH ₃	CH ₃	(CH ₂) ₃ C(-CH ₂)CH(CH ₃) ₂
NH	CH ₃	CH ₃	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
NH	CH ₃	CH ₃	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
NH	CH ₃	CH ₃	(CH ₂) ₂ OC(CH ₃) ₃
NH	CH ₃	CH ₃	(CH ₂) ₂ SC(CH ₃) ₃
NH	CH ₃	CH ₃	(CH ₂) ₂ SCH(CH ₃) ₂
NH	CH ₃	CH ₃	CH ₂ CH=CHC(CH ₃) ₃
NH	CH ₃	CH ₃	CH ₂ CH=CHCH(CH ₃) ₂
NH	CH ₃	CH ₃	(CH ₂) ₂ S(-O)C(CH ₃) ₃
NH	CH ₃	CH ₃	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
NH	CH ₃	CH ₃	(CH ₂) ₂ OCH(CH ₃) ₂

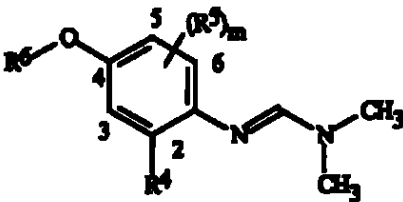
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Δ	R^2	R^3	R^6
NH	CH ₃	CH ₃	(CH ₂) ₃ OC(CH ₃) ₃
NH	CH ₃	CH ₃	(CH ₂) ₃ P(=O)(CH ₃) ₂
NH	CH ₃	CH ₃	CH ₂ C(=O)CH ₂ C(CH ₃) ₃
NH	CH ₃	CH ₃	CH(CH ₃)(CH ₂) ₃ CH ₃
NH	CH ₃	CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
NH	CH ₃	CH ₃	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
NH	CH ₃	CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
NH	CH ₃	CH ₃	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
NH	CH ₃	CH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂
NH	CH ₃	CH ₃	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
NH	CH ₃	CH ₃	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
NH	CH ₃	CH ₃	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
NH	CH ₃	CH ₃	CH ₂ CH=C(CH ₃) ₂
NH	CH ₃	CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
NH	CH ₃	CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Cl
NH	CH ₃	CH ₃	CH ₂ CH ₂ CH=C(CH ₃) ₂
NH	CH ₃	CH ₃	(CH ₂) ₈ CH ₃
NH	CH ₃	CH ₃	(CH ₂) ₉ CH ₃
NH	CH ₃	CH ₃	(CH ₂) ₁₁ CH ₃
NH	CH ₃	CH ₃	(CH ₂) ₄ CH(CH ₃) ₂
NH	CH ₃	CH ₃	C(=O)OCH(C ₂ H ₅)C(CH ₃) ₃
NH	CH ₃	CH ₃	C(=O)OC(CH ₃) ₂ C(CH ₃) ₃
NH	CH ₃	CH ₃	CH ₂ CH ₂ CH ₂ CH=C(CH ₃) ₂
NH	CH ₃	CH ₃	C(=O)CH ₂ SC(CH ₃) ₃
NH	CH ₃	CH ₃	(CH ₂) ₄ Cl
NH	CH ₃	CH ₃	(CH ₂) ₅ Cl
NH	CH ₃	CH ₃	(CH ₂) ₂ CH(CH ₃)(CH ₂) ₃ CH(CH ₃) ₂
NH	CH ₃	CH ₃	(S)-(CH ₂) ₂ CH(CH ₃)CH ₂ CH ₂ CH=C(CH ₃) ₂
NH	CH ₃	CH ₃	(R)-(CH ₂) ₂ CH(CH ₃)CH ₂ CH ₂ CH=C(CH ₃) ₂
NH	CH ₃	CH ₃	(CH ₂) ₂ CH(CH ₃) ₂
NH	CH ₃	CH ₃	(CH ₂) ₂ C(CH ₃) ₃
NH	CH ₃	CH ₃	CH ₂ C(=O)C(CH ₃) ₃
NH	CH ₃	CH ₃	CH ₂ CH=C(CH ₃)(CH ₂) ₂ CH=C(CH ₃) ₂
NH	CH ₃	CH ₃	CH ₂ (CH=C(CH ₃)(CH ₂) ₂) ₂ CH=C(CH ₃) ₂
NH	CH ₃	CH ₃	(CH ₂) ₃ CH=CH ₂
NH	CH ₃	CH ₃	(CH ₂) ₄ CH=CH ₂
NH	CH ₃	CH ₃	CH(C ₂ H ₅) ₂

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Δ	R^2	R^3	R^6
NH	CH ₃	CH ₃	CH(CH ₂ CH ₂ CH ₃) ₂
NH	CH ₃	CH ₃	CH(CH ₂ CH ₂ CH ₂ CH ₃) ₂
NH	CH ₃	CH ₃	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH ₂ CH ₃
NH	CH ₃	CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃)(C ₂ H ₅)
NH	CH ₃	CH ₃	CH(CH ₂ CH ₂ CH ₂ CH ₂ CH ₃) ₂
NH	CH ₃	CH ₃	CH(CH ₂ CH ₂ CH ₂ CH ₃)(CH ₂) ₅ CH ₃
NH	CH ₃	CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ C(=CH ₂)CH ₃

TABLA 4



R^4	m	R^5	R^6
CH ₃	1	5-Cl	(CH ₂) ₄ CH ₃
CH ₃	1	5-Cl	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
CH ₃	1	5-Cl	(CH ₂) ₅ CH ₃
CH ₃	1	5-Cl	(CH ₂) ₆ CH ₃
CH ₃	1	5-Cl	(CH ₂) ₃ C(CH ₃) ₂ Br
CH ₃	1	5-Cl	(CH ₂) ₇ CH ₃
CH ₃	1	5-Cl	(CH ₂) ₃ CH(CH ₃) ₂
CH ₃	1	5-Cl	(CH ₂) ₃ C(CH ₃) ₃
CH ₃	1	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃
CH ₃	1	5-Cl	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
CH ₃	1	5-Cl	(CH ₂) ₃ C(=CH ₂)CH(CH ₃) ₂
CH ₃	1	5-Cl	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
CH ₃	1	5-Cl	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
CH ₃	1	5-Cl	(CH ₂) ₂ OC(CH ₃) ₃
CH ₃	1	5-Cl	(CH ₂) ₂ SC(CH ₃) ₃
CH ₃	1	5-Cl	(CH ₂) ₂ SCH(CH ₃) ₂
CH ₃	1	5-Cl	CH ₂ CH=CHC(CH ₃) ₃
CH ₃	1	5-Cl	CH ₂ CH=CHCH(CH ₃) ₂
CH ₃	1	5-Cl	(CH ₂) ₂ S(-O)C(CH ₃) ₃
CH ₃	1	5-Cl	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
CH ₃	1	5-Cl	(CH ₂) ₂ OCH(CH ₃) ₂
CH ₃	1	5-Cl	(CH ₂) ₃ OC(CH ₃) ₃

R^4	m	R^5	R^6
CH ₃	1	S-Cl	(CH ₂) ₃ P(=O)(CH ₃) ₂
CH ₃	1	S-Cl	CH ₂ C(=O)CH ₂ C(CH ₃) ₃
CH ₃	1	S-Cl	CH(CH ₃)(CH ₂) ₃ CH ₃
CH ₃	1	S-Cl	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	1	S-Cl	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
CH ₃	1	S-Cl	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	1	S-Cl	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	1	S-Cl	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂
CH ₃	1	S-Cl	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
CH ₃	1	S-Cl	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
CH ₃	1	S-Cl	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
CH ₃	1	S-Cl	CH ₂ CH=C(CH ₃) ₂
CH ₃	1	S-Cl	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
CH ₃	1	S-Cl	(CH ₂) ₃ C(CH ₃) ₂ Cl
CH ₃	1	S-Cl	CH ₂ CH ₂ CH=C(CH ₃) ₂
Cl	1	S-CH ₃	(CH ₂) ₄ CH ₃
Cl	1	S-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
Cl	1	S-CH ₃	(CH ₂) ₅ CH ₃
Cl	1	S-CH ₃	(CH ₂) ₆ CH ₃
Cl	1	S-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Br
Cl	1	S-CH ₃	(CH ₂) ₇ CH ₃
Cl	1	S-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂
Cl	1	S-CH ₃	(CH ₂) ₃ C(CH ₃) ₃
Cl	1	S-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃
Cl	1	S-CH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
Cl	1	S-CH ₃	(CH ₂) ₃ C(=CH ₂)CH(CH ₃) ₂
Cl	1	S-CH ₃	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
Cl	1	S-CH ₃	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
Cl	1	S-CH ₃	(CH ₂) ₂ OC(CH ₃) ₃
Cl	1	S-CH ₃	(CH ₂) ₂ SC(CH ₃) ₃
Cl	1	S-CH ₃	(CH ₂) ₂ SCH(CH ₃) ₂
Cl	1	S-CH ₃	CH ₂ CH=CHC(CH ₃) ₃
Cl	1	S-CH ₃	CH ₂ CH=CHCH(CH ₃) ₂
Cl	1	S-CH ₃	(CH ₂) ₂ S(=O)C(CH ₃) ₃
Cl	1	S-CH ₃	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
Cl	1	S-CH ₃	(CH ₂) ₂ OCH(CH ₃) ₂
Cl	1	S-CH ₃	(CH ₂) ₃ OC(CH ₃) ₃

R^4	m	R^5	R^6
Cl	1	5-CH_3	$(\text{CH}_2)_3\text{P(=O)(CH}_3)_2$
Cl	1	5-CH_3	$\text{CH}_2\text{C(=O)CH}_2\text{C(CH}_3)_3$
Cl	1	5-CH_3	$\text{CH(CH}_3)(\text{CH}_2)_3\text{CH}_3$
Cl	1	5-CH_3	$\text{CH(CH}_3)\text{CH}_2\text{CH}_2\text{CH(CH}_3)_2$
Cl	1	5-CH_3	$\text{CH(CH}_3)\text{CH}_2\text{CH}_2\text{C(CH}_3)_3$
Cl	1	5-CH_3	$\text{CH(C}_2\text{H}_5)\text{CH}_2\text{CH}_2\text{CH(CH}_3)_2$
Cl	1	5-CH_3	$\text{CH(CH}_2\text{CH}_2\text{CH}_3)\text{CH}_2\text{CH}_2\text{CH(CH}_3)_2$
Cl	1	5-CH_3	$\text{CH(CH}_2\text{CH}_2\text{CH(CH}_3)_2)_2$
Cl	1	5-CH_3	$\text{CH}_2\text{CH}_2\text{CH}_2\text{N(CH}_3)_2$
Cl	1	5-CH_3	$\text{CH}_2\text{CH}_2\text{N(CH}_3)\text{C(CH}_3)_3$
Cl	1	5-CH_3	$\text{CH}_2\text{CH}_2\text{N(CH}_3)\text{CH(CH}_3)_2$
Cl	1	5-CH_3	$\text{CH}_2\text{CH=C(CH}_3)_2$
Cl	1	5-CH_3	$(\text{CH}_2)_3\text{C(CH}_3)_2\text{OCH}_3$
Cl	1	5-CH_3	$(\text{CH}_2)_3\text{C(CH}_3)_2\text{Cl}$
Cl	1	5-CH_3	$\text{CH}_2\text{CH}_2\text{CH=C(CH}_3)_2$
Cl	1	5-Cl	$(\text{CH}_2)_4\text{CH}_3$
Cl	1	5-Cl	$(\text{CH}_2)_3\text{C(CH}_3)_2\text{OC}_2\text{H}_5$
Cl	1	5-Cl	$(\text{CH}_2)_5\text{CH}_3$
Cl	1	5-Cl	$(\text{CH}_2)_6\text{CH}_3$
Cl	1	5-Cl	$(\text{CH}_2)_3\text{C(CH}_3)_2\text{Br}$
Cl	1	5-Cl	$(\text{CH}_2)_7\text{CH}_3$
Cl	1	5-Cl	$(\text{CH}_2)_3\text{CH(CH}_3)_2$
Cl	1	5-Cl	$(\text{CH}_2)_3\text{C(CH}_3)_3$
Cl	1	5-Cl	$(\text{CH}_2)_3\text{Si(CH}_3)_3$
Cl	1	5-Cl	$(\text{CH}_2)_7\text{CH(CH}_3)\text{CH}_2\text{C(CH}_3)_3$
Cl	1	5-Cl	$(\text{CH}_2)_3\text{C(=CH}_2)\text{CH(CH}_3)_2$
Cl	1	5-Cl	$(\text{CH}_2)_3\text{CH(CH}_3)\text{C}_2\text{H}_5$
Cl	1	5-Cl	$(\text{CH}_2)_2\text{OSi(CH}_3)_2\text{C(CH}_3)_3$
Cl	1	5-Cl	$(\text{CH}_2)_2\text{OC(CH}_3)_3$
Cl	1	5-Cl	$(\text{CH}_2)_2\text{SC(CH}_3)_3$
Cl	1	5-Cl	$(\text{CH}_2)_2\text{SCH(CH}_3)_2$
Cl	1	5-Cl	$\text{CH}_2\text{CH=CHC(CH}_3)_3$
Cl	1	5-Cl	$\text{CH}_2\text{CH=CHCH(CH}_3)_2$
Cl	1	5-Cl	$(\text{CH}_2)_2\text{S(=O)C(CH}_3)_3$
Cl	1	5-Cl	$(\text{CH}_2)_3\text{OSi(CH}_3)_2\text{C(CH}_3)_3$
Cl	1	5-Cl	$(\text{CH}_2)_2\text{OCH(CH}_3)_2$
Cl	1	5-Cl	$(\text{CH}_2)_3\text{OC(CH}_3)_3$

R^4	m	R^5	R^6
Cl	1	S-Cl	$(CH_2)_3P(=O)(CH_3)_2$
Cl	1	S-Cl	$CH_2C(=O)CH_2C(CH_3)_3$
Cl	1	S-Cl	$CH(CH_3)(CH_2)_3CH_3$
Cl	1	S-Cl	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
Cl	1	S-Cl	$CH(CH_3)CH_2CH_2C(CH_3)_3$
Cl	1	S-Cl	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
Cl	1	S-Cl	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
Cl	1	S-Cl	$CH(CH_2CH_2CH(CH_3)_2)_2$
Cl	1	S-Cl	$CH_2CH_2CH_2N(CH_3)_2$
Cl	1	S-Cl	$CH_2CH_2N(CH_3)C(CH_3)_3$
Cl	1	S-Cl	$CH_2CH_2N(CH_3)CH(CH_3)_2$
Cl	1	S-Cl	$CH_2CH=C(CH_3)_2$
Cl	1	S-Cl	$(CH_2)_3C(CH_3)_2OCH_3$
Cl	1	S-Cl	$(CH_2)_3C(CH_3)_2Cl$
Cl	1	S-Cl	$CH_2CH_2CH=C(CH_3)_2$
CH ₃	0	-	$(CH_2)_4CH_3$
CH ₃	0	-	$(CH_2)_3C(CH_3)_2OC_2H_5$
CH ₃	0	-	$(CH_2)_5CH_3$
CH ₃	0	-	$(CH_2)_6CH_3$
CH ₃	0	-	$(CH_2)_3C(CH_3)_2Br$
CH ₃	0	-	$(CH_2)_7CH_3$
CH ₃	0	-	$(CH_2)_3CH(CH_3)_2$
CH ₃	0	-	$(CH_2)_3C(CH_3)_3$
CH ₃	0	-	$(CH_2)_3Si(CH_3)_3$
CH ₃	0	-	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
CH ₃	0	-	$(CH_2)_3C(=CH_2)CH(CH_3)_2$
CH ₃	0	-	$(CH_2)_3CH(CH_3)C_2H_5$
CH ₃	0	-	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$
CH ₃	0	-	$(CH_2)_2OC(CH_3)_3$
CH ₃	0	-	$(CH_2)_2SC(CH_3)_3$
CH ₃	0	-	$(CH_2)_2SCH(CH_3)_2$
CH ₃	0	-	$CH_2CH=CHC(CH_3)_3$
CH ₃	0	-	$CH_2CH=CHCH(CH_3)_2$
CH ₃	0	-	$(CH_2)_2S(=O)C(CH_3)_3$
CH ₃	0	-	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
CH ₃	0	-	$(CH_2)_2OCH(CH_3)_2$
CH ₃	0	-	$(CH_2)_3OC(CH_3)_3$

R^4	m	R^5	R^6
CH_3	0	-	$(CH_2)_3P(-O)(CH_3)_2$
CH_3	0	-	$CH_2C(-O)CH_2C(CH_3)_3$
CH_3	0	-	$CH(CH_3)(CH_2)_3CH_3$
CH_3	0	-	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
CH_3	0	-	$CH(CH_3)CH_2CH_2C(CH_3)_3$
CH_3	0	-	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
CH_3	0	-	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
CH_3	0	-	$CH(CH_2CH_2CH(CH_3)_2)_2$
CH_3	0	-	$CH_2CH_2CH_2N(CH_3)_2$
CH_3	0	-	$CH_2CH_2N(CH_3)C(CH_3)_3$
CH_3	0	-	$CH_2CH_2N(CH_3)CH(CH_3)_2$
CH_3	0	-	$CH_2CH=C(CH_3)_2$
CH_3	0	-	$(CH_2)_3C(CH_3)_2OCH_3$
CH_3	0	-	$(CH_2)_3C(CH_3)_2Cl$
CH_3	0	-	$CH_2CH_2CH=C(CH_3)_2$
CF_3	1	$S-CH_3$	$(CH_2)_4CH_3$
CF_3	1	$S-CH_3$	$(CH_2)_3C(CH_3)_2OC_2H_5$
CF_3	1	$S-CH_3$	$(CH_2)_5CH_3$
CF_3	1	$S-CH_3$	$(CH_2)_6CH_3$
CF_3	1	$S-CH_3$	$(CH_2)_3C(CH_3)_2Br$
CF_3	1	$S-CH_3$	$(CH_2)_7CH_3$
CF_3	1	$S-CH_3$	$(CH_2)_3CH(CH_3)_2$
CF_3	1	$S-CH_3$	$(CH_2)_3C(CH_3)_3$
CF_3	1	$S-CH_3$	$(CH_2)_3Si(CH_3)_3$
CF_3	1	$S-CH_3$	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
CF_3	1	$S-CH_3$	$(CH_2)_3C(-CH_2)CH(CH_3)_2$
CF_3	1	$S-CH_3$	$(CH_2)_3CH(CH_3)C_2H_5$
CF_3	1	$S-CH_3$	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$
CF_3	1	$S-CH_3$	$(CH_2)_2OC(CH_3)_3$
CF_3	1	$S-CH_3$	$(CH_2)_2SC(CH_3)_3$
CF_3	1	$S-CH_3$	$(CH_2)_2SCH(CH_3)_2$
CF_3	1	$S-CH_3$	$CH_2CH=CHC(CH_3)_3$
CF_3	1	$S-CH_3$	$CH_2CH=CHCH(CH_3)_2$
CF_3	1	$S-CH_3$	$(CH_2)_2S(-O)C(CH_3)_3$
CF_3	1	$S-CH_3$	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
CF_3	1	$S-CH_3$	$(CH_2)_2OCH(CH_3)_2$
CF_3	1	$S-CH_3$	$(CH_2)_3OC(CH_3)_3$

R^4	m	R^5	R^6
CF_3	1	$S-CH_3$	$(CH_2)_3P(=O)(CH_3)_2$
CF_3	1	$S-CH_3$	$CH_2C(=O)CH_2C(CH_3)_3$
CF_3	1	$S-CH_3$	$CH(CH_3)(CH_2)_3CH_3$
CF_3	1	$S-CH_3$	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
CF_3	1	$S-CH_3$	$CH(CH_3)CH_2CH_2C(CH_3)_3$
CF_3	1	$S-CH_3$	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
CF_3	1	$S-CH_3$	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
CF_3	1	$S-CH_3$	$CH(CH_2CH_2CH(CH_3)_2)_2$
CF_3	1	$S-CH_3$	$CH_2CH_2CH_2N(CH_3)_2$
CF_3	1	$S-CH_3$	$CH_2CH_2N(CH_3)C(CH_3)_3$
CF_3	1	$S-CH_3$	$CH_2CH_2N(CH_3)CH(CH_3)_2$
CF_3	1	$S-CH_3$	$CH_2CH=CH(CH_3)_2$
CF_3	1	$S-CH_3$	$(CH_2)_3C(CH_3)_2OCH_3$
CF_3	1	$S-CH_3$	$(CH_2)_3C(CH_3)_2Cl$
CF_3	1	$S-CH_3$	$CH_2CH_2CH=CH(CH_3)_2$
CH_3	2	$S-CH_3-6-Cl$	$(CH_2)_4CH_3$
CH_3	2	$S-CH_3-6-Cl$	$(CH_2)_3C(CH_3)_2OC_2H_5$
CH_3	2	$S-CH_3-6-Cl$	$(CH_2)_5CH_3$
CH_3	2	$S-CH_3-6-Cl$	$(CH_2)_6CH_3$
CH_3	2	$S-CH_3-6-Cl$	$(CH_2)_3C(CH_3)_2Br$
CH_3	2	$S-CH_3-6-Cl$	$(CH_2)_7CH_3$
CH_3	2	$S-CH_3-6-Cl$	$(CH_2)_3CH(CH_3)_2$
CH_3	2	$S-CH_3-6-Cl$	$(CH_2)_3C(CH_3)_3$
CH_3	2	$S-CH_3-6-Cl$	$(CH_2)_3Si(CH_3)_3$
CH_3	2	$S-CH_3-6-Cl$	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
CH_3	2	$S-CH_3-6-Cl$	$(CH_2)_3C(=CH_2)CH(CH_3)_2$
CH_3	2	$S-CH_3-6-Cl$	$(CH_2)_3CH(CH_3)C_2H_5$
CH_3	2	$S-CH_3-6-Cl$	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$
CH_3	2	$S-CH_3-6-Cl$	$(CH_2)_2OC(CH_3)_3$
CH_3	2	$S-CH_3-6-Cl$	$(CH_2)_2SC(CH_3)_3$
CH_3	2	$S-CH_3-6-Cl$	$(CH_2)_2SCH(CH_3)_2$
CH_3	2	$S-CH_3-6-Cl$	$CH_2CH=CHC(CH_3)_3$
CH_3	2	$S-CH_3-6-Cl$	$CH_2CH=CHCH(CH_3)_2$
CH_3	2	$S-CH_3-6-Cl$	$(CH_2)_2S(=O)C(CH_3)_3$
CH_3	2	$S-CH_3-6-Cl$	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
CH_3	2	$S-CH_3-6-Cl$	$(CH_2)_2OCH(CH_3)_2$
CH_3	2	$S-CH_3-6-Cl$	$(CH_2)_3OC(CH_3)_3$

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R^4	m	R^5	R^6
CH ₃	2	5-CH ₃ -6-Cl	(CH ₂) ₃ P(=O)(CH ₃) ₂
CH ₃	2	5-CH ₃ -6-Cl	CH ₂ C(=O)CH ₂ C(CH ₃) ₃
CH ₃	2	5-CH ₃ -6-Cl	CH(CH ₃)(CH ₂) ₃ CH ₃
CH ₃	2	5-CH ₃ -6-Cl	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	2	5-CH ₃ -6-Cl	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
CH ₃	2	5-CH ₃ -6-Cl	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	2	5-CH ₃ -6-Cl	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	2	5-CH ₃ -6-Cl	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂
CH ₃	2	5-CH ₃ -6-Cl	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
CH ₃	2	5-CH ₃ -6-Cl	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
CH ₃	2	5-CH ₃ -6-Cl	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
CH ₃	2	5-CH ₃ -6-Cl	CH ₂ CH=CH(CH ₃) ₂
CH ₃	2	5-CH ₃ -6-Cl	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
CH ₃	2	5-CH ₃ -6-Cl	(CH ₂) ₃ C(CH ₃) ₂ Cl
CH ₃	2	5-CH ₃ -6-Cl	CH ₂ CH ₂ CH=C(CH ₃) ₂
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₄ CH ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₅ CH ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₆ CH ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Br
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₇ CH ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ C(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ C(=CH ₂)CH(CH ₃) ₂
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₂ OC(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₂ SC(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₂ SCH(CH ₃) ₂
CH ₃	2	3,5-di-CH ₃	CH ₂ CH=CHC(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	CH ₂ CH=CHCH(CH ₃) ₂
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₂ S(=O)C(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₂ OCH(CH ₃) ₂
CH ₃	2	3,5-di-CH ₃	(CH ₂) ₃ OC(CH ₃) ₃

R^4	m	R^5	R^6
CH_3	2	3,5-di- CH_3	$(CH_2)_3P(-O)(CH_3)_2$
CH_3	2	3,5-di- CH_3	$CH_2C(-O)CH_2C(CH_3)_3$
CH_3	2	3,5-di- CH_3	$CH(CH_3)(CH_2)_3CH_3$
CH_3	2	3,5-di- CH_3	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
CH_3	2	3,5-di- CH_3	$CH(CH_3)CH_2CH_2C(CH_3)_3$
CH_3	2	3,5-di- CH_3	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
CH_3	2	3,5-di- CH_3	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
CH_3	2	3,5-di- CH_3	$CH(CH_2CH_2CH(CH_3)_2)_2$
CH_3	2	3,5-di- CH_3	$CH_2CH_2CH_2N(CH_3)_2$
CH_3	2	3,5-di- CH_3	$CH_2CH_2N(CH_3)C(CH_3)_3$
CH_3	2	3,5-di- CH_3	$CH_2CH_2N(CH_3)CH(CH_3)_2$
CH_3	2	3,5-di- CH_3	$CH_2CH=C(CH_3)_2$
CH_3	2	3,5-di- CH_3	$(CH_2)_3C(CH_3)_2OCH_3$
CH_3	2	3,5-di- CH_3	$(CH_2)_3C(CH_3)_2Cl$
CH_3	2	3,5-di- CH_3	$CH_2CH_2CH=C(CH_3)_2$
CH_3	1	3- CH_3	$(CH_2)_4CH_3$
CH_3	1	3- CH_3	$(CH_2)_3C(CH_3)_2OC_2H_5$
CH_3	1	3- CH_3	$(CH_2)_5CH_3$
CH_3	1	3- CH_3	$(CH_2)_6CH_3$
CH_3	1	3- CH_3	$(CH_2)_3C(CH_3)_2Br$
CH_3	1	3- CH_3	$(CH_2)_7CH_3$
CH_3	1	3- CH_3	$(CH_2)_3CH(CH_3)_2$
CH_3	1	3- CH_3	$(CH_2)_3C(CH_3)_3$
CH_3	1	3- CH_3	$(CH_2)_3Si(CH_3)_3$
CH_3	1	3- CH_3	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
CH_3	1	3- CH_3	$(CH_2)_3C(-CH_2)CH(CH_3)_2$
CH_3	1	3- CH_3	$(CH_2)_3CH(CH_3)C_2H_5$
CH_3	1	3- CH_3	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$
CH_3	1	3- CH_3	$(CH_2)_2OC(CH_3)_3$
CH_3	1	3- CH_3	$(CH_2)_2SC(CH_3)_3$
CH_3	1	3- CH_3	$(CH_2)_2SCH(CH_3)_2$
CH_3	1	3- CH_3	$CH_2CH=CHC(CH_3)_3$
CH_3	1	3- CH_3	$CH_2CH=CHCH(CH_3)_2$
CH_3	1	3- CH_3	$(CH_2)_2S(-O)C(CH_3)_3$
CH_3	1	3- CH_3	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
CH_3	1	3- CH_3	$(CH_2)_2OCH(CH_3)_2$
CH_3	1	3- CH_3	$(CH_2)_3OC(CH_3)_3$

