



Delo XLC Antifreeze/Coolant

High performance extended life antifreeze/coolant

Product description

Texaco® Delo® XLC Antifreeze/Coolant is a high performance long-life 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 fluid formulated with advanced non-depleting corrosion inhibitor technology. It is designed to offer long, low maintenance service life and is available as a concentrate, or premixed in concentrations of 40/60, 50/50 and 55/45 (grades dependent on region/country).

Customer benefits

- Advanced non-depleting corrosion inhibitor technology promotes extended low maintenance service life and system uptime
- Mixed fleet applications offer at least 650,000 km in trucks and buses and up to 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

* These are general indications. Some OEMs may have their own specific guidelines, and these should always take precedence

Product highlights

- **Formulated for long, low maintenance service life**
- **Offers at least 650,000 km in trucks and buses and up to 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 |
| GM | Hino |
| Isuzu | Jenbacher |
| Kobelco | Komatsu |
| Mack | MAN |
| MTU | MWM |
| 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
- No compatibility problems should be encountered with seals, hoses and plastic components, provided that the operating temperature is within the range appropriate for that material type.
- This product is not to be used to protect the inside of potable water systems against freezing

Approvals, performance and suitable for use

Approvals

- Daimler MB-Approval 325.3 (concentrate)
- Daimler MB-Approval 326.3 (premixed 50/50)
- Detroit Diesel DFS 93K217
- Deutz DQC CB-14
- Cummins CES 14439
- DAF 74002
- Jenbacher TA 1000-0200
- MAN Energy Systems MAN 175D engines
MAN 4-stroke medium speed engines
- MAN 324 Type SNF
(premixed 40/60 and 50/50)
- MWM TR-2091 GR.2
- MTU 2000 and 4000 series engines
(cooling systems free of light metal)

| | 2000 | 4000-1 | 4000-2 | 4000-3 |
|---------------------------|------|--------|-------------|--------|
| Construction & Industrial | x | x | x | x |
| Oil & Gas | x | — | x | x |
| Genset | — | x | x | x |
| Marine | — | — | — | x |
| Rail | | | R41 and R43 | |

Performance

Delo XLC Antifreeze/Coolant meets the requirements of:

- ASTM D6210
- Ford WSS-M97B44-D
- MaK (concentrate)
- TMC RP 364 Type 1
- Volvo VCS 418-0001

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
- 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
- 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. It is recommended to use deionized or distilled water for this purpose. 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 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

Delo® XLC Antifreeze/Coolant — Continued

the storage/mixing installation (the copper inhibitor may react with the zinc from the galvanized parts, reducing its effectiveness in protecting red and yellow metals).

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.

RESTRICTED TO PROFESSIONAL USERS ONLY.

| 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 |

(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 typical test data set out above does not constitute a specification. It is indicative only and can be affected by allowable production tolerances. Chevron may modify this test data. Modified data will supersede all previous data, so please ensure you refer to the latest version of this Product Data Sheet (PDS).

| Corrosion Test for Engine Coolants in Glassware (ASTM D1384) | | |
|--|------------------|--------------------------------|
| Weight loss, mg/coupon ⁽¹⁾ | | |
| | ASTM D3306 (max) | Antifreeze/Coolant Concentrate |
| Brass | 10 | 1.6 |
| Copper | 10 | 1.9 |
| Solder | 30 | 0.1 |
| Steel | 10 | -0.5 |
| Cast iron | 10 | -1.4 |
| Aluminium | 30 | 4.6 |
| Corrosion of Cast Aluminium Alloys in Engine Coolants | | |
| Under Heat-Rejecting Conditions (ASTM D4340) | | |
| 25 vol% dilution | | |
| Weight loss, mg/cm ² /week ⁽¹⁾ | | |
| | 1.0 | <0.2 |

(1) Weight loss AFTER chemical cleaning in accordance with the ASTM procedure. Negative sign indicates a weight gain

Disclaimer: Data provided in this Product Data Sheet (PDS) is based on standard tests under laboratory conditions and is indicative only. This product should not be used for any purpose other than those expressly set out in this PDS. The user has sole responsibility for verifying that this product is suitable for the user's intended application. Neither Chevron nor its subsidiaries (i) make any warranty or representation as to the accuracy or completeness of this PDS; and/or (ii) accept liability for any loss or damage suffered as a result of the use of this product other than in accordance with the terms of this PDS.

When disposing of used product, take care to protect the environment and follow local legislation.

Always confirm that the product selected is consistent with the original equipment manufacturer's recommendation for the equipment operating conditions and customer's maintenance practices.

Safety Data Sheets (SDS's) are available for all Chevron products. If you require a SDS or any further information regarding a Chevron product, please contact your local sales office or see www.texacolubricants.com.

A Chevron company product