

# Reco-Cool HD Ultra ELC Concentrate Antifreeze/ Coolant

## Next Generation, Ultra Extended Life Coolant for Heavy Duty Engines; NAP free (no nitrites, amines, phosphates)

Reco-Cool HD Ultra ELC Concentrate Antifreeze/ Coolant is a NAP free, Extended Life Coolant using OAT based corrosion inhibitors for Heavy Duty Diesel engines. It is free from amines, borate, nitrite, phosphate and silicate, meeting some major chemistry restrictions of several OEM's around the globe. The corrosion inhibitor technology used in this product provides effective corrosion protection to all coolant system metals without the need to use SCA's. This makes for a genuine premium high performance overall engine coolant which is designed for use in heavy duty diesel engines. It can also be used in gasoline and natural gas powered engines.

### Applications

Reco-Cool HD Ultra ELC Concentrate Antifreeze/ Coolant is designed to be used in heavy duty applications. The product can also be used in gasoline and natural gas engines, making it a good mixed fleet product.

It is recommended for use in heavy duty diesel engines found in applications on-road and off-road, farm, mining and construction equipment, as well as all applications in such areas where mixed gasoline/ natural gas/ diesel engines are present.

The product is a concentrated antifreeze/ coolant and should be diluted 50% with good quality water (demineralised or deionised) before use. When diluted as directed, this product provides excellent year round performance.

### Performance Features and Benefits

- **Long life organic additive technology**

For heavy duty diesel applications, when used as directed, the product will provide up to 6 years, 1,000,000 km or 12,000 hours whichever comes first of in-field service life.

The product is also suitable in gasoline or natural gas engines, for up to for up to 5 years or 250,000km, whichever comes first.

- **Free from amine, borates, nitrites, phosphates and silicates.**

Reco-Cool HD Ultra ELC Concentrate Antifreeze/ Coolant does not contain any amines, borates, nitrites, phosphates

or silicates and therefore is the recommended choice to meet the major chemistry restrictions of Heavy Duty OEMs around the globe.

Being silicate free, Reco-Cool HD Ultra ELC Antifreeze/ Coolant has no possibility of silicate gelation and other associated fallout issues.

When used in long haul or heavy-duty applications, there is no need to add an initial charge of SCA to the fresh coolant.

- **Wet sleeve linear cavitation protection**

Reco-Cool HD Ultra ELC Concentrate Antifreeze/ Coolant provides excellent wet sleeve liner cavitation protection as determined through fleet testing and the Deere Liner Cavitation Test, ASTM D7583.

- **Compatibility**

This product is fully compatible with other similarly formulated organic additive technology long life engine coolants. The product is also widely compatible with other silicate-free engine coolants. It is also compatible with but does not need coolant SCA's.

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

- **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.



### Specifications and Approvals

Reco-Cool HD Ultra ELC Concentrate Antifreeze/ Coolant is recommended for use with the following industry and OEM specifications (when pre-diluted as described in this document):

ASTM D3306, D4985, D6210-10, D7583  
 AS/NZS 2108:2004 Type A  
 AFNOR NFR 15-601  
 BS 6580  
 Caterpillar EC-1  
 Cummins Bulletin 3666132, 14603  
 DAF MAT 74002  
 DDC 7SE 298, 93K217  
 Freightliner 48-22880  
 GM 1825M, 1899M, Heavy Truck  
 International Truck & Engine CEMS B-1  
 JIS K2234  
 Kenworth R026-170-97  
 Mack Truck  
 MAN MAN 324  
 Mercedes-Benz DBL7700  
 MTU MTL 5048  
 PACCAR CS0185  
 Peterbilt 8502.002  
 SAE J1034, J1941  
 Volvo  
 Scania TB1451

### Health & Safety

Guidance on Health and Safety is available on the appropriate Material 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.

### Typical Physical and Chemical Characteristics

Reco-Cool HD Ultra ELC Concentrate Antifreeze/ Coolant	Method	Units	Performance
Appearance	Visual		Yellow, Clear and Bright Fluid
Ash content (% w/w)	ASTM D1119		5 max.
Flash point (°C)	ASTM D92		116 min
pH (50% v/v solution)	ASTM D 1287		7.8 – 9.0
Reserve Alkalinity	ASTM D 1121	mL 0.1N HCL	4.0 min
Specific Gravity (15.6 DegC)	ASTM D 1122	kg/L	1.120 – 1.140
Freeze Point (50% v/v solution)	ASTM D 1177	Deg C	-37
Chloride	ASTM D 3634	Ppm	25 max
Silicon		Ppm	10 max
Total Apparent Water	ASTM D1123	%w/w	5.0 max
Shelf Life (new)			2 years

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

