



# RECO-COOL HD EXPERT ENDURANCE Concentrate Antifreeze/Coolant

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

Reco-Cool HD Expert ENDURANCE 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. The product is a concentrate and should be diluted with water.

### Applications

Reco-Cool HD Expert ENDURANCE 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.

This product is a concentrated antifreeze/coolant and should be diluted 50% with good quality (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 Expert ENDURANCE 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 Expert ENDURANCE 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 Expert ENDURANCE 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 coolant technology.



MINING | CONSTRUCTION | AGRICULTURE | MARINE | TRUCK | EQUIPMENT

## Specifications and Approvals

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

### OEM/Industry

ASTM

AS/NZS

AFNOR

BS

Caterpillar

Cummins Bulletin

DAF

DDC

Freightliner

General Motors

International Truck & Engine

JIS

Kenworth

Mack Truck

MAN

Mercedes-Benz

MTU

PACCAR

Peterbilt

SAE

Scania

Volvo

### Specification

D3306, D4985, D6210-10, D7583

2108:2004 "Type A"

NFR 15-601

6580

EC-1

3666132 and 14603

MAT 74002

7SE298 and 93K217

48-22880

1825M, 1899M, Heavy Truck

CEMS B-1

K 2234

R026-170-97

MAN 324

DBL 7700

MTL 5048

CS0185

8502.002

J1034, J1941

TB1451

## 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 ENDURANCE Concentrate Antifreeze/Coolant	Performance	Test Method
Appearance, visual colour	Yellow, clear and bright fluid	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)	7.8-9.0	ASTM D 1287
Reserve Alkalinity (ml 0.1N HCL)	12.0 Min	ASTM D 1121
Shelf life (unused)	2 years	
Chloride (ppm)	25 Max	ASTM D 3634
Silicon as silicate (ppm)	10 Max	ASTM D 6130
Total Apparent Water (% w/w)	5.0 Max	ASTM D 1123
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.