



## Gulf Antifreeze LL

### Superior Anti-freeze Coolant Concentrate Fluid

#### Product Description

**Gulf Antifreeze LL** is a latest generation Antifreeze concentrate based on of Mono Ethylene Glycol and effective corrosion inhibitors to provide protection against frost and corrosion. It needs to be mixed with appropriate amount of water for using as cooling and heat transfer fluid in internal combustion engines. It is free from potentially harmful additives such as nitrites, amines and phosphates and hence it contributes to a safer environment. It is neutral towards gaskets, hoses and provides good resistance against foam and provides frost & corrosion protection.

#### Features & Benefits

- It is formulated with combination of Silicate and Carboxylate inhibitor technology to provide effective and long lasting corrosion protection to cooling system and engine parts made out of ferrous and non-ferrous metals.
- It provides round the year protection against frost, protection against boiling
- With excellent Seal compatibility it can be used without any adverse effect on rubber hoses & gasket materials.
- As it is free from nitrites, amines and phosphates, it contributes to safer environment.

#### Applications

- It is recommended to be used at least 33% dosage of Gulf Antifreeze LL in 67% water. For enhanced protection, 50% of concentrate in 50% of water is recommended.
- It is recommended for use in cooling systems of all types of liquid cooled automotive and industrial engines where such types of coolants are used. (Please refer OEM manual for recommended coolant)

Warning: Keep all antifreezes out of reach of children. Do not drink antifreeze. If swallowed, induce vomiting and immediately seek medical advice.

#### Dilution Table:

Antifreeze	Water	Freeze Protection
33%	67%	Up to -20 °C
40%	60%	Up to -27 °C
50%	50%	Up to -40 °C
60%	40%	Up to -52 °C

#### Suitable for Use Applications & Typical Properties:

Meets the following Specifications		
ASTM D3306, SAE J1034, MB 325.0, JASO M325/JIS K2234		X
Behr, BMW-GS 9400, Cummins 85T8-2, Daimler-Chrysler MS-7170, Fiat-Lancia Fiat 9,55523, Iveco 18-1830, Volvo 128 6083/002, Opel/GM GME L1301, Saab 6901 599, Perkins, JI Case JIC-501, MAN 324 Type NF, MTU MTL 5048, VW TL 774C (G11)		X
Typical Properties		
Test Parameters	ASTM Method	Typical Values
Density @ 20°C, Kg/l	D 1298	1.125
Equilibrium Boiling Point °C	D 1120	174
Freezing point °C (50 vol %)	D 1177	-35
Reserve Alkalinity	D 1121	16
pH value (50 vol %)	D 1287	7.2

May 2016

Properties mentioned above are typical only and minor variations, which do not affect the product performances, are to be expected in normal manufacturing. The above information is based on past history of the grade only and must not be construed as a guarantee of performance. Follow equipment manufacturer's recommendations for performance level and viscosity grade. The Material Safety Data Sheet for this product is available from your nearest Gulf Distributor.

Gulf Oil International

The information contained herein is believed to be correct at time of publication. No warranty expressed or implied is given concerning the accuracy of the information or the suitability of the products. Gulf Oil International reserves the right to modify and change its products and specifications without prior notice.

[www.gulfoilltd.com](http://www.gulfoilltd.com)