R^4	m	R^5	R^6
CH ₃	1	3-CH ₃	(CH ₂) ₃ P(=O)(CH ₃) ₂
CH ₃	1	3-CH ₃	CH ₂ C(=O)CH ₂ C(CH ₃) ₃
CH ₃	1	3-CH ₃	CH(CH ₃)(CH ₂) ₃ CH ₃
CH ₃	1	3-CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	1	3-CH ₃	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
CH ₃	1	3-CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	1	3-CH ₃	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
CH ₃	1	3-CH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂
CH ₃	1	3-CH ₃	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
CH ₃	1	3-CH ₃	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
CH ₃	1	3-CH ₃	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
CH ₃	1	3-CH ₃	CH ₂ CH=C(CH ₃) ₂
CH ₃	1	3-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
CH ₃	1	3-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Cl
CH ₃	1	3-CH ₃	CH ₂ CH ₂ CH=C(CH ₃) ₂
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₄ CH ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₅ CH ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₆ CH ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Br
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₇ CH ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ C(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ C(=CH ₂)CH(CH ₃) ₂
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₂ OC(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₂ SC(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₂ SC(CH ₃) ₂
CH ₃	3	3,6-di-Cl-5-CH ₃	CH ₂ CH=CHC(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	CH ₂ CH=CHCH(CH ₃) ₂
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₂ S(=O)C(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₂ OCH(CH ₃) ₂
CH ₃	3	3,6-di-Cl-5-CH ₃	(CH ₂) ₃ OC(CH ₃) ₃

R^4	m	R^5	R^6
CH_3	3	3,6-di-Cl-5- CH_3	$(CH_2)_3P(=O)(CH_3)_2$
CH_3	3	3,6-di-Cl-5- CH_3	$CH_2C(=O)CH_2C(CH_3)_3$
CH_3	3	3,6-di-Cl-5- CH_3	$CH(CH_3)(CH_2)_3CH_3$
CH_3	3	3,6-di-Cl-5- CH_3	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
CH_3	3	3,6-di-Cl-5- CH_3	$CH(CH_3)CH_2CH_2C(CH_3)_3$
CH_3	3	3,6-di-Cl-5- CH_3	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
CH_3	3	3,6-di-Cl-5- CH_3	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
CH_3	3	3,6-di-Cl-5- CH_3	$CH(CH_2CH_2CH(CH_3)_2)_2$
CH_3	3	3,6-di-Cl-5- CH_3	$CH_2CH_2CH_2N(CH_3)_2$
CH_3	3	3,6-di-Cl-5- CH_3	$CH_2CH_2N(CH_3)C(CH_3)_3$
CH_3	3	3,6-di-Cl-5- CH_3	$CH_2CH_2N(CH_3)CH(CH_3)_2$
CH_3	3	3,6-di-Cl-5- CH_3	$CH_2CH=C(CH_3)_2$
CH_3	3	3,6-di-Cl-5- CH_3	$(CH_2)_3C(CH_3)_2OCH_3$
CH_3	3	3,6-di-Cl-5- CH_3	$(CH_2)_3C(CH_3)_2Cl$
CH_3	3	3,6-di-Cl-5- CH_3	$CH_2CH_2CH=C(CH_3)_2$
F	3	3,5,6-tri-F	$(CH_2)_4CH_3$
F	3	3,5,6-tri-F	$(CH_2)_3C(CH_3)_2OC_2H_5$
F	3	3,5,6-tri-F	$(CH_2)_5CH_3$
F	3	3,5,6-tri-F	$(CH_2)_6CH_3$
F	3	3,5,6-tri-F	$(CH_2)_3C(CH_3)_2Br$
F	3	3,5,6-tri-F	$(CH_2)_7CH_3$
F	3	3,5,6-tri-F	$(CH_2)_3CH(CH_3)_2$
F	3	3,5,6-tri-F	$(CH_2)_3C(CH_3)_3$
F	3	3,5,6-tri-F	$(CH_2)_3Si(CH_3)_3$
F	3	3,5,6-tri-F	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
F	3	3,5,6-tri-F	$(CH_2)_3C(=CH_2)CH(CH_3)_2$
F	3	3,5,6-tri-F	$(CH_2)_3CH(CH_3)C_2H_5$
F	3	3,5,6-tri-F	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$
F	3	3,5,6-tri-F	$(CH_2)_2OC(CH_3)_3$
F	3	3,5,6-tri-F	$(CH_2)_2SC(CH_3)_3$
F	3	3,5,6-tri-F	$(CH_2)_2SCH(CH_3)_2$
F	3	3,5,6-tri-F	$CH_2CH=CHC(CH_3)_3$
F	3	3,5,6-tri-F	$CH_2CH=CHCH(CH_3)_2$
F	3	3,5,6-tri-F	$(CH_2)_2S(=O)C(CH_3)_3$
F	3	3,5,6-tri-F	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
F	3	3,5,6-tri-F	$(CH_2)_2OCH(CH_3)_2$
F	3	3,5,6-tri-F	$(CH_2)_3OC(CH_3)_3$

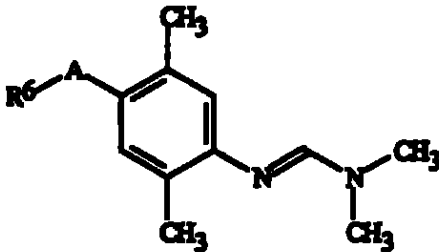
R^4	m	R^5	R^6
F	3	3,5,6-tri-F	$(CH_2)_3P(-O)(CH_3)_2$
F	3	3,5,6-tri-F	$CH_2C(-O)CH_2C(CH_3)_3$
F	3	3,5,6-tri-F	$CH(CH_3)(CH_2)_3CH_3$
F	3	3,5,6-tri-F	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
F	3	3,5,6-tri-F	$CH(CH_3)CH_2CH_2C(CH_3)_3$
F	3	3,5,6-tri-F	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
F	3	3,5,6-tri-F	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
F	3	3,5,6-tri-F	$CH(CH_2CH_2CH(CH_3)_2)_2$
F	3	3,5,6-tri-F	$CH_2CH_2CH_2N(CH_3)_2$
F	3	3,5,6-tri-F	$CH_2CH_2N(CH_3)C(CH_3)_3$
F	3	3,5,6-tri-F	$CH_2CH_2N(CH_3)CH(CH_3)_2$
F	3	3,5,6-tri-F	$CH_2CH=C(CH_3)_2$
F	3	3,5,6-tri-F	$(CH_2)_3C(CH_3)_2OCH_3$
F	3	3,5,6-tri-F	$(CH_2)_3C(CH_3)_2Cl$
F	3	3,5,6-tri-F	$CH_2CH_2CH=C(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$(CH_2)_4CH_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3C(CH_3)_2OC_2H_5$
Cl	3	3,5,6-tri-Cl	$(CH_2)_5CH_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_6CH_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3C(CH_3)_2Br$
Cl	3	3,5,6-tri-Cl	$(CH_2)_7CH_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3CH(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3C(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3Si(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3C(-CH_2)CH(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3CH(CH_3)C_2H_5$
Cl	3	3,5,6-tri-Cl	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_2OC(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_2SC(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_2SCH(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$CH_2CH=CHC(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$CH_2CH=CHCH(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$(CH_2)_2S(-O)C(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_2OCH(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3OC(CH_3)_3$

R^4	m	R^5	R^6
Cl	3	3,5,6-tri-Cl	$(CH_2)_3P(-O)(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$CH_2C(-O)CH_2C(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$CH(CH_3)(CH_2)_3CH_3$
Cl	3	3,5,6-tri-Cl	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$CH(CH_3)CH_2CH_2C(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$CH(CH_2CH_2CH(CH_3)_2)_2$
Cl	3	3,5,6-tri-Cl	$CH_2CH_2CH_2N(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$CH_2CH_2N(CH_3)C(CH_3)_3$
Cl	3	3,5,6-tri-Cl	$CH_2CH_2N(CH_3)CH(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$CH_2CH=CH(CH_3)_2$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3C(CH_3)_2OCH_3$
Cl	3	3,5,6-tri-Cl	$(CH_2)_3C(CH_3)_2Cl$
Cl	3	3,5,6-tri-Cl	$CH_2CH_2CH=CH(CH_3)_2$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_4CH_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_3C(CH_3)_2OC_2H_5$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_5CH_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_6CH_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_3C(CH_3)_2Br$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_7CH_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_3CH(CH_3)_2$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_3C(CH_3)_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_3Si(CH_3)_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_3C(-CH_2)CH(CH_3)_2$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_3CH(CH_3)C_2H_5$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_2OC(CH_3)_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_2SC(CH_3)_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_2SCH(CH_3)_2$
CH ₃	1	5-CH(CH ₃) ₂	$CH_2CH=CHC(CH_3)_3$
CH ₃	1	5-CH(CH ₃) ₂	$CH_2CH=CHCH(CH_3)_2$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_2S(-O)C(CH_3)_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_2OCH(CH_3)_2$
CH ₃	1	5-CH(CH ₃) ₂	$(CH_2)_3OC(CH_3)_3$

R^4	m	R^5	R^6
CH_3	1	$5-CH(CH_3)_2$	$(CH_2)_3P(-O)(CH_3)_2$
CH_3	1	$5-CH(CH_3)_2$	$CH_2C(-O)CH_2C(CH_3)_3$
CH_3	1	$5-CH(CH_3)_2$	$CH(CH_3)(CH_2)_3CH_3$
CH_3	1	$5-CH(CH_3)_2$	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
CH_3	1	$5-CH(CH_3)_2$	$CH(CH_3)CH_2CH_2C(CH_3)_3$
CH_3	1	$5-CH(CH_3)_2$	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
CH_3	1	$5-CH(CH_3)_2$	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
CH_3	1	$5-CH(CH_3)_2$	$CH(CH_2CH_2CH(CH_3)_2)_2$
CH_3	1	$5-CH(CH_3)_2$	$CH_2CH_2CH_2N(CH_3)_2$
CH_3	1	$5-CH(CH_3)_2$	$CH_2CH_2N(CH_3)C(CH_3)_3$
CH_3	1	$5-CH(CH_3)_2$	$CH_2CH_2N(CH_3)CH(CH_3)_2$
CH_3	1	$5-CH(CH_3)_2$	$CH_2CH-C(CH_3)_2$
CH_3	1	$5-CH(CH_3)_2$	$(CH_2)_3C(CH_3)_2OCH_3$
CH_3	1	$5-CH(CH_3)_2$	$(CH_2)_3C(CH_3)_2Cl$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_4CH_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3C(CH_3)_2OC_2H_5$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_5CH_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_6CH_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3C(CH_3)_2Br$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_7CH_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3CH(CH_3)_2$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3C(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3Si(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3C(=CH_2)CH(CH_3)_2$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3CH(CH_3)C_2H_5$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_2OC(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_2SC(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_2SCH(CH_3)_2$
CH_3	1	$5-C(CH_3)_3$	$CH_2CH-CHC(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$CH_2CH=CHCH(CH_3)_2$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_2S(-O)C(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_2OCH(CH_3)_2$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3OC(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3P(-O)(CH_3)_2$

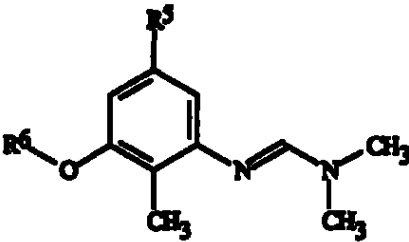
R^4	m	R^5	R^6
CH_3	1	$5-C(CH_3)_3$	$CH_2C(=O)CH_2C(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$CH(CH_3)(CH_2)_3CH_3$
CH_3	1	$5-C(CH_3)_3$	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
CH_3	1	$5-C(CH_3)_3$	$CH(CH_3)CH_2CH_2C(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
CH_3	1	$5-C(CH_3)_3$	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
CH_3	1	$5-C(CH_3)_3$	$CH(CH_2CH_2CH(CH_3)_2)_2$
CH_3	1	$5-C(CH_3)_3$	$CH_2CH_2CH_2N(CH_3)_2$
CH_3	1	$5-C(CH_3)_3$	$CH_2CH_2N(CH_3)C(CH_3)_3$
CH_3	1	$5-C(CH_3)_3$	$CH_2CH_2N(CH_3)CH(CH_3)_2$
CH_3	1	$5-C(CH_3)_3$	$CH_2CH=C(CH_3)_2$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3C(CH_3)_2OCH_3$
CH_3	1	$5-C(CH_3)_3$	$(CH_2)_3C(CH_3)_2Cl$

TABLE 5



Δ	R^6
NH	$C(=O)CH_2SC(CH_3)_3$
NH	$C(=O)CH_2S(=O)C(CH_3)_3$
NH	$C(=O)CH_2S(=O)_2C(CH_3)_3$
NH	$C(=O)OCH_2C(CH_3)_3$
NH	$C(=O)NHCH_2C(CH_3)_3$
NH	$C(=O)N(CH_3)CH_2C(CH_3)_3$
NH	$C(=O)OCH_2CH(CH_3)_2$
NH	$C(=O)NHCH_2CH(CH_3)_2$
NH	$C(=O)N(CH_3)CH_2CH(CH_3)_2$
O	$C(CH_3)_2CH_2CH_2CH(CH_3)_2$
O	$C(CH_3)(CH_2CH_2CH_2CH_3)_2$
O	$C(CH_3)(CH_2CH_2CH_3)_2$

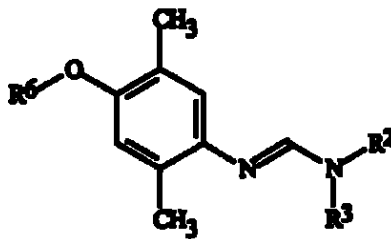
TABLE 6



R ⁵	R ⁶
5-CH ₃	(CH ₂) ₄ CH ₃
5-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
5-CH ₃	(CH ₂) ₅ CH ₃
5-CH ₃	(CH ₂) ₆ CH ₃
5-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Br
5-CH ₃	(CH ₂) ₇ CH ₃
5-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂
5-CH ₃	(CH ₂) ₃ C(CH ₃) ₃
5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃
5-CH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
5-CH ₃	(CH ₂) ₃ C(-CH ₂)CH(CH ₃) ₂
5-CH ₃	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
5-CH ₃	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
5-CH ₃	(CH ₂) ₂ OC(CH ₃) ₃
5-CH ₃	(CH ₂) ₂ SC(CH ₃) ₃
5-CH ₃	(CH ₂) ₂ SCH(CH ₃) ₂
5-CH ₃	CH ₂ CH=CHC(CH ₃) ₃
5-CH ₃	CH ₂ CH=CHCH(CH ₃) ₂
5-CH ₃	(CH ₂) ₂ S(-O)C(CH ₃) ₃
5-CH ₃	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
5-CH ₃	(CH ₂) ₂ OCH(CH ₃) ₂
5-CH ₃	(CH ₂) ₃ OC(CH ₃) ₃
5-CH ₃	(CH ₂) ₃ P(-O)(CH ₃) ₂
5-CH ₃	CH ₂ C(-O)CH ₂ C(CH ₃) ₃
5-CH ₃	CH(CH ₃)(CH ₂) ₃ CH ₃
5-CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
5-CH ₃	CH(CH ₃)CH ₂ CH ₂ C(CH ₃) ₃
5-CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂
5-CH ₃	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂
5-CH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂

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R^5	R^6
5-CH ₃	CH ₂ CH ₂ CH ₂ N(CH ₃) ₂
5-CH ₃	CH ₂ CH ₂ N(CH ₃)C(CH ₃) ₃
5-CH ₃	CH ₂ CH ₂ N(CH ₃)CH(CH ₃) ₂
5-CH ₃	CH ₂ CH=C(CH ₃) ₂
5-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ OCH ₃
5-CH ₃	(CH ₂) ₃ C(CH ₃) ₂ Cl
5-CH ₃	CH ₂ CH ₂ CH=C(CH ₃) ₂

TABLA 7

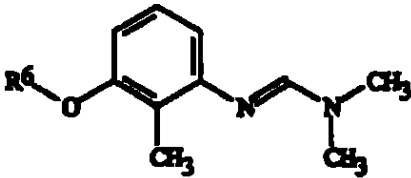
$R^2 + R^3$	R^6
-(CH ₂) ₄ -	(CH ₂) ₄ CH ₃
-(CH ₂) ₄ -	(CH ₂) ₃ C(CH ₃) ₂ OC ₂ H ₅
-(CH ₂) ₄ -	(CH ₂) ₅ CH ₃
-(CH ₂) ₄ -	(CH ₂) ₆ CH ₃
-(CH ₂) ₄ -	(CH ₂) ₃ C(CH ₃) ₂ Br
-(CH ₂) ₄ -	(CH ₂) ₇ CH ₃
-(CH ₂) ₄ -	(CH ₂) ₃ CH(CH ₃) ₂
-(CH ₂) ₄ -	(CH ₂) ₃ C(CH ₃) ₃
-(CH ₂) ₄ -	(CH ₂) ₃ Si(CH ₃) ₃
-(CH ₂) ₄ -	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃
-(CH ₂) ₄ -	(CH ₂) ₃ C(-CH ₂)CH(CH ₃) ₂
-(CH ₂) ₄ -	(CH ₂) ₃ CH(CH ₃)C ₂ H ₅
-(CH ₂) ₄ -	(CH ₂) ₂ OSi(CH ₃) ₂ C(CH ₃) ₃
-(CH ₂) ₄ -	(CH ₂) ₂ OC(CH ₃) ₃
-(CH ₂) ₄ -	(CH ₂) ₂ SC(CH ₃) ₃
-(CH ₂) ₄ -	(CH ₂) ₂ SCH(CH ₃) ₂
-(CH ₂) ₄ -	CH ₂ CH=CHC(CH ₃) ₃
-(CH ₂) ₄ -	CH ₂ CH=CHCH(CH ₃) ₂
-(CH ₂) ₄ -	(CH ₂) ₂ S(-O)C(CH ₃) ₃
-(CH ₂) ₄ -	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃
-(CH ₂) ₄ -	(CH ₂) ₂ OCH(CH ₃) ₂

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$R^2 + R^3$	R^6
$-(CH_2)_4-$	$(CH_2)_3OC(CH_3)_3$
$-(CH_2)_4-$	$(CH_2)_3P(-O)(CH_3)_2$
$-(CH_2)_4-$	$CH_2C(-O)CH_2C(CH_3)_3$
$-(CH_2)_4-$	$CH(CH_3)(CH_2)_3CH_3$
$-(CH_2)_4-$	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
$-(CH_2)_4-$	$CH(CH_3)CH_2CH_2C(CH_3)_3$
$-(CH_2)_4-$	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
$-(CH_2)_4-$	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
$-(CH_2)_4-$	$CH(CH_2CH_2CH(CH_3)_2)_2$
$-(CH_2)_4-$	$CH_2CH_2CH_2N(CH_3)_2$
$-(CH_2)_4-$	$CH_2CH_2N(CH_3)C(CH_3)_3$
$-(CH_2)_4-$	$CH_2CH_2N(CH_3)CH(CH_3)_2$
$-(CH_2)_4-$	$CH_2CH=CH(CH_3)_2$
$-(CH_2)_4-$	$(CH_2)_3C(CH_3)_2OCH_3$
$-(CH_2)_4-$	$(CH_2)_3C(CH_3)_2Cl$
$-(CH_2)_4-$	$CH_2CH_2CH=C(CH_3)_2$
$-CH_2CH_2OCH_2CH_2-$	$(CH_2)_4CH_3$
$-CH_2CH_2OCH_2CH_2-$	$(CH_2)_3C(CH_3)_2OC_2H_5$
$-CH_2CH_2OCH_2CH_2-$	$(CH_2)_5CH_3$
$-CH_2CH_2OCH_2CH_2-$	$(CH_2)_6CH_3$
$-CH_2CH_2OCH_2CH_2-$	$(CH_2)_3C(CH_3)_2Br$
$-CH_2CH_2OCH_2CH_2-$	$(CH_2)_7CH_3$
$-CH_2CH_2OCH_2CH_2-$	$(CH_2)_3CH(CH_3)_2$
$-CH_2CH_2OCH_2CH_2-$	$(CH_2)_3C(CH_3)_3$
$-CH_2CH_2OCH_2CH_2-$	$(CH_2)_3Si(CH_3)_3$
$-CH_2CH_2OCH_2CH_2-$	$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$
$-CH_2CH_2OCH_2CH_2-$	$(CH_2)_3C(-CH_2)CH(CH_3)_2$
$-CH_2CH_2OCH_2CH_2-$	$(CH_2)_3CH(CH_3)C_2H_5$
$-CH_2CH_2OCH_2CH_2-$	$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$
$-CH_2CH_2OCH_2CH_2-$	$(CH_2)_2OC(CH_3)_3$
$-CH_2CH_2OCH_2CH_2-$	$(CH_2)_2SC(CH_3)_3$
$-CH_2CH_2OCH_2CH_2-$	$(CH_2)_2SCH(CH_3)_2$
$-CH_2CH_2OCH_2CH_2-$	$CH_2CH=CHC(CH_3)_3$
$-CH_2CH_2OCH_2CH_2-$	$CH_2CH=CHCH(CH_3)_2$
$-CH_2CH_2OCH_2CH_2-$	$(CH_2)_2S(-O)C(CH_3)_3$
$-CH_2CH_2OCH_2CH_2-$	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
$-CH_2CH_2OCH_2CH_2-$	$(CH_2)_2OCH(CH_3)_2$

$R^2 + R^3$	R^6
$-(CH_2)_5-$	$(CH_2)_3OC(CH_3)_3$
$-(CH_2)_5-$	$(CH_2)_3P(=O)(CH_3)_2$
$-(CH_2)_5-$	$CH_2C(=O)CH_2C(CH_3)_3$
$-(CH_2)_5-$	$CH(CH_3)(CH_2)_3CH_3$
$-(CH_2)_5-$	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
$-(CH_2)_5-$	$CH(CH_3)CH_2CH_2C(CH_3)_3$
$-(CH_2)_5-$	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
$-(CH_2)_5-$	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
$-(CH_2)_5-$	$CH(CH_2CH_2CH(CH_3)_2)_2$
$-(CH_2)_5-$	$CH_2CH_2CH_2N(CH_3)_2$
$-(CH_2)_5-$	$CH_2CH_2N(CH_3)C(CH_3)_3$
$-(CH_2)_5-$	$CH_2CH_2N(CH_3)CH(CH_3)_2$
$-(CH_2)_5-$	$CH_2CH=C(CH_3)_2$
$-(CH_2)_5-$	$(CH_2)_3C(CH_3)_2OCH_3$
$-(CH_2)_5-$	$(CH_2)_3C(CH_3)_2Cl$
$-(CH_2)_5-$	$CH_2CH_2CH=C(CH_3)_2$

TABLA 8

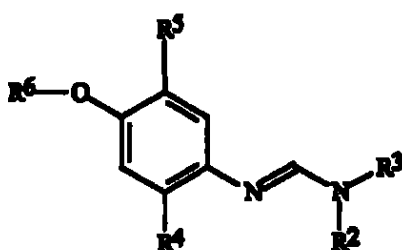


R^6	R^6
$(CH_2)_4CH_3$	$(CH_2)_3OSi(CH_3)_2C(CH_3)_3$
$(CH_2)_3C(CH_3)_2OC_2H_5$	$(CH_2)_2OCH(CH_3)_2$
$(CH_2)_5CH_3$	$(CH_2)_3OC(CH_3)_3$
$(CH_2)_6CH_3$	$(CH_2)_3P(=O)(CH_3)_2$
$(CH_2)_3C(CH_3)_2Br$	$CH_2C(=O)CH_2C(CH_3)_3$
$(CH_2)_7CH_3$	$CH(CH_3)(CH_2)_3CH_3$
$(CH_2)_3CH(CH_3)_2$	$CH(CH_3)CH_2CH_2CH(CH_3)_2$
$(CH_2)_3C(CH_3)_3$	$CH(CH_3)CH_2CH_2C(CH_3)_3$
$(CH_2)_3Si(CH_3)_3$	$CH(C_2H_5)CH_2CH_2CH(CH_3)_2$
$(CH_2)_2CH(CH_3)CH_2C(CH_3)_3$	$CH(CH_2CH_2CH_3)CH_2CH_2CH(CH_3)_2$
$(CH_2)_3C(=CH_2)CH(CH_3)_2$	$CH(CH_2CH_2CH(CH_3)_2)_2$
$(CH_2)_3CH(CH_3)C_2H_5$	$CH_2CH_2CH_2N(CH_3)_2$
$(CH_2)_2OSi(CH_3)_2C(CH_3)_3$	$CH_2CH_2N(CH_3)C(CH_3)_3$

R^6
 $(CH_2)_2OC(CH_3)_3$
 $(CH_2)_2SC(CH_3)_3$
 $(CH_2)_2SCH(CH_3)_2$
 $CH_2CH=CHC(CH_3)_3$
 $CH_2CH=CHCH(CH_3)_2$
 $(CH_2)_2S(-O)C(CH_3)_3$

R^6
 $CH_2CH_2N(CH_3)CH(CH_3)_2$
 $CH_2CH=C(CH_3)_2$
 $(CH_2)_3C(CH_3)_2OCH_3$
 $(CH_2)_3C(CH_3)_2Cl$
 $CH_2CH_2CH=C(CH_3)_2$

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R^6	R^2	R^3	R^4	R^5
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	C_2H_5
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	C_2H_5
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	C_2H_5
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	C_2H_5
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	C_2H_5
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	C_2H_5
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	C_2H_5
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	C_2H_5
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	C_2H_5
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	C_2H_5
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	C_2H_5
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	C_2H_5
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	C_2H_5
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	C_2H_5
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	CH_3	C_2H_5
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>o</i> -Pr	CH_3	C_2H_5
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	C_2H_5
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	C_2H_5
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	C_2H_5
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	C_2H_5
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	C_2H_5
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	C_2H_5

R ⁶	R ²	R ³	R ⁴	R ⁵
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	CH ₃	C ₂ H ₅
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	CH ₃	C ₂ H ₅
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C=CH	CH ₃	C ₂ H ₅
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C=CH	CH ₃	C ₂ H ₅
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ C=CH	CH ₃	C ₂ H ₅
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C=CH	CH ₃	C ₂ H ₅
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	C ₂ H ₅
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	C ₂ H ₅
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₃	Br
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₃	Br
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₃	CH ₃	Br
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₃	CH ₃	Br
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	Br
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	Br
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₃	Br
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	CH ₃	Br
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	Br
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	Br
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH(CH ₃) ₂	CH ₃	Br
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	CH ₃	Br
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	n-Pr	CH ₃	Br
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	n-Pr	CH ₃	Br
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	n-Pr	CH ₃	Br
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	n-Pr	CH ₃	Br
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₃	Br
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₃	Br
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	C ₂ H ₅	C ₂ H ₅	CH ₃	Br
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	CH ₃	Br
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	Br
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	Br
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	CH ₃	Br
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	CH ₃	Br
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C=CH	CH ₃	Br
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C=CH	CH ₃	Br
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ C=CH	CH ₃	Br
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C=CH	CH ₃	Br
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	Br

R ⁶	R ²	R ³	R ⁴	R ⁵
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	Br
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₃	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₃	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH(CH ₃) ₂	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	<i>o</i> -Pr	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	<i>o</i> -Pr	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	<i>o</i> -Pr	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	<i>o</i> -Pr	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	C ₂ H ₅	C ₂ H ₅	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C≡CH	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C≡CH	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ C≡CH	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C≡CH	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	CH ₂ F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₃	CHF ₂
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₃	CHF ₂
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₃	CH ₃	CHF ₂
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₃	CH ₃	CHF ₂
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	CHF ₂
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	CHF ₂

R^6	R^2	R^3	R^4	R^5
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CHF_2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CHF_2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$n\text{-Pr}$	CH_3	CHF_2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$n\text{-Pr}$	CH_3	CHF_2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$n\text{-Pr}$	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$n\text{-Pr}$	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	CHF_2
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	CHF_2
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	CHF_2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	CHF_2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	CHF_2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	CHF_2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2C\equiv CH$	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	CHF_2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	CHF_2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	CF_3
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	CF_3
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	CF_3
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	CF_3
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CF_3
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CF_3
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$n\text{-Pr}$	CH_3	CF_3

R^6	R^2	R^3	R^4	R^5
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	CF_3
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>o</i> -Pr	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	CF_3
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	CF_3
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	CF_3
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	CF_3
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2O=CH$	CH_3	CF_3
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2O=CH$	CH_3	CF_3
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2O=CH$	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2O=CH$	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	CF_3
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	CF_3
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	CH_2Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	CH_2Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	CH_2Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	CH_2Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CH_2Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CH_2Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	CH_2Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	CH_2Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>o</i> -Pr	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	CH_2Cl
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	CH_2Cl
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	CH_2Cl

