

Delo® XLC Antifreeze/Coolant

High performance extended life antifreeze/coolant

Product description

Delo XLC Antifreeze/Coolant is a high performance longlife coolant formulated to protect engines from freezing and boiling while offering advanced cooling system corrosion protection, including high temperature corrosion resistance in modern aluminium engines.

Delo XLC Antifreeze/Coolant is an ethylene glycol based formulation in combination with an advanced non-depleting corrosion inhibitor technology. It is designed to offer long, low maintenance service life and is available as a concentrate, premix 50/50 and as premix 40/60.

Customer benefits

- Advanced non-depleting corrosion inhibitor technology promotes extended low maintenance service life and system uptime
- Mixed fleet applications offer in excess of 650,000km in trucks and buses and 32,000 hours in stationary engines
- Promotes reliability and corrosion protection in thermostats, radiators, water pumps and other vulnerable cooling system components
- High performance silicate- and phosphate-free formulation contributes to reliable hard water stability
- Aids high temperature corrosion protection in modern engines, helping reduce maintenance, downtime, cost, and waste

Product highlights

- · Formulated for long, low maintenance service life
- Offers over 650,000km in trucks and buses and 32,000 hours in stationary engines
- Promotes reliability and corrosion protection
- · Contributes to reliable hard water stability
- Aids high temperature corrosion protection

Selected performance standards include:

ASTM	Chrysler		
Cummins	DAF		
Daimler	Detroit Diesel		
Deutz	Ford		
GE - Jenbacher	GM		
Hino	Isuzu		
Kobelco	Komatsu		
Mack	MAN		
MTU	Navistar™		
Scania	TMC		
Volvo	Wärtsilä		

Applications

- Delo XLC Antifreeze/Coolant is recommended for use in heavy duty and stationary engines that require improved heat transfer performance, cavitation protection and long-life cooling system protection
- This product is not to be used to protect the inside of potable water systems against freezing

Approvals, performance and recommendations

Approvals

Detroit Diesel	DFS 93K217
• Deutz	DQC CB-14
Cummins	CES 14439
• DAF	74002
• MTU	2000/4000 series
• Daimler	MB-Approval 325.3 (concentrate only)

Performance

Delo XLC Antifreeze/Coolant meets the requirements of:

• ASTM	D6210	

- Ford WSS-M97B44-D
- MAN 324 Typ SNF
- MTU MTL 5048
- TMC RP 364 Type 1

Recommendations

Delo XLC Antifreeze/Coolant is suitable for use in the following engines:

- General Motors vehicles post 1995
- Chrysler vehicles post 2001
- · Ford vehicles post 2003
- · Deutz stationary diesel engines
- · GE Jenbacher stationary natural gas engines
- · Hino truck diesel engines
- · Isuzu truck diesel engines
- Kobelco construction equipment diesel engines
- · Komatsu construction equipment diesel engines
- Navistar™ MAXXFORCE engines
- · Scania truck diesel engines
- · Volvo construction equipment (VCE) diesel engines
- · Volvo and Mack truck diesel engines
- A Chevron company product

- · Wärtsilä stationary diesel engines
- European HD OEMs that require both phosphate-free and nitrite-free formulations
- Japanese HD OEMs that require silicate-free formulations

It is recommended not to dilute this product with other coolant formulations by more than 25% in order to maintain performance claims.

Product maintenance and handling

Delo XLC Antifreeze/Coolant should be stored above - 20°C and preferably at ambient temperatures. Periods of exposure to temperatures above 35°C should be minimized.

It is strongly advised not to expose Delo XLC Antifreeze/Coolant in translucent packages to direct sunlight because this can result in discoloration over time.

Delo XLC Antifreeze/Coolant – Concentrate should be diluted before use. For maximum protection against freezing in extremely cold areas, a 60 percent solution (3 parts coolant concentrate/2parts water) can be used. Concentrations greater than 67 percent and lower than 33 percent are not recommended.

Delo XLC Antifreeze/Coolant – Premixed 50/50 and Delo XLC Antifreeze/Coolant – Premixed 40/60 should be used as purchased. No dilution is recommended.

As with any antifreeze coolant, the use of galvanized steel is not recommended for pipes or any other part of the storage/mixing installation.

Delo XLC Antifreeze/Coolant has a storage shelf life of up to 8 years, provided the container remains sealed.

Always dispose of used coolant in accordance with all local, state and federal guidelines.

Typical test data						
Test	Test Methods	Results				
Dilution		40/60	50/50	Concentrate		
Shelf Life: 96 months from date of filling indicated on the product label.						
Density at 20°C, Kg/L	ASTM D5931	1.056	1.068	1.113		
Freezing point, °C	ASTM D1177	< -24	< -37	NA		
Boiling point, °C	ASTM D1120	105	108	180		
pH at 20°C, NUOM	ASTM D1287	8.5	8.6	8.7		
Reserve alkalinity, mL 0.1N HCl	ASTM D1121	2.4	3.0	6.0		
ASTM D1384 Glassware Corrosion Test ⁽¹⁾						
Copper, Weight loss, mg/coupon (2)	ASTM D1384	NA	NA	2		
Solder, Weight loss, mg/coupon (2)	ASTM D1384	NA	NA	0		
Brass, Weight loss, mg/coupon ⁽²⁾	ASTM D1384	NA	NA	2		
Steel, Weight loss, mg/coupon (2)	ASTM D1384	NA	NA	0		
Cast iron, Weight loss, mg/coupon (2)	ASTM D1384	NA	NA	-2		
Aluminium, Weight loss, mg/coupon (2)	ASTM D1384	NA	NA	5		
ASTM D4340 Aluminium Heat Rejection Test ⁽³⁾						
Aluminium, Weight loss, mg/cm²/week (2)	ASTM D4340	NA	NA	< 0.2		

(1) Data generated on a 33vol% dilution as per the method

(2) Negative sign indicates a weight gain

(3) Data generated on a 25vol% dilution as per the method

The information given in the typical data does not constitute a specification but is an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved. This supersedes all previous editions and information contained in them.

Disclaimer Chevron accepts no liability for any loss or damage suffered as a result of using this product for any application other than applications specifically stated in any Product Data Sheet's.

<u>Health. safety. storage and environmental</u> Based on current available information, this product is not expected to produce adverse effects on health when used for the intended application and in accordance with the recommendations provided in the Material Safety Data Sheet (MSDS). MSDS's are available upon request through your local sales office, or via the Internet. This product should not be used for purposes other than its intended use. When disposing of used product, take care to protect the environment and follow local legislation.

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