Delo®XLI

Water-Based Corrosion Inhibitor Concentrate

Product Data Sheet

Customer benefits

Complete cooling system protection

Unique Carboxylate Technology inhibitor provides corrosion protection in aqueous solutions for all engine and cooling system metals, including aluminum, iron, steel, copper and solder alloys. The corrosion inhibitor prevents wet liner cavitation erosion and protects aluminum heat transfer surfaces.

Extended service life

Very low depletion rate of the organic acid inhibitor ensures long-term corrosion protection under all operating conditions.

Reduced maintenance costs

Unique Carboxylate Technology inhibitor system prevents wet liner cavitation erosion, and provides exceptional protection to aluminum surfaces under heat transfer conditions .

Saves time and money

Very low depletion rate and complete cooling system protection of the special organic acid inhibitor removes the need for supplementary additives for cavitation erosion protection, and reduces the need to regularly test inhibitor level and add extra additive to maintain the inhibitor concentration.

Applications

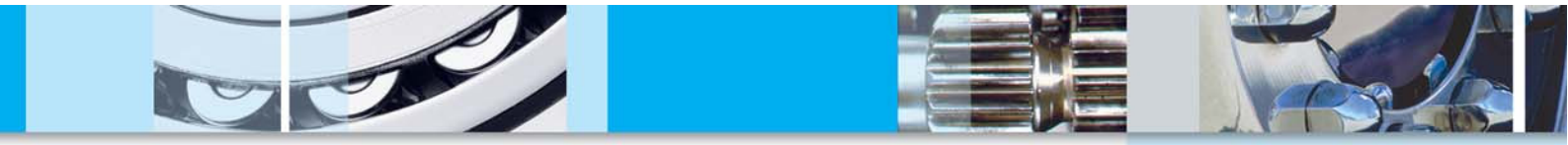
- Automotive and transport engines.
- Construction, earthmoving, mining and quarrying equipment.
- Marine engines.
- Stationary power generation engines.
- High temperature aluminium engine blocks.
- Inhibitor package for central heating systems, hydraulic safety fluids and mining fluids.

Recommended maximum service intervals, using 7.5% volume with water, are:

Heavy-duty diesel, on-road	:	600,000 km or 4 years
Heavy-duty diesel, off-road	:	8,000 hours or 4 years
Passenger car & light truck commercial vehicles	:	250,000 km or 5 years
Stationary power generation & marine engines	:	32,000 hours

Product features:

- **Delo®XLI** is an environmentally sensitive, coolant and corrosion inhibitor concentrate based on extended-life organic acid Carboxylate Technology.
- **Delo®XLI**, when mixed at 7.5% by volume with water, is suitable for use in automotive cooling systems, marine engines and stationary power generation where glycol-based antifreeze is not required.



Product specifications

DELO®XLI KEY PROPERTIES	
Product Code	510636
Mixing rate, % volume with water	7.5
Nitrate, amine, phosphate, borate content	Nil
Silicate content, as Na2SiO3, m%	Nil
pH, 7.5% dilution	8.3

1206

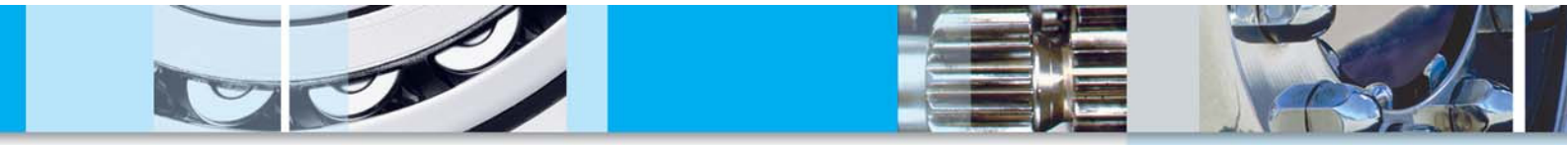
Performance standards

- Detroit Diesel
- Mercedes Benz trucks, MB 312.0
- MAN 248
- Liebherr MD 1-36-130 (DCA)
- MTU MTL 5049
- Deutz (TR0199-99-2091) medium & large engines
- Wärtsilä, diesel/gas/dual fuel engines
- MAN B&W, 2 and 4-cycle engines
- MaK
- New Sulzer Diesel, 2-cycle engines
- Ulstein Bergen 2.13.01, diesel and gas engines
- Yanmar

ENVIRONMENT, HEALTH and SAFETY

Information is available on this product in the Material Safety Data Sheet (MSDS) and Customer Safety Guide. Customers are encouraged to review this information, follow precautions and comply with laws and regulations concerning product use and disposal.

To obtain a MSDS for this product, visit: www.deloperformance.com.



Delo®XLI

Service considerations

For optimum year-round protection, a solution of 7.5% by volume Delo®XLI in water is recommended.

While Delo®XLI is compatible with hard water, it is recommended that water of the following quality is used to minimize scale deposits:

Chloride Ion content, max mg/kg	40
Sulfate content, max, mg/kg	100
Total Hardness (CaCO3 & MgCO3) max, mg/kg	170
pH at 25°C	5.5 to 9.0
Total Solids, max, mg/kg	340

Traditional phosphate and borate containing coolants exhibit higher pH and reserve alkalinity than the new organic acid based Carboxylate Technology. However, this difference bears no relationship to corrosion control potential. In comparison with conventional coolants, the different inhibitor mechanism of Delo®XLI means reserve alkalinity is of no relevance, and it is able to afford corrosion protection to aluminum and other system metals at much lower pH levels.

Produced by:
Chevron Lubricants
- Asia Pacific

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