R^6	R^2	R^3	R^4	R^5
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	CH_2Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	CH_2Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	CH_2Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	CH_2Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2C\equiv CH$	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	CH_2Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	CH_2Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	CH_2Br
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	CH_2Br
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	CH_2Br
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	CH_2Br
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CH_2Br
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	CH_2Br
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$n\text{-Pr}$	CH_3	CH_2Br
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$n\text{-Pr}$	CH_3	CH_2Br
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$n\text{-Pr}$	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$n\text{-Pr}$	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	CH_2Br
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	CH_2Br
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	CH_2Br
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	CH_2Br
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	CH_2Br
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	CH_2Br
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	CH_2Br
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2C\equiv CH$	CH_3	CH_2Br

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R ⁶	R ²	R ³	R ⁴	R ⁵
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C=CH	CH ₃	CH ₂ Br
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	CH ₂ Br
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	CH ₂ Br
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₃	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₃	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH(CH ₃) ₂	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	n-Pr	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	n-Pr	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	n-Pr	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	n-Pr	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	C ₂ H ₅	C ₂ H ₅	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C=CH	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C=CH	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ C=CH	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C=CH	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₃	CH ₂ Br	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₃	CH ₂ Br	Cl

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R^6	R^2	R^3	R^4	R^5
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_2Br	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_2Br	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_2Br	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_2Br	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$n-Pr$	CH_2Br	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$n-Pr$	CH_2Br	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$n-Pr$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$n-Pr$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_2Br	Cl
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_2Br	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_2Br	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_2Br	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_2Br	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_2Br	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2C\equiv CH$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_2Br	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_2Br	F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_2Br	F
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_2Br	F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_2Br	F
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_2Br	F
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_2Br	F
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_2Br	F

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R^6	R^2	R^3	R^4	R^5
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH ₃	$CH(CH_3)_2$	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	<i>o</i> -Pr	CH_2Br	F
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	<i>o</i> -Pr	CH_2Br	F
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	<i>o</i> -Pr	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH ₃	<i>o</i> -Pr	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_2Br	F
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_2Br	F
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	$CH_2CH=CH_2$	CH_2Br	F
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	$CH_2CH=CH_2$	CH_2Br	F
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	$CH_2CH=CH_2$	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH ₃	$CH_2CH=CH_2$	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	$CH_2O=CH$	CH_2Br	F
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	$CH_2O=CH$	CH_2Br	F
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	$CH_2O=CH$	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH ₃	$CH_2O=CH$	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	CH_2CH_2F	CH_2Br	F
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	CH_2CH_2F	CH_2Br	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	CH ₃	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	CH ₃	C_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	CH ₃	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH ₃	CH ₃	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	C_2H_5	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	C_2H_5	C_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	C_2H_5	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH ₃	C_2H_5	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	$CH(CH_3)_2$	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	$CH(CH_3)_2$	C_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	$CH(CH_3)_2$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH ₃	$CH(CH_3)_2$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	CH ₃	<i>o</i> -Pr	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	CH ₃	<i>o</i> -Pr	C_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	CH ₃	<i>o</i> -Pr	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH ₃	<i>o</i> -Pr	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	C_2H_5	F

R ⁶	R ²	R ³	R ⁴	R ⁵
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	C ₂ H ₅	C ₂ H ₅	C ₂ H ₅	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	C ₂ H ₅	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	C ₂ H ₅	F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	C ₂ H ₅	F
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	C ₂ H ₅	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	C ₂ H ₅	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C≡CH	C ₂ H ₅	F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C≡CH	C ₂ H ₅	F
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ C≡CH	C ₂ H ₅	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C≡CH	C ₂ H ₅	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	C ₂ H ₅	F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	C ₂ H ₅	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₃	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₃	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH(CH ₃) ₂	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	n-Pr	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	n-Pr	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	n-Pr	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	n-Pr	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	C ₂ H ₅	C ₂ H ₅	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C≡CH	CH ₂ SCH ₃	Cl

R ⁶	R ²	R ³	R ⁴	R ⁵
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C=CH	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ C=CH	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C=CH	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₂ SCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₃	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₃	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH(CH ₃) ₂	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	<i>o</i> -Pr	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	<i>o</i> -Pr	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	<i>o</i> -Pr	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	<i>o</i> -Pr	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	C ₂ H ₅	C ₂ H ₅	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C=CH	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C=CH	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ C=CH	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C=CH	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₂ OCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₃	CN
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₃	CN

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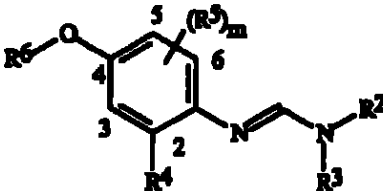
R ⁶	R ²	R ³	R ⁴	R ⁵
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₃	CH ₃	CN
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₃	CH ₃	CN
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	CN
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	CN
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₃	CN
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	CH ₃	CN
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	CN
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	CN
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH(CH ₃) ₂	CH ₃	CN
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	CH ₃	CN
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	<i>o</i> -Pr	CH ₃	CN
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	<i>o</i> -Pr	CH ₃	CN
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	<i>o</i> -Pr	CH ₃	CN
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	<i>o</i> -Pr	CH ₃	CN
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₃	CN
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₃	CN
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	C ₂ H ₅	C ₂ H ₅	CH ₃	CN
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	CH ₃	CN
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	CN
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	CN
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	CH ₃	CN
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	CH ₃	CN
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C≡CH	CH ₃	CN
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C≡CH	CH ₃	CN
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ C≡CH	CH ₃	CN
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C≡CH	CH ₃	CN
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	CN
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	CN
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₃	CHO
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₃	CHO
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₃	CH ₃	CHO
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₃	CH ₃	CHO
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	CHO
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	CHO
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₃	CHO
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	CH ₃	CHO
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	CHO

R ⁶	R ²	R ³	R ⁴	R ⁵
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	CHO
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH(CH ₃) ₂	CH ₃	CHO
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	CH ₃	CHO
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	<i>o</i> -Pr	CH ₃	CHO
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	<i>o</i> -Pr	CH ₃	CHO
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	<i>o</i> -Pr	CH ₃	CHO
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	<i>o</i> -Pr	CH ₃	CHO
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₃	CHO
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₃	CHO
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	C ₂ H ₅	C ₂ H ₅	CH ₃	CHO
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	CH ₃	CHO
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	CHO
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	CHO
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	CH ₃	CHO
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	CH ₃	CHO
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C=CH	CH ₃	CHO
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C=CH	CH ₃	CHO
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ C=CH	CH ₃	CHO
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C=CH	CH ₃	CHO
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	CHO
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	CHO
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₃	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₃	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH(CH ₃) ₂	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	<i>o</i> -Pr	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	<i>o</i> -Pr	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	<i>o</i> -Pr	CH ₂ Br	C≡N
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	<i>o</i> -Pr	CH ₂ Br	C≡N

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R ⁶	R ²	R ³	R ⁴	R ⁵
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₂ Br	OMe
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₂ Br	OMe
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	C ₂ H ₅	C ₂ H ₅	CH ₂ Br	OMe
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	CH ₂ Br	OMe
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₂ Br	OMe
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₂ Br	OMe
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	CH ₂ Br	OMe
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	CH ₂ Br	OMe
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ OMe	CH ₂ Br	OMe
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ OMe	CH ₂ Br	OMe
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ OMe	CH ₂ Br	OMe
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ OMe	CH ₂ Br	OMe
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₂ Br	OMe
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₂ Br	OMe

TABLA 10



R ⁶	R ²	R ³	R ⁴	R ⁵	m
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₃	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₃	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH(CH ₃) ₂	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	o-Pr	CH ₃	5,6-di-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	o-Pr	CH ₃	5,6-di-Cl	2

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>o</i> -Pr	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2C\equiv CH$	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	5,6-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	CH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	CH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_3$	CH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	CH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	CH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_2CH_3$	CH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	CH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>o</i> -Pr	CH_3	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	5-Cl	1

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R ⁶	R ²	R ³	R ⁴	R ⁵	m
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	CH ₃	S-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	S-Cl	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	S-Cl	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	CH ₃	S-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	CH ₃	S-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C=CH	CH ₃	S-Cl	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C=CH	CH ₃	S-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂	CH ₃	CH ₂ C=CH	CH ₃	S-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C=CH	CH ₃	S-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	S-Cl	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	S-Cl	1
CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₃	S-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₃	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	n-Pr	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	n-Pr	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	n-Pr	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	n-Pr	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C=CH	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C=CH	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C=CH	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ CH ₃	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH ₂ CH ₃	CH ₃	S-F	1

R ⁶	R ²	R ³	R ⁴	R ⁵	m
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ CH ₃	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ CH ₂ CH ₃	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ CH ₂ CH ₃	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH ₂ CH ₂ CH ₃	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ CH ₃	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ CH ₂ CH ₃	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH ₂ CH ₃	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH ₂ CH ₂ CH ₃	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH(CH ₃) ₂	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	n-Pr	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	n-Pr	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	n-Pr	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	n-Pr	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	C ₂ H ₅	C ₂ H ₅	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C=CH	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C=CH	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ C=CH	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C=CH	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	S-t-Pr	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	SCH ₃	S-Cl	1

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R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$n-Pr$	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$n-Pr$	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$n-Pr$	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$n-Pr$	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2O=CH$	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2O=CH$	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2O=CH$	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_3$	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_2CH_3$	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	SCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	OCH_3	$5-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	OCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	OCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	OCH_3	$5-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	OCH_3	$5-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	OCH_3	$5-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	OCH_3	$5-Cl$	1

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R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>n</i> -Pr	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C=CH$	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C=CH$	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C=CH$	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_3$	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_2CH_3$	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	OC_2H_5	$S-Cl$	1

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R ⁶	R ²	R ³	R ⁴	R ⁵	m
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	n-Pr	OC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	OC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	OC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	OC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	OC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	OC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	OC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C≡CH	OC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C≡CH	OC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C≡CH	OC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ CH ₃	OC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH ₂ CH ₃	OC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ CH ₃	OC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ CH ₂ CH ₃	OC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ CH ₂ CH ₃	OC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH ₂ CH ₂ CH ₃	OC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	OC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	OC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	SCH ₃	5-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	SCH ₃	5-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₃	SCH ₃	5-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	SCH ₃	5-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	SCH ₃	5-F	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	SCH ₃	5-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	SCH ₃	5-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	SCH ₃	5-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	SCH ₃	5-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	SCH ₃	5-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	n-Pr	SCH ₃	5-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	n-Pr	SCH ₃	5-F	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	n-Pr	SCH ₃	5-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	n-Pr	SCH ₃	5-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	SCH ₃	5-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	SCH ₃	5-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	SCH ₃	5-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	SCH ₃	5-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	SCH ₃	5-F	1

R ⁶	R ²	R ³	R ⁴	R ⁵	m
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	SCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ O=CH	SCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ O=CH	SCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ O=CH	SCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ CH ₃	SCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH ₂ CH ₃	SCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ CH ₃	SCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ CH ₂ CH ₃	SCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ CH ₂ CH ₃	SCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH ₂ CH ₂ CH ₃	SCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	SCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	SCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₃	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	<i>n</i> -Pr	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	<i>n</i> -Pr	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	<i>n</i> -Pr	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	<i>n</i> -Pr	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ O=CH	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ O=CH	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ O=CH	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ CH ₃	OCH ₃	S-F	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH ₂ CH ₃	OCH ₃	S-F	1

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R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	OCH_3	5-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	OCH_3	5-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	OCH_3	5-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_2CH_3$	OCH_3	5-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	OCH_3	5-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	OCH_3	5-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	OC_2H_5	5-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	OC_2H_5	5-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	OC_2H_5	5-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	OC_2H_5	5-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	OC_2H_5	5-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	OC_2H_5	5-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	OC_2H_5	5-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	OC_2H_5	5-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	OC_2H_5	5-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	OC_2H_5	5-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	OC_2H_5	5-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	OC_2H_5	5-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	OC_2H_5	5-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>n</i> -Pr	OC_2H_5	5-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	OC_2H_5	5-F	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	OC_2H_5	5-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	OC_2H_5	5-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OC_2H_5	5-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OC_2H_5	5-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	OC_2H_5	5-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2O=CH$	OC_2H_5	5-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2O=CH$	OC_2H_5	5-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2O=CH$	OC_2H_5	5-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	OC_2H_5	5-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_3$	OC_2H_5	5-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	OC_2H_5	5-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	OC_2H_5	5-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	OC_2H_5	5-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_2CH_3$	OC_2H_5	5-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	OC_2H_5	5-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	OC_2H_5	5-F	1

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>o</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_3$	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_3$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH_2CH_2CH_3$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH_2CH_2CH_3$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	SC_2H_5	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	SC_2H_5	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	SC_2H_5	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	SC_2H_5	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	SC_2H_5	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	SC_2H_5	S-Cl	1

R ⁶	R ²	R ³	R ⁴	R ⁵	m
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	n-Pr	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	n-Pr	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	n-Pr	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	n-Pr	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C=CH	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C=CH	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C=CH	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ CH ₃	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH ₂ CH ₃	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ CH ₃	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ CH ₂ CH ₃	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ CH ₂ CH ₃	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH ₂ CH ₂ CH ₃	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	SC ₂ H ₅	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH(CH ₃) ₂	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	n-Pr	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	n-Pr	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	n-Pr	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	n-Pr	CH ₃	5,6-di-CH ₃	2

R ⁶	R ²	R ³	R ⁴	R ⁵	#
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	C ₂ H ₅	C ₂ H ₅	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C≡CH	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C≡CH	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ C≡CH	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C≡CH	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	5,6-di-CH ₃	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH(CH ₃) ₂	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	<i>o</i> -Pr	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	<i>o</i> -Pr	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	<i>o</i> -Pr	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	<i>o</i> -Pr	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	C ₂ H ₅	C ₂ H ₅	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C≡CH	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C≡CH	Cl	5-CH ₃	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ C≡CH	Cl	5-CH ₃	1

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R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	Cl	5- CH_3	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	Cl	5- CH_3	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	Cl	5- CH_3	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	Cl	5- Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	Cl	5- Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	Cl	5- Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	Cl	5- Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	Cl	5- Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	Cl	5- Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	Cl	5- Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	Cl	5- Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$n\text{-}Pr$	Cl	5- Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$n\text{-}Pr$	Cl	5- Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$n\text{-}Pr$	Cl	5- Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$n\text{-}Pr$	Cl	5- Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	Cl	5- Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	Cl	5- Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	Cl	5- Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	Cl	5- Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	Cl	5- Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	Cl	5- Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	Cl	5- Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	Cl	5- Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	Cl	5- Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	Cl	5- Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2C\equiv CH$	Cl	5- Cl	1
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	Cl	5- Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	Cl	5- Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	Cl	5- Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	5- CH_3 -6- Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	5- CH_3 -6- Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	5- CH_3 -6- Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	5- CH_3 -6- Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	5- CH_3 -6- Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	5- CH_3 -6- Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	5- CH_3 -6- Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	5- CH_3 -6- Cl	2

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>o</i> -Pr	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2C\equiv CH$	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	5- CH_3 -6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	Cl	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	Cl	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	Cl	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	Cl	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	5- CH_3 -6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	5- CH_3 -6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	5- CH_3 -6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	5- CH_3 -6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	5- CH_3 -6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	5- CH_3 -6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	5- CH_3 -6-Br	2

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R ⁶	R ²	R ³	R ⁴	R ⁵	m
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH(CH ₃) ₂	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	<i>o</i> -Pr	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	<i>o</i> -Pr	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	<i>o</i> -Pr	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	<i>o</i> -Pr	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	C ₂ H ₅	C ₂ H ₅	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C≡CH	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C≡CH	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ C≡CH	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C≡CH	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	5-CH ₃ -6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₃	5-Cl-6-Br	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₃	5-Cl-6-Br	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₃	CH ₃	5-Cl-6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₃	CH ₃	5-Cl-6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	5-Cl-6-Br	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	5-Cl-6-Br	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₃	5-Cl-6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	CH ₃	5-Cl-6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	5-Cl-6-Br	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	5-Cl-6-Br	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH(CH ₃) ₂	CH ₃	5-Cl-6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	CH ₃	5-Cl-6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	<i>o</i> -Pr	CH ₃	5-Cl-6-Br	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	<i>o</i> -Pr	CH ₃	5-Cl-6-Br	2

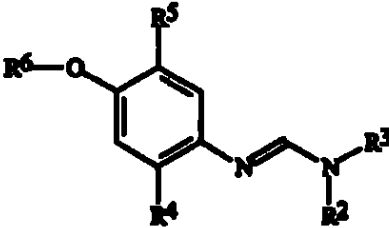
R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>n</i> -Pr	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C\equiv CH$	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2C\equiv CH$	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C\equiv CH$	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	5-Cl-6-Br	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH(CH_3)_2$	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH(CH_3)_2$	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH(CH_3)_2$	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	<i>n</i> -Pr	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	5-F-6-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	5-F-6-Cl	2

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R ⁶	R ²	R ³	R ⁴	R ⁵	m
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	5-F-6-Cl	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	CH ₃	5-F-6-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	CH ₃	5-F-6-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C≡CH	CH ₃	5-F-6-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C≡CH	CH ₃	5-F-6-Cl	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ C≡CH	CH ₃	5-F-6-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C≡CH	CH ₃	5-F-6-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	5-F-6-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	5-F-6-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₃	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₃	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH(CH ₃) ₂	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH(CH ₃) ₂	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH(CH ₃) ₂	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	<i>o</i> -Pr	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	<i>o</i> -Pr	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	<i>o</i> -Pr	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	<i>o</i> -Pr	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	C ₂ H ₅	C ₂ H ₅	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	C ₂ H ₅	C ₂ H ₅	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ CH=CH ₂	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ C≡CH	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ C≡CH	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ C≡CH	CH ₃	5-F-6-Br	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₂ C≡CH	CH ₃	5-F-6-Br	2

R ⁶	R ²	R ³	R ⁴	R ⁵	m
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	3-F-6-Br	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH ₂ F	CH ₃	3-F-6-Br	2

TABLE 11



R ⁶	R ² , R ³	R ⁴	R ⁵
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ -	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ -	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ CH ₂ CH ₂ -	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ CH ₂ CH ₂ -	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CHCH ₃ -	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CHCH ₃ -	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ CHCH ₃ -	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ CHCH ₃ -	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CH-CHCH ₂ -	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CH-CHCH ₂ -	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ CH-CHCH ₂ -	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ CH-CHCH ₂ -	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ SCH ₂ CH ₂ -	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ SCH ₂ CH ₂ -	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ SCH ₂ CH ₂ -	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ SCH ₂ CH ₂ -	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ CH ₂ -	CH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ CH ₂ -	CH ₃	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ CH ₂ CH ₂ CH ₂ -	CH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ CH ₂ CH ₂ CH ₂ -	CH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ -	CH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ -	CH ₃	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ CH ₂ CH ₂ -	CH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ CH ₂ CH ₂ -	CH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CHCH ₃ -	CH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CHCH ₃ -	CH ₃	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ CHCH ₃ -	CH ₃	Cl

000292

R^6	R^2+R^3	R^4	R^5
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH=CHCH_2-$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH=CHCH_2-$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	CH_3	Br
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	CH_3	Br
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_3	Br
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_3	Br
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH=CHCH_2-$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH=CHCH_2-$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	CH_3	Br
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_3	$i\text{-Pr}$
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_3	$i\text{-Pr}$
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	CH_3	$i\text{-Pr}$
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	CH_3	$i\text{-Pr}$
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	$i\text{-Pr}$
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	$i\text{-Pr}$
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	CH_3	$i\text{-Pr}$
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	CH_3	$i\text{-Pr}$

000293

R ⁶	R ^{2+R³}	R ⁴	R ⁵
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CHCH ₃ -	CH ₃	<i>i</i> -Pr
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CHCH ₃ -	CH ₃	<i>i</i> -Pr
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ CHCH ₃ -	CH ₃	<i>i</i> -Pr
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ CHCH ₃ -	CH ₃	<i>i</i> -Pr
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CH-CHCH ₂ -	CH ₃	<i>i</i> -Pr
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CH-CHCH ₂ -	CH ₃	<i>i</i> -Pr
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ CH-CHCH ₂ -	CH ₃	<i>i</i> -Pr
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ CH-CHCH ₂ -	CH ₃	<i>i</i> -Pr
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ SCH ₂ CH ₂ -	CH ₃	<i>i</i> -Pr
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ SCH ₂ CH ₂ -	CH ₃	<i>i</i> -Pr
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ SCH ₂ CH ₂ -	CH ₃	<i>i</i> -Pr
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ SCH ₂ CH ₂ -	CH ₃	<i>i</i> -Pr
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ CH ₂ -	CH ₃	F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ CH ₂ -	CH ₃	F
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ CH ₂ CH ₂ CH ₂ -	CH ₃	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ CH ₂ CH ₂ CH ₂ -	CH ₃	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ -	CH ₃	F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ -	CH ₃	F
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ CH ₂ CH ₂ -	CH ₃	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ CH ₂ CH ₂ -	CH ₃	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CHCH ₃ -	CH ₃	F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CHCH ₃ -	CH ₃	F
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ CHCH ₃ -	CH ₃	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ CHCH ₃ -	CH ₃	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CH-CHCH ₂ -	CH ₃	F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CH-CHCH ₂ -	CH ₃	F
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ CH-CHCH ₂ -	CH ₃	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ CH-CHCH ₂ -	CH ₃	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ SCH ₂ CH ₂ -	CH ₃	F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ SCH ₂ CH ₂ -	CH ₃	F
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ SCH ₂ CH ₂ -	CH ₃	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ SCH ₂ CH ₂ -	CH ₃	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ CH ₂ -	OCH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ CH ₂ -	OCH ₃	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ CH ₂ CH ₂ CH ₂ -	OCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ CH ₂ CH ₂ CH ₂ -	OCH ₃	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ -	OCH ₃	Cl

294
11:45 234

R^6	R^2+R^3	R^4	R^5
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	OCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	OCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	OCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH=CHCH_2-$	OCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH=CHCH_2-$	OCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH=CHCH_2-$	OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH=CHCH_2-$	OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	OCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	OCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	OCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	OC_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	OC_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	OC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	OC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH=CHCH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH=CHCH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH=CHCH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH=CHCH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	OC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	OC_2H_5	Cl

JJ 1285
205

R^6	R^2+R^3	R^4	R^5
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	SCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	SCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	SCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	SCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	SCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	SCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH=CHCH_2-$	SCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH=CHCH_2-$	SCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH=CHCH_2-$	SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH=CHCH_2-$	SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	SCH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	SCH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	SCH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	SC_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	SC_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	SC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	SC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH=CHCH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH=CHCH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH=CHCH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH=CHCH_2-$	SC_2H_5	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	SC_2H_5	Cl

1245
29/6

R ⁶	R ^{2+R³}	R ⁴	R ⁵
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ SCH ₂ CH ₂ -	SC ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ SCH ₂ CH ₂ -	SC ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ SCH ₂ CH ₂ -	SC ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ CH ₂ -	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ CH ₂ -	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ CH ₂ CH ₂ CH ₂ -	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ CH ₂ CH ₂ CH ₂ -	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ -	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ -	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ CH ₂ CH ₂ -	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ CH ₂ CH ₂ -	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CHCH ₃ -	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CHCH ₃ -	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ CHCH ₃ -	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ CHCH ₃ -	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CH-CHCH ₂ -	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CH-CHCH ₂ -	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ CH-CHCH ₂ -	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ CH-CHCH ₂ -	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ SCH ₂ CH ₂ -	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ SCH ₂ CH ₂ -	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ SCH ₂ CH ₂ -	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ SCH ₂ CH ₂ -	C ₂ H ₅	Cl
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ CH ₂ -	OCH ₃	F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ CH ₂ -	OCH ₃	F
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ CH ₂ CH ₂ CH ₂ -	OCH ₃	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ CH ₂ CH ₂ CH ₂ -	OCH ₃	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ -	OCH ₃	F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CH ₂ CH ₂ -	OCH ₃	F
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ CH ₂ CH ₂ -	OCH ₃	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ CH ₂ CH ₂ -	OCH ₃	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CHCH ₃ -	OCH ₃	F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CHCH ₃ -	OCH ₃	F
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	-CH ₂ CHCH ₃ -	OCH ₃	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	-CH ₂ CHCH ₃ -	OCH ₃	F
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	-CH ₂ CH-CHCH ₂ -	OCH ₃	F
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	-CH ₂ CH-CHCH ₂ -	OCH ₃	F

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R^6	R^2+R^3	R^4	R^5
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH-CHCH_2-$	OCH_3	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH-CHCH_2-$	OCH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	OCH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	OCH_3	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	OCH_3	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	OCH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	OC_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	OC_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	OC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	OC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH-CHCH_2-$	OC_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH-CHCH_2-$	OC_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH-CHCH_2-$	OC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH-CHCH_2-$	OC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	OC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	SCH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	SCH_3	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	SCH_3	F

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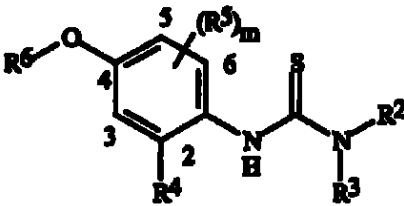
R^6	R^2+R^3	R^4	R^5
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	SCH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH-CHCH_2-$	SCH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH-CHCH_2-$	SCH_3	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH-CHCH_2-$	SCH_3	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH-CHCH_2-$	SCH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	SCH_3	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	SC_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	SC_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	SC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	SC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH-CHCH_2-$	SC_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH-CHCH_2-$	SC_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH-CHCH_2-$	SC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH-CHCH_2-$	SC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	SC_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	C_2H_5	F

R^6	R^2+R^3	R^4	R^5
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	C_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH=CHCH_2-$	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH=CHCH_2-$	C_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH=CHCH_2-$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH=CHCH_2-$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	C_2H_5	F
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	CH_3	CN
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	CH_3	CN
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_3	CN
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_3	CN
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH=CHCH_2-$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH=CHCH_2-$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	CH_3	CN
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	CHO

300
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R^6	R^2+R^3	R^4	R^5
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	CH_3	CHO
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	CH_3	CHO
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_3	CHO
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_3	CHO
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH=CHCH_2-$	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH=CHCH_2-$	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	CH_3	CHO
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CHCH_3-$	CH_2Br	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CHCH_3-$	CH_2Br	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CHCH_3-$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CHCH_3-$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2CH=CHCH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2CH=CHCH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2CH=CHCH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2C(CH_3)_3$	$-CH_2SCH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	$-CH_2SCH_2CH_2-$	CH_2Br	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	$-CH_2SCH_2CH_2-$	CH_2Br	Cl

TABLE 12



R ⁶	R ²	R ³	R ⁴	R ⁵	m
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₃	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	i-Pr	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	i-Pr	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	i-Pr	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	o-Pr	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	o-Pr	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	o-Pr	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	n-Pr	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	n-Pr	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	n-Pr	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	n-Bu	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	n-Bu	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	n-Bu	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	C ₂ H ₅	C ₂ H ₅	CH ₃	5-CH ₃	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₃	5-Cl	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₃	5-Cl	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₃	CH ₃	5-Cl	1
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	5-Cl	1
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	5-Cl	1
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₃	5-Cl	1

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R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>i</i> -Pr	CH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>i</i> -Pr	CH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>i</i> -Pr	CH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	CH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	CH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Bu	CH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Bu	CH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Bu	CH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	OCH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	OCH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	OCH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	OCH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	OCH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	OCH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>i</i> -Pr	OCH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>i</i> -Pr	OCH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>i</i> -Pr	OCH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	OCH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	OCH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	OCH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	OCH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	OCH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	OCH_3	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Bu	OCH_3	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Bu	OCH_3	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Bu	OCH_3	S-Cl	1

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	OCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>i</i> -Pr	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>i</i> -Pr	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>i</i> -Pr	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Bu	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Bu	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Bu	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	OC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	SCH_3	$S-Cl$	1

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>i</i> -Pr	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>i</i> -Pr	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>i</i> -Pr	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Bu	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Bu	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Bu	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	SCH_3	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>i</i> -Pr	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>i</i> -Pr	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>i</i> -Pr	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Bu	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Bu	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Bu	SC_2H_5	$S-Cl$	1

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R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	SC_2H_5	$S-Cl$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	OCH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	OCH_3	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	OCH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	OCH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	OCH_3	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	OCH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$i-Pr$	OCH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$i-Pr$	OCH_3	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$i-Pr$	OCH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$o-Pr$	OCH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$o-Pr$	OCH_3	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$o-Pr$	OCH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$n-Pr$	OCH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$n-Pr$	OCH_3	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$n-Pr$	OCH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$n-Bu$	OCH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$n-Bu$	OCH_3	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$n-Bu$	OCH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OCH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OCH_3	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	OCH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	OCH_3	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	OCH_3	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	OCH_3	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	OC_2H_5	$S-F$	1

