

LONG LIFE ANTIFREEZE G12+

Organic Acid Technology (OAT)

REXOIL LONG LIFE ANTIFREEZE G12+ is a high-performance, extended-life engine coolant concentrate formulated with **Monoethylene Glycol (MEG)** and a carefully balanced package of **Organic Acid Technology (OAT)** corrosion inhibitors. The product is engineered to deliver long-term protection of modern engine cooling systems against **freezing, overheating, corrosion, cavitation, scaling, and deposit formation**, while ensuring efficient heat transfer and reliable engine operation under a wide range of climatic and operating conditions.

The advanced **silicate-free, nitrite-free, amine-free, borate-free, and phosphate-free** inhibitor system provides superior long-term protection for all common cooling system materials, including **aluminum alloys, cast iron, steel, copper, brass, and soldered components**, making it particularly suitable for modern aluminum engines and high-efficiency radiators. The formulation helps maintain cooling system cleanliness, protects water pump components and seals, and supports extended drain intervals when used according to OEM recommendations.

LONG LIFE ANTIFREEZE G12+ is recommended for use in **passenger cars, SUVs, light commercial vehicles, heavy-duty trucks, buses, agricultural machinery, construction equipment, and stationary engines** requiring **G12+ or OAT-type coolant technology**. It is suitable for both **gasoline and diesel engines**, including turbocharged and high-load applications, and can be used in **pressurized closed-circuit cooling systems** operating in severe service conditions.

For optimum performance and maximum service life, the cooling system should be clean and free from incompatible coolant residues before filling. It offers an average service life of 5 years or 250,000 km for passenger cars and 500,000 km for professional applications.

Features and Benefits

- **Extended Service Life:** Advanced Organic Acid Technology (OAT) inhibitor system provides long-term corrosion protection, enabling extended drain intervals in accordance with OEM recommendations.
- **Outstanding Corrosion Protection:** Effectively protects all cooling system metals including aluminum, cast iron, steel, copper, brass, and solder against rust, corrosion, and electrochemical degradation.
- **Silicate-, Nitrite-, Amine-, Phosphate- and Borate-Free Formulation:** Modern additive technology reduces deposit formation, prevents abrasive silicate drop-out, and ensures long-term cooling system cleanliness.
- **Excellent Thermal Stability:** Maintains chemical stability at high operating temperatures, supporting efficient heat transfer and preventing overheating under severe service conditions.
- **Protection Against Cavitation & Erosion:** Helps prevent liner pitting and water pump cavitation, extending the service life of critical engine components.
- **Prevents Scale and Deposit Formation:** Minimizes scaling in radiator channels and engine passages, ensuring consistent cooling performance and system efficiency.
- **Water Pump & Seal Compatibility:** Provides reliable lubrication and protection for water pump seals, gaskets, and hoses, reducing leakage risk.
- **Low Maintenance Requirements:** Long-life formulation reduces coolant replacement frequency and maintenance downtime.
- **Wide Application Compatibility:** Suitable for modern gasoline and diesel engines, including aluminum engines and high-performance cooling systems requiring G12+ OAT coolant technology.
- **Reliable Freeze & Boil Protection:** When properly diluted, provides effective protection against freezing in cold climates and boiling in high-temperature operating environments.

Approval and Specifications

Porsche/VW/Audi/Seat/Skoda TL 774D/F (G12 and G12+); VW G 012 A8F M1; VW G 012 A8F M8; VW G 012 A8F M9; Renault/Nissan RNUR 41-01-001/S Type D; MB Approval 325.3; MAN 324 Type SNF; MAN B&W AG D36 5600; Opel/GM/Vauxhall GMW 3420; Opel/GM 6277 M; Opel/GM B0401065; Wartsila 329011; Volvo 9437650; Volvo 9437651; Volvo Construction (STD 418-0001); Volvo Trucks; Waukesha; Ford 1336797; Ford 1336807; Ford 1365305; Ford WSS-M97B44-D; DAF 74002; Case New Holland MAT 3624; Fiat/Lancia 9.55523; Caterpillar/GCM34/MAK; Cummins CES 14439/14603; MTU MTL 5048; Mitsubishi heavy Industry; Mazda MEZ MN 121D; BS 6580 (GB); ASTM D3306/D4985/D6210; JASO M325; JASO JIS K2234; Chevrolet; Jaguar/ Land Rover STJLR 651.5003; Jaguar CMR 8229; Jaguar JLM 209722; Toyota 00272-1LLAC; Toyota 08889-00115; Toyota 08889-01005; Toyota 08889-80014; Deutz DQC CB-14; Deutz-MWM; Detroit DFS93K217; Isuzu; Scania; Komatsu 07.892; Leyland Trucks DW03245403; Mack 014 GS 17009; Hitachi; John Deere JDM H5; Kobelco; Yanmar-2

Technical Specifications

Test	Method	Typical Properties
Color	-	Red
Boiling Point, °C	ASTM D 1120	Min. 160
Density @ 20°C, kg/l	ASTM D 4052	1,015 – 1,135
pH	ASTM D 1293	7,5 – 11,0

Mixing Table (ASTM D 1177)

ANTIFREEZE	WATER	Freezing Point
1 unit	2 units	-18°C
1 unit	1 unit	-37°C
2 units	1 unit	-56°C

Health and Safety

This product does not pose a significant health or safety risk when used appropriately. For detailed safety information, please refer to the Safety Data Sheet (SDS).

Storage & Handling

Store in a cool, dry, and well-ventilated area, away from direct sunlight and moisture. Keep containers tightly closed to prevent contamination. Dispose of contents and containers in accordance with local regulations.