Product Information

ENEOS X HYPER COOL XLR

X-OAT Coolant with High Performance Long-Life Protection

ENEOS X Hyper Cool XLR is a premium X-OAT coolant, featuring X technology from Japan, providing year-round frost protection and excellent corrosion, freeze, and boil resistance. With increased oxidation stability, it can withstand high temperatures and compensate for potential flux contamination effects. Designed to cope with extreme engine conditions in passenger cars and heavy-duty applications, ENEOS X Hyper Cool XLR serves as a cooling and heat transfer fluid for Internal Combustion Engines (ICE), Hybrid Electric Vehicles (HEV), and Battery Electric Vehicles (BEV). Additionally, its inhibitor package ensures excellent compatibility with CAB (Controlled Atmosphere Brazing) brazed materials by neutralizing the negative effects of flux residues.

SPECIAL FEATURES

1. Advanced Flux Neutralization Technology

Incorporating a specialized neutralization package, this feature counteracts the negative effects of flux materials used in manufacturing aluminium heat exchangers and effectively prevents the formation of gels and deposits in the cooling system, ensuring optimal performance and longevity.

2. Extended service life

Offering extended service life through increased service intervals and long-lasting protection. Its OAT (Organic Acid Technology) foundation, featuring non-depleting organic corrosion inhibitors, ensures sustained effectiveness over time. This combination minimizes maintenance needs and operational downtime, enhancing overall efficiency and cost-effectiveness.

3. Robust performance in challenging conditions

Providing excellent hard water stability, which prevents insoluble deposit formation, ensuring system cleanliness. It also offers superior oxidation and pH stability at high temperatures, minimizing glycol degradation acids and extending fluid life. Combined with outstanding heat transfer properties that maintain optimal engine cooling efficiency, this advanced formulation ensures long-lasting protection and performance across diverse operating environments.

4. Eco-Friendly and Safety-Conscious Formulation

Featuring carefully selected additives to minimize environmental impact, utilizing a 2-EHA, nitrite, and borate-free formulation. Additionally, it complies with EU CO2 emission performance standards, ensuring both environmental responsibility and regulatory compliance.

APPLICATION

ENEOS X Hyper Cool XLR is compatible with engines made from cast iron, aluminum, or a combination of both metals. It's also safe for cooling systems containing aluminum or copper alloys. This coolant is especially recommended for advanced engines where high-temperature aluminum protection is crucial.

ENEOS X Hyper Cool XLR is also versatile, suitable for both combustion engines and Battery Electric Vehicles in automotive and heavy-duty applications, provided there are no specific requirements for electrical conductivity.

TYPICAL MIXING RATIO

ENEOS X Hyper Cool XLR coolant provides long-life frost and corrosion protection. To ensure good corrosion protection, it is recommended to use at least 33 vol.% of XLR in the coolant solution. This provides frost protection to -18 °C. Typical mixtures in Northern Europe are 50/50, offering frost protection down to -37 °C. Mixtures with more than 70 vol.% of XLR in water are not recommended. XLR is compatible with most other coolants based on ethylene glycol. Exclusive use of XLR is however recommended for optimum corrosion protection and sludge control.

For optimal performance and controlled quality, we recommend the use of deionised or distilled water to prepare the ready-to-use dilutions although lab testing has shown that acceptable corrosion results are still obtained with water of 20°dH, containing up to 500 ppm chlorides or 500 ppm sulphates.

Vol, % in water	40	50	60
Freezing Protection **°C**	-26	-37	-53

PACK SIZES

1L, 5L, 60L & 200L

TYPICAL PROPERTIES

Parameters	Fully Concentrate 100%	40% Pre-mixed	50% Pre-mixed	60% Pre-mixed
Colour	Light red/Pink			
Density @ 20°C, kg/l, ASTM D5931	1.124	1.059	1.073	1.085
Freezing Protection ASTM D1177	report	-26 °C	-37°C	-53 °C
pH ((20°C) ASTM D1287	8.6	8.2 - 8.7	8.2 - 8.7	8.2 - 8.7
Boiling Point, °C ASTM D1120	180 °C	108 °C	108 °C	108 °C
Reserve Alkalinity (pH 5.5) ASTM D1121	6.4	report	report	report

Note: The typical properties may be changed without notice. (July 2024)

PERFORMANCE LEVELS

OEM GROUP	OEM BRAND	SPECIFICATION
Alstom	Alstom	/
Aston Martin	Aston Martin	/
Caterpillar	Perkins	/
Caterpillar	Caterpillar Motoren	GCM34
Claas	Claas	/
CNH Industrial	Case New Holland	MAT 3624
CNH Industrial	Case New Holland	MAT 3724
Daimler Trucks & Buses	Detroit	DFS93K217
Daimler Trucks & Buses	Evobus	/
Daimler Trucks & Buses	Freightliner	/
Daimler Trucks & Buses	Mercedes-Benz Trucks	325.3
Daimler Trucks & Buses	Mercedes-Benz Trucks	326.3
Deutz	Deutz	DQC CB-14
Ford	Ford	WSS-M97B44-D
General Motors	Chevrolet	GMW 3420
General Motors	Chevrolet	GMW 18270
Great Wall Motors	GWM	/
Hitachi	Hitachi	/
Ingersoll Rand	Thermo King	/
Isuzu	UD Trucks	/
Isuzu	Isuzu	/
John Deere	John Deere Power Systems	/
Kobelco	Kobelco	/
Komatsu	Komatsu	07.892 (2017)
Kubota	Kubota	/
Mahle	Behr	/
Mitsubishi Heavy Industry (MHI)	Mitsubishi MHI	/
Paccar	DAF	/
Paccar	Leyland Trucks	/
Stellantis	Abarth	/
Stellantis	Alfa Romeo	/
Stellantis	Chrysler	/
Stellantis	Dodge	/
Stellantis	Fiat	Fiat 9,55523
Stellantis	Jeep	/
Stellantis	Maserati	/
Stellantis	Opel	GMW 3420
Stellantis	Vauxhall	GMW 3420
Stellantis	Opel	GMW 18270
Stellantis	Vauxhall	GMW 18270
Suzuki	Santana Motors	/
Tata Motors	Jaguar	STJLR.03.5212
Tata Motors	Land Rover	STJLR.03.5212
Tata Motors	Tata	/
Vestas Wind Systems	Vestas	/

Voith	Voith	/
Volvo AB	Mack	VCS-2
Volvo AB	Renault Trucks	VCS-2
Volvo AB	Volvo Bus	VCS-2
Volvo AB	Volvo Construction	VCS-2
Volvo AB	Volvo Penta	VCS-2
Volvo AB	Volvo Trucks	VCS-2
VW	Audi	TL-774 D
VW	Audi	TL-774 F
VW	MAN	324 Typ SNF
VW	MAN Truck & Bus SE	324 Typ SNF
VW	Seat	TL-774 D
VW	Seat	TL-774 F
VW	Skoda	61-0-0257
VW	Skoda	TL-774 D
VW	Skoda	TL-774 F
VW	Volkswagen	TL-774 D
VW	Volkswagen	TL-774 F
Yanmar	Yanmar	/
ZF AG	ZF	/

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.