

Havoline® XLB

1 Description

Havoline® XLB (Havoline® Extended Life Base) is a concentrated engine coolant additive package in ethylene glycol, designed to prepare premium quality engine coolants - **Havoline® XLC (Havoline® Extended Life Coolant)** - by the simple addition of ethylene glycol.

Based on patented *silicate-free* aliphatic additives technology, a coolant is obtained that meets the requirements of many important Original Equipment Manufacturers. This coolant - **Havoline® XLC** - provides long-life corrosion protection for all engine metals, including aluminium and ferrous alloys, and is recommended for use in cooling systems of all types of liquid cooled automotive and industrial

combustion engines. The corrosion inhibitors contained in **Havoline® XLB** have very low depletion rates, unlike traditional silicate based technologies. During extensive fleet testing, the synergistic combination of mono- and di-carboxylates present in this coolant, have proven to provide protection for at least **650,000 km** (ca. 8,000 hours) in truck & bus-application or **250,000 km** (ca. 2,000 hours) for passenger cars or **32,000 hours** (or 6 years) for stationary engines.

Exempt from potentially harmful additives such as nitrites, amines and phosphates, the coolant will contribute to a safer environment.

2 Blending Engine Coolant from Havoline® XLB

Havoline® XLC can be blended from **Havoline® XLB** by simply mixing the following ingredients at ambient temperatures:

<u>Ingredient (weight %)</u>	Havoline® XLC
Ethylene glycol	75.00
Havoline® XLB	25.00
Colouring agent	optional

3 Availability

Havoline® XLB is available in bulk and various packages in different colours and with or without bittering agent. Please

contact your local Artec Area Sales Manager on availability of packages, dilutions and colours.

- **Havoline® XLC (Havoline® Extended Life Antifreeze Coolant)** is the MEG-based coolant concentrate. **Havoline® XLC** is obtained by mixing 25 % wt of **Havoline® XLB** with 75 % MEG.

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- **Havoline® XLI (Havoline® Extended Life Corrosion Inhibitor)** is an aqueous superconcentrate of the same inhibitor package.

Separate information leaflets with more details are available for these different products.

4 Storage requirements

The product should be stored above -30°C and preferably at ambient temperatures. Periods of exposure to temperatures above 35°C should be minimised.

Further, it is strongly advised not to expose the coolant in translucent packages to direct sunlight because this can degrade the colour dyes present in the coolant, and result in fading of the colour or discoloration over time. This reaction can be accelerated if coupled with high ambient temperatures. To avoid this issue, it is therefore advisable

to store coolant filled in translucent packages indoors.

Havoline® XLB can be stored for minimum 2 years in unopened containers without any effect on the product quality or performance.

It is strongly recommended to use new containers and not recycled ones. As with any antifreeze coolant, the use of galvanised steel is not recommended for pipes or any other part of the storage/mixing installation.

5 Toxicity & safety

For Toxicity and Safety Data we refer to the Safety Data Sheet. The information and advice given should be observed and due attention should be given to the precautions

necessary for handling chemicals. This product should not be used to protect the inside of drinking water systems against freezing. The transport is not regulated.

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Addendum - Technical information

Chemical and physical properties

	Havoline® XLB	method
Ethylene glycol	72 % w/w glycol	
Other glycols	0.4 % max.	
Total water content (including crystal water)	15 % w/w max	ASTM D1123
Ash content	3.1 % w/w typ.	ASTM D1119
Nitrite, amine, phosphate, borate, silicate	nil	
Colour	uncoloured	
Specific gravity, 20°C	1.110 typ.	ASTM D1122
Flash Point, open cup	144°C typ.	ASTM D92
Storage stability	1 year	
pH in water, 33% vol. ⁽¹⁾	8.3 typ.	ASTM D1287
Reserve alkalinity (pH 5.5) ⁽¹⁾	6.2 typ.	ASTM D1121

⁽¹⁾ 25.0 g Havoline® XLB + 75.0 g monoethylene glycol