

Havoline® Xtended Life Antifreeze/Coolant

High performance extended life antifreeze/coolant

Product description

Havoline Xtended Life Antifreeze/Coolant is a high performance extended life antifreeze/coolant, formulated to protect engines from freezing and boiling while offering advanced cooling system corrosion protection, including high temperature corrosion resistance in modern aluminium engines.

Havoline Xtended Life Antifreeze/Coolant is a high performance ethylene glycol-based formulation in combination with an advanced non-depleting corrosion inhibitor technology. It offers a long, low maintenance service life and is available as a concentrate and a premix 50/50.

Customer benefits

- Advanced non-depleting corrosion inhibitor technology offers extended low maintenance service life and system uptime
- Designed to offer protection to passenger cars for more than 250,000 km, or up to five years
- Promotes reliability and corrosion protection in thermostats, radiators, water pumps and other vulnerable cooling system components
- High performance silicate- and phosphate-free formulation contributes reliable hard water stability
- Aids high temperature corrosion protection in modern engines, helping reduce maintenance, downtime and cost

Product highlights

- · Offers extended low maintenance service life
- Designed to protect vehicles over distances of 250,000 km, or 5 years intervals
- · Promotes reliability and corrosion protection
- · Formulated for hard water stability
- Aids high temperature corrosion protection

Selected specification standards include:

ASTM	Chrysler	
Ford	General Motors	
GMW	Opel	
VW		

Applications

 Havoline Xtended Life Antifreeze/Coolant is recommended for use in automotive engines that require improved heat transfer performance, cavitation resistance and long-life cooling system protection.

This product is not to be used to protect the inside of potable water systems against freezing.

Approvals, performance and recommendations

Performance

Havoline Xtended Life Antifreeze/Coolant meets the requirements of:

- ASTM D3306
- Ford WSS-M97B44-D
- GMW 3420
- VW TL 774-F

Recommendations

Havoline Xtended Life Antifreeze/Coolant is suitable for use in the following engines:

- Ford Vehicles post 2003
- · European gasoline and diesel automobiles
- Japanese gasoline automobiles, SUVs and Pickup trucks
- Korean gasoline automobiles and SUVs
- · Opel vehicles post 1995
- · General Motors vehicles post 1995
- · Chrysler vehicles post 2001

It is recommended not to dilute this product with other coolant formulations by more than 25% in order to maintain performance claims.

Product maintenance and handling

- Havoline Xtended Life Antifreeze/Coolant should be stored above -20°C and preferably at ambient temperatures
- Periods of exposure to temperatures above +35°C should be minimised
- It is strongly advised not to expose Havoline Xtended Life Antifreeze/Coolant in translucent packages to direct sunlight, as this can result in discoloration over time
- Havoline Xtended Life Antifreeze/Coolant Concentrate should be diluted before use
- For maximum protection against freezing in extremely cold areas, a 60% solution (3 parts coolant concentrate/2 parts water) can be used.
 Concentrations greater than 67% and lower than 33% are not recommended
- Havoline Xtended Life Antifreeze/Coolant Premixed 50/50 should be used as purchased. Dilution is not recommended
- As with any antifreeze coolant, the use of galvanized steel is not recommended for pipes or any other part of the storage/mixing installation
- Havoline Xtended Life Antifreeze/Coolant has a storage shelf life of up to 8 years, provided the container remains sealed

Always dispose of used coolant in accordance with all local, state and federal guidelines.

Typical test data			
Test	Test Methods	Results	
Dilution		50/50	Concentrate
Shelf Life: 96 months from date of filling indicated on the product label			
Density at 20°C, Kg/L	ASTM D1122	1.068	1.113
Freezing point, °C	ASTM D3321	< -37	N/A
Boiling point, °C	ASTM D1120	108	180
pH at 20°C, NUOM	ASTM D1287	8.6	8.7
Reserve alkalinity, mL 0.1N HCl	ASTM D1121	3.0	6.0
ASTM D1384 Glassware Corrosion Test (1)			
Copper, Weight loss, mg/coupon (2)	ASTM D1384	N/A	2 (10) (3)
Solder, Weight loss, mg/coupon (2)	ASTM D1384	N/A	0 (30) (3)
Brass, Weight loss, mg/coupon (2)	ASTM D1384	N/A	2 (10) (3)
Steel, Weight loss, mg/coupon (2)	ASTM D1384	N/A	0 (10) (3)
Cast iron, Weight loss, mg/coupon (2)	ASTM D1384	N/A	-2 (10) ⁽³⁾
Aluminium, Weight loss, mg/coupon (2)	ASTM D1384	N/A	5 (30) ⁽³⁾
ASTM D4340 Aluminium Heat Rejection Test (4)			
Aluminium, Weight loss, mg/cm²/week (2)	ASTM D4340	N/A	< 0.2 (1.0) (3)

⁽¹⁾ Data generated on a 33vol% dilution as per the method

The information given in the typical data does not constitute a specification but is an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved. This supersedes all previous editions and information contained in them.

<u>Disclaimer</u> Chevron accepts no liability for any loss or damage suffered as a result of using this product for any application other than applications specifically stated in any Product Data Sheet's.

Health, safety, storage and environmental Based on current available information, this product is not expected to produce adverse effects on health when used for the intended application and in accordance with the recommendations provided in the Material Safety Data Sheet (MSDS). MSDS's are available upon request through your local sales office, or via the Internet. This product should not be used for purposes other than its intended use. When disposing of used product, take care to protect the environment and follow local legislation.

⁽²⁾ Negative sign indicates a weight gain

⁽³⁾ Values in between "()" are ASTM D3306 max limits

⁽⁴⁾ Data generated on a 25vol% dilution as per the method