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R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>i</i> -Pr	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>i</i> -Pr	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>i</i> -Pr	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Bu	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Bu	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Bu	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	OC_2H_5	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	$SCCH_3$	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	$SCCH_3$	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	$SCCH_3$	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	$SCCH_3$	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	$SCCH_3$	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	$SCCH_3$	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>i</i> -Pr	$SCCH_3$	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>i</i> -Pr	$SCCH_3$	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>i</i> -Pr	$SCCH_3$	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	$SCCH_3$	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	$SCCH_3$	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	$SCCH_3$	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	$SCCH_3$	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	$SCCH_3$	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	$SCCH_3$	$S-F$	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Bu	$SCCH_3$	$S-F$	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Bu	$SCCH_3$	$S-F$	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Bu	$SCCH_3$	$S-F$	1

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SCH_3	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SCH_3	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	SCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	SCH_3	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	SCH_3	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	SCH_3	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	SC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>i</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>i</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>i</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Bu	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Bu	SC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Bu	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	SC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	SC_2H_5	S-F	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	Cl	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	Cl	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	Cl	S-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	Cl	S-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	Cl	S-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	Cl	S-Cl	1

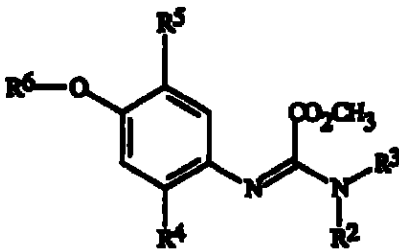
R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>i</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>i</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>i</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Bu	Cl	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Bu	Cl	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Bu	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	Cl	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	Cl	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	Cl	5-Cl	1
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	Cl	5-Cl	1
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	Cl	5-Cl	1
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>i</i> -Pr	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>i</i> -Pr	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>i</i> -Pr	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Bu	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Bu	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Bu	CH_3	3,5-di-Cl	2

R^6	R^2	R^3	R^4	R^5	m
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>i</i> -Pr	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>i</i> -Pr	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>i</i> -Pr	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>o</i> -Pr	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>o</i> -Pr	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Pr	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Pr	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	<i>n</i> -Bu	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	<i>n</i> -Bu	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	<i>n</i> -Bu	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	3-Cl-5- CH_3	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_3	Cl	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_3	Cl	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	Cl	3,5-di-Cl	2
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	Cl	3,5-di-Cl	2
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	Cl	3,5-di-Cl	2
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	Cl	3,5-di-Cl	2

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R ⁶	R ²	R ³	R ⁴	R ⁵	m
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	<i>i</i> -Pr	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	<i>i</i> -Pr	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	<i>i</i> -Pr	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	<i>o</i> -Pr	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	<i>o</i> -Pr	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	<i>o</i> -Pr	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	<i>n</i> -Pr	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	<i>n</i> -Pr	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	<i>n</i> -Pr	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	<i>n</i> -Bu	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	<i>n</i> -Bu	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	<i>n</i> -Bu	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₂ CH=CH ₂	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₂ CH=CH ₂	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	C ₂ H ₅	C ₂ H ₅	Cl	3,5-di-Cl	2
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	C ₂ H ₅	C ₂ H ₅	Cl	3,5-di-Cl	2

TABLA 13



R ⁶	R ²	R ³	R ⁴	R ⁵
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	CH ₃	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	CH ₃	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	C ₂ H ₅	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ CH(CH ₃) ₂	CH ₃	C ₂ H ₅	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₂ (C ₂ H ₅)	CH ₃	C ₂ H ₅	CH ₃	CH ₃
CH ₂ CH ₂ CH ₂ Si(CH ₃) ₃	CH ₃	CH ₃	CH ₃	Cl
CH ₂ CH ₂ CH ₂ C(CH ₃) ₃	CH ₃	CH ₃	CH ₃	Cl

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R^6	R^2	R^3	R^4	R^5
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	CH_3	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	CH_3	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	C_2H_5	CH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	C_2H_5	CH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	C_2H_5	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	C_2H_5	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	C_2H_5	C_2H_5	CH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	C_2H_5	C_2H_5	CH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	C_2H_5	C_2H_5	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	C_2H_5	C_2H_5	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2CH=CH_2$	CH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2CH=CH_2$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2CH=CH_2$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	$CH_2C=CH$	CH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	$CH_2C=CH$	CH_3	Cl
$CH_2CH_2CH_2CH(CH_3)_2$	CH_3	$CH_2C=CH$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_2(C_2H_5)$	CH_3	$CH_2C=CH$	CH_3	Cl
$CH_2CH_2CH_2Si(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	Cl
$CH_2CH_2CH_2C(CH_3)_3$	CH_3	CH_2CH_2F	CH_3	Cl

Formulación/Utilidad

Los compuestos de esta invención generalmente se utilizarán como una formulación o composición con un portador adecuado agrícolamente que comprende al menos un diluyente líquido, un diluyente sólido o un tensoactivo.

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De acuerdo con esto, se suministran composiciones que comprenden, adicionalmente a una cantidad efectiva fungicidamente de los compuestos activos (S), al menos un componente adicional seleccionado del grupo que consiste de tensoactivos, diluyentes sólidos y diluyentes líquidos. Los ingredientes de la formulación o composición son seleccionados por ser consistentes con las propiedades físicas del ingrediente activo, modo de aplicación y factores ambientales tales como el tipo del suelo, humedad y temperatura. Formulaciones útiles incluyen líquidos tales como soluciones (que incluyen concentrados emulsificables), suspensiones, emulsiones (que incluyen microemulsiones y/o suspoemulsiones) y similares las cuales opcionalmente se pueden espesar en geles. Las formulaciones útiles incluyen además sólidos tales como polvos, gránulos, pelletas, tabletas, películas y similares que pueden ser dispersables en agua ("humectables") o solubles en agua. El ingrediente activo puede ser (micro) encapsulado y adicionalmente formado en una suspensión o una formulación sólida; alternativamente la formulación completa del ingrediente activo puede ser encapsulada (o "recubierta"). La encapsulación puede controlar o retardar la liberación del ingrediente activo. Las formulaciones rociables pueden ser extendidas

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en medio adecuado y utilizadas en volúmenes de roseado de cerca de uno a varios cientos de litros por hectárea. Las composiciones altamente fuertes son sobre todo utilizadas como intermedios para formulaciones adicionales.

Las formulaciones típicamente contendrán cantidades efectivas de ingrediente activo, diluyente y/o tensoactivo dentro de los siguientes rangos aproximados que suman más del 100 por ciento por peso.

<u>Porcentaje de peso</u>			
	<u>Ingrediente</u>		
	<u>Activo</u>	<u>Diluyente</u>	<u>tensoactivo</u>
Gránulos dispersables en Agua Y solubles en agua, tabletas Y polvos.	5-90	0-94	1-15
Suspensiones, emulsiones, Soluciones (que incluyen Concentrados emulsificables)	5-50	40-95	0-15
Polvos	1-25	70-99	0-5
Gránulos y pelotillas	0,01-99	5-99,99	0-15
Composiciones altamente Fuertes	90-99	0-10	0-2

Los diluyentes sólidos se describen en Watkins, et al., *Handbook of Insecticida Dust Diluents and Carriers*, 2da Edición., Dorland Books, Caldwell, New Jersey. Los diluyentes líquidos típicos se describen en Mariden, *Solvents Guide*, 2da Edición., Interscience, New Cork, 1950. *McCutcheon's Detergents and Emulsifiers Annual*, Allured Publ. Corp., Ridgewood, New Jersey, así como también Sisely and Word, *Encyclopedia of Surface Active Agents*, Chemical Publ. Co., Inc., New York, 1964, lista los tensoactivos y usos recomendados. Todas las formulaciones pueden contener cantidades menores de aditivos para reducir espuma, apelmazamiento, corrosión, crecimientos microbiológicos y similares, o espesadores para incrementar la viscosidad.

Los tensoactivos incluyen, por ejemplo, alcoholes polietoxilatados, alquilfenoles polietoxilatados, ésteres de ácido graso de sorbitán polietoxilados, sulfosuccinatos de dialquilo, sulfatos de alquilo, sulfonatos de alquilbenceno, organosiliconas, N,N-dailquiltauratos, sulfonatos de lignino, condensados de formaldehído sulfonato naftaleno, policarboxilatos, y copilímeros de bloque de polioxipropileno/polioxietileno. Los diluyentes sólidos incluyen, por ejemplo, arcillas

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tales como bentonita, montmorillonita, atapulgita y caolín, almidón, azúcar, sílice, palco, tierras de diatomáceas, urea, carbonato de calcio, carbonato de sodio y bicarbonato, y sulfato de sodio. Los diluyentes líquidos incluyen, por ejemplo, agua, N,N-dimetilformamida, sulfoxido de dimetilo, N-alquilpirrolidona, etilenglicol, propilenglicol, parafinas, alquilbencenos, alquilnaftalenos, aceites de oliva, castor, linaza, tung, sésamo, maíz, cacahuate, semilla de algodón, soja, rabina y coco, ésteres de ácidos grasos, cetonas tales como ciclohexanona, 2-heptanona, isoforona y 4-hidroxi-4-metil-2-pentanona, y alcoholes tales como metanol, ciclohexanol, decanol y alcohol tetrahidrofurfurilo.

Soluciones, que incluyen concentrados emulsificables, pueden ser preparadas simplemente al mezclar los ingredientes. Los polvos pueden ser preparados mediante mezclar y, usualmente, y moler como en un molino de martillo o molino de energía fluida. Las suspensiones son usualmente preparadas mediante molido en húmedo; ver por ejemplo, U.S. 3,064,084. Los gránulos y pelletillas pueden ser preparadas mediante rosear el material activo sobre portadores granulados preformados o mediante técnicas de

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aglomeración. Ver Browning, "Agglomeration", *Chemical Engineering*, December 4, 1967, pp 147-48 *Perry's Chemical Engineer's Handbook*, 4th Ed., Mc Graw Hill, New York , 1963 páginas 8-57 y siguientes, y WO 91/13546. Las pelotillas pueden se preparadas como se describió en U.S. 4,172,714. Los gránulos dispersables en agua y solubles en agua pueden ser preparados como se enseñó en U.S. 4,144,050, U.S. 3,920,442 y DE 3,246,493. Las tabletas pueden ser preparadas como se enseñó en U.S. 5,180,587, U.S. 5,232,701 y U.S. 5,208,030. Las películas pueden ser preparadas como se enseñó en GB 2,095,558 y U.S. 3,299,566.

Para información adicional con respecto a la técnica de formulación, ver T.S. Woods, "The Formulator's Toolbox - Product Forms for Modern Agricultura" in *Pesticide Chemistry and Bioscience, The Food-Environment Challenge*, T. Brooks and T.R. Roberts, Eds., Proceedings of the 9th Internacional Congreso on Pesticide Chemistry, The Royal Society of Chemistry, Cambridge, 1999, pp. 120-133. También ver U.S. 3,235,361, Col. 6, línea 16 hasta columna 7 línea 19 y ejemplos 10-41; U.S. 3,309,192, Col. 5, línea 43 a columna 7, línea 62 y ejemplos 8, 12, 15, 39, 41, 52, 53, 58, 132, 138-140, 162-164, 166, 167 y 169-

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182; U.S. 2,891,855, Col.3, línea 66 a Col. 5, línea 17 y ejemplos 1-4; Klingman, *Weed Control as a Science*, John Wiley and Sons, Inc., New York, 1961, pp 81-96; y Hance et al., *Weed Control Handbook*, 8th Ed., Black well Scientific Publications, Oxford, 1989.

En los siguientes ejemplos, todos los porcentajes se dan por peso y todas las formulaciones son preparadas en las formas convencionales. Los números de los compuestos se refieren a los compuestos en el índice de la Tabla A.

EJEMPLO A

Polvo Humectable

Compuesto 13	65,0%
Éter de glicol polietilen dodecilfenol	2,0%
Ligninsulfonato de sodio	4,0%
Silicoaluminato de sodio	6,0%
Motmorillonita (calcinada)	23,0%

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EJEMPLO BGRANULO

Compuesto 13	10,0%
Gránulos de atapulgita (materia volátil baja, 0,71/0,30 mm; u.S.S. No.25-50 tamices)	90,0%

EJEMPLO CPELOTILLAS EXTRUIDAS

Compuesto 13	25,0%
Sulfato de sodio anhidro	10,0%
Ligninsulfonato de calcio crudo	5,0%
Alquilnaftalinosulfonato de sodio	1,0%
Bentonita de magnesio/calcio	59,0%

EJEMPLO DCONCENTRADO EMULSIFICABLE

Compuesto 13	20,0%
Mezcla de sulfonatos solubles en aceite Y éteres de polioexotileno	10,0%
Isoforona	70,0%

Los compuestos de esta invención son útiles como agentes de control de enfermedades de las plantas, La presente invención por lo tanto comprende además un método para controlar enfermedades de las plantas originados por patógenos de planta fungal que comprenden aplicar a la planta o porción de esta a ser protegida, o a la semilla de la planta o planta de semillero a ser protegida, una cantidad efectiva de un compuesto de la invención o una composición fungicida que contiene dicho compuesto. Los compuestos o composiciones de esta invención suministran control de enfermedades originadas por un amplio espectro de patógenos de planta fungal en las clases Basidiomicete, Ascomicete, Oomicete y Deuteromicete. Ellas son efectivas en controlar un amplio espectro de enfermedades de la planta, particularmente, patógenos foliares de cultivos ornamentales, de vegetales, en campo, de cereales y frutas. Estos patógenos incluyen plasmopara vitícola , Plasmopara viticola, Phytophthora infestans, Peronospora tabacina, Pseudoperonospora cubensis, Pythium aphanidermatum, Alternaria brassicae, Septoria nodorum, Septoria tritici, cercosporidium personatum, cercospora arachidicola, pseudocercospora herpotrichoides, cercospora beticola, botrytis cinerea, monilinia fructicola, pyricularia oryzae, podosphaera

leucotricha, venturia inaequalis, erysiphe graminis, uncinula necatur, puccinia recondita, puccinia graminis, hemileia vastatrix, puccinia striiformis, puccinia arachidis, rhizoctonia solani, sphaerothecafuliginea, fusarium oxysporum, verticillium dahliae, pythium aphanidermatum, megasperma, sclerotinia sclerotiorum, sclerotium rolfsii, erysiphe polygoni, pyrenophora teres, gaeumannomyces graminis, rynchosporium secalis, fusarium roseum, bremia y otro género y especies cercanamente relacionados a estos patógenos.

Los compuestos de esta invención también pueden ser mezclados con uno o más de otros insecticidas, fungicidas, nematocidas, bactericidas, acaricidas, reguladores del crecimiento, quimoesterilizantes, semi-químicos, repelentes, atrayentes, feromonas, estimulantes de alimentación u otros compuestos activos biológicamente para formar un pesticida multicomponente dando un espectro más amplio de protección agrícola. Ejemplos de tales protectores agrícolas con tales compuestos de esta invención que pueden ser formulados son: insecticidas tales como abamectina, acefato, azinfos-metilo, bifentrin, buprofesin, carbifuran, clorfenapir, clorpirifos, clorpirifos.metilo ciflutrin, beta-

ciflutrin, cialotrin, lambda.cialotrin, deltametrin, diafentiuron, diazinon, diflubenzuron, dimetoato, esfenvalerato, fenoxicarb, fenpropatrin, fenvalerato, fipronil, flucitrinato, tau-fluvalinato, fonosfos, imidacloprit, indoxacarb, isofenfos, malatión, metaldehido, matamidofos, metidation, metomil, metopreno, metoxiclor, monocrotófos, oxamil, paratión, paratión-metilo parametrin, forato, fosalona, fosmet, fosfamidón, pirimicarb, profenofos, rotenona, sulprofos, tebufenozida, teflutrin, terbufos, tetraclorvinfos, tiodicarb, tralometrin, triclorfon y triflumuron; fungicidas tales como acibenzolar, azoxistrobin, binomial, blasticidin-s, mezcla Bordeaux (sulfato de cobre tribásico), boscalid/nicobifen, bromuconazola, bitiobato, carpropamid (KTU3616), captafol, captan, carbendazim, cloroneb, clorotalonil, clotrimazol, oxicloruro de cobre, sales de cobre, cimoxanil, ciproconazol, ciprodinil (CGA219471), (S)-3,5-dicloro-N-(3-cloro-1-etil-1-metil-2-2 oxopropil)-4-metilbenzamida (RH 7281), diclocimet (S-2900), diclomezina, dicloran, difenoconazol, (S)- 3,5 -dihidro- 5-metil-2-(metilito)-5-fenil-3-(fenilamino)-4H-imidazol-4-ona (RP 407213), dimetomorf, dimoxistrobin (SSF-126), diniconazol, diniconazol-M, domina, econazol, edifenfos, epoxiconasol,

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(BAS 480F) famoxadona, fenarimol, fenbuconazol, fencaramid, (SZX0722) fempiclonil, fenpropidin, fenpropimorf, acetato de fentin, hidróxido de fentin, fluazinam, fludioxolin, flumetover (RPA 403397), fluquinconazol, flusilazol, flutolanil, flutriafol, folpet, fosetil-aluminio, furalaxil, furametapir (S-82658), hexaconazol, imazalil, 6- yodo-3-propil-2-propiloxi-4(3H)-quinazolina, ipconazol, iprobenfos, iprodina, isoconazol, isoprotiolan, casugamicina, cresoxin-metilo, mancozeb, maneb, mefenoxam, mepronil, metalaxil, metconazol, metominostrobin/fenominostrobin (SSF-126), miconazol, miclobutanil, neo-asozin (metanearsonato férrico), nuarimol, oxadixil, penconazol, pencicuron, picoxistroin, probenazol, ploccloraz, propamocarb, propiconazol, piraclostrobin, pirifenox, pirimetanil, procloraz, pirifenox, piroquilon, quinoxifen, espiroximina, azufre, tebuconazol, tetraconazol, tiabnedazol, trifluzamida, tiofanato-metilo, tiram, triadimefon, triadimenol, triarimol, triciclazol, trifloxistrobin, trifoina, triticonazol, uniconazol, validamicina y vinclozolin; nematocidas tales como aldoxicarb y fenamifos; bactericidas tales como estreptomicina; acaricidas tales como amitraz, quinometionat, clorobenzilato, cihexatin, dicofol,

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dienoclor, etoxazol, fenazaquin, oxido fenbutatin, fenpropatrin, fenperoximato, hexitiazox, propargita, piridaben y tebufenpirad; y agentes biológicos tales como *Bacilos turingiensis*, *Bacillus turingiensis* delta endotoxina, baculovirus, y bacteria entomopatogénica, virus y hongos. Los índices de peso de estos varios socios que se mezclan a los compuestos de esta invención típicamente están entre 100:1 y 1:100, preferiblemente entre 30:1 y 1:30, más preferiblemente entre 10:1 y 1:10, y más preferiblemente entre 4:1 y 1:4.

Tales como el compuesto 1 de esta invención son considerados por inhibir la transmetilasa C24 en la senda de la biosíntesis de ergosterol. En ciertas instancias, las combinaciones con otros fungicidas que tienen un espectro de control similar pero un modo diferente de acción serán particularmente ventajosos para el manejo de la resistencia (especialmente si el otro fungicida también tiene un espectro de control similar) Ejemplos de otros fungicidas que tienen modo diferente de acción incluyen los compuestos que actúan el complejo bc₁ del sitio de transferencia de electrón respiratorio mitocondrial del hongo, compuestos que actúan en la enzima de metilaza de la senda de biosíntesis del

esterol, compuestos morfolino y piperidino que actúan sobre la senda de diosíntesis del esteroles y los fungicidas pirimidina.

LOS FUNGICIDAS DEL COMPLEJO bc_1

Los fungicidas estrobilurin tales como el azoxistrobin, cresoxim-metilo, metominostrobin/fenominostrobin (SSF-126), picoxistrobin, piraclostrobin y trifloxistrobin son conocidos por tener una forma fungicida de acción que inhibe el complejo bc_1 en la cadena de respiración mitocondrial (Angew.Chem.Int.Ed.,1999,38,1328-1349) (E)-2-[[6-(2-cianofenoxi)-4-pirimidinil]oxi]- α -(metoxiimino)bencenoacetato de metilo (también conocido como azoxistrobin) se describe como un inhibidor del complejo bc_1 en *Biochemical, Society Transactions* 1993, 22, 68S. (E)- α -(metoxiimino)-2-[(2-metilfenoxi)metil]bencenoacetato de metilo (también conocido como cresoxim-metilo) se describe como un inhibidor del complejo bc_1 en *Biochemical Society Transactions* 1993, 22, 64S. (E)-2-[(2,5-Dimetilfenoxi)metil]- α -(metioxiimino)-N-metilbencenoacetamida se describió como un inhibidor del complejo bc_1 en *Biochemistry and Cell Biology* 1995, 85

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(3), 306-311. Otros compuestos que inhiben el complejo bc_1 en la cadena de respiración mitocondrial incluyen famoxadone y fenamidona.

El complejo bc_1 es algunas veces referido a por otros nombres en la literatura bioquímica, que incluyen complejo III de la cadena de transferencia de electrón, y ubihidroquinona: oxidoreductasa c citocromo. Este se identifica únicamente por el número de la Comisión de Enzima EC 1.10.2.2. El complejo bc_1 se describe en, por ejemplo, *J. Biol. Chem.* 1989, 264, 14543-38; *Methods Enzymol.* 1986, 126, 253-71; y las referencias citadas en estas.

Los Fungicidas Inhibidores de la Biosíntesis de Esterol

La clase de inhibidores de biosíntesis de esterol incluyen los compuestos DMI y no DMI, que controlan hongos por la inhibición de las enzimas en la senda de biosíntesis de esterol. Los fungicidas DMI tienen un sitio común de acción dentro de la senda de biosíntesis de esterol del hongo; que es una inhibición de metilación en la posición 14 de lanosterol o dihidrolanosterol 24-metileno, que son precursores de esteroides en los hongos.

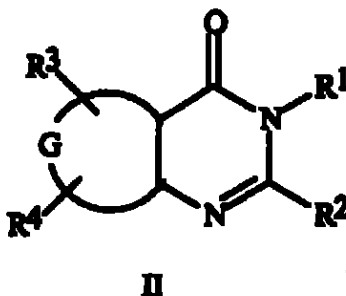
Los compuestos que actúan en este sitio se refieren a menudo a inhibidores de demetilasa, fungicidas DMI, o DMI. La enzima demetilasa es algunas veces referida mediante otros nombres en la literatura bioquímica que incluyen citocromo P-450 (14DM). La enzima demetilasa se describe en, por ejemplo, *J. Biol. Chem.* 1992, 267, 13175-79 y las referencias citadas en estas. Los fungicidas DMI caen dentro de varias clases: azoles (que incluyen triazoles y imidazoles), pirimidinas, piperazinas y piridinas. Los triazoles incluyen bromuconazol, ciproconazol, difenoconazol, diniconazol, epoxiconazol, fenbuconazol, fluquinconazol, flusilazol, flutriafol, hexaconazol, ipconazol, metconazol, penconazol, propiconazol, tebuconazol, tetraconazol, triadimefon, triadimenol, triticonazol y uniconazol. Los imidazoles incluyen clotrimazol, econazol, imazalilo, isoconazol, miconazol y procloraz. Las pirimidinas incluyen fenarimol, nuarimol y triarimol. Las piperazinas incluyen triforina. Las piridinas incluyen butiobato y pirifenox. Las investigaciones bioquímicas han mostrado que todos los fungicidas mencionados anteriormente son fungicidas DMI como se describió por K. H. Kuck, et al. en *Modern Selective fungicides-properties, applications*

and mechanisms of action, Lyr, H. , Ed.; Gustav Fischer Verlag: New York, 1995, 205-258.

Los fungicidas DMI han sido agrupados juntos para distinguirlos de otros inhibidores de biosíntesis de esterol, tales como los fungicidas morfolino y piperidino. Los morfolinos y piperidinos también son inhibidores de biosíntesis de esterol pero han sido mostrados por inhibir otras etapas en la senda de biosíntesis de esterol. Los morfolinos incluyen aldimorf, dodemorf, fenpropimorf, tridemorf y trimorfamida. Las piperidinas incluyen fenpropidina. Las investigaciones bioquímicas han mostrado que todos los fungicidas de morfolino y piperidino mencionados anteriormente son fungicidas inhibidores de la biosíntesis de esterol como se describió por K. H. Kuck, et al. en *Modern Selective fungicides-properties, applications and mechanisms of action*, Lyr, H. , Ed.; Gustav Fischer Verlag: New York, 1995, 185-204.

Fungicidas Pirimidona

Los fungicidas pirimidona incluyen los compuestos de fórmula II



En donde G es un anillo fenilo, tiofeno o piridino fusionado;

R¹ es alquilo (C₁-C₆);

R² es alquilo (C₁-C₆); o alcoxi (C₁-C₆)

R³ es halógeno; y

R⁴ es hidrógeno o halógeno.

Los fungicidas pirimidona son descritos en la solicitud de patente internacional WO 94/26722, patente U.S. No. 6,066,638, patente U.S. No. 6,245,770, patente U.S. No. 6,262,058 y patente U.S. No. 6,277,858.

Son destacados los fungicidas de pirimidona seleccionados a partir del grupo:

6-bromo-3-propil-2-propiloxi-4(3H)-quinazolinona, 6,8-di-yodo-3-propil-2-propiloxi-4(3H)-quinazolinona, 6-yodo-3-propil-2-propiloxi-4(3H)-quinazolinona, 6-cloro-2-propoxi-3-propiltieno[2,3-d]pirimidin-4(3H)-ona, 6-bromo-2-propoxi-3-propiltieno[2,3-d]pirimidin-4(3H)-ona, 7-bromo-2-propoxi-3-propiltieno[3,2-d]pirimidin-4(3H)-ona, 6-bromo-2-propoxi-3-propilpirido[2,3-d]pirimidin-4(3H)-ona, 6,7-dibromo-2-propoxi-3-propiltieno[3,2-d]pirimidin-4(3H)-ona, y 3-(ciclopropilmetil)-6-yodo-2-(propiltio)pirido[2,3-d]pirimidin-4(3H)-ona.

Son destacadas las combinaciones de los compuestos de fórmula I (por ejemplo el compuesto 13) con azoxistrobin, kesoxim-metil, trifloxistrobin, piraclostrobin, picoxistrobin, dimoxistrobin (SSF-129), metominostrobin/fenominostrobin (SSF-126), carbendazim, clorotalonil, quinoxifen, metrafenona, ciflufenamid, fenpropidina, fenpropimorf, bromuconazol, ciproconazol, difenoconazol, epoxiconazol, fenbuconazol, flusilazol, hexaconazol, ipconazol, metconazol, penconazol, propiconazol, proquinazid, tebuconazol, triticonazol, procloraz, boscalid/nicobifen.

Preferidos para mejor control de enfermedades de las plantas ocasionados por hongos patógenos de las plantas (por ejemplo índice de uso más bajo o de amplio espectro de patógenos de plantas controlados) o manejo de la resistencia y mezclas de un compuesto de esta invención con un fungicida seleccionado del grupo: azoxistrobin, kesoxim-methyl, trifloxistrobin, piraclostrobin, picoxistrobin, dimoxistrobin (SSF-129), metominostrobin/fenominostrobin (SSF-126), quinoxifen, metrafenona, ciflufenamid, fenpropidina, fenpropimorf, ciproconazol, epoxiconazol, flusilazol, metconazol, propiconazol, proquinazid, tebuconazol, triticonazol.

