



Recochem Inc.
Your Partner in Formulating Solutions
Votre partenaire branché sur les solutions

TECHNICAL DATA SHEET

HD Expert Long Life EXTRA 33%

HD Expert Long Life EXTRA 33% Antifreeze/Coolant Ready-to-Use premium quality 33% Pre-Diluted Antifreeze/ Coolant that has been tested to be compatible with all automotive and light duty truck antifreeze/ coolant products available in the market today.

HD Expert Long Life EXTRA 33% Antifreeze/Coolant is based on Shell's proprietary hybrid organic acid technology and has been specifically designed for complete mixed use. It can be used in all makes and models of passenger vehicles, light duty and heavy-duty diesel applications. HD Expert Long Life EXTRA 33% Antifreeze/Coolant not only guards against freezing and boil-over, it also provides critical protection against corrosion.

Applications

HD Expert Long Life EXTRA 33% Antifreeze/Coolant is a low silicate, organic additive, ethylene glycol based, extended service product, which is free of phosphates, borates, nitrites and amines. It will provide extended protection against rust, corrosion and pitting caused by cavitation for all coolant system metals, including aluminium. It also provides protection against wet sleeve liner cavitation and is compatible with the flux found in controlled atmosphere brazed (CAB) radiators.

HD Expert Long Life EXTRA 33% Antifreeze/Coolant offers excellent protection against temperature extremes, preventing freezing and boiling when used with no additional water. This product does not impart any significant color change if mixed with another engine coolant. The superior performance and stability of Shell's premium extended life corrosion inhibitors allows them to go on working well beyond the lifetime of traditional products. As sold it is ready for use - **do not add water**.

Performance Features and Benefits

When HD Expert Long Life EXTRA 33% Antifreeze/Coolant is added as an initial fill and properly maintained in accordance with engine manufacturer's maintenance recommendation, it will provide up to 250,000km (150,000 miles) or 5 years of service life protection in automotive application and up to 1,000,000km (600,000

miles) or 6 years of service life protection in heavy duty diesel use.

- Complete mixed fleet use; automotive, light and heavy duty diesel
- Borate, nitrite, amine and phosphate free
- Add as top-up to any colour antifreeze
- Protects coolant system metals such as brass, copper, solder, steel, cast iron and aluminium
- Protects against wet sleeve liner cavitation
- Enhanced water pump performance
- Fully compatible with inorganic, hybrid and organic acid coolant technologies
- Compatible with CAB radiators
- Extended service life

Specifications and Approvals

Recommended applications:

General Motors
Ford
Honda
Chrysler
Mercedes-Benz
Toyota
VW
Nissan
Hyundai

Suitable in mixtures with all major coolant types for service fill.

Recochem Premium Long-Life Antifreeze/Coolant has been fully tested and meets and exceeds ASTM D-3306. It passes fully the following coolant tests:

ASTM D-4340 Hot Service Aluminium Protection
ASTM D-1384 Corrosion Protection
ASTM D-2809 Water Pump Cavitation
ASTM D-1881 Foaming Characteristics
ASTM D-2570 Metal Protection





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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 five years after manufacture. Product should not be left in open unsealed containers due to possible water loss.

Typical Physical and Chemical Characteristics

Premium Long-Life Antifreeze/Coolant	Performance	Test Method
pH ^a	7.5 – 9.5	ASTM D1287
Specific gravity ^b	1.045 – 1.055	ASTM D1122
Freeze point ^a , °C	-17 Max	ASTM D1177
Foam volume, ml	150 max.	ASTM D1881
Foam break time, second	5 max.	ASTM D1881
Reserve Alkalinity, ml	1.0 min.	ASTM D1121
Chloride, ppm	25 max.	ASTM D3634
Colour	Red	
Glycol Content (vol. %).	33 min.	
Silicon, from silicate (ppm)	90 max.	ASTM D6130
Boron (ppm)	< 10	
Phosphorous (ppm)	< 10	

^a as is

^b Measured at 15.6°C/60°F

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

