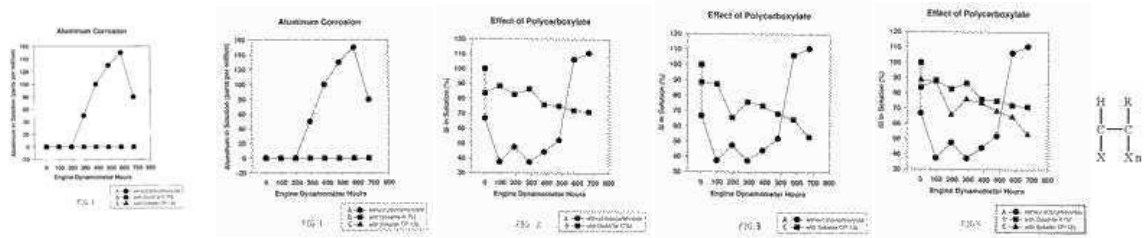


#	Title	Publication number	1st App. date	Applicant/Assignee	1st Publ. date	Publ. date
1.	Extended engine coolant lifetime through polymeric polycarboxylate secondary silicate stabilization	CA2226472	1997-01-10	ASHLAND ASHLAND AQUALON* HERCULES* ISP INVESTMENT* ISP INVESTMENTS* VALVOLINE LICENSING & INTELLECTUAL PROPERTY*	1998-07-10	1998-07-10

Engine Dynamometer Hours	Aluminum Corrosion (mg/cm²)	Aluminum Corrosion (Control) (mg/cm²)
0	10	10
100	10	10
200	10	10
300	40	10
400	140	10
500	160	10
600	180	10
800	100	10


$$\begin{array}{cc} \text{H} & \text{R} \\ | & | \\ \text{C} & - \text{C} \\ | & | \\ \text{X} & \text{X}_n \end{array}$$

45

$$\begin{array}{c} \text{---CH}_2\text{---CH}^1\text{---} \\ | \\ \text{H}_2\text{C---CH}^2\text{---(XY)} \end{array}$$
$$\begin{array}{c} \text{---CH}_2\text{---CH}^+ \text{---} \\ | \\ \text{H}_2\text{C---CH}^+ \text{---} \end{array}$$

This invention relates to a coolant composition for use in automotive engines which composition comprises a liquid alcohol freezing depressant and a corrosion inhibitor consisting essentially of decanedioic acid, dodecanedioic acid and sodium tolyltriazole. This coolant composition is environmentally acceptable, uses readily available and relatively inexpensive materials and is more effective in protecting aluminum engine parts than traditional corrosion inhibitors.

$$\begin{array}{c}
 \text{R}_2\text{COOM} \\
 | \\
 \text{N} \\
 / \quad \backslash \\
 \text{R}_1-\text{C} \quad \text{C}-\text{R}_1 \\
 | \quad \quad || \\
 \text{R}_1-\text{C} \quad \text{N}
 \end{array}$$