Mezclas especialmente preferidas (los números de los compuestos se refieren a los compuestos en el índice de las tablas A) se seleccionan del grupo: combinaciones de los compuestos 11, Compuestos 13, Compuesto 17 o Compuesto 27 con azoxistrobin, combinaciones de Compuesto 11, Compuesto 13, Compuesto 17 o Compuesto 27 con kesoxim-metilo, combinaciones de Compuesto 11, Compuesto 13, Compuesto 17 o Compuesto 27 con trifloxistrobin, combinaciones de Compuesto 11, Compuesto 13, Compuesto 17 o Compuesto 27 con piraclostrobin, combinaciones de Compuesto 11, Compuesto 13, Compuesto 17 o Compuesto 27

con picoxistrobin, combinaciones de Compuesto 11, Compuesto 13, Compuesto 17 o Compuesto 27 con dimoxistrobin (SSF-129), combinaciones de Compuesto 11, Compuesto 13, Compuesto 17 o Compuesto 27 con metominostrobin/fenominostrobin (SSF-126), combinaciones de Compuesto 11, Compuesto 13, Compuesto 17 o Compuesto 27 con quinoxifen, combinaciones de Compuesto 11, Compuesto 13, Compuesto 17 o Compuesto 27 con metrafenoina, combinaciones de Compuesto 11, Compuesto 13, Compuesto 17 o Compuesto 27 con ciflufenamid, combinaciones de Compuesto 11, Compuesto 13, Compuesto 17 o Compuesto 27 con fenpropidiina, combinaciones de Compuesto 11, Compuesto 13, Compuesto 17 o Compuesto 27 con fenpropimorf, combinaciones de Compuesto 11, Compuesto 13, Compuesto 17 o Compuesto 27 con ciproconazol, combinaciones de Compuesto 11, Compuesto 13, Compuesto 17 o Compuesto 27 con epoxiconazol, combinaciones de Compuesto 11, Compuesto 13, Compuesto 17 o Compuesto 27 con flusilazol, combinaciones de Compuesto 11, Compuesto 13, Compuesto 17 o Compuesto 27 con metconazol, combinaciones de Compuesto 11, Compuesto 13, Compuesto 17 o Compuesto 27 con propiconazol, combinaciones de Compuesto 11, Compuesto 13, Compuesto 17 o Compuesto 27 con proquinazid, combinaciones de

Compuesto 11, Compuesto 13, Compuesto 17 o Compuesto 27 con tebuconazol, combinaciones de Compuesto 11, Compuesto 13, Compuesto 17 o Compuesto 27 con triticonazol.

Mezclas preferidas específicamente (los números de los compuestos se refieren a compuestos en el índice de las tablas B) también se seleccionan del grupo: combinaciones de compuesto 54 con azoxistrobin, combinaciones de compuesto 54 con kesoxim-methyl, combinaciones de compuesto 54 con trifloxistrobin, combinaciones de compuesto 54 con piraclostrobin, combinaciones de compuesto 54 con picoxistrobin, combinaciones de compuesto 54 con dimoxistrobin (SSF- 129), combinaciones de compuesto 54 con metominostrobin/fenominostrobin (SSF- 126), combinaciones de compuesto 54 con quinoxifen, combinaciones de compuesto 54 con metrafenona, combinaciones de compuesto 54 con ciflufenamid, combinaciones de compuesto 54 con fenpropidina, combinaciones de compuesto 54 con fenpropimorf, combinaciones de compuesto 54 con ciproconazol, combinaciones de compuesto 54 con epoxiconazol, combinaciones de compuesto 54 con flusilazol, combinaciones de compuesto 54 con metconazol, combinaciones de compuesto 54 con propiconazol,

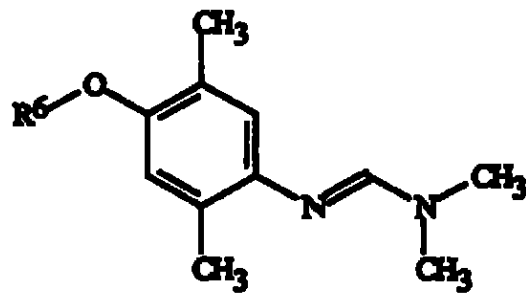
combinaciones de compuesto 54 con proquinazid,
combinaciones de compuesto 54 con tebuconazol,
combinaciones de compuesto 54 con triticonazol.

El control de las enfermedades de la planta ordinariamente se acompaña mediante la aplicación de una cantidad efectiva de un compuesto de esta invención ya sea pre o postinfección, a la porción de la planta a ser protegida tal como las raíces, tallos, follaje, frutas, semillas, tubérculos o bulbos, o al medio (tierra o arena) en la que las planta a ser protegidas están creciendo. Los compuestos también pueden ser aplicados a la semilla para proteger la semilla y la plántula.

Los índices de aplicación para estos compuestos pueden ser influenciados por muchos factores del ambiente y deben ser determinados bajo las condiciones de uso actuales. El follaje puede normalmente ser protegido cuando se trata en un índice de menos de 1 g/ha a 5.000 g/ha de ingrediente activo. La semilla y las plántulas pueden normalmente ser protegidas cuando se trata la semilla en un índice de 0,1 a 10g por kilogramo de semilla.

Los siguientes ensayos demostraron la eficacia del control de los compuestos de esta invención sobre patógenos específicos. La protección de control patógeno producido por los compuestos no se limita, sin embargo, a estas especies. Ver índice de tablas A-E para las descripciones de los compuestos. Las siguientes abreviaturas se utilizan en los índices de las tablas que siguen: t significa terciario, s significa secundario, n significa normal, i significa iso, c significa ciclo, Pr significa propilo, i-Pr significa isopropilo, c-Pr significa ciclopropilo, Bu significa butilo, CN significa ciano y "Ex" significa "Ejemplo" y seguido por un número que indica en qué ejemplo se preparó el compuesto.

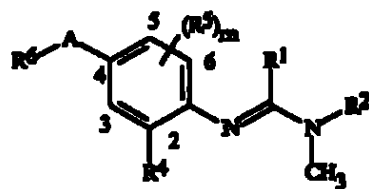
INDICE TABLA A



Compd.	R ⁶	d.f. (° C)
1 (Ex. 1)	CH ₂ CH-C(CH ₃) ₂	•
2	CH ₂ CH-C(CH ₃)(CH ₂) ₂ CH-C(CH ₃) ₂	•
3	CH ₂ (CH-C(CH ₃)(CH ₂) ₂) ₂ CH-C(CH ₃) ₂	•
4	CH ₂ C(-O)C(CH ₃) ₃	•
5	(CH ₂) ₄ CH=CH ₂	•
6	(CH ₂) ₃ CH=CH ₂	•
7	(CH ₂) ₄ C(OCH ₃) ₃	•
8	(CH ₂) ₂ CH(CH ₃) ₂	•
9	(CH ₂) ₃ C(=CH ₂)CH(CH ₃) ₂	•
10	(CH ₂) ₂ CH(CH ₃)(CH ₂) ₃ CH(CH ₃) ₂	•
11	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃	•
12	(CH ₂) ₂ C(CH ₃) ₃	•
13 (Ex. 2)	(CH ₂) ₃ CH(CH ₃) ₂	•
14	(S)-(CH ₂) ₂ CH(CH ₃)CH ₂ CH ₂ CH-C(CH ₃) ₂	•
15	(R)-(CH ₂) ₂ CH(CH ₃)CH ₂ CH ₂ CH-C(CH ₃) ₂	•
16	(CH ₂) ₃ CH ₂ Cl	•
17	(CH ₂) ₄ CH ₂ Cl	•
18	CH(CH ₃)(CH ₂) ₃ CH ₃	•
19	(CH ₂) ₄ CH ₃	•
20	(CH ₂) ₅ CH ₃	•

Compuesto	R ⁶	p.f. °C
21	(CH ₂) ₆ CH ₃	•
22	(CH ₂) ₇ CH ₃	•
23	(CH ₂) ₈ CH ₃	•
24	(CH ₂) ₉ CH ₃	•
25	(CH ₂) ₁₁ CH ₃	53-54°
26 (Ex. 3)	(CH ₂) ₃ Si(CH ₃) ₃	•
27	(CH ₂) ₃ OSi(CH ₃) ₂ C(CH ₃) ₃	•
28 (Ex. 4)	CH(CH ₂ CH ₂ CH ₂ CH ₃) ₂	•
29	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH ₂ CH ₃	•
30	CH(CH ₂ CH ₂ CH ₂ CH ₂ CH ₃) ₂	•
31	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂	•
32	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂	•
33	CH(CH ₂ CH ₂ CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂	•
34	CH(C ₂ H ₅) ₂	•
35	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂	•
36	CH(CH ₂ CH ₂ CH ₃) ₂	•
37	CH(CH ₂ CH ₂ CH ₂ CH ₃)(CH ₂) ₅ CH ₃	•
38	CH ₂ C(-CH ₂)CH ₂ Si(CH ₃) ₃	•
39	CH ₂ CH ₂ CH-CH(CH ₃) ₂	•
40	CH ₂ CH-CHC(CH ₃) ₃	•
41	CH ₂ CH ₂ OC(CH ₃) ₃	•
42	(CH ₂) ₃ C(Cl) ₂ (CH ₃) ₂	•
43	(CH ₂) ₃ C(CH ₃) ₂ (OCH ₃)	•
44	(CH ₂) ₃ C(CH ₃) ₂ (OC ₂ H ₅)	•
45	(CH ₂) ₃ C(CH ₃) ₂ OH	•
46	(CH ₂) ₃ C(Cl)(CH ₃)(CH(CH ₃) ₂)	•
47	(CH ₂) ₄ C(CH ₃) ₂ (CN)	•
48	(CH ₂) ₄ CH(CH ₃) ₂	•
49	(CH ₂) ₃ CH(CH ₃)(CH(CH ₃) ₂)	•
50	(CH ₂) ₃ C(CH ₃) ₃	•
51	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	•
52	(CH ₂) ₃ Si(CH ₃) ₂ (CH ₂ CH ₂ CH ₃)	•
53	(CH ₂) ₃ Si(CH ₃)(C ₂ H ₅) ₂	•

INDICE TABLA B



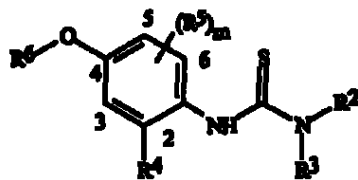
! Comp	m	Δ	R ¹	R ²	R ⁴	R ⁵	R ⁶	p.f. (°C.)
54 (Ex. 5)	1	O	H	C ₂ H ₅	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	•
55	2	O	H	CH ₃	Cl	3,5-di-Cl	(CH ₂) ₃ Si(CH ₃) ₃	•
56	1	O	H	CH ₂ CH=CH 2	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	•
57	1	O	H	C ₂ H ₅	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	•
58	1	O	H	n-Pr	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	•
59	1	O	H	C ₂ H ₅	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₃	•
60	1	O	H	n-Pr	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₃	•
61	1	O	H	o-Pr	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	•
62	1	O	H	n-Bu	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₃	•
63	1	O	H	i-Pr	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₃	•
64	1	O	H	CH ₂ CH=CH 2	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₃	•
65	1	O	H	o-Pr	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	•
66	1	O	H	C ₂ H ₅	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	•
67	1	O	H	n-Pr	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	•
68	1	O	H	n-Bu	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	•
69	1	O	H	i-Pr	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	•
70	1	O	H	CH ₂ CH=CH 2	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	•
71	1	O	H	o-Pr	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	•
72	1	O	H	o-Pr	CH ₃	5-F	(CH ₂) ₃ Si(CH ₃) ₃	•
73	1	O	H	n-Bu	CH ₃	5-i-Pr	(CH ₂) ₃ Si(CH ₃) ₃	•
74	1	O	H	i-Pr	CH ₃	5-i-Pr	(CH ₂) ₃ Si(CH ₃) ₃	•
75	1	O	H	n-Pr	CH ₃	5-i-Pr	(CH ₂) ₃ Si(CH ₃) ₃	•
76	1	O	H	C ₂ H ₅	CH ₃	5-i-Pr	(CH ₂) ₃ Si(CH ₃) ₃	•
96	1	O	CH ₃	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂	•
97	1	O	CH ₃	CH ₃	CH ₃	5-CH ₃	CH(p-Pr)(CH ₂) ₇ CH(CH ₃) ₂	•

Comp	m	Δ	R ¹	R ²	R ⁴	R ⁵	R ⁶	p.f. (°C)
98	1	O	CH ₃	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃	•
99	1	O	CH ₃	CH ₃	CH ₃	5-CH ₃	CH((CH ₂) ₄ CH ₃) ₂	•
100	1	O	CH ₃	CH ₃	CH ₃	5-CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂	•
101	1	O	CH ₃	CH ₃	CH ₃	5-CH ₃	CH(n-Pr) ₂	•
102	1	O	CH ₃	CH ₃	CH ₃	5-CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂	•
103	1	O	CH ₃	CH ₃	CH ₃	5-CH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂	•
104	1	O	CH ₃	CH ₃	CH ₃	5-CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ C(=CH ₂)C H ₃	•
105	1	S	H	CH ₃	CH ₃	5-CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂	•
110	1	O	CH ₃	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₂	•
111	1	O	CH ₃	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₂	•
115	2	O	H	CH ₃	CH ₃	3,5-di-Cl	(CH ₂) ₃ CH(CH ₃) ₂	•
116	2	O	CH ₃	CH ₃	CH ₃	3,5-di-Cl	(CH ₂) ₃ CH(CH ₃) ₂	•
126	1	O	H	CH ₃	Cl	5-Cl	(CH ₂) ₃ CH(CH ₃) ₂	•
128	1	O	CO ₂ C H ₃	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	•
129	1	O	CO ₂ C H ₃	C ₂ H ₅	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	•
130	1	O	CO ₂ C H ₃	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	•
131	1	O	CO ₂ C H ₃	C ₂ H ₅	CH ₃	5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	•
132	1	O	H	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂	•
140	2	O	H	C ₂ H ₅	CH ₃	3-Cl-5- CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	•
141	1	S	H	CH ₃	CH ₃	5-CH ₃	CH(n-Pr)(n-Bu)	•
142	1	S	CH ₃	CH ₃	CH ₃	5-CH ₃	CH(n-Pr)(n-Bu)	•
143	1	S	CH ₃	CH ₃	CH ₃	5-CH ₃	CH(n-Bu) ₂	•
144	1	N H	CH ₃	CH ₃	CH ₃	5-CH ₃	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂	•
145	1	N H	H	CH ₃	CH ₃	5-CH ₃	CH((CH ₂) ₄ CH ₃) ₂	•
146	1	N H	H	CH ₃	CH ₃	5-CH ₃	CH(n-Pr)(n-Bu)	•
147	1	N	H	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₂ CH(CH ₃)CH ₂ C(CH ₃) ₃	•

Comp no	B	A	R ¹	R ²	R ⁴	R ⁵	R ⁶	p.f. (CC)
		H						
148	1	N H	H	CH ₃	CH ₃	5-CH ₃	CH(<i>n</i> -Pr)(CH ₂) ₂ CH(CH ₃) ₂	•
149	1	N H	H	CH ₃	CH ₃	5-CH ₃	CH(C ₂ H ₅)(CH) ₂ CH(CH ₃) ₂	•
150	1	N H	H	CH ₃	CH ₃	5-CH ₃	CH(<i>n</i> -Bu) ₂	•
151	1	N H	H	CH ₃	CH ₃	5-CH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂	•
152	1	N H	H	CH ₃	CH ₃	5-CH ₃	CH(C ₂ H ₅)CH ₂ CH ₂ C(-CH ₃)C H ₃	•
153	1	N H	H	CH ₃	CH ₃	5-CH ₃	CH ₂ CH ₂ S(<i>n</i> -Bu)	•
154	1	N H	H	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂	•
155	1	S	H	CH ₃	CH ₃	5-CH ₃	CH(<i>n</i> -Bu) ₂	•
156	1	S	H	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂	•
157	1	S	H	CH ₃	CH ₃	5-CH ₃	CH(<i>n</i> -Pr) ₂	•
158	1	S	H	CH ₃	CH ₃	5-CH ₃	CH ₂ CH(CH ₃)CH ₂ C(<i>n</i> -Bu)	•
159	1	S	H	CH ₃	CH ₃	5-CH ₃	CH(CH ₂ CH ₂ CH(CH ₃) ₂) ₂	•
160	1	S	H	CH ₃	CH ₃	5-CH ₃	CH(<i>n</i> -Pr)(<i>n</i> -Bu)	•
161	1	S	H	CH ₃	CH ₃	5-CH ₃	CH(C ₂ H ₅)CH ₂ C(-CH ₃)CH ₃	•
162	1	S	H	CH ₃	CH ₃	5-CH ₃	CH ₂ (C ₂ H ₅)CH ₂ CH ₂ CH(CH ₃) ₂	•
171	2	O	CH ₃	CH ₃	CH ₃	3,5-di-Cl	(CH ₂) ₃ Si(CH ₃) ₃	160- 162
172	1	O	H	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	55-58
173	1	O	CH ₃	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	•
174	1	N H	H	CH ₃	CH ₃	5-CH ₃	C(O)CH ₂ S(O)(<i>n</i> -Bu)	•
175	1	O	H	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ C(CH ₃) ₃	•
176	1	O	H	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ C(CH ₃) ₃	•
182	2	O	H	C ₂ H ₅	CH ₃	3,5-di-Cl	(CH ₂) ₃ Si(CH ₃) ₃	•
189	1	N H	H	CH ₃	CH ₃	5-CH ₃	C(O)NHCCH ₂ CH(CH ₃) ₂	147- 149
190	1	N	H	CH ₃	CH ₃	5-CH ₃	C(O)NHCH ₂ C(CH ₃) ₃	180-

Comp	m	Δ	R ¹	R ²	R ⁴	R ⁵	R ⁶	p.f. (°C)
		H						182
193	1	N H	H	CH ₃	CH ₃	5-CH ₃	C(O)N(CH ₃)CH ₂ C(CH ₃) ₃	158- 160
196	1	O	H	C ₂ H ₅	CH ₃	5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	*
197	1	O	H	C ₂ H ₅	CH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₃	*
198	1	O	H	C ₂ H ₅	CH ₃	5-Cl	CH(CH ₃)CH ₂ CH ₂ CH(CH ₃) ₂	*
199	1	O	H	C ₂ H ₅	CH ₃	5-CH ₃	(CH ₂) ₃ C(CH ₃) ₃	*
200	2	O	H	C ₂ H ₅	CH ₃	3-Cl-5- CH ₃	(CH ₂) ₃ CH(CH ₃) ₂	*
201	2	O	H	C ₂ H ₅	CH ₃	3-Cl-5- CH ₃	(CH ₂) ₃ C(CH ₃) ₃	*
202	1	O	H	C ₂ H ₅	OCH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₃	*
203	1	O	H	C ₂ H ₅	SCH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₃	*
204	1	O	H	<i>o</i> -Pr	SCH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₃	62-64
205	1	O	H	<i>i</i> -Pr	SCH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₃	*
206	1	O	H	<i>n</i> -Pr	SCH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₃	*
207	1	O	H	CHC=CH	CH ₃	5-Cl	(CH ₂) ₃ CH(CH ₃) ₃	*
208	2	O	H	C ₂ H ₅	CH ₃	5-Cl-6-Br	(CH ₂) ₃ CH(CH ₃) ₃	*

ÍNDICE TABLA C

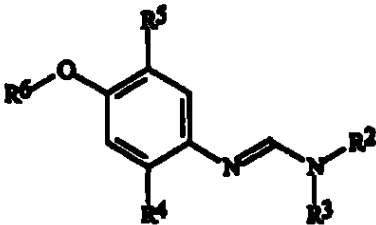


Comp	m	R ²	R ³	R ⁴	R ⁵	R ⁶	p.f. (°C)
77	1	C ₂ H ₅	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	94-95
78	1	<i>n</i> -Pr	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	*
79	1	C ₂ H ₅	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ Si(CH ₃)(C ₂ H ₅) ₂	81-82
80	2	C ₂ H ₅	CH ₃	Cl	3,5-diCl	(CH ₂) ₃ Si(CH ₃) ₃	94-97
81	2	<i>n</i> -Pr	CH ₃	Cl	3,5-diCl	(CH ₂) ₃ Si(CH ₃) ₃	121-123
82	2	<i>i</i> -Pr	CH ₃	Cl	3,5-diCl	(CH ₂) ₃ Si(CH ₃) ₃	118-119
83	2	CH ₂ CH=CH ₂	CH ₃	Cl	3,5-diCl	(CH ₂) ₃ Si(CH ₃) ₃	64-65
84	1	C ₂ H ₅	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₂ (C ₂ H ₅)	*

! Comp	m	R ²	R ³	R ⁴	R ⁵	R ⁶	p.f. (°C)
85	1	CH ₂ CH-CH ₂	CH ₃	CH ₃	S-Cl	(CH ₂) ₃ Si(CH ₃) ₃	*
86	1	CH ₂ CH-CH ₂	CH ₃	CH ₃	S-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	*
87	1	C ₂ H ₅	CH ₃	CH ₃	S-F	(CH ₂) ₃ Si(CH ₃) ₃	*
88	1	n-Pr	CH ₃	CH ₃	S-F	(CH ₂) ₃ Si(CH ₃) ₃	*
89	1	n-Bu	CH ₃	CH ₃	S-F	(CH ₂) ₃ Si(CH ₃) ₃	*
90	1	i-Pr	CH ₃	CH ₃	S-F	(CH ₂) ₃ Si(CH ₃) ₃	*
91	1	n-Bu	CH ₃	CH ₃	S-i-Pr	(CH ₂) ₃ Si(CH ₃) ₃	*
92	1	i-Pr	CH ₃	CH ₃	S-i-Pr	(CH ₂) ₃ Si(CH ₃) ₃	*
93	1	n-Pr	CH ₃	CH ₃	S-i-Pr	(CH ₂) ₃ Si(CH ₃) ₃	*
94	1	C ₂ H ₅	CH ₃	CH ₃	S-i-Pr	(CH ₂) ₃ Si(CH ₃) ₃	*
106	1	C ₂ H ₅	CH ₃	CH ₃	S-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂	*
107	1	CH ₃	CH ₃	CH ₃	S-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂	*
108	1	C ₂ H ₅	C ₂ H ₅	CH ₃	S-CH ₃	(CH ₂) ₃ CH(CH ₃) ₂	*
112	1	CH ₃	C ₂ H ₅	CH ₃	S-Cl	(CH ₂) ₃ CH(CH ₃) ₂	138-140
113	1	C ₂ H ₅	C ₂ H ₅	CH ₃	S-Cl	(CH ₂) ₃ CH(CH ₃) ₂	191-192
114	1	C ₂ H ₅	CH ₃	CH ₃	S-Cl	(CH ₂) ₃ CH(CH ₃) ₂	58-60
117	2	C ₂ H ₅	C ₂ H ₅	CH ₃	3,5-di-Cl	(CH ₂) ₃ CH(CH ₃) ₂	112-114
118	2	C ₂ H ₅	CH ₃	CH ₃	3,5-di-Cl	(CH ₂) ₃ CH(CH ₃) ₂	68-70
119	2	CH ₃	CH ₃	CH ₃	3,5-di-Cl	(CH ₂) ₃ CH(CH ₃) ₂	136-138
120	1	C ₂ H ₅	C ₂ H ₅	CH ₃	S-Cl	(CH ₂) ₃ C(CH ₃) ₃	118-120
121	2	CH ₃	CH ₃	CH ₃	3,5-di-Cl	(CH ₂) ₃ C(CH ₃) ₃	150-152
122	2	C ₂ H ₅	CH ₃	CH ₃	3,5-di-Cl	(CH ₂) ₃ C(CH ₃) ₃	122-124
123	1	CH ₃	CH ₃	Cl	S-Cl	(CH ₂) ₃ CH(CH ₃) ₂	128-130
124	1	C ₂ H ₅	CH ₃	Cl	S-Cl	(CH ₂) ₃ CH(CH ₃) ₂	70-72
125	1	C ₂ H ₅	C ₂ H ₅	Cl	S-Cl	(CH ₂) ₃ CH(CH ₃) ₂	90-92
127	1	i-Pr	C ₂ H ₅	Cl	S-Cl	(CH ₂) ₃ CH(CH ₃) ₂	*
133	2	CH ₃	CH ₃	CH ₃	3-Cl-5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	128-130
134	2	C ₂ H ₅	CH ₃	CH ₃	3-Cl-5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	110-112
136	2	CH ₃	CH ₃	CH ₃	3-Cl-5-CH ₃	(CH ₂) ₃ CH(CH ₃) ₃	136-138
137	2	C ₂ H ₅	CH ₃	CH ₃	3-Cl-5-CH ₃	(CH ₂) ₃ CH(CH ₃) ₃	*
138	2	CH ₃	CH ₃	CH ₃	3-Cl-5-CH ₃	(CH ₂) ₃ C(CH ₃) ₃	148-150
139	2	C ₂ H ₅	CH ₃	CH ₃	3-Cl-5-CH ₃	(CH ₂) ₃ C(CH ₃) ₃	120-123
163	1	C ₂ H ₅	C ₂ H ₅	CH ₃	S-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	*
164	1	C ₂ H ₅	CH ₃	CH ₃	S-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	*
165	1	CH ₃	CH ₃	CH ₃	S-CH ₃	(CH ₂) ₂ O(<i>n</i> -Bu)	*

! Comp	m	R ²	R ³	R ⁴	R ⁵	R ⁶	p.f. (°C.)
167	1	CH ₃	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ Si(CH ₃) ₃	*
168	1	CH ₃	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	98-99
169 (Ex. 6)	1	C ₂ H ₅	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	71-72
170	1	C ₂ H ₅	C ₂ H ₅	CH ₃	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	62-63
177	1	C ₂ H ₅	C ₂ H ₅	CH ₃	5-Cl	(CH ₂) ₃ C(CH ₃) ₃	*
178	1	C ₂ H ₅	CH ₃	CH ₃	5-Cl	(CH ₂) ₃ C(CH ₃) ₃	88-90
179	2	C ₂ H ₅	C ₂ H ₅	CH ₃	3,5-di-Cl	(CH ₂) ₃ Si(CH ₃) ₃	90-101
180	2	CH ₃	CH ₃	CH ₃	3,5-di-Cl	(CH ₂) ₃ Si(CH ₃) ₃	89-90
181	2	C ₂ H ₅	CH ₃	CH ₃	3,5-di-Cl	(CH ₂) ₃ Si(CH ₃) ₃	79-82
183	1	CH ₃	CH ₃	Cl	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	75-78
184	1	C ₂ H ₅	CH ₃	Cl	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	85-88
185	1	C ₂ H ₅	C ₂ H ₅	Cl	5-Cl	(CH ₂) ₃ Si(CH ₃) ₃	91-92
186	1	CH ₃	CH ₃	Cl	5-Cl	(CH ₂) ₃ C(CH ₃) ₃	106-108
187	1	C ₂ H ₅	CH ₃	Cl	5-Cl	(CH ₂) ₃ C(CH ₃) ₃	86-87
188	1	C ₂ H ₅	C ₂ H ₅	Cl	5-Cl	(CH ₂) ₃ C(CH ₃) ₃	88-89
191	1	C ₂ H ₅	C ₂ H ₅	CH ₃	5-CH ₃	(CH ₂) ₃ C(CH ₃) ₃	*
192	1	CH ₃	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ C(CH ₃) ₃	102-104
194	1	C ₂ H ₅	CH ₃	CH ₃	5-CH ₃	(CH ₂) ₃ C(CH ₃) ₃	82-84

ÍNDICE TABLA D



Comp	R ² +R ³	R ⁴	R ⁵	R ⁶	p.f. l. (°C.)
95	(CH ₂) ₄	CH ₃	Cl	(CH ₂) ₃ Si(CH ₃) ₃	*
209	(CH ₂) ₃	CH ₃	Cl	(CH ₂) ₃ Si(CH ₃) ₃	*

* Ver índice Tabla F para datos ¹H RMN

ÍNDICE TABLA E

Comp	Datos ¹ H RMN (Solución CDCl ₃ a menos que se indique otra cosa)*
1	8 1.72 (s,3H), 1.78 (s,3H), 2.17 (s,3H), 2.24 (s,3H), 2.99 (s,6H), 4.46 (d,2H), 5.5 (t,1H), 6.55 (s,1H), 6.66 (s,1H), 7.38 (s,1H).

