Havoline® Xtended Life

Antifreeze/Coolant



Product description

Havoline[®] Xtended Life Antifreeze/Coolant is a single phase, ethylene glycol antifreeze/coolants based on an aliphatic corrosion inhibitor system available as a concentrate, a premix 50/50 and a premix 55/45.

Customer benefits and product features

Customer benefits

Havoline® Xtended Life Antifreeze/Coolant delivers value through:

- OEM Approval meet the requirements of Ford WSS-M97B44-D, GMW3420, MB 325.3 and Volkswagen TL 774F specifications.
- Wide service application May be used in North American, Asian and European automotive and passenger car diesel applications including newer hybrid vehicles.
- Heat Transfer Improved heat transfer when compared to silicate containing antifreeze/coolant products.
- Long Service Life up to 250,000 kilometers/5 years of cooling system protection.
- Beneficial formulation Organic additive formulation that is free of silicate, nitrite, borate, phosphate, nitrate and amines and which allows longer service life.
- Protection Outstanding high temperature protection of cooling systems metals including aluminum.
- Water Pump Performance Compatible with water pump seal materials and helps minimize formation of abrasive solids which can help extend water pump life.
- Performance Superb protection at high operating temperatures. Helps reduce the occurrence of hard water scale
- Wide temperature application Helps protect against winter freeze up and minimize chances of summer boil over.
- Helps reduce inventory Can be used in mixed fleet applications where both gasoline and passenger car diesel vehicles are present from various manufacturers.
- Stability Can be stored for approximately 8 years in sealed containers minimal effect on the product quality or performance.

Product features

Havoline® Xtended Life Antifreeze/Coolant is based on a patented aliphatic organic additive formulation that provides a service life of up to 250,000 kilometers/5 years and is approved under GMW3420 meeting the GM DEX-COOL® requirements.1

The main corrosion inhibitors in Havoline® Xtended Life Antifreeze/Coolant have been shown to remain above 95% of their original concentration with proper top off after 250,000 kilometers in automobiles. This allows longer intervals between coolant change-outs.

Havoline[®] Xtended Life Antifreeze/Coolant has been formulated without inhibitors such as silicates that have been shown to be abrasive to water pump seals. In comparison taxi field tests conducted by [Chevron], use of Havoline[®] Xtended Life Antifreeze/Coolant resulted in fewer instances where water pumps needed replacing during the 160,000 kilometer test, compared to conventional silicate-containing coolants. In addition to fleet tests, this product has also been tested by a major manufacturer of water pump seals and was found to be more compatible with the seals of that manufacturer than other coolants previously tested.

Note: These products are not to be used to protect the inside of potable water systems against freezing.

¹ DEX-COOL[®] is a registered trademark of General Motors Corporation.

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Applications

Havoline® Xtended Life Antifreeze/Coolant meets the following specifications:

- ASTM D3306
- Ford WSS-M97B44-D
- GMW3420
- MB 325.3
- VW TL 774F

Havoline® Xtended Life Antifreeze/Coolant is recommended by Chevron for use in:

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

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

Product approvals, performance and recommendations

Product Dilution and Boil Over Protection Recommendations For Havoline® Xtended Life Antifreeze/Coolant

Boiling Protection, 50% 1:1 (1 part antifreeze/1 part water)	°C/°F (using a 15 lb pressure cap) 129.4/265	
Freezing Protection, °C/°F		
33% 33:67 (33 parts antifreeze/67 parts water)	-19/-2.2	
40% 2:3 (2 parts antifreeze/3 parts water)	-26/-14.8	
50% 1:1 (1 part antifreeze/1 part water)	-37/-34.6	
55% 55:45 (55 parts antifreeze/45 parts water)	-45/-49.0	
60% 3:2 (3 parts antifreeze/2 parts water)	-50/-58	

Notes

- Product concentrates should be mixed before use or dilution.
- Havoline® Xtended Life Antifreeze/Coolant Premixed 50/50 should be used as purchased. No dilution is recommended.
- For maximum protection against freezing in extremely cold areas, a 60 percent solution (3 parts antifreeze/2 parts water) can be used. Concentrations greater than 67 percent are not recommended.
- Always dispose of used coolant in accordance with all local, state, and federal guidelines.

Product Reference

Note: These products contain bitterant. Bitterant is a flavor aversive that may help reduce the accidental ingestion of these products.

Product Code: 510563 Havoline® Xtended Life Antifreeze/Coolant - Concentrate

 $\textbf{Product Code: 510564} \ \ \text{Havoline} \\ ^{\text{@}} \ \ \text{Xtended Life Antifreeze/Coolant - Premixed 50/50}$

Product Code: 510566Havoline® Xtended Life Antifreeze/Coolant - Premixed 55/45

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Typical test data

HAVOLINE® XTENDED LIFE ANTIFREEZE/COOLANT KEY PROPERTIES	RESULTS
Appearance	Orange
Specific gravity 15/15°C	1.117
Freezing point, °C ² , ASTM D1177	-36.7
pH ³ , ASTM D1287	8.5
Reserve alkalinity ⁴ , ASTM D1121	6.0
Silicate, % ⁵	None

ASTM D1384 Glassware Corrosion Test

HAVOLINE® XTENDED LIFE ANTIFREEZE/COOLANT KEY PROPERTIES	ASTM D1384 GLASSWARE CORROSION TEST	
	ASTM Limit	Weight loss, mg per coupon ⁶
Copper	10 max	2
Solder	30 max	-2
Brass	10 max	2
Steel	10 max	-1
Iron	10 max	-3
Aluminum	30 max	4

²50 vol % aqueous solution. ³1:2 dilution with water. ⁴As received. ⁵As anhydrous alkali metasilicate. ⁶Negative indicates net gain.

This bulletin was prepared in good faith from the best information available at the time of issue. While the values and characteristics are considered representative, some variation, not affecting performance, can be expected. It is the responsibility of the user to ensure that the products are used in the applications for which they are intended. Produced by Chevron Global Lubricants: Asia Pacific

ENVIRONMENT, HEALTH and SAFETY. Information is available on this product in the Material Safety Data Sheet (MSDS) and Customer Safety Guide. Customers are encouraged to review this information, follow precautions and comply with laws and regulations concerning product use and disposal. To obtain a MSDS for this product, visit the <u>Product Information Center</u>.

This Product Data Sheet (PDS) was produced for the Asia Pacific region based on the best available information at the time of issue. The specific information included may not directly reflect the market or conditions, and may vary. For the most up-to-date, country-specific information, please contact your local customer service center.