

ENEOS Hyper Cool XLR

Organic Antifreeze Coolant

High Performance Long-Life Protection

ENEOS Hyper Cool XLR is high performance Long life antifreeze coolant, with exceptional heat transfer capability; suitable for use as a coolant and heat transfer fluid in all combustion engines. Extensively fleet tested for over 100,000,000 km with both heavy duty and automotive vehicles. Based on ethylene glycol, it guarantees protection against boiling and freezing of up to -69°C . Furthermore, the reliance on superior Organic Acid Technology (OAT) means long life through non-depleting corrosion inhibitor and a maintenance-free protection. It is approved for leading engine manufacturers including Ford, Mercedes-Benz, General Motors, MAN and Volkswagen.

FEATURES & BENEFITS

- Extended Life**
 Provides long-life corrosion protection for all engine metals. First of 5 years or 650,000Km in truck & bus, and 250,000Km in passenger cars.
- Frost & Boiling protection**
 Offers winter protection against engine freeze damage. Control of overheating, coolant loss and breakdown at high engine temperatures.
- Suitable for mixed fleets**
 One coolant for automotive & heavy duty.
- Miscibility**
 Mixes with existing ethylene glycol coolants.

APPLICATION

- Passenger car gasoline, LPG and diesel engines
- Light-duty commercial vehicle gasoline and diesel engines
- Heavy-duty diesel engines fitted with wet or dry liners, in on and off-highway service
- Motorbike, Power equipment & Outboard engines

TYPICAL MIXING RATIO

This concentrate provides year-round frost & corrosion protection. It is recommended to use at least 33 vol. % of this concentrate in the coolant solution, providing frost protection to -20°C . Concentrations higher than 70 vol. % are not recommended as the maximum frost protection is reached. The maximum protection (about -69°C) is obtained at 68 vol. %.

| Vol % in water | 33 | 40 | 50 | 60 | 68 |
|--|-----|-----|-----|-----|-----|
| Freezing Protection $^{\circ}\text{C}$ | -20 | -27 | -40 | -54 | -69 |

PACK SIZES

1L, 5L, 60L & 200L

TYPICAL PROPERTIES

| Parameters | Concentrate | 50% Pre-mixed | 40% Pre-mixed |
|--------------------------------|-----------------------|-----------------------|-----------------------|
| Appearance | Red | | |
| Density @ 20°C | 1.1 | | |
| Freezing Protection | | -40°C | -27°C |
| pH | 8.6 | 8.6 | 8.4 |
| Boiling Point | 180°C | 108°C | |
| Reserve Alkalinity mL PH 5.5 | 6.2 | 3.0 | 2.4 |

Note: The typical properties may be changed without notice. (September 2014)

STORAGE

The product should be stored above -20°C and preferably at ambient temperatures. Periods of exposure to temperatures above 35°C should be minimized. Further, it is strongly advised not to expose the coolant in translucent packages to direct sunlight because this can degrade the colour dyes present in the coolant, and result in fading of the colour or discoloration over time. This reaction can be accelerated if coupled with high ambient temperatures. It is therefore advisable to store coolant filled in translucent packages indoors to avoid this issue.

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PERFORMANCE LEVELS

| OEM Group | OEM | Specification |
|---------------------------|------------------|----------------------------------|
| ADE | ADE | |
| Aston Martin | Aston Martin | |
| Behr | Behr | |
| Caterpillar | MAK | A4.05.09.01 |
| Claas | Claas | |
| Cummins | Cummins | IS series u N14 |
| Daimler | Mercedes-Benz | 325.3 |
| Detroit Diesel | Detroit Diesel | Power Cool Plus |
| Deutz | Deutz | 0199-99-1115/6 |
| Deutz/MWM | Deutz-MWM | 0199-99-2091/8 |
| Fiat | Case New Holland | MAT3624 |
| Ford | Ford | WSS-M97B44-D |
| General Motors | Chevrolet | |
| General Motors | Opel – GM | GMW 3420 |
| General Motors | Saab | GM 6277M (+B040 1065) |
| General Motors | Saturn | |
| General Motors | Vauxhall | GME L1301, GM 6277M (+B040 1065) |
| Hitachi | Hitachi | |
| Hyundai | Hyundai | |
| Isuzu | Isuzu | |
| Jenbacher | Jenbacher | TA 1000-0201 |
| John Deere | John Deere | JDM H5 |
| Irisbus | Karosa | |
| Kobelco | Kobelco | |
| Komatsu | Komatsu | 07.892 (2009) |
| Liebherr | Liebherr | MD1-36-130 |
| MAN | MAN | 324 Typ SNF |
| MAN | MAN B&W AG | D36 5600 |
| MAN | MAN B&W A/S | |
| MAN | Semt Pielstick | |
| Mazda | Mazda | MEZ MN 121 D |
| MG-Motors | Rover | |
| Mitsubishi Heavy Industry | Mitsubishi MHI | |
| MTU | MTU | MTL 5048 |
| Paccar | DAF | 74002 |
| Paccar | Leyland Trucks | DW03245403 |
| Renault | Renault RNUR | 41-01-001/- -S Type D |
| Suzuki | Santana Motors | |
| Tata Motors | Jaguar | CMR 8229, WSS-M97B44-D |
| Tata Motors | Land-Rover | |
| Tata Motors | Land-Rover | WSS-M97B44-D |
| Thermo King | Thermo King | |
| ulstein Bergen | ulstein Bergen | 2.13.01 |



| | | |
|----------|--------------------|-----------------------------------|
| Volvo AB | Mack | 014 GS 17009 |
| Volvo AB | Volvo Penta | 128 6083 / 002 |
| Volvo AB | Renault Trucks | 41-01-001/- -S Type D |
| Volvo AB | Volvo Construction | 128 6083 / 002 |
| Volvo AB | Volvo Trucks | 128 6083 / 002 |
| VW | Audi | TL-774 D = G 12, TL-774 F = G 12+ |
| VW | Seat | TL-774 D = G 12, TL-774 F = G 12+ |
| VW | Skoda | TL-774 D = G 12, TL-774 F = G 12+ |
| VW | Skoda | 61-0-0257 |
| VW | Volkswagen | TL-774 D = G 12, TL-774 F = G 12+ |
| Wärtsilä | SACM Diesel | DLP799861 |
| Wärtsilä | Wärtsilä | 32-9011 |
| Waukesha | Waukesha | |
| Yanmar | Yanmar | |

STANDARDS & SPECIFICATIONS

| | | |
|--------------------|-------------|------------------------------------|
| BRB | | BR 637 |
| ASTM Standards | | ASTM D3306, ASTM D4656, ASTM D4985 |
| British Standards | | BS 6580 |
| French Standards | | NFR 15-601 |
| FVV Standards | Germany | FVV Heft R443 |
| Japanese Standards | | JASO M325 |
| Korean Standards | | KSM 2142 |
| MIL Standards | MIL-Belgium | BT-PS-606 A |
| MIL Standards | MIL-France | DCSEA 615/C |
| MIL Standards | MIL-Italy | E/L-1415b |
| MIL Standards | MIL-Sweden | FSD 8704 |
| NATO Standards | | NATO S-759 |
| Önorm | | Önorm V5123 |
| SAE Standards | | SAE J1034 |
| UNE Standards | | uNE 26-361-88/1 |

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