000343

Comp	Datos ¹ H RMN (Solución CDCl ₃ , a menos que se indique otra cosa) ^a
2	δ 1.6-1.8 (m,9H), 1.9-2.5 (m,10H), 2.98(a,6H), 4.46(d,2H), 5.1 (m,1H), 5.5 (m,1H), 6.54 (a,1H), 6.66 (a,1H), 7.38 (a,1H).
3	δ 1.6-2.4 (m,26H), 2.99 (a,6H), 4.5(d,2H), 5-5.2 (m,2H), 5.5 (m,1H), 6.54 (a,1H), 6.66 (a,1H), 7.38 (a,1H).
4	δ 1.25 (a,9H), 2.21(a,3H), 2.23 (a,3H), 2.99 (a,6H), 4.79 (a,2H), 6.50 (a,1H), 6.55 (a,1H), 7.37 (a,1H).
5	δ 1.5-2.3 (m,12H), 2.98(a,6H), 3.92 (t,2H), 4.95-5.1 (m,2H), 5.7-5.9 (m,1H), 6.54 (a,1H), 6.63 (a,1H), 7.37 (a,1H).
6	δ 1.8-1.92 (m,2H), 2.17-2.3 (m,8H), 2.98 (a,6H), 3.92 (t,2H), 4.97-5.13 (m,2H), 5.8-5.95 (m,1H), 5.55 (a,1H), 6.64 (a,1H), 7.37 (a,1H).
7	δ 1.6-2.04 (m,6H), 2.17 (a,3H), 2.22 (a,3H), 2.99 (a,6H), 3.26 (a,9H), 3.97 (t,2H), 6.54 (a,1H), 6.64 (a,1H), 7.38 (a,1H).
8	δ 0.96 (d,6H), 1.67 (q,2H), 1.87 (m,1H), 2.15 (a,3H), 2.23 (a,3H), 2.98 (a,6H), 3.93 (t, 2H), 6.54 (a,1H), 6.64 (a,1H), 7.37 (a,1H).
9	δ 1.04 (d,6H), 1.8-2.35 (m,11H), 2.98 (a,6H), 3.93 (t,2H), 4.72 (d,1H), 4.98 (d,1H), 6.55 (a,1H), 6.64 (a,1H), 7.38 (a,1H).
10	δ 0.87 (d,6H), 0.94 (d,3H), 1.1-1.9 (m,10H), 2.16 (a,3H), 2.23 (a,3H), 2.98 (a,6H), 3.93 (m,2H), 6.54 (a,1H), 6.63 (a,1H), 7.38 (a,1H).
11	δ 0.91 (a,9H), 0.98 (d,3H), 1.05-1.35 (m,2H), 1.5-1.9 (m,3H), 2.16 (a,3H), 2.23 (a,3H), 2.98 (a,6H), 3.92 (t,3H), 6.54 (a,1H), 6.62 (a,1H), 7.38 (a,1H).
12	δ 0.99 (a,9H), 1.72 (t,2H), 2.15 (a,3H), 2.24 (a,3H), 2.98 (a,6H), 3.96 (t,2H), 6.54 (a,1H), 6.63 (a,1H), 7.38 (a,1H).
13	δ 0.91 (d,6H), 1.28-1.82 (m,5H), 2.16 (a,3H), 2.23 (a,3H), 2.98 (a,6H), 3.89 (t,2H), 6.54 (a,1H), 6.63 (a,1H), 7.37 (a,1H).
14	δ 0.95 (d,3H), 1.18-2.1 (m,13H), 2.15 (a,3H), 2.23 (a,3H), 2.97 (a,6H), 3.93 (m,2H), 5.1 (t,1H), 6.54 (a,1H), 6.63 (a,1H), 7.37 (a,1H).
15	δ 0.95 (d,3H), 1.18-2.1 (m,13H), 2.15 (a,3H), 2.23 (a,3H), 2.98 (a,6H), 3.94 (m,2H), 5.1 (t,1H), 6.54 (a,1H), 6.63 (a,1H), 7.37 (a,1H).
16	δ 1.9-2.1 (m,4H), 2.16 (a,3H), 2.23 (a,3H), 2.98 (a,6H), 3.63 (t,2H), 3.95 (t,2H), 6.55 (a,1H), 6.62 (a,1H), 7.37 (a,1H).
17	δ 1.6-2 (m,6H), 2.16 (a,3H), 2.23 (a,3H), 2.98 (a,6H), 3.57 (t,2H), 3.92 (t,2H), 6.54 (a,1H), 6.62 (a,1H), 7.37 (a,1H).
18	δ 0.91 (m,3H), 1.2-1.8 (m,9H), 2.15 (a,3H), 2.22 (a,3H), 2.98 (a,6H), 4.21 (m,1H), 6.53 (a,1H), 6.64 (a,1H), 7.39 (a,1H).

Comp	Datos ^1H RMN (Solución CDCl_3 , a menos que se indique otra cosa)
19	δ 0.93 (t,3H), 1.3-1.55 (m,4H), 1.7-1.82 (m,2H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.9 (t,2H), 6.54 (s,1H), 6.63 (s,1H), 7.37 (s,1H).
20	δ 0.9 (t,3H), 1.3-1.56 (m,6H), 1.7-1.82 (m,2H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.9 (t,2H), 6.55 (s,1H), 6.63 (s,1H), 7.38 (s,1H).
21	δ 0.89 (t,3H), 1.2-1.6 (m,8H), 1.7-1.82 (m,2H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.9 (t,2H), 6.54 (s,1H), 6.64 (s,1H), 7.37 (s,1H).
22	δ 0.89 (t,3H), 1.2-1.56 (m,10H), 1.7-1.82 (m,2H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.9 (t,2H), 6.54 (s,1H), 6.63 (s,1H), 7.38 (s,1H).
23	δ 0.88 (t,3H), 1.2-1.56 (m,12H), 1.7-1.82 (m,2H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.9 (t,2H), 6.54 (s,1H), 6.63 (s,1H), 7.37 (s,1H).
24	δ 0.88 (t,3H), 1.2-1.56 (m,14H), 1.7-1.82 (m,2H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.9 (t,2H), 6.54 (s,1H), 6.63 (s,1H), 7.37 (s,1H).
25	δ 0.88 (t,3H), 1.2-1.82 (m,20H), 2.16 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.9 (t,2H), 6.54 (s,1H), 6.63 (s,1H), 7.37 (s,1H).
26	δ 0.02 (t,9H), 0.6 (m,2H), 1.7-1.82 (m,2H), 2.17 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.87 (t,2H), 6.54 (s,1H), 6.62 (s,1H), 7.38 (s,1H).
27	δ 0.05 (s,6H), 0.9 (s,9H), 1.97 (m,2H), 2.15 (s,3H), 2.23 (s,3H), 2.98 (s,6H), 3.82 (t,2H), 4.0 (t,2H), 6.54 (s,1H), 6.64 (s,1H), 7.37 (s,1H).
28	δ 0.9 (t,6H), 1.2-1.4 (m,8H), 1.5-1.7 (m,4H), 2.15 (s,3H), 2.2 (s,3H), 3.0 (s,6H), 4.1 (m,1H), 6.5 (s,1H), 6.6 (s,1H), 7.4 (s,1H).
29	δ 0.9 (t,6H), 1.2-1.4 (m,6H), 1.5-1.7 (m,4H), 2.15 (s,3H), 2.25 (s,3H), 3.0 (s,6H), 4.05-4.2 (m,1H), 6.5 (s,1H), 6.6 (s,1H), 7.4 (s,1H).
30	δ 0.9 (m,6H), 1.2-1.4 (m,12 H), 1.5-1.7 (m,4H), 2.1 (s,3H), 2.2 (s,3H), 3.0 (s,6H), 4.05-4.2 (m,1H), 6.45 (s,1H), 6.6 (s,1H), 7.35 (s,1H).
31	δ 0.8 (d,6 H), 0.9(t,3H), 1.2-1.4 (m,2H), 1.5-1.7 (m,4H), 2.1 (s,3H), 2.2 (s,3H), 3.0 (s,6H), 3.95-4.1 (m,1H), 6.5 (s,1H), 6.6 (s,1H), 7.4 (s,1H).
32	δ 0.8 (d,6H), 1.2(d,3H), 1.4-1.6 (m,2H), 1.6-1.75 (m,2H), 2.15 (s,3H), 2.2 (s,3H), 2.95 (s,6H), 4.10-4.2 (m,1H), 6.5 (s,1H), 6.6 (s,1H), 7.4 (s,1H).
33	δ 0.8 (d,6H), 0.9(t,3H), 1.2-1.4 (m,6H), 1.5-1.7 (m,4H), 2.15 (s,3H), 2.25 (s,3H), 3.0 (s,6H), 4.05-4.2 (m,1H), 6.5 (s,1H), 6.6 (s,1H), 7.4 (s,1H).
34	δ 0.9 (t,6H), 1.55-1.75 (m,4H), 2.1 (s,3H), 2.2 (s,3H), 2.95 (s,6H), 3.95-4.1 (m,1H), 6.5 (s,1H), 6.6 (s,1H), 7.4 (s,1H).

Comp	Datos ^1H RMN (Solución CDCl_3 , a menos que se indique otra cosa)*
35	δ 0.85 (d, 6H), 0.95 (d, 6H), 1.2-1.4 (m, 4H), 1.5-1.8 (m, 6H), 2.1 (s, 3H), 2.2 (s, 3H), 2.95 (s, 6H), 3.8-3.95 (m, 1H), 6.5 (s, 1H), 6.6 (s, 1H), 7.4 (s, 1H).
36	δ 0.8-0.9 (t, 6H), 1.3-1.5 (m, 4H), 1.5-1.65 (m, 4H), 2.15 (s, 3H), 2.25 (s, 3H), 3.0 (s, 6H), 4.05-4.2 (m, 1H), 6.5 (s, 1H), 6.6 (s, 1H), 7.4 (s, 1H).
37	δ 0.8-0.9 (q, 6H), 1.2-1.4 (m, 14 H), 1.5-1.7 (m, 4H), 2.1 (s, 3H), 2.2 (s, 3H), 2.95 (s, 6H), 4.05-4.1 (m, 1H), 6.5 (s, 1H), 6.6 (s, 1H), 7.4 (s, 1H).
38	δ 0.06 (s, 9H), 1.64 (s, 2H), 2.20 (s, 3H), 2.24 (s, 3H), 2.98 (s, 6H), 4.31 (s, 2H), 4.75 (s, 1H), 5.03 (s, 1H), 6.55 (s, 1H), 6.61 (s, 1H), 7.38 (s, 1H).
39	δ 1.66 (s, 3H), 1.72 (s, 3H), 2.16 (s, 3H), 2.22 (s, 3H), 2.45 (q, 2H), 2.98 (s, 6H), 3.88 (t, 2H), 5.23 (t, 1H), 6.54 (s, 1H), 6.63 (s, 1H), 7.37 (s, 1H).
40	δ 1.04 (s, 9H), 2.18 (s, 3H), 2.22 (s, 3H), 2.98 (s, 6H), 4.43 (d, 2H), 5.6 (m, 1H), 5.8 (d, 1H), 6.54 (s, 1H), 6.65 (s, 1H), 7.38 (s, 1H).
41	δ 1.22 (s, 9H), 2.16 (s, 3H), 2.22 (s, 3H), 2.98 (s, 6H), 3.69 (t, 2H), 4.02 (t, 2H), 6.53 (s, 1H), 6.66 (s, 1H), 7.37 (s, 1H).
42	δ 1.62 (s, 6H), 1.96 (m, 4H), 2.16 (s, 3H), 2.23 (s, 3H), 2.98 (s, 6H), 3.94 (t, 2H), 6.55 (s, 1H), 6.62 (s, 1H), 7.37 (s, 1H).
43	δ 1.18 (s, 6H), 1.6-1.9 (m, 4H), 2.16 (s, 3H), 2.23 (s, 3H), 2.98 (s, 6H), 3.2 (s, 3H), 3.9 (t, 2H), 6.54 (s, 1H), 6.62 (s, 1H), 7.37 (s, 1H).
44	δ 1.15-1.25 (m, 9H), 1.6-1.9 (m, 4H), 2.16 (s, 3H), 2.23 (s, 3H), 2.98 (s, 6H), 3.4 (q, 2H), 3.9 (t, 2H), 6.54 (s, 1H), 6.62 (s, 1H), 7.37 (s, 1H).
45	δ 1.26 (s, 6H), 1.6-1.97 (m, 4H), 2.16 (s, 3H), 2.23 (s, 3H), 2.98 (s, 6H), 3.94 (t, 2H), 6.57 (s, 1H), 6.63 (s, 1H), 7.37 (s, 1H).
46	δ 1-1.1 (m, 6H), 1.51 (s, 3H), 1.6-2.1 (m, 4H), 2.16 (s, 3H), 2.23 (s, 3H), 2.99 (s, 6H), 3.94 (m, 2H), 6.55 (s, 1H), 6.61 (s, 1H), 7.37 (s, 1H).
47	δ 1.2-2 (m, 12H), 2.16 (s, 3H), 2.23 (s, 3H), 2.98 (s, 6H), 3.2 (s, 3H), 3.94 (t, 2H), 6.55 (s, 1H), 6.62 (s, 1H), 7.37 (s, 1H).
48	δ 0.88 (d, 6H), 1.2-1.9 (m, 7H), 2.16 (s, 3H), 2.23 (s, 3H), 2.98 (s, 6H), 3.9 (t, 2H), 6.54 (s, 1H), 6.63 (s, 1H), 7.37 (s, 1H).
49	δ 0.8-2 (m, 15H), 2.16 (s, 3H), 2.23 (s, 3H), 2.98 (s, 6H), 3.9 (t, 2H), 6.54 (s, 1H), 6.63 (s, 1H), 7.37 (s, 1H).
50	δ 0.92 (s, 9H), 1.34 (m, 2H), 1.74 (m, 2H), 2.16 (s, 3H), 2.23 (s, 3H), 2.98 (s, 6H), 3.88 (t, 2H), 6.54 (s, 1H), 6.62 (s, 1H), 7.37 (s, 1H).
51	δ 0.01 (s, 6H), 0.46-0.7 (m, 4H), 0.93 (t, 3H), 1.7-1.87 (m, 2H), 2.18 (s, 3H), 2.24 (s, 3H), 3.0 (s, 6H), 3.88 (t, 2H), 6.56 (s, 1H), 6.64 (s, 1H), 7.39 (s, 1H).

Comp	Datos ^1H RMN (Solución CDCl_3 a menos que se indique otra cosa) ^a
52	δ 0.01 (s, 6H), 0.46-0.7 (m, 4H), 0.97 (t, 3H), 1.27-1.4 (m, 2H), 1.7-1.87 (m, 2H), 2.18 (s, 3H), 2.24 (s, 3H), 2.99 (s, 6H), 3.87 (t, 2H), 6.56 (s, 1H), 6.63 (s, 1H), 7.38 (s, 1H).
53	δ 0.00 (s, 3H), 0.46-0.7 (m, 6H), 0.93 (t, 6H), 1.7-1.87 (m, 2H), 2.21 (s, 3H), 2.27 (s, 3H), 3.0 (s, 6H), 3.9 (t, 2H), 6.59 (s, 1H), 6.66 (s, 1H), 7.42 (s, 1H).
54	δ 0.02 (s, 9H), 0.6 (m, 2H), 1.2 (t, 3H), 1.8 (m, 2H), 2.23 (s, 3H), 2.98 (s, 3H), 3.35 (br s, 2H), 3.93 (t, 2H), 6.74 (s, 1H), 6.77 (s, 1H), 7.4 (s, 1H).
55	δ 0.03 (s, 9H), 0.6 (m, 2H), 1.83 (m, 2H), 3.05 (s, 6H), 3.92 (t, 2H), 6.82 (s, 1H), 7.41 (s, 1H).
56	δ 0.02 (s, 9H), 0.6 (m, 2H), 1.8 (m, 2H), 2.23 (s, 3H), 2.96 (s, 3H), 3.75-3.97 (m, 4H), 5.23 (m, 2H), 5.83 (m, 1H), 6.74 (s, 1H), 6.77 (s, 1H), 7.42 (s, 1H).
57	δ 0.00 (s, 6H), 0.46-0.65 (m, 4H), 0.95 (t, 3H), 1.21 (t, 3H), 1.82 (m, 2H), 2.24 (s, 3H), 2.99 (s, 3H), 3.37 (br s, 2H), 3.94 (t, 2H), 6.75 (s, 1H), 6.78 (s, 1H), 7.4 (s, 1H).
58	δ 0.02 (s, 9H), 0.6 (m, 2H), 0.92 (t, 3H), 1.61 (m, 2H), 1.8 (m, 2H), 2.22 (s, 3H), 2.98 (s, 3H), 3.22 (br s, 2H), 3.92 (t, 2H), 6.74 (s, 1H), 6.76 (s, 1H), 7.4 (s, 1H).
59	δ 0.02 (s, 9H), 0.6 (m, 2H), 1.2 (t, 3H), 1.79 (m, 2H), 2.21 (s, 3H), 2.98 (s, 3H), 3.35 (br s, 2H), 3.94 (t, 2H), 6.55 (d, 1H), 6.77 (d, 1H), 7.4 (s, 1H).
60	δ 0.02 (s, 9H), 0.6 (m, 2H), 0.92 (t, 3H), 1.61 (m, 2H), 1.79 (m, 2H), 2.2 (s, 3H), 2.98 (s, 3H), 3.21 (br s, 2H), 3.93 (t, 2H), 6.55 (d, 1H), 6.77 (d, 1H), 7.4 (s, 1H).
61	δ 0.02 (s, 9H), 0.6 (m, 2H), 0.72 (m, 4H), 1.8 (m, 2H), 2.22 (s, 3H), 2.65 (m, 1H), 3.01 (s, 3H), 3.93 (t, 2H), 6.74 (s, 1H), 6.77 (s, 1H), 7.58 (s, 1H).
62	δ 0.01 (s, 9H), 0.6 (m, 2H), 0.95 (t, 3H), 1.34 (m, 2H), 1.57 (m, 2H), 1.78 (m, 2H), 2.2 (s, 3H), 2.98 (s, 3H), 3.24 (br s, 2H), 3.93 (t, 2H), 6.55 (d, 1H), 6.77 (d, 1H), 7.39 (s, 1H).
63	δ 0.01 (s, 9H), 0.6 (m, 2H), 1.23 (d, 6H), 1.79 (m, 2H), 2.21 (s, 3H), 2.9 (s, 3H), 3.64 (br s, 1H), 3.93 (t, 2H), 6.55 (d, 1H), 6.77 (d, 1H), 7.43 (s, 1H).
64	δ 0.01 (s, 9H), 0.6 (m, 2H), 1.79 (m, 2H), 2.2 (s, 3H), 2.96 (s, 3H), 3.9-4.0 (m, 4H), 5.21 (m, 2H), 5.81 (m, 1H), 6.55 (d, 1H), 6.77 (d, 1H), 7.42 (s, 1H).

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Comp	Datos ^1H RMN (Solución CDCl_3 , a menos que se indique otra cosa)*
65	δ -0.01 (s,6H), 0.47-0.8 (m,8H), 0.94 (t,3H), 1.8 (m,2H), 2.22 (s,3H), 2.65 (m,1H), 3.01 (s,3H), 3.93 (t,2H), 6.74 (s,1H), 6.77 (s,1H), 7.59 (s,1H).
66	δ -0.02 (s,6H), 0.45-0.63 (m,4H), 0.93 (t,3H), 1.2 (t,3H), 1.78 (m,2H), 2.21 (s,3H), 2.98 (s,3H), 3.37 (br s,2H), 3.93 (t,2H), 6.55 (d,1H), 6.77 (d,1H), 7.4 (s,1H).
67	δ -0.02 (s,6H), 0.45-0.63 (m,4H), 0.9-1 (m,6H), 1.61 (m,2H), 1.78 (m,2H), 2.2 (s,3H), 2.98 (s,3H), 3.2 (br s,2H), 3.93 (t,2H), 6.52 (d,1H), 6.77 (d,1H), 7.4 (s,1H).
68	δ -0.02 (s,6H), 0.45-0.63 (m,4H), 0.9-1 (m,6H), 1.31 (m,2H), 1.57 (m,2H), 1.78 (m,2H), 2.2 (s,3H), 2.98 (s,3H), 3.25 (br s,2H), 3.93 (t,2H), 6.52 (d,1H), 6.77 (d,1H), 7.4 (s,1H).
69	δ -0.02 (s,6H), 0.45-0.63 (m,4H), 0.96 (t,3H), 1.23 (d,6H), 1.78 (m,2H), 2.21 (s,3H), 2.89 (s,3H), 3.65 (br s,1H), 3.93 (t,2H), 6.55 (d,1H), 6.77 (d,1H), 7.45 (s,1H).
70	δ -0.01 (s,6H), 0.45-0.63 (m,4H), 0.94 (t,3H), 1.78 (m,2H), 2.21 (s,3H), 2.97 (s,3H), 3.9-4.0 (m,4H), 5.21 (m,2H), 5.81 (m,1H), 6.57 (d,1H), 6.78 (d,1H), 7.43 (s,1H).
71	δ -0.02 (s,6H), 0.45-0.8 (m,8H), 0.94 (t,3H), 1.78 (m,2H), 2.2 (s,3H), 2.67 (m, 1H), 2.98 (s,3H), 3.93 (t,2H), 6.55 (d,1H), 6.77 (d,1H), 7.58 (s,1H).
72	δ 0.01 (s,9H), 0.59 (m,2H), 0.72 (m,4H), 1.79 (m,2H), 2.2 (s,3H), 2.65 (m,1H), 3.01 (s,3H), 3.93 (t,2H), 6.55 (d,1H), 6.77 (d,1H), 7.58 (s,1H).
73	δ 0.00 (s,9H), 0.6 (m,2H), 0.93 (t,3H), 1.19 (d,6H), 1.3 (m,2H), 1.55 (m,2H), 1.75 (m,2H), 2.2 (s,3H), 2.95 (s,3H), 3.3 (m,3H), 3.85 (t,2H), 6.55 (s,1H), 6.65 (s,1H), 7.4 (s,1H).
74	δ 0.01 (s,9H), 0.6 (m,2H), 1.22 (m,12H), 1.8 (m,2H), 2.2 (s,3H), 2.86 (s,3H), 3.3 (m,1H), 3.87 (t,2H), 6.58 (s,1H), 6.62 (s,1H), 7.45 (s,1H).
75	δ 0.00 (s,9H), 0.6 (m,2H), 0.9 (t,3H), 1.2 (d,6H), 1.55-1.8 (m,4H), 2.19 (s,3H), 2.96 (s,3H), 3.2 (m,3H), 3.85 (t,2H), 6.57 (s,1H), 6.62 (s,1H), 7.37 (s,1H).
76	δ 0.00 (s,9H), 0.6 (m,2H), 1.2 (m,9H), 1.7 (m,2H), 2.2 (s,3H), 2.96 (s,3H), 3.3 (m,3H), 3.85 (t,2H), 6.57 (s,1H), 6.62 (s,1H), 7.4 (s,1H).
78	δ 0.01 (s,6H), 0.46-0.67 (m,4H), 0.9-1.0 (m,6H), 1.67-1.82 (m,4H), 2.17 (s,3H), 2.22 (s,3H), 3.27 (s,3H), 3.75 (t,2H), 3.9 (t,2H), 6.64 (s,1H), 6.7 (s,1H), 6.95 (s,1H).

Comp	Datos ^1H RMN (Solución CDCl_3 , a menos que se indique otra cosa)
84	δ 0.00 (s,6H), 0.46-0.67 (m,4H), 0.94 (t,3H), 1.29 (t,3H), 1.77-1.9 (m,2H), 2.23 (s,3H), 3.26 (s,3H), 3.87 (q,2H), 3.96 (t,2H), 6.65 (s,1H), 6.76 (s,1H), 7.19 (s,1H).
85	δ 0.03 (s,9H), 0.6 (m,2H), 1.82 (m,2H), 2.21 (s,3H), 3.33 (s,3H), 3.96 (t,2H), 4.4 (d,2H), 5.3 (m,2H), 5.9 (m,1H), 6.75 (m,2H), 7.2 (s,1H).
86	δ 0.04 (s,9H), 0.6 (m,2H), 1.78 (m,2H), 2.18 (s,3H), 2.21 (s,3H), 3.33 (s,3H), 3.9 (t,2H), 4.4 (d,2H), 5.3 (m,2H), 5.9 (m,1H), 6.64 (s,1H), 6.79 (s,1H), 6.94 (s,1H).
87	δ 0.02 (s,9H), 0.6 (m,2H), 1.28 (t,3H), 1.8 (m,2H), 2.2 (s,3H), 3.25 (s,3H), 3.86 (q,2H), 3.94 (t,2H), 6.65 (s,1H), 6.77 (d,1H), 6.95 (d,1H).
88	δ 0.02 (s,9H), 0.6 (m,2H), 0.97 (t,3H), 1.67-1.82 (m,4H), 2.19 (s,3H), 3.27 (s,3H), 3.74 (t,2H), 3.94 (t,2H), 6.69 (s,1H), 6.79 (d,1H), 6.97 (d,1H).
89	δ 0.02 (s,9H), 0.6 (m,2H), 0.97 (t,3H), 1.39 (m,2H), 1.62-1.82 (m,4H), 2.2 (s,3H), 3.27 (s,3H), 3.77 (t,2H), 3.96 (t,2H), 6.65 (s,1H), 6.79 (d,1H), 6.97 (d,1H).
90	δ 0.02 (s,9H), 0.6 (m,2H), 1.22 (d,6H), 1.8 (m,2H), 2.2 (s,3H), 3.01 (s,3H), 3.96 (t,2H), 5.44 (m,1H), 6.65 (s,1H), 6.79 (d,1H), 6.95 (d,1H).
91	δ 0.00 (s,9H), 0.6 (m,2H), 0.97 (t,3H), 1.18 (d,6H), 1.4 (m,2H), 1.6-1.8 (m,4H), 2.2 (s,3H), 3.21 (m,4H), 3.7 (m,2H), 3.87 (t,2H), 6.63 (s,1H), 6.7 (s,1H), 6.93 (s,1H).
92	δ 0.01 (s,9H), 0.6 (m,2H), 1.2 (m,12H), 1.8 (m,2H), 2.2 (s,3H), 2.91 (s,3H), 3.3 (m,1H), 3.87 (t,2H), 5.4 (m,1H), 6.63 (s,1H), 6.7 (s,1H), 6.91 (s,1H).
93	δ 0.00 (s,9H), 0.6 (m,2H), 0.97 (t,3H), 1.18 (d,6H), 1.8 (m,4H), 2.19 (s,3H), 3.22 (m,4H), 3.7 (m,2H), 3.87 (m,2H), 6.63 (s,1H), 6.7 (s,1H), 6.94 (s,1H).
94	δ : 0.03 (s,9H), 0.6 (m,2H), 1.18 (d,6H), 1.25 (t,3H), 1.7 (m,2H), 2.2 (s,3H), 3.2-3.3 (m,4H), 3.87 (m,4H), 6.57 (s,1H), 6.7 (s,1H), 6.9 (s,1H).
95	δ 0.02 (s,9H), 0.6 (m,2H), 1.8 (m,2H), 1.94 (m,4H), 2.24 (s,3H), 3.48 (m,4H), 3.93 (t,2H), 6.73 (s,1H), 6.77 (s,1H), 7.6 (s,1H).
96	δ 0.95 (d,6H), 1.25-1.4 (m,2H), 1.5-1.7 (m,3H), 2.0 (s,3H), 2.15 (s,3H), 3.0 (s,6H), 6.4 (s,1H), 6.6 (s,1H).
97	δ 0.8-0.95 (m,9H), 1.15-1.65 (m,9H), 1.75 (s,3H), 2.0 (s,3H), 2.10 (s,3H), 3.0 (s,6H), 4.4 (m,1H), 6.35 (s,1H), 6.6 (s,1H).

