

[SS 3] biodiesel and supercrit+ and transesterif+ and distillat+ and (preheat+) and (palm or chicken or tall or recycled or used)

Results in EPODOC 0

[SS 4] biodiesel and supercrit+ and transesterif+ and distillat+ and (palm or chicken or tall or recycled or used)

Results in EPODOC 0

[SS 5] biodiesel and supercrit+ and transesterif+ and distillat+

Results in EPODOC 0

[SS 6] biodiesel and supercrit+ and (palm or chicken or tall or recycled or used or reused)

Results in EPODOC 23

[SS 7] 6 and cool+

Results in EPODOC 2

[SS 8] ..li



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PN - [CN104629914](#) A 20150520

PR - CN20151063353 20150204

AP - CN20151063353 20150204

DT - I

CT - || STSE (A)

[CN1594504](#) A 20050316 [A] (WUHAN INST TECHNOLOGY [CN])

[A] 1-2

* 全文 *;

[CN101041782](#) A 20070926 [A] (UNIV TSINGHUA [CN])

[A] 1-2

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[CN101935593](#) A 20110105 [A] (RONGJIANG XU)

[A] 1-2

* 全文 *;

[CN103080287](#) A 20130501 [Y] (NISSHIN OILLIO GROUP LTD)

[Y] 1-2

* 说明书摘要、第0057-0063、0067-0068、0072、0075-0076、0079、0084段 *

CTNP - || STSE (A)

[A] - 谢明霞等, "超临界甲醇制备生物柴油的研究", 《化学与生物工程》

[A] 1-2

* 40-42 *

[Y] - 陈文等, "油菜籽与超临界甲醇原位萃取-酯交换反应制备生物柴油", 《应用化学》

[Y] 1-2

* 1332-1335 *

- CNOI - [B01J20/12](#) ; [B01J20/3433](#) ; [B01J20/345](#) ; [C10L1/02](#) ; [C11B13/04](#) ; [C11C3/10](#)
- CCA - [Y02E50/13](#) ; [Y02W30/74](#)
- CNOA - [B01J2220/4806](#)
- PA - UNIV DALIAN TECH
- TI - **Supercritical** methanol extraction reaction coupling method for preparing **biodiesel** oil and coproducing regenerated carclazyte by using waste carclazyte
- AB - The invention discloses a **supercritical** methanol extraction reaction coupling method for preparing **biodiesel** oil and coproducing regenerated carclazyte by using waste carclazyte. The method comprises the following steps: putting the waste carclazyte and methanol in a high-pressure stirring reactor by a solid to liquid ratio of 1:2 to 1:5; stirring at the temperature of 240 to 300 DEG C, at the pressure of 9MPa to 30 MPa and at a speed of 500rpm to 1500rpm; reacting for 0.5 to 4 hours after the temperature and the pressure are stable, and then **cooling** to room temperature in a water bath; taking out products and separating to obtain the **biodiesel** oil and the regenerated carclazyte. By taking the waste carclazyte of which the grease is hard to recycle as a raw material to prepare the **biodiesel** oil, the method disclosed by the invention has the advantages of solving the problem of treatment of the waste carclazyte generated by vegetable oil plants and also providing a cheap raw material for preparation of the **biodiesel** oil. Extraction reaction coupling is performed in **supercritical** methanol; the methanol is taken as an extracting agent, a reactant and a solvent; the **supercritical** methanol is **used** for extracting the grease in the waste carclazyte; simultaneously the grease and the **supercritical** methanol have an ester interchange reaction to prepare the **biodiesel** oil; the waste carclazyte of which the grease is extracted is regenerated and **recycled**; the final **biodiesel** oil yield is as high as 90%.

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- PN - [RU2008149226](#) A 20100620
- PNFP - RU2412236 C2 20110220
- PR - RU20080149226 20081215
- AP - RU20080149226 20081215
- DT - I
- CCA - [Y02E50/13](#)
- PA - (C2)
G OBRAZOVATEL NOE
UCHREZH DENIE VYSSHEGO
PROFESSIONAL NOGO
OBRAZOVANIJA ROSSIJSKIJ GU
NEFTI I GAZA IM [RU];
ASSOTSIIATSIJA DELOVOGO
SOTRUDNICHESTVA V OBLASTI
PEREDOVYKH KOMPLEKSNYKH T
ASPEKT ASSOTSIIATSIJA ASPE [RU]



TI	- (C2) METHOD OF PRODUCING BIODIESEL FUEL
AB	- (C2) FIELD: chemistry. ^ SUBSTANCE: rape-seed oil is treated with ethyl alcohol through re- esterification in volume ratio 0.5- 1.0:10-15 until achieving homogeneous state. The obtained mixture is fed into a reactor in which re-esterification takes place at temperature 250- 280C, pressure 15-20 MPa, for 5- 10 minutes. The mixture is cooled and then fed into an extractor. The mixture is the extracted with carbon dioxide in supercritical conditions with carbon dioxide flow rate of 20- 35 l/h, temperature 240-260C and pressure 15-20 MPa. The obtained homogeneous mixture is fed into a first separator for separation of glycerine from the end product at pressure 0.5 MPa and temperature 20-30C. The end product is fed into a second separator for separation of fatty acid ethyl alcohol from carbon dioxide at pressure 0.2-0.3 MPa and temperature 5-10C. The end product is fed into the second separator for separation of carbon dioxide at pressure 0.1- 0.15 MPa and temperature 10- 20C. Carbon dioxide separated in the second separator is preferably recycled . ^ EFFECT: simple process. ^ 2 cl, 1 tbl, 2 ex