



RECO-COOL HD EXPERT EXTREME Concentrate Antifreeze/Coolant

Nitrited OAT Extended Life Heavy Duty Ethylene Glycol Engine Antifreeze/Coolant Concentrate

Reco-Cool HD Expert EXTREME Concentrate Antifreeze/Coolant Concentrate is an extended life ethylene glycol antifreeze for heavy duty diesel, gasoline and natural gas powered engines. Reco-Cool HD Expert EXTREME contains OAT corrosion inhibitor eachnology plus nitrites and molybdates. The product is free of amines, borates, nitrates, phosphates and silicates. It provides excellent corrosion protection of HD engines and cooling system components without the use of supplemental coolant additives (SCAs). Reco-Cool HD Expert EXTREME Concentrate Antifreeze/Coolant also provides protection for light duty engines making it suitable for mixed fleet applications. It is a concentrate and should be diluted with water.

Applications

Heavy duty diesel or gasoline engines

Reco-Cool HD Expert EXTREME Concentrate Antifreeze/Coolant is formulated to be an extended life coolant in heavy duty applications, found in on-road, off-road, marine, farm, mining and construction equipment.

Reco-Cool HD Expert EXTREME Concentrate Antifreeze/Coolant contains organic additive technology corrosion inhibitors along with molybdate and nitrite to provide extra protection to cylinder liners found in heavy duty applications. It will not require an initial charge of supplemental coolant additives (SCAs).

Reco-Cool HD Expert EXTREME Concentrate Antifreeze/Coolant also provides protection in light duty engines making it highly suitable for mixed fleets (light duty as well as heavy duty gasoline and diesel engines).

Performance Features and Benefits

- **All-climate year round performance**

When blended with 50% water, Reco-Cool HD Expert EXTREME Concentrate Antifreeze/Coolant provides freeze protection down to -37°C and boilover protection up to +132°C (with the use of a 120 kPa pressure cap).

- **Extended Life Capability**

Reco-Cool HD Expert EXTREME Concentrate Antifreeze/Coolant typically provides up to 12,000 hours or 1 million km in heavy duty applications under normal operating conditions, provided the coolant is kept in good condition with the nitrite level in line with the engine's OEM's requirements (typically SCA extenders are required at 6,000 hrs/500,000 km).

- **Field Compatibility**

Reco-Cool HD Expert EXTREME Concentrate Antifreeze/Coolant is miscible and compatible with other engine antifreeze of similar type; although to get the best performance from the long life capabilities, it is always recommended to not dilute Reco-Cool HD Expert EXTREME Concentrate Antifreeze/Coolant with other coolants. It is also compatible with standard heavy duty SCAs, coolant filters and hard water.

Reco-Cool HD Expert EXTREME Concentrate Antifreeze/Coolant is part of the Reco-Cool HD Expert family of heavy duty lubricants and coolants for the heavy duty market.

It is also compatible with Coolant Extenders that are or have been used with OAT engine coolant technology.



Specifications and Approvals

Reco-Cool HD Expert EXTREME Concentrate Antifreeze/Coolant has been formulated to meet the following coolant specifications:

| OEM/Industry | Specification |
|------------------------------|---------------------------------|
| ASTM | D3306, D4985, D6210 |
| AS/NZS | 2108.1:1997 "Type A" |
| Caterpillar | EC-1 (Sections 2.3 – 4.5 incl.) |
| Cummins Bulletin | 3666132 and 14603 |
| Detroit Diesel | 7SE298 and 93K217 |
| Freightliner | 48-22880, |
| General Motors | 1825M, 1899M, Heavy Truck |
| International Truck & Engine | CEMS B-1 |
| JIS | K 2234 |
| John Deere | JDM H24 |
| Kenworth | R026-170-97 |
| Landrover | |
| Mack Truck | 014GS17004 |
| MAN | MAN 324 |
| Mercedes-Benz | DBL 7700 |
| MTU | MTL 5048 |
| PACCAR | CS0185 |
| Peterbilt | 8502.002 |
| SAE | J1034 |
| Scania | TB1451 |
| TMC | RP 329 |
| Volvo | |

Health & Safety

Guidance on Health and Safety is available on the appropriate Safety Data Sheet, which can be obtained from your Recochem representative.

Protect the Environment

Take used coolant products to an authorised collection point. Do not discharge into drains, soil or water.

Extended Shelf Life

When stored undercover, away from moisture and direct sunlight, this product should be suitable for use for up to two years after manufacture.

Typical Physical & Chemical Characteristics

| Reco-Cool HD Expert EXTREME Concentrate Antifreeze/Coolant | Performance | Test Method |
|--|-------------|-------------|
| Appearance, visual colour | Red-Orange | Visual |
| Ash Content (% w/w) | 5.0 Max | ASTM D 1119 |
| Flash Point (°C) | 116 Min | ASTM D 92 |
| Freeze Point (50% by vol) | -37°C | ASTM D 1177 |
| pH (50% vol) | 7.5-9.5 | ASTM D 1287 |
| Reserve Alkalinity (ml 0.1N HCL) | 3.0 Min | ASTM D 1121 |
| Shelf life (unused) | 2 years | |
| Silicon as silicate (ppm) | <10 | ASTM D 6130 |
| Specific Gravity (15.6°C) | 1.120-1.140 | ASTM D 1122 |

These characteristics are typical of current production. Whilst future production will conform to Recochem's specification, variations in these characteristics may occur.