Comp	Datos ^1H RMN (Solución CDCl_3 , a menos que se indique otra cosa) ^a
98	δ 0.9 (s,9H), 1.0 (d,3H), 1.0-1.6 (m,5H), 1.75 (s,3H), 2.0 (s,3H), 2.15 (s,3H), 3.0 (s,6H), 6.4 (s,1H), 6.6 (s,1H).
99	δ 0.9 (t,6H), 1.3-1.7 (m,16H), 1.8 (s,3H), 2.0 (s,3H), 2.2 (s,3H), 3.05 (s,6H), 4.1 (m,1H), 6.35 (s,1H), 6.65 (s,1H).
100	δ 0.8-1.0 (m,10H), 1.2-1.7 (m,6H), 1.8 (s,3H), 2.0 (s,3H), 2.15 (s,3H), 3.0 (s,6H), 4.05 (m,1H), 6.35 (s,1H), 6.6 (s,1H).
101	δ 0.9 (t,6H), 1.4-1.7 (m,8H), 1.8 (s,3H), 2.0 (s,3H), 2.15 (s,3H), 3.05 (s,6H), 4.1 (m,1H), 6.4 (s,1H), 6.6 (s,1H).
102	δ 0.9 (t,6H), 1.25 (d,3H), 1.3-1.7 (m,5H), 1.8 (s,3H), 2.0 (s,3H), 2.15 (s,3H), 3.05 (s,6H), 4.15 (m,1H), 6.4 (s,1H), 6.6 (s,1H).
103	δ 0.9 (d,12H), 1.2-1.7 (m,10H), 1.8 (s,3H), 2.0 (s,3H), 2.15 (s,3H), 3.0 (s,6H), 4.1 (m,1H), 6.4 (s,1H), 6.6 (s,1H).
104	δ 0.9-1.0 (m,3H), 1.25 (m,3H), 1.5-1.7 (m,6H), 1.8 (s,3H), 2.0 (s,3H), 2.15 (s,3H), 3.0 (s,6H), 4.1 (m,1H), 4.7 (d,2H), 6.4 (s,1H), 6.6 (s,1H).
105	δ 0.9 (d,6H), 1.2 (d,2H), 1.25 (m,2H), 1.4-1.6 (m,4H), 2.2 (s,3H), 2.37 (s,3H), 6.6 (s,1H), 7.15 (s,1H), 7.4 (s,1H).
106	δ 0.95 (d,6H), 1.28 (t,2H), 1.35 (m,1H), 1.6 (m,2H), 1.8 (m,2H), 2.18 (s,3H), 2.1 (s,3H), 3.22 (s,3H), 3.88 (q,2H), 3.92 (t,2H), 6.6 (s,1H), 6.9 (s,1H).
108	δ 0.9 (d,6H), 1.2-1.4 (t & m,8H), 1.6 (m,2H), 1.75 (m,2H), 2.15 (s,3H), 2.2 (s,3H), 3.7 (q,4H), 3.9 (t,2H), 6.6 (s,1H), 6.9 (s,1H).
110	δ 0.9 (d,6H), 1.05 (m,2H), 1.4 (m,1H), 1.7 (m,2H), 1.8 (s,3H), 2.0 (s,3H), 3.0 (s,6H), 3.95 (t,2H), 6.65 (s,1H), 6.75 (s,1H).
111	δ 0.9 (d,6H), 1.35 (m,2H), 1.65 (m,2H), 1.7 (m,2H), 2.25 (s,3H), 3.0 (s,6H), 3.95 (s,6H), 6.65 (s,1H), 7.3 (s,1H).
115	δ 0.9 (d,6H), 1.4 (t,2H), 1.6 (m,1H), 1.8 (m,2H), 2.3 (s,3H), 3.0 (s,6H), 3.9 (t,2H), 6.7 (s,1H), 7.2 (s,1H).
116	δ 0.95 (d,6H), 1.3-1.5 (m,2H), 1.5-1.7 (m,2H), 1.8 (s,3H), 1.8-1.95 (m,1H), 2.2 (s,3H), 3.0 (s,6H), 4.8 (t,2H), 6.8 (s,1H).
126	δ 0.95 (d,6H), 1.3 (t,2H), 1.6 (m,1H), 1.8 (m,2H), 3.0 (s,6H), 3.9 (t,2H), 6.9 (s,1H), 7.4 (s,1H).
127	δ 0.9 (d,6H), 1.2 (d,6H), 1.3 (m,2H), 1.6 (m,1H), 1.8 (m,2H), 3.05 (s,3H), 3.95 (t,2H), 5.40 (m,1H), 6.8 (s,1H), 6.9 (s,1H), 7.80 (s,1H).
128	δ 0.00 (s,9H), 0.62 (m,2H), 2.1 (s,3H), 3.00 (s,6H), 3.55 (s,3H), 3.85 (t,2H), 6.4 (s,1H), 6.6 (s,1H).

Comp	Datos ^1H RMN (Solución CDCl_3 , a menos que se indique otra cosa) ^a
129	δ 0.0 (s, 9H), 0.6 (m, 2H), 1.2 (t, 2H), 1.8 (m, 2H), 2.08 (s, 3H), 2.93 (s, 3H), 3.3 (q, 2H), 3.52 (s, 3H), 3.8 (t, 2H), 6.652 (s, 1H), 6.66 (s, 1H).
130	δ 0.0 (s, 9H), 0.6 (m, 2H), 1.8 (m, 2H), 2.1 (s, 3H), 3.0 (s, 6H), 3.6 (t, 2H), 6.8 (d, 2H).
131	δ 0.00 (s, 9H), 0.62 (m, 2H), 1.2 (t, 3H), 1.8 (s, 3H), 2.1 (s, 6H), 3.00 (s, 3H), 3.3 (q, 2H), 3.5 (s, 3H), 3.9 (t, 2H), 6.45 (s, 1H), 6.6 (s, 1H).
132	δ 0.89 (d, 6H), 1.34 (m, 2H), 1.587 (m, 1H), 1.8 (m, 2H), 2.2 (s, 3H), 2.26 (s, 3H), 2.96 (s, 6H), 3.78 (t, 2H), 6.43 (s, 1H), 7.3 (s, 1H).
135	δ 0.89 (s, 9H), 1.35 (m, 2H), 1.8 (m, 2H), 2.2 (s, 3H), 2.25 (s, 3H), 3.0 (s, 6H), 3.8 (t, 2H), 6.45 (s, 1H), 7.3 (s, 1H).
137	δ 0.95 (d, 6H), 1.3 (t, 3H), 1.4 (m, 2H), 1.6 (m, 1H), 1.85 (m, 2H), 2.3 (s, 6H), 3.35 (s, 3H), 3.9 (m, 4H), 6.7 (s, 1H), 6.95 (s, 1H).
140	δ 0.0 (s, 9H), 0.5-0.65 (m, 2H), 1.2 (t, 3H), 1.6-1.85 (m, 2H), 2.2 (s, 3H), 2.25 (s, 3H), 2.95 (s, 3H), 3.3 (br s, 2H), 3.75 (t, 2H), 6.4 (s, 1H), 7.3 (s, 1H).
141	δ 0.9 (m, 6H), 1.2-1.25 (m, 6H), 1.4-1.5 (m, 4H), 2.2 (s, 3H), 2.3 (s, 3H), 2.9 (m, 1H), 3.0 (s, 6H), 6.6 (s, 1H), 7.15 (s, 1H), 7.2 (s, 1H).
142	δ 0.9 (m, 6H), 1.2-1.7 (m, 10H), 1.75 (s, 3H), 1.95 (s, 3H), 2.1 (s, 3H), 3.0 (s, 6H), 4.1 (m, 1H), 6.45 (s, 1H), 6.6 (s, 1H).
143	δ 0.9 (m, 6H), 1.2-1.5 (m, 8H), 1.6 (m, 4H), 1.8 (s, 3H), 2.0 (s, 3H), 2.1 (s, 3H), 3.0 (s, 6H), 4.1 (m, 1H), 6.4 (s, 1H), 6.7 (s, 1H).
144	δ 0.8-0.9 (m, 6H), 1.1 (d, 3H), 1.2-1.6 (m, 5H), 2.05 (s, 3H), 2.2 (s, 3H), 2.95 (s, 6H), 3.4 (m, 1H), 6.4 (s, 1H), 7.4 (s, 1H).
145	δ 0.8-0.9 (m, 6H), 1.1-1.5 (m, 16H), 1.2-1.6 (m, 5H), 2.0 (s, 3H), 2.2 (s, 3H), 2.9 (s, 6H), 3.3 (m, 1H), 6.4 (s, 1H), 6.45 (s, 1H), 7.4 (s, 1H).
146	δ 0.9 (m, 6H), 1.25-1.5 (m, 8H), 2.0 (s, 3H), 2.2 (s, 3H), 3.0 (s, 6H), 3.35 (m, 1H), 6.4 (s, 1H), 6.45 (s, 1H), 7.4 (s, 1H).
147	δ 0.85 (s, 9H), 0.95 (d, 3H), 1.2 (m, 2H), 1.45 (m, 1H), 1.6 (m, 2H), 2.0 (s, 3H), 2.2 (s, 3H), 3.0 (s, 6H), 3.1 (m, 1H), 6.4 (s, 1H), 6.5 (s, 1H), 7.2 (s, 1H).
148	δ 0.8-0.9 (m, 9H), 1.2-1.3 (m, 6H), 1.4-1.5 (m, 3H), 2.0 (s, 3H), 2.2 (s, 3H), 3.0 (s, 6H), 3.3 (m, 1H), 6.4 (s, 1H), 6.5 (s, 1H), 7.4 (s, 1H).
149	δ 0.8-0.9 (m, 9H), 1.15-1.3 (m, 2H), 1.4-1.6 (m, 5H), 2.0 (s, 3H), 2.2 (s, 3H), 2.95 (s, 6H), 3.2 (m, 1H), 6.4 (s, 1H), 6.5 (s, 1H), 7.4 (s, 1H).
150	δ 0.8-0.9 (m, 6H), 1.2-1.4 (m, 8H), 1.4-1.5 (m, 4H), 2.0 (s, 3H), 2.2 (s, 3H), 2.95 (s, 6H), 3.3 (m, 1H), 6.35 (s, 1H), 6.45 (s, 1H), 7.35 (s, 1H).

Comp. 1	Datos ^1H RMN (Solución CDCl_3 , a menos que se indique otra cosa) ^a
151	δ 0.8-0.9 (m, 12H), 1.1-1.3 (m, 4H), 1.4-1.5 (m, 6H), 2.0 (s, 3H), 2.2 (s, 3H), 2.95 (s, 6H), 3.25 (m, 1H), 6.35 (s, 1H), 6.45 (s, 1H), 7.35 (s, 1H).
152	δ 0.9 (m, 3H), 1.4-1.7 (m, 6H), 1.7 (m, 3H), 2.1 (s, 3H), 2.2 (s, 3H), 3.0 (s, 6H), 3.3 (m, 1H), 4.7 (d, 2H), 6.4 (s, 1H), 6.55 (s, 1H), 7.4 (s, 1H).
153	δ 1.3 (s, 9H), 2.1 (s, 3H), 2.2 (s, 3H), 2.8 (t, 2H), 2.95 (s, 6H), 3.3 (t, 2H), 6.4 (s, 1H), 6.5 (s, 1H), 7.4 (s, 1H).
154	δ 0.9 (dd, 6H), 1.2-1.3 (m, 2H), 1.5-1.7 (m, 3H), 2.05 (s, 3H), 2.2 (s, 3H), 2.95 (s, 6H), 3.05 (m, 2H), 6.45 (s, 1H), 6.5 (s, 1H), 7.35 (s, 1H).
155	δ 0.95 (t, 6H), 1.3-1.7 (m, 12H), 2.25 (s, 3H), 2.4 (s, 3H), 2.9 (m, 1H), 3.0 (s, 6H), 6.6 (s, 1H), 7.2 (s, 1H), 7.4 (s, 1H).
156	δ 0.9 (d, 6H), 1.4 (m, 2H), 1.6 (m, 2H), 2.2 (s, 3H), 2.4 (s, 3H), 2.8 (t, 2H), 3.0 (s, 6H), 6.6 (s, 1H), 7.1 (s, 1H), 7.4 (s, 1H).
157	δ 0.95 (t, 6H), 1.2-1.6 (m, 10H), 2.25 (s, 3H), 2.4 (s, 3H), 2.9 (m, 1H), 3.0 (s, 6H), 6.6 (s, 1H), 7.2 (s, 1H), 7.4 (s, 1H).
158	δ 0.85 (s, 9H), 0.95 (d, 3H), 1.4 (m, 2H), 2.25 (s, 3H), 2.4 (s, 3H), 2.8 (m, 2H), 3.0 (s, 6H), 6.55 (s, 1H), 7.05 (s, 1H), 7.4 (s, 1H).
159	δ 0.85 (d, 12 H), 1.25-1.6 (m, 10H), 2.25 (s, 3H), 2.40 (s, 3H), 2.95 (m, 1H), 3.05 (s, 6H), 6.60 (s, 1H), 7.20 (s, 1H), 7.45 (s, 1H).
160	δ 0.9 (t, 6H), 1.25 - 1.6 (m, 10H), 2.2 (s, 3H), 2.35 (s, 3H), 2.9 (m, 1H), 3.0 (s, 6H), 6.5 (s, 1H), 7.25 (s, 1H), 7.4 (s, 1H).
161	δ 0.9 (t, 3H), 1.0 (m, 2H), 1.6 (s, 3H), 2.25 (s, 3H), 2.4 (s, 3H), 3.05 (s, 6H), 3.1 (m, 1H), 4.7 (m, 2H), 6.55 (s, 1H), 7.20 (s, 1H), 7.45 (s, 1H).
162	δ 0.9 (d, 6H), 1.0 (t, 3H), 1.3-1.7 (m, 5H), 2.20 (s, 3H), 2.4 (s, 3H), 2.9 (m, 1H), 3.0 (s, 6H), 6.6 (s, 1H), 7.20 (s, 1H), 7.45 (s, 1H).
163	δ 0.00 (s, 9H), 0.60 (m, 2H), 1.30 (t, 6H), 1.75 (m, 2H), 2.15 (s, 3H), 2.3 (s, 3H), 3.45 (q, 4H), 3.85 (t, 2H), 6.65 (s, 1H), 6.90 (s, 1H), 7.35 (s, 1H).
165	δ 1.25 (s, 9H), 2.15 (s, 3H), 2.25 (s, 3H), 2.8 (s, 3H), 3.5 (s, 6H), 3.65 (m, 2H), 3.95 (m, 2H), 6.65 (s, 1H), 6.85 (s, 1H).
167	δ 0.00 (s, 9H), 0.60 (m, 2H), 1.65 (m, 2H), 2.15 (s, 3H), 2.25 (s, 3H), 3.3 (s, 6H), 3.85 (t, 2H), 6.62 (s, 1H), 6.75 (br s, 1H), 6.9 (s, 1H).
173	δ 0.00 (s, 9H), 0.62 (m, 2H), 1.72 (s, 3H), 1.8 (m, 2H), 1.96 (s, 3H), 3.05 (s, 6H), 3.88 (t, 2H), 6.62 (s, 1H), 6.73 (s, 1H).
174	δ 1.40 (s, 9H), 2.32 (s, 3H), 2.35 (s, 3H), 3.00 (s, 6H), 3.55 (s, 2H), 6.60 (s, 1H), 7.38 (s, 1H), 7.60 (s, 1H), 8.70 (br s, 1H).
175	δ 0.80 (s, 9H), 1.20-1.40 (m, 4H), 1.8 (s, 3H), 3.0 (s, 6H), 3.9 (t, 2H), 6.60 (s, 1H), 6.70 (s, 1H), 7.25 (s, 1H).

Comp	Datos ^1H RMN (Solución CDCl_3 , a menos que se indique otra cosa) ^a
176	δ 0.80 (s, 9H), 1.30 (m, 2H), 1.5 (m, 2H), 1.8 (s, 3H), 2.0 (s, 3H), 3.0 (s, 6H), 3.95 (t, 2H), 6.60 (s, 1H), 6.70 (s, 1H).
177	δ 0.90 (s, 9H), 1.25 (m, 2H), 1.45 (t, 6H), 1.80 (m, 2H), 2.20, (s, 3H), 3.80 (q, 4H), 3.95 (t, 2H), 6.40 (br s, 1H), 6.50 (s, 1H), 7.20 (s, 1H)
182	δ 0.00 (s, 9H), 0.60 (m, 2H), 1.80 (m, 2H), 2.15 (s, 3H), 2.95 (s, 6H), 3.85 (t, 2H), 6.65 (s, 1H), 7.4 (s, 1H).
191	δ 0.92 (s, 9H), 1.26-1.35 (m, 8H), 1.75 (m, 2H), 2.15 (s, 3H), 2.2 (s, 3H), 3.75 (q, 4H), 3.9 (t, 2H), 6.6 (s, 1H), 6.7 (s, 1H), 6.9 (s, 1H).
196	δ 0.00 (s, 9H), 0.6 (m, 2H), 1.15 (t, 3H), 1.7 (m, 2H), 2.13 (s, 3H), 2.19 (s, 3H), 2.93 (s, 3H), 3.3 (m, 2H), 3.83 (t, 2H), 6.5 (s, 1H), 6.59 (s, 1H), 7.36 (br s, 1H).
197	δ 0.9 (d, 6H), 1.15 (t, 3H), 1.3 - 1.45 (m, 2H), 1.5-1.7 (m, 1H), 1.7-1.9 (m, 2H), 2.2 (s, 3H), 2.9 (s, 3H), 3.3 (m, 2H), 3.9 (t, 2H), 6.7 (s, 1H), 6.8 (s, 1H), 7.4 (br s, 1H).
198	δ 0.95 (d, 6H), 1.15 (t, 3H), 1.25 (d, 3H), 1.35 (m, 2H), 1.55 (m, 2H), 1.7 (m, 1H), 2.1 (s, 3H), 2.9 (s, 3H), 3.3 (br s, 2H), 4.2 (m, 1H), 6.7 (s, 1H), 7.4 (s, 1H).
199	δ 0.9 (d, 9H), 1.18 (t, 3H), 1.3 (m, 2H), 1.7 (m, 2H), 2.17 (s, 3H), 2.2 (s, 3H), 2.95 (s, 3H), 3.3 (br m, 2H), 3.85 (t, 2H), 6.5 (s, 1H), 6.6 (s, 1H), 7.3 (s, 1H).
200	δ 0.9 (d, 6H), 1.18 (t, 2H), 1.3 (m, 2H), 1.55 (m, 1H), 1.78 (m, 2H), 2.2 (s, 3H), 2.26 (s, 3H), 2.94 (s, 3H), 3.3 (br m, 2H), 3.78 (t, 2H), 6.4 (s, 1H), 7.3 (s, 1H).
201	δ 0.9 (d, 9H), 1.18 (t, 3H), 1.3 (m, 2H), 1.7 (m, 2H), 2.2 (s, 3H), 2.26 (s, 3H), 2.94 (s, 3H), 3.3 (br m, 2H), 3.78 (t, 2H), 6.4 (s, 1H), 7.3 (s, 1H).
202	δ 0.02 (s, 9H), 0.62 (m, 2H), 1.2 (t, 3H), 1.82 (m, 2H), 3 (s, 3H), 3.2-3.6 (m, 2H), 3.82 (s, 3H), 3.95 (t, 2H), 6.51 (s, 1H), 6.79 (s, 1H), 7.47 (br, 1H).
203	δ 0.02 (s, 9H), 0.62 (m, 2H), 1.22 (t, 3H), 1.82 (m, 2H), 2.4 (s, 3H), 3.01 (s, 3H), 3.2-3.6 (m, 2H), 3.96 (t, 2H), 6.69 (s, 1H), 6.79 (s, 1H), 7.3-7.53 (br, 1H).
205	δ 0.02 (s, 9H), 0.65 (m, 2H), 1.24 (d, 6H), 1.82 (m, 2H), 2.4 (s, 3H), 2.94 (br s, 3H), 3.64 (m, 1H), 3.96 (t, 2H), 6.69 (s, 1H), 6.79 (s, 1H), 7.6 (s, 1H).
206	δ 0.02 (s, 9H), 0.62 (m, 2H), 0.92 (t, 3H), 1.62 (m, 2H), 1.82 (m, 2H), 2.4 (s, 3H), 3.02 (s, 3H), 3.1-3.5 (m, 2H), 3.96 (t, 2H), 6.69 (s, 1H), 6.79 (s, 1H), 7.45 (br s, 1H).

Comp	Datos ¹ H RMN (Solución CDCl ₃ , a menos que se indique otra cosa) ^a
207	δ 0.02 (s,9H), 0.62 (m,2H), 1.82 (m,2H), 2.23 (s,3H), 2.27 (s,1H), 3.04 (s,3H), 3.93 (t,2H), 4.17 (br s, 2H), 6.74 (s, 1H), 6.78 (s, 1H), 7.4 (s, 1H).
208	δ 0.02 (s,9H), 0.61 (m,2H), 1.23 (t,3H), 1.8 (m,2H), 2.16 (s,3H), 3.01 (s,3H), 3.1-3.6 (m, 2H), 3.93 (t,2H), 6.72 (s, 1H), 7.22 (br s, 1H).
209	δ 0.02 (s,9H), 0.6 (m,2H), 1.8 (m,2H), 2.23 (s,3H), 2.43 (m,2H), 3.93 (t,2H), 4.3 (t, 4H), 6.72 (s, 1H), 6.75 (s, 1H), 7.31 (s, 1H).

^a Los datos ¹H RMN están en ppm campo debajo de del tetrametilsilano. Los acoples están designados por (s)-singulete, (d)-doblete, (t)-triplete, (q)-cuarteto, (m)-múltiple, (dd)-doblete de dobletes, (dt) doblete de tripletes, (br s) singulete amplio

EJEMPLOS BIOLÓGICOS DE LA INVENCION

El protocolo general para preparar suspensiones de ensayo: los compuestos de ensayo se disolvieron primero en acetona en una cantidad igual al 3% del volumen final y luego suspendida en la concentración deseada (en ppm) en acetona y agua purificada (mezcla 50/50) que contiene 250 ppm del tensoactivo Trem® 014 (ésteres de alcohol polihídrico). Las suspensiones de ensayo resultantes fueron luego utilizadas en los siguientes ensayos. Rociar una suspensión de ensayo 200 ppm al punto de

escurrimiento sobre las plantas de ensayo fue el equivalente de un índice de 500 g/ha.

ENSAYO A

La suspensión de ensayo fue rociada al punto de escurrimiento sobre plántulas de trigo. Al siguiente día las plántulas se inocularon con un polvo de espora de *Erisiphe graminis* f. sp. *Tritici*, (el agente causal de moho polvoroso del trigo) e incubado en una cámara de crecimiento a 20° C durante 7 días, después de lo cual se midieron los índices de la enfermedad.

ENSAYO B

La suspensión de ensayo fue rociada al punto de escurrimiento sobre plántulas de trigo. Al siguiente día las plántulas se inocularon con una suspensión de espora de *Puccinia recondita* (el agente causal de moho de la hoja de trigo) e incubado en una atmósfera saturada a 20° C durante 24 h, y luego movida a una cámara de crecimiento a 20° C durante 6 días, después de lo cual se midieron los índices de la enfermedad.

ENSAYO C

La suspensión de ensayo fue rociada al punto de escurrimiento sobre plántulas de trigo. Al siguiente día las plántulas se inocularon con una suspensión de espora *Septoria nodorum*, (el agente causal de la mancha de gluma de septoria) e incubada en una atmósfera saturada a 20° C durante 48 h, y luego movida a una cámara de crecimiento a 20° C durante 9 días, después de lo cual se midieron los índices de la enfermedad.

Los resultados para los ensayos A - C se dan la tabla A. en la tabla, un índice de 100 indica 100% de control de la enfermedad y un índice de 0 indica que no hay control de la enfermedad (relativo a los controles). Un guión (-) indica que no hay resultados.

Tabla A

Comp. No. _	Ensayo A_	Ensayo B_	Ensayo C_
1	32	100	92
2	95	100	36
3	0	87	0
4	0	92	0
5	0	100	89
6	0	100	60
7	0	0	0
8	97	100	98
9	98	100	97
10	97	100	0
11	97	100	100
12	97	100	80
13	97	100	100
14	90	100	0
15	94	100	0
16	88	100	97
17	92	100	100
18	98	100	98
19	96	100	100
20	96	100	99
21	98	100	96
22	98	100	88
23	97	98	13
24	86	23	0
25	0	90	0
26	98	100	100
27	99	100	100
28	0	97	0
29	99	100	58
30	0	100	0
31	93	100	53
32	97	100	95

000357

Comp. No.	Ensayo A	Ensayo B	Ensayo C
33	95	100	0
34	96	100	0
35	95	100	100
36	88	100	0
37	—	—	—
38	96	100	20
39	0	100	94
40	97	100	100
41	79	99	47
42	96	99	63
43	96	100	93
44	99	100	99
45	0	80	0
46	97	100	97
47	29	99	80
48	99	100	96
49	99	99	83
50	99	67	100
51	96	100	100
52	100	100	99
53	100	100	99
54	100	100	100
55	0	19	0
56	100	100	100
57	100	100	100
58	100	100	100
59	100	100	100
60	100	100	100
61	100	100	100
62	100	100	100
63	100	100	100
64	100	100	100
65	100	100	96
66	-	-	-
67	-	-	-
68	-	-	-

119358

Comp. No.	Enzyme A	Enzyme B	Enzyme C
69	-	-	-
70	-	-	-
71	-	-	-
72	-	-	-
73	99	61	66
74	100	100	100
75	100	100	100
76	100	100	100
77	100	100	100
78	0	98	100
79	0	99	100
83	0	9	0
84	100	100	100
85	100	99	100
86	100	99	100
87	-	-	-
88	-	-	-
89	-	-	-
90	-	-	-
91	0	26	0
92	100	100	100
93	99	100	99
94	99	100	100
95	100	100	100
96	0	100	100
97	0	45	85
98	0	60	94
99	0	9	0
100	0	86	76
101	100	100	100
102	21	95	89
103	31	0	0
104	0	23	0
105	97	100	98
106	100	100	100
107	60	99	99

000359

Comp. No.	Ensayo A	Ensayo B	Ensayo C
108	87	89	96
110	42	97	99
111	99	100	100
112	95	99	99
113	91	99	100
114	99	100	100
115	85	85	100
116	87	92	100
117	29	37	60
118	99	100	78
119	0	64	78
120	91	8	0
121	49	85	67
122	99	100	0
123	54	46	100
124	98	98	100
125	96	97	100
126	95	40	100
127	0	99	100
128	98	95	73
129	100	100	67
130	100	97	0
131	67	100	96
132	98	100	97
133	99	85	53
134	100	100	81
135	100	100	92
136	95	91	84
137	100	100	84
138	98	74	60
139	100	100	99
140	100	100	100
141	0	99	100
142	0	0	53
143	0	0	80
147	0	0	53

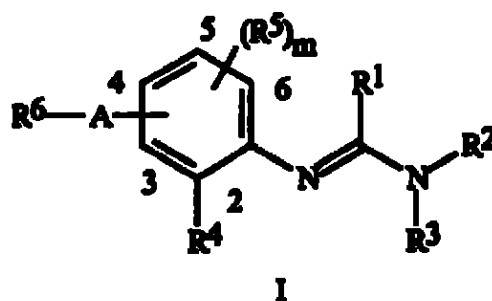
Comp. No.	Ensayo A	Ensayo B	Ensayo C
148	0	0	47
150	0	0	47
151	0	0	60
154	0	0	47
155	0	23	95
156	93	100	100
157	0	96	99
158	61	98	56
159	94	100	47
160	0	55	0
161	72	100	53
162	21	99	67
163	32	100	73
164	100	100	100
165	0	28	0
167	99	99	100
168	99	100	100
169	99	100	100
170	99	100	99
172	100	100	100
173	32	90	99
175	97	100	100
176	43	99	100
177	96	100	100
178	100	100	100
179	20	23	0
180	75	58	0
181	100	100	67
182	98	79	67
183	99	85	90
184	100	99	78
185	99	98	63
186	94	9	0
187	100	99	78
188	100	79	90
189	0	9	0

Comp. No.	Ensayo A	Ensayo B	Ensayo C
190	0	68	0
191	63	99	91
192	99	100	100
193	0	23	0
194	99	100	100
196	100	100	100
197	100	100	100
198	100	100	100
199	100	100	100
200	100	100	100
201	100	100	100

REIVINDICACIONES

Lo que se reivindica es:

1. Un compuesto de fórmula I y o una sal adecuada agrícolamente de este,



En donde:

R^1 es H, OH, SH, SO_3H , CN, $-OR^7$ o $-SR^7$; alquilo C_1-C_{10} , alquenilo C_2-C_{10} , alcoxycarbonilo C_2-C_3 , alquinilo C_2-C_{10} , un carbociclo C_3-C_6 o un heterociclo de 3-, 4-, 5- o 6-miembros, cada uno opcionalmente sustituido; con la condición de que cuando R^1 es un heterociclo que contiene nitrógeno como miembro del anillo, este no está unido al resto de la Fórmula I hasta dicho miembro del anillo de nitrógeno;

R^2 es H, CN, $-OR^7$, o $-SR^7$; alquilo C_1-C_{10} , alquenilo C_2-C_{10} , alquinilo C_2-C_{10} , carbociclo C_3-C_6 , un heterociclo de 3-, 4-, 5- o 6- miembros o alquilcarbonilo C_2-C_{10} , cada uno opcionalmente sustituido;

R^3 es H; alquilo C_1-C_{10} , alquenilo C_2-C_{10} , alquinilo C_2-C_{10} , un carbociclo C_3-C_6 , un heterociclo de 3-, 4-, 5- o 6- miembros o alquilcarbonilo C_2-C_{10} , cada uno opcionalmente sustituido; o

R^2 y R^3 son tomados juntos con su nitrógeno interconectante para formar un anillo heterocíclico que contiene 3 a 7 átomos, dicho anillo consiste de dicho átomo de hidrógeno interconectante, carbono y opcionalmente uno o dos átomos adicionales seleccionados del grupo que consiste de nitrógeno, azufre y oxígeno, y dicho anillo es opcionalmente sustituido con uno o más R^9 ;

R^4 y cada R^5 son cada uno independientemente alquilo C_1-C_6 , alquenilo C_2-C_6 , alquinilo C_2-C_6 , cicloalquilo C_3-C_6 , haloalquilo C_1-C_6 , haloalquenilo C_2-C_6 , haloalquinilo C_2-C_6 , halocicloalquilo C_3-C_6 , halógeno, CN, CHO, CO_2H , $CONH_2$,

SF₅, alcoxí C₁-C₄, haloalcoxí C₁-C₄, alquiltio C₁-C₄,
alquilsulfinilo C₁-C₄, alquilsulfonilo C₁-C₄,
haloalquiltio C₁-C₄, haloalquilsulfinilo C₁-C₄,
haloalquilsulfonilo C₁-C₄, alquilamino C₁-C₄,
dialquilamino C₂-C₈, cicloalquilamino C₃-C₆,
alquilcarbonilo C₂-C₆, alcoxicarbonilo C₂-C₆,
alquilaminocarbonilo C₂-C₆, dialquilaminocarbonilo C₃-C₈ o
trialquilsililo C₃-C₆;

R⁶ es alquilo C₅-C₂₁, alquenilo C₅-C₂₁, alquinilo C₅-C₂₁,
alcoxicarbonilo C₄-C₉, alquilaminocarbonilo C₄-C₆,
dialquilaminocarbonilo C₃-C₁₀ o trialquilsililo C₃-C₁₂,
cada uno opcionalmente sustituido; o R⁶ es alquilo C₁-C₄ o
alquilcarbonilo C₂-C₉, cada uno sustituido con uno o más
R¹²;

A es un enlace directo, O, S(O)_n o NR¹⁰;

cada R⁷ es independientemente alquilo C₁-C₆, alquenilo C₂-C₆, alquinilo C₂-C₆, un carbociclo C₃-C₆ o un heterociclo de 3-, 4-, 5- o 6- miembros, cada uno opcionalmente sustituido;

cada R^9 es independientemente halógeno, CN, NO₂, alcoxí C₁-C₄, alquilo C₁-C₄, haloalcoxí C₁-C₄ o alquiltio C₁-C₄;

R^{10} es H, alquilo C₁-C₆, alquénilo C₂-C₆, alquínilo C₂-C₆, alquilsulfonilo C₁-C₄, haloalquilsulfonilo C₁-C₄, alquilcarbonilo C₂-C₆, alcoxicarbonilo C₂-C₆, alquilaminocarbonilo C₂-C₆, dialquilaminocarbonilo C₃-C₈ o trialquilsililo C₃-C₆;

cada R^{12} es independientemente CO₂H, CONH₂, NO₂, haloalcoxí C₁-C₆, alquiltio C₂-C₆, alquilsulfinilo C₁-C₆, alquilsulfonilo C₁-C₆, haloalquiltio C₁-C₆, haloalquilsulfinilo C₁-C₆, haloalquilsulfonilo C₁-C₆, alquilamino C₁-C₆, dialquilamino C₂-C₈, alquilcarbonilo C₂-C₆, alcoxicarbonilo C₂-C₆, alcoxialquilcarbonilo C₃-C₉, alquilaminocarbonilo C₂-C₆, alquilaminoalquilcarbonilo C₃-C₁₀, dialquilaminocarbonilo C₃-C₈, dialquilaminoalquilcarbonilo C₄-C₈, alquiltioalquilcarbonilo C₃-C₉, trialquilsililo C₃-C₉, halotrialquilsililo C₃-C₉, alcoxitrialquilsililo C₄-C₉ o trialquilsililoxi C₃-C₉;

n es 0, 1 o 2; y

m es 0, 1, 2 o 3.

