

Title (en)  
AMINE-FREE COOLING LUBRICANTS

Title (de)  
AMINFREIE KÜHLSCHMIERSTOFFE

Title (fr)  
REFRIGERANTS LUBRIFIANTS SANS AMINES

Publication  
**EP 0658182 B1 19960703 (DE)**

Application  
**EP 93919222 A 19930830**

Priority  
• DE 4229848 A 19920907  
• EP 9302344 W 19930830

Abstract (en)  
[origin: WO9405746A1] Amine-free cooling lubricants contain as essential component sets of anticorrosive substances, besides the usual base oils, emulsifiers and solubilizers. These sets of anticorrosive substances consist of a mixture of dimeric fatty acids and one or several carboxylic acids. The latter are selected among the aliphatic and aromatic carboxylic acids. Alkali metal, magnesium and/or calcium salts of said acids may be used in a similar manner. These amine-free cooling lubricants have an anticorrosive effect comparable to that of alkanolamine-containing cooling lubricants.

IPC 1-7  
**C10M 129/26**; C10M 173/00; C23F 11/10

IPC 8 full level  
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**C10M 101/02** (2013.01); **C10M 101/04** (2013.01); **C10M 105/12** (2013.01); **C10M 105/14** (2013.01); **C10M 105/18** (2013.01); **C10M 105/38** (2013.01); **C10M 105/48** (2013.01); **C10M 107/08** (2013.01); **C10M 107/10** (2013.01); **C10M 107/34** (2013.01); **C10M 107/48** (2013.01); **C10M 107/50** (2013.01); **C10M 125/10** (2013.01); **C10M 129/26** (2013.01); **C10M 129/32** (2013.01); **C10M 129/34** (2013.01); **C10M 129/40** (2013.01); **C10M 129/42** (2013.01); **C10M 129/50** (2013.01); **C10M 129/54** (2013.01); **C10M 129/60** (2013.01); **C10M 129/64** (2013.01); **C10M 135/10** (2013.01); **C10M 137/02** (2013.01); **C10M 145/36** (2013.01); **C10M 173/00** (2013.01); **C10M 2201/062** (2013.01); **C10M 2201/063** (2013.01); **C10M 2203/1006** (2013.01); **C10M 2203/1025** (2013.01); **C10M 2203/1045** (2013.01); **C10M 2203/1065** (2013.01); **C10M 2203/1085** (2013.01); **C10M 2205/0265** (2013.01); **C10M 2205/0285** (2013.01); **C10M 2207/021** (2013.01); **C10M 2207/0215** (2013.01); **C10M 2207/022** (2013.01); **C10M 2207/0225** (2013.01); **C10M 2207/04** (2013.01); **C10M 2207/0406** (2013.01); **C10M 2207/10** (2013.01); **C10M 2207/121** (2013.01); **C10M 2207/122** (2013.01); **C10M 2207/123** (2013.01); **C10M 2207/125** (2013.01); **C10M 2207/126** (2013.01); **C10M 2207/127** (2013.01); **C10M 2207/129** (2013.01); **C10M 2207/14** (2013.01); **C10M 2207/141** (2013.01); **C10M 2207/142** (2013.01); **C10M 2207/144** (2013.01); **C10M 2207/146** (2013.01); **C10M 2207/18** (2013.01); **C10M 2207/22** (2013.01); **C10M 2207/2835** (2013.01); **C10M 2207/325** (2013.01); **C10M 2207/401** (2013.01); **C10M 2207/4045** (2013.01); **C10M 2209/1033** (2013.01); **C10M 2209/104** (2013.01); **C10M 2209/1045** (2013.01); **C10M 2209/105** (2013.01); **C10M 2209/1055** (2013.01); **C10M 2209/1065** (2013.01); **C10M 2209/1075** (2013.01); **C10M 2209/108** (2013.01); **C10M 2209/1085** (2013.01); **C10M 2209/1095** (2013.01); **C10M 2215/202** (2013.01); **C10M 2219/044** (2013.01); **C10M 2223/02** (2013.01); **C10M 2223/04** (2013.01); **C10M 2223/042** (2013.01); **C10M 2223/049** (2013.01); **C10M 2223/10** (2013.01); **C10M 2225/003** (2013.01); **C10M 2225/025** (2013.01); **C10M 2225/0405** (2013.01); **C10M 2229/025** (2013.01); **C10M 2229/0405** (2013.01); **C10M 2229/0415** (2013.01); **C10M 2229/0425** (2013.01); **C10M 2229/0435** (2013.01); **C10M 2229/0445** (2013.01); **C10M 2229/0455** (2013.01); **C10M 2229/0465** (2013.01); **C10M 2229/0475** (2013.01); **C10M 2229/0485** (2013.01); **C10M 2229/0505** (2013.01); **C10M 2229/0515** (2013.01); **C10M 2229/0525** (2013.01); **C10M 2229/0535** (2013.01); **C10M 2229/0545** (2013.01); **C10N 2010/00** (2013.01); **C10N 2010/02** (2013.01); **C10N 2010/04** (2013.01); **C10N 2040/20** (2013.01); **C10N 2040/24** (2013.01); **C10N 2040/241** (2020.05); **C10N 2040/242** (2020.05); **C10N 2040/243** (2020.05); **C10N 2040/244** (2020.05); **C10N 2040/245** (2020.05); **C10N 2040/246** (2020.05); **C10N 2040/247** (2020.05); **C10N 2050/01** (2020.05)

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