



PRISTA® ANTIFREEZE LONG LIFE

AUTOMOTIVE FLUID

Description and application

PRISTA® ANTIFREEZE LONG LIFE is antifreeze concentrate based on ethylene glycol and an additive system developed with silicate-free organic (mono- and di-carboxylic) acids. The product is free from potentially harmful substances such as nitrites, amines, and phosphates, which makes it environmentally friendly.

PRISTA® ANTIFREEZE LONG LIFE can be used all-year-round for protection against freezing, overheating, and corrosion of the engines of passenger cars, trucks, buses, off-road vehicles, stationary and marine engines, etc. It is used only after dilution with distilled or soft water. Along with conventional combustion engines, the product is particularly suitable for high-tech engines where high-temperature corrosion protection for the aluminium heat transfer surfaces is vital.

For durable corrosion protection, it is recommended to use at least 33 % v/v of PRISTA® ANTIFREEZE LONG LIFE in distilled water. The typical mixing ratio is 1:1, offering protection against freezing at ambient temperatures down to minus 40 °C. Mixtures with more than 70 % v/v PRISTA® ANTIFREEZE LONG LIFE in water are not recommended.

Maximum freezing protection (down to minus 69 °C approximately) is achieved with 68 % v/v of PRISTA® ANTIFREEZE LONG LIFE in water.

PRISTA® ANTIFREEZE LONG LIFE products allow extended drain intervals thanks to the special organic additives used in their formulation with minimum depletion during service. The recommended drain intervals are as follows:

- Passenger cars - **250 000 km** or **2 000 hours**
- Heavy-duty trucks, buses, and other commercial vehicles – **650 000 km** or **8 000 hours**
- Stationary engines – **32 000 hours** or **6 years**

Specifications

| ASTM | D 3306/D 4340/D 6210 |
|------------|--------------------------------------|
| MB | 325.3 |
| MAN | 324 Type SNF |
| SAE J | 1034 |
| VW | TL 774-D (G12); TL774-F (G12+) |
| VOLVO | 1286083 |
| MTU MTL | 5048 |
| OPEL | GM 6277M |
| Ford | WSS-M97B44-D |
| Deutz | DQC CB-14 |
| Cummins | IS series, N14; CES 14439; CES 14603 |
| John Deere | JDM H5 |

The table below summarizes different dilutions of PRISTA® ANTIFREEZE LONG LIFE in water and the respective temperatures for "Freezing Protection":

| PRISTA® Antifreeze Long Life, % v/v | Distilled or Soft Water, % v/v | Freezing Protection down to Temperature*, °C |
|-------------------------------------|--------------------------------|--|
| 33 | 67 | - 17 |
| 40 | 60 | - 25 |
| 50 | 50 | - 40 |
| 60 | 40 | - 55 |
| 70 | 30 | - 70 |

*Note - This temperature is the average value of the Initial Crystallization Temperature and the Pour Point. The exact value of the Freezing Temperature is determined in a laboratory. Approximate values can be obtained by refraction meters and hydrometers calibrated for ethylene glycol-based coolants.



Typical characteristics

| Parameter | Test Method | Typical Value |
|--|-------------|--|
| Appearance | Visual | Clear fluid |
| Colour | Visual | Pink-red, fluorescent |
| Relative Density at 15.5 °C | ASTM D 1122 | 1.12 |
| Initial Boiling Point, °C | ASTM D 1120 | 163 |
| Initial crystallization point**, °C | ASTM D 1177 | minus 37 |
| pH** | ASTM D 1287 | 8.5 |
| Foaming properties*** - Foam Volume, ml - Break Time, s | ASTM D 1881 | 20 0 |
| Alkalinity, cm ³ | ASTM D 1121 | 4.5 |
| Corrosion in Glassware***, weight loss, mg/specimen - Copper - Solder - Brass - Steel - Cast Iron - Aluminium | ASTM D 1384 | 1.9 1.0 1.6 -0.5 -1.4 4.6 |

** measured after dilution of Antifreeze concentrate in distilled water in ratio 1:1.

*** measured on 33% v/v of Antifreeze concentrate in distilled water

Important note: typical data values do not constitute a specification but are an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved.

Guidelines for safe handling, transport, and storage

This product is classified as dangerous and therefore requires special labeling. Follow the guidelines and requirements for safe handling and storage described in the product's safety data sheet.

For more information about product MSDS, terms and conditions for storage, and shelf life, please visit www.prista-oil.com.