2. Un compuesto de la reivindicación 1 en donde:

R^1 es H, SH, SO_3H , CN, $-OR^7$ o $-SR^7$; alquilo C_1-C_{10} , alquenilo C_2-C_{10} o alquinilo C_2-C_{10} , cada uno opcionalmente sustituido con uno o más R^8 ; o un carbociclo C_3-C_6 o un heterociclo de 3-, 4-, 5- o 6- miembros, cada uno opcionalmente sustituido con uno o más R^9 ;

R^2 es H, CN, $-OR^7$ o $-SR^7$; alquilo C_1-C_{10} , alquenilo C_2-C_{10} , alquinilo C_2-C_{10} o alquilcarbonilo C_2-C_{10} , cada uno opcionalmente sustituido con uno o más R^8 ; o un carbociclo C_3-C_6 o un heterociclo de 3-, 4-, 5- o 6- miembros, cada uno opcionalmente sustituido con uno o más R^9 ;

R^3 es H; alquilo C_1-C_{10} , alquenilo C_2-C_{10} , alquinilo C_2-C_{10} o alquilcarbonilo C_2-C_{10} , cada uno opcionalmente sustituido con uno o más R^8 ; o un carbociclo C_3-C_6 o un heterociclo de 3-, 4-, 5- o 6- miembros, cada uno opcionalmente sustituido con uno o más R^9 ; o

R^2 y R^3 son tomados juntos con su nitrógeno interconectante para formar un anillo heterocíclico que

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contiene 3 a 7 átomos, dicho anillo consiste de dicho átomo de nitrógeno interconectante, carbono y opcionalmente uno o dos átomos adicionales seleccionados del grupo que consiste de nitrógeno, azufre y oxígeno, y dicho anillo es opcionalmente sustituido con uno o más R^9 ;

R^6 es alquilo C_5-C_{21} , alquenilo C_5-C_{21} , alquinilo C_5-C_{21} , alcoxicarbonilo C_4-C_9 , alquilaminocarbonilo C_4-C_6 , dialquilaminocarbonil C_3-C_{10} o trialquilsililo C_3-C_{12} , cada uno opcionalmente sustituido con uno o más R^{11} ; o R^6 es alquil C_1-C_4 o alquilcarbonilo C_2-C_9 , cada uno sustituido con uno o más R^{12} ;

cada R^7 es independientemente alquilo C_1-C_6 , alquenilo C_2-C_6 , alquinilo C_2-C_6 , cada uno opcionalmente sustituido con uno o más R^8 ; o un carbociclo C_3-C_6 o un heterociclo de 3-, 4-, 5- o 6- miembros, cada uno opcionalmente sustituido con uno o más R^9 ;

cada R^8 es independientemente halógeno, CN, NO_2 , alcoxi C_1-C_4 , haloalcoxi C_1-C_4 o alquiltio C_1-C_4 ; y

cada R^{11} es independientemente halógeno, CO_2H , $CONH_2$, NO_2 , hidroxilo, alcoxi C_1-C_6 , haloalcoxi C_1-C_6 , alquiltio C_2-C_6 , alquilsulfinilo C_1-C_6 , alquilsulfonilo C_1-C_6 , haloalquiltio C_1-C_6 , haloalquilsulfinilo C_1-C_6 , haloalquilsulfonilo C_1-C_6 , alquilamino C_1-C_6 , dialquilamino C_2-C_8 , alquilcarbonilo C_2-C_6 , alcoxycarbonilo C_2-C_6 , alcoxialquilcarbonilo C_3-C_9 , alquilaminocarbonilo C_2-C_6 , alquilaminoalquilcarbonilo C_4-C_{10} , dialquilaminocarbonilo C_3-C_8 , dialquilaminoalquilcarbonilo C_4-C_8 , alquiltioalquilcarbonilo C_3-C_9 , dialquifosforilo C_2-C_8 , dialquifosfinilo C_2-C_8 , trialquilsililo C_3-C_9 o trialquilsililoxi C_3-C_9 .

3. Un compuesto de la reivindicación 2 en donde

R^1 es H, SH, o alquilo C_1-C_{10} ,

R^2 es H, CN, $-OR^7$ o $-SR^7$; alquilo C_1-C_{10} , alquenilo C_2-C_{10} , alquinilo C_2-C_{10} , cada uno opcionalmente sustituido con uno o más R^8 ; o fenilo opcionalmente sustituido con 1 a 3 R^9 ;

R^3 es H; alquilo C_1-C_{10} , alquenilo C_2-C_{10} o alquinilo C_2-C_{10} , cada uno opcionalmente sustituido con uno o más R^6 ; o fenilo opcionalmente sustituido con 1 a 3 R^9 ; o

R^2 y R^3 son tomados juntos con su nitrógeno interconectante para formar un anillo heterocíclico que contiene 3 a 7 átomos, dicho anillo consiste de dicho átomo de nitrógeno interconectante, carbono y opcionalmente un átomo adicional seleccionado del grupo que consiste de nitrógeno, azufre y oxígeno, y dicho anillo es opcionalmente sustituido con uno o más R^9 ;

R^4 y R^5 son cada uno independientemente alquilo C_1-C_6 , alquenilo C_2-C_6 , alquinilo C_2-C_6 , haloalquilo C_1-C_6 , halógeno, CO_2H , $CONH_2$, alcoxi C_1-C_4 , haloalcoxi C_1-C_4 , alquiltio C_1-C_4 , alquilsulfinilo C_1-C_4 , alquilsulfonilo C_1-C_4 , haloalquiltio C_1-C_4 , haloalquilsulfinilo C_1-C_4 , haloalquilsulfonilo C_1-C_4 , alquilcarbonilo C_1-C_6 , alcoxycarbonilo C_2-C_6 , alquilaminocarbonilo C_2-C_6 , CN , CHO o dialquilaminocarbonilo C_3-C_8 ;

R^6 es alquilo C_5-C_{15} , alquenilo C_5-C_{15} o alquinilo C_5-C_{15} , cada uno opcionalmente sustituido con uno o más R^{11} ; o R^6 es alquilo C_1-C_4 sustituido con uno o más R^{12} ;

cada R^7 es independientemente alquilo C_1-C_6 , opcionalmente sustituido con uno o más R^8 ;

A es un enlace directo, O o $S(O)_n$; y

m es 0, 1 o 2.

4. Un compuesto de la reivindicación 3 en donde

A se adhiere al restante de la fórmula I en la posición 4 del anillo de benceno.

5. Un compuesto de la reivindicación 4 en donde

R^2 y R^3 son cada uno independientemente H o alquil C_1-C_{10} ;
o

R^2 y R^3 son tomados juntos con su nitrógeno interconectante para formar un anillo heterocíclico que contiene 3 a 7 átomos, dicho anillo consiste de dicho átomo de nitrógeno interconectante, carbono y opcionalmente un átomo adicional seleccionado del grupo que consiste de nitrógeno, azufre y oxígeno, y dicho anillo es opcionalmente sustituido con uno o más R^9 ;

R^4 y R^5 son cada uno independientemente halógeno, CN, CHO, alquilo C_1-C_6 , alcoxi C_1-C_4 , haloalcoxi C_1-C_4 , alquiltio C_1-C_4 , alquilsulfinilo C_1-C_4 , haloalquiltio C_1-C_4 , haloalquilsulfinilo C_1-C_4 o haloalquilo C_1-C_6 ;

Un R^5 está unido al resto de la Fórmula I de la posición 5 del anillo de benceno y un segundo R^5 opcional está unido en la posición 6 del anillo de benceno; y

m es 1 o 2.

6. Un compuesto de la reivindicación 5 en donde

R^1 es H; y

R^6 es alquilo C_6-C_{15} en donde al menos uno del cuarto y quinto carbono de A tiene o no un hidrógeno unido o 2-alquenilo C_5-C_{15} en donde el cuarto o quinto carbono de A tiene uno o ningún hidrógeno unido

7. Un compuesto de la reivindicación 5 en donde

R^1 es H; y

R⁶ es alquilo C₁-C₄ sustituido con uno o más sustituyentes seleccionados del grupo que consiste de alquiltio C₂-C₆, alquilsulfinilo C₁-C₆, alcoxicarbonilo C₂-C₆, dialquilamino C₂-C₆, alquilcarbonilo C₂-C₆, alcoxialquilcarbonilo C₃-C₉, alquilaminocarbonilo C₂-C₆, dialquilaminocarbonilo C₃-C₈, C₃-C₉ trialquilsililo, halotrialquilsililo C₃-C₉, alcoxitrialquilsililo C₄-C₉ o trialquilsililoxi C₃-C₉.

8. Una composición fungicida que comprende una cantidad efectiva fungicidamente de un compuesto de la reivindicación 1 y al menos un componente adicional seleccionado del grupo que consiste de tensoactivos, diluyentes sólidos y diluyentes líquidos.

9. Una composición fungicida que comprende una mezcla de un compuesto de la reivindicación 1 y al menos otro fungicida que tiene un modo diferente de acción.

10. Un método para tratar enfermedades de las plantas originado por hongos patógenos de las

plantas que comprende aplicar a la planta o porción de esta, o a la semilla de la planta o plántula, una cantidad efectiva de un compuesto de la reivindicación 1.

PATENT COOPERATION TREATY

000374

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

To:

Heiser, David E.
E.I. DU PONT DE NEMOURS AND COMPANY
Legal Patent Records Center
4417 Lancaster Pike
Wilmington, Delaware 19805
ETATS-UNIS D'AMERIQUE

RECEIVED
PATENT RECORDS CENTER
JUL 12 2004

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT
(PCT Rule 71.1)

Applicant's or agent's file reference
BA9302PCT

Date of mailing
(day/month/year) 06.07.2004

IMPORTANT NOTIFICATION

International application No.
PCT/US 03/13371

International filing date (day/month/year)
30.04.2003

Priority date (day/month/year)
03.05.2002

Applicant
E.I. DU PONT DE NEMOURS AND COMPANY

- The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
- A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.

- Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

EEL NOTED

03 Nov 2004

Name and mailing address of the International
preliminary examining authority:



European Patent Office - Gitschiner Str. 103
D-10958 Berlin
Tel. +49 30 25901 - 0
Fax +49 30 25901 - 840

Authorized Officer

HALBARTSCHLAGER, M

Tel. +49 30 25901-714



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference BA9302PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/16)	
International application No. PCT/US 03/13371	International filing date (day/month/year) 30.04.2003	Priority date (day/month/year) 03.05.2002
International Patent Classification (IPC) or both national classification and IPC C07C257/10		
Applicant E.I. DU PONT DE NEMOURS AND COMPANY		
1. This International preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36. 2. This REPORT consists of a total of 5 sheets, including this cover sheet. ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 807 of the Administrative Instructions under the PCT). These annexes consist of a total of — sheets.		
3. This report contains indications relating to the following items: I ☒ Basis of the opinion II ☐ Priority III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV ☐ Lack of unity of invention V ☒ Reasoned statement under Rule 66.2(a)(II) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI ☐ Certain documents cited VII ☐ Certain defects in the international application VIII ☐ Certain observations on the international application		
Date of submission of the demand 27.11.2003	Date of completion of this report 06.07.2004	
Name and mailing address of the international preliminary examining authority:  European Patent Office - Glitschiner Str. 103 D-10058 Berlin Tel. +49 30 25901 - 0 Fax: +49 30 25901 - 840	Authorized Officer Rufet, J Telephone No. +49 30 25901-332 	

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**International application No. **PCT/US 03/13371****I. Basis of the report**

1. With regard to the elements of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17):*

Description, Pages

1-138 as originally filed

Claims, Numbers

1-10 as originally filed

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

 International application No. **PCT/US 03/13371**
III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☒ claims Nos. 1-10 all partially

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):

☒ the claims, or said claims Nos. 1-10 all partially are so inadequately supported by the description that no meaningful opinion could be formed.

☒ no international search report has been established for the said claims Nos. 1-10 all partially

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the Standard.

☐ the computer readable form has not been furnished or does not comply with the Standard.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
1. Statement

Novelty (N)	Yes: Claims	6-10
	No: Claims	1-5
Inventive step (IS)	Yes: Claims	
	No: Claims	1-10
Industrial applicability (IA)	Yes: Claims	1-10
	No: Claims	

2. Citations and explanations

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US 03/13371

Re Item III**Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

Present claims 1-10 relate to an extremely large number of possible compounds, compositions and uses thereof. Support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT is to be found, however, for only a very small proportion of the compounds claimed. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful examination over the whole of the scope is impossible.

The international search report has not been established for the part of claims 1-10 which appear not to be supported and disclosed.

Consequently, the examination has only been carried out for those parts of claims which appear to be supported and disclosed (Art. 34(4)(a)(ii) PCT) and which have been searched (Rule 66.1(e) PCT), namely those parts relating to the compounds of formula (I) of claim 1 with the following limitations:

- R1 is H, SH, Methyl and C2-C5 alkoxy carbonyl;
- R2, R3 are independently H, C1-C10 alkyl, C2-C10 alkenyl, C2-C10 alkynyl, cyclopropyl or R2 and R3 taken together are -CH₂CH₂nCH₂- wherein n is 0 to 5;
- R4 to R10, R12 according to their respective definitions given in claim 1; R11 according to claim 2.

It is stressed that expressions like "carbocycle", "membered heterocycle", "optionally substituted", "heterocyclic ring containing 3 to 7 atoms....and optionally one or two additional atoms" etc.. present in the claims are speculative, embracing a great variety of structural possibilities not yet explored by the Applicant, the effect of which cannot be foreseen having regard to the problem to be solved.

Re Item V**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

Reference is made to the following documents:

- D1: US-A-5177106
- D2: WO-A-0006555
- D3: US-A-3284289
- D4: DE-A-2029298

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US 03/13371

D5: DE-A-2113978
D6: DE-A-2259221
D7: WO-A-0046184
D8: DE-A-2755549

1. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1-5 is in view of D1, D2 and D4 not new in the sense of Article 33(2) PCT.

Documents D1, D2 and D4 disclose a family of compounds using also a Markush formula, which overlaps with the family of compounds claimed (see D1, column 2, l. 36-52; column 8, l. 45-65; D2, page 6, example 4, claims 1, 7 and D4, p. 4, l. 32-34 and claims 1, 2).

It is pointed out that the subject-matter of claims 6-10 refer to compounds and compositions thereof, which appears to be novel over the prior art D1-D8.

2. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 6-10 (which appears to be novel) does not involve an inventive step in the sense of Article 33(3) PCT for the following reasons:

The skilled person already knows from D3-D8 that amidinylphenyl compounds are useful for combatting pests, especially for combatting undesired plant growth, harmful micro-organisms (fungi), insects, acarids and nematodes (see D3, column 2, l. 8-20; D4, p. 45-46; D5, p. 6, l. 11, claims 3, 4; D6, p. 5, l. 3-8; D7, claims 1, 16 and D8, p. 6, l. 3-35, examples 2-7).

The skilled person looking for further amidinylphenyl compounds useful as fungicide would have, with expectation of success, considered the claimed compounds as possible alternatives to the compounds of D3 to D8, since he knows from D3 and D8 that structurally very close amindinylphenyl compounds are not only useful for combatting undesired plant growth, insects, acarids and nematodes but also for combatting fungi.

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

CPV

To:

Heiser, David E.
E.I. DU PONT DE NEMOURS AND COMPANY
Legal Patent Records Center
4417 Lancaster Pike
Wilmington, Delaware 19805
ETATS-UNIS D'AMERIQUE

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MAR 02 2004

MAR 03 2004
WRITTEN OPINION
(PCT Rule 66)

☐ TO BE REVIEWED
BY ATTORNEY

Date of mailing
(day/month/year) 25.02.2004

Applicant's or agent's file reference
BA9302PCT

REPLY DUE within 3 month(s)
from the above date of mailing

International application No.
PCT/US 03/13371

International filing date (day/month/year)
30.04.2003

Priority date (day/month/year)
03.05.2002

International Patent Classification (IPC) or both national classification and IPC
C07C257/10

Applicant
E.I. DU PONT DE NEMOURS AND COMPANY

1. This written opinion is the first drawn up by this International Preliminary Examining Authority.
2. This opinion contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application
3. The applicant is hereby invited to reply to this opinion.

When? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also: For an additional opportunity to submit amendments, see Rule 66.4.
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis.
For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.
4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 03.09.2004

KEY NOTED

Name and mailing address of the international preliminary examining authority:



European Patent Office - Glitschiner Str. 103
D-10968 Berlin
Tel. +49 30 25901 - 0
Fax +49 30 25901 - 840

Authorized Officer

Rufet, J

Formalities officer (incl. extension of time limits)
Geier, A
Telephone No. +49 30 25901-708



WRITTEN OPINIONInternational application No. **PCT/US 03/13371****I. Basis of the opinion**

1. With regard to the elements of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed"*):

Description, Pages

1-136 as originally filed

Claims, Numbers

1-10 as originally filed

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

6. Additional observations, if necessary:

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

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WRITTEN OPINION

International application No. PCT/US 03/13371

Novelty (N)	Claims	1-5 NO
Inventive step (IS)	Claims	1-10 NO
Industrial applicability (IA)	Claims	1-10 YES

2. Citations and explanations

see separate sheet

**WRITTEN OPINION
SEPARATE SHEET**

International application No. PCT/US03/13371

Re Item III**Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

Present claims 1-10 relate to an extremely large number of possible compounds, compositions and uses thereof. Support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT is to be found, however, for only a very small proportion of the compounds claimed. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful examination over the whole of the scope is impossible.

The international search report has not been established for the part of claims 1-10 which appear not to be supported and disclosed.

Consequently, the examination has only been carried out for those parts of claims which appear to be supported and disclosed (Art. 34(4)(a)(ii) PCT) and which have been searched (Rule 66.1(e) PCT), namely those parts relating to the compounds of formula (I) of claim 1 with the following limitations:

- R1 is H, SH, Methyl and C2-C5 alkoxy carbonyl;
- R2, R3 are independently H, C1-C10 alkyl, C2-C10 alkenyl, C2-C10 alkynyl, cyclopropyl or R2 and R3 taken together are -CH₂CH₂nCH₂- wherein n is 0 to 5;
- R4 to R10, R12 according to their respective definitions given in claim 1; R11 according to claim 2.

It is stressed that expressions like "carbocycle", "membered heterocycle", "optionally substituted", "heterocyclic ring containing 3 to 7 atoms....and optionally one or two additional atoms" etc.. present in the claims are speculative, embracing a great variety of structural possibilities not yet explored by the Applicant, the effect of which cannot be foreseen having regard to the problem to be solved.

Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
Reference is made to the following documents:

- D1: US-A-5177106
- D2: WO-A-0006555
- D3: US-A-3284289
- D4: DE-A-2029298
- D5: DE-A-2113978

**WRITTEN OPINION
SEPARATE SHEET**

International application No. PCT/US03/13371

D6: DE-A-2259221
D7: WO-A-0046184
D8: DE-A-2755549

1. Novelty

The documents D1, D2 and D4 destroy the novelty of the subject-matter of claims 1-5. Documents D1, D2 and D4 disclose a family of compounds using also a Markush formula, which overlaps with the family of compounds claimed (see D1, column 2, l. 36-52; column 8, l. 45-65; D2, page 6, example 4, claims 1, 7 and D4, p. 4, l. 32-34 and claims 1, 2).

It is stressed that in limiting the claims over the prior art D1-D2, D4 not only the individual compounds disclosed in D1-D2, D4 but the whole overlapping area should be deleted. Accordingly the limitation of the claims should be made in a "positive way", that means that a list of disclaimers will not be accepted.

2. The Applicant is invited to submit a new set of claims the subject-matter of which is clearly distinguished from the prior art D1-D2, D4 and for which the presence of an inventive step within the meaning of Art. 33(1)-(3) may be substantiated.

It should be made clear which features distinguish the subject-matter of these new claims from each cited documents D1-D8 and which objective technical problem is solved by these features in an **unexpected** manner.

It should be taken into account that the skilled person already knows from D3-D8 that amidinylphenyl compounds are useful for combatting pests, especially for combatting undesired plant growth, harmful micro-organisms (fungi), insects, acarids and nematodes (see D3, column 2, l. 8-20; D4, p. 45-46; D5, p. 6, l. 11, claims 3, 4; D6, p. 5, l. 3-8; D7, claims 1, 16 and D8, p. 6, l. 3-35, examples 2-7).

The skilled person looking for **further amidinylphenyl compounds useful as fungicide** would have, with expectation of success, considered the claimed compounds as possible alternatives to the compounds of D3 to D8, since he knows from D3 and D8 that structurally very close amidinylphenyl compounds are not only useful for combatting fungi but also for combatting undesired plant growth, insects, acarids and nematodes.

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REQUISITOS NECESARIOS PARA PRESENTACION Y AGILIZACION DEL TRAMITE

	USUARIO	RADIADOR
PATENTE DE INVENCION (X) MODELO DE UTILIDAD	()	()
Indicacion de que se solicita la concesion de una patente	(X)	()
Datos de Identificación del solicitante o de la persona que presenta la solicitud.	(X)	()
- Descripción de la invención.	(X)	()
Dibujos de ser estos pertinentes	()	()
Comprobante de Pago de las tasas establecidas (X)		
COMPLETA (X)	INCOMPLETA ()	()

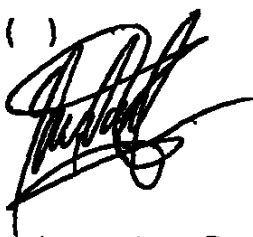
DISEÑO INDUSTRIAL ()

- Indicación de que se solicita el registro de Diseño Industrial	()	()
- Datos de Identificación del solicitante o de la persona que presenta la solicitud	()	()
- Representación gráfica y fotográfica del Diseño Industrial o muestra del Material que incorpora el diseño	()	()
Comprobante de pago de las tasas establecidas	()	()
COMPLETA ()	INCOMPLETA ()	()

ESQUEMA DE TRAZADO ()

- Indicación de que solicita el registro de un Esquema de trazado	()	()
- Datos de Identificación del solicitante o de la persona que presenta La solicitud	()	()
Representación gráfica del esquema de trazado	()	()
Comprobante de pago de las tasas establecidas	()	()
COMPLETA ()	INCOMPLETA ()	()

Firma Responsable



Fecha Bogotá, Noviembre 3 de 2004

SUPERINDUSTRIA Y COMERCIO
Radicación : 04110432 00000000 Folios: 304
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Trámite : 011 OCT-PATENT 379 FASE INCI 411 PRESENTAC
Dependencia: 2026 DIVISION DE INVENCCIONES

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Doctor(a) A
ALVARO CORREA ORDOÑEZ
Apoderado(a)
EL DUPONT DE NEMOURS AND COMPANY

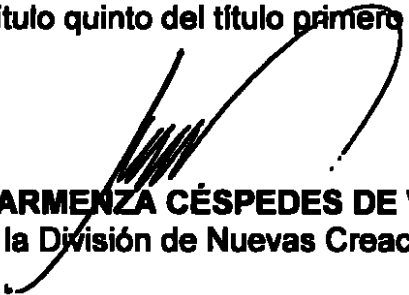
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REFERENCIA:	Radicación N°	04-110432
	Solicitud internacional	PCT/US03/13371
	Fecha inicio fase nacional	2004-12-03
	Trámite	011
	Evento	379
	Actuación	430
	Folios	001

Como resultado del examen de forma, realizado con fundamento en el artículo 38 de la Decisión 486 de la Comisión de la Comunidad Andina, artículo 27 del Tratado de Cooperación en Materia de Patentes (PCT), regla 51 bis del Reglamento y Circular Única de la Superintendencia de Industria y Comercio, se le comunica que:

- La solicitud no contiene copia del documento en que consta la cesión del derecho de patente del inventor al solicitante o a su causante (Art. 26-k Decisión 486).
- La solicitud no contiene la sustitución del poder debidamente otorgado, con el lleno de requisitos exigidos por los artículos 63 y subsiguientes del Código de Procedimiento Civil..
- En caso que el examen preliminar contenga anexos, estos deben ser presentados junto con su traducción.

Notifíquese el presente oficio conforme a lo dispuesto en el numeral 5.2, literal e), del capítulo quinto del título primero de la Circular Única N° 10 de 2001.


ALIX CARMENZA CÉSPEDES DE VERGEL
Jefe de la División de Nuevas Creaciones.

El anterior requerimiento fue notificado por fijación en lista de fecha,
26 NOV. 2004
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