

MAINTAIN FRICOFIN LL

Premium Performance Coolant Concentrate based on monoethylene glycol. Free of nitrites, amines, phosphates and silicates with OAT-technology.

Description

MAINTAIN FRICOFIN LL is an antifreeze coolant concentrate based on monoethylene glycol and is used for engines in Heavy Duty vehicles, passenger cars and stationary machines. As OAT-coolant concentrate it provides a stable inhibitor system made of organic acids with highest change intervals. MAINTAIN FRICOFIN LL is free from nitrites, amines, phosphates and silicates.

Application

MAINTAIN FRICOFIN LL is a coolant concentrate and must be diluted with water before it is filled into the coolant system. The concentration range should be between 33% to 70% by volume, typically at 50%. The properties of the water should not exceed the following limits.

Water hardness:	0 - 20 °dH (0-3,6 mmol/l)
Chloride content:	max. 100 ppm
Sulphate content:	max. 100 ppm

By adding distilled or deionized water these values can easily be adjusted where necessary.

MAINTAIN FRICOFIN is miscible with coolants that are approved to VW TL 774-C (G11), TL 774-F (G12+), 774-G (G12++) and 774-J (G13), while for full performance a complete change is recommended.

Attention:

This product is recommended for use at combustion engines only. Manufacturers' drain intervals and recommendations about the application concentration are mandatory.

Advantages/Benefits

- Long lasting protection against deposits, cavitation and corrosion in engines and coolers.
- Protection against freezing or overheating.
- Highest change intervals possible.
- Miscible with MAINTAIN FRICOFIN, MAINTAIN FRICOFIN DP and MAINTAIN FRICOFIN V.
- Successfully tested for Heavy Duty applications without requiring an initial charge of Supplement Coolant Additive (SCA).
- Extremely reducing the risk of precipitation.
- Preserves sealings, plastics and conduits.
- Contains bittering agent to prevent swallowing.

Specifications

- ASTM D 3306 TYPE I
- ASTM D 6210 TYPE I-FF
- BS 6580:2010
- SAE J814
- FORD-WSS-M97-B44-D
- JAGUAR LAND ROVER STJLR.651.5003
- FVV Heft R443
- KSM 2142
- UNE 26-361-88/1

Approvals

- Bez.Reg.Arnsbg. E62.12.22.64-2011-1
- CAT / MWM TR 0199-99-2091
- DAF 74002
- DEUTZ DQC CB-14
- MAN 324 TYPE SNF
- MB-APPROVAL 325.3
- MTU MTL 5048

PI60461e, PMA, 08.06.2021, Page 1

MAINTAIN FRICOFIN LL

FUCHS Recommendations

- AFNOR NFR 15-601 TYPE I
- AS/NZS 2108:2004 TYPE A
- ASTM D 4985
- SAE J1034
- ADE (ATLANTIS DIESEL ENGINES)
- BAIC GROUP FOTON Q-FPT 2313005-2013
- CATERPILLAR MAK A4.05.09.01
- CHRYSLER MS 12106
- CNH MAT 3624
- CNH MAT 3724
- CUMMINS (ISBe engines at DAF and Leyland)
- CUMMINS CES 14603, CES 14439
- DETROIT DIESEL 93K217
- FIAT 9.55523
- GM GMW 3420 (6277M)/GME L 1301
- HYUNDAI MS 591-08
- JASO M325
- JIS K2234
- JOHN DEERE JDM H5
- KOMATSU AF-NAC (07.892 (2009))
- LIEBHERR MD 1-36-130
- MACK 014 GS 17009
- MAZDA MEZ MN 121 D
- PSA B 71 5110
- RENAULT 41-01-001/- -S Type D
- Bergen Engines 2.13.01
- SAAB B 040 1065
- SKODA 61-0-0257
- TOYOTA TSK 2601G-8A
- VW TL 774-D/F (G12+ / different colour)
- VOLVO COOLANT VCS (STD 418-0001)
- VOLVO COOLANT XLC (STD 418-0005)

PI60461e, PMA, 08.06.2021, Page 2

TYPICAL CHARACTERISTICS

Density at 20 °C	DIN 51757	1.113 g/ml
Boiling Point	ASTM D 1120	>160 °C
pH-Value	DIN 51 369	8.6
Product dyeing	DIN 10964	orange

Mixing ratio

MAINTAIN FRICOFIN LL: H₂O



1:1 (50%)	-40°C / -40 °F
2:3 (40%)	-28°C / -18.4°F
1:2 (33%)	-21°C / -5.8°F

PI60461e, PMA, 08.06.2021, Page 3