Customer benefits

**Complete cooling system protection**
Unique Carboxylate Technology inhibitor provides corrosion protection in aqueous solutions for all engine and cooling system metals, including aluminium, iron, steel, copper and solder alloys. The corrosion inhibitor prevents wet liner cavitation erosion, and protects aluminium heat transfer surfaces.

**Extended service life**
Very low depletion rate of the organic acid inhibitor ensures long-term corrosion protection under all operating conditions.

**Reduced maintenance costs**
Unique Carboxylate Technology inhibitor system prevents wet liner cavitation erosion, and provides exceptional protection to aluminium surfaces under heat transfer conditions. Lower dissolved solids content reduces rate of water pump seal failures.

**Saves time and money**
Very low depletion rate and complete cooling system protection of the special organic acid inhibitor removes the need for supplementary additives for cavitation erosion protection, and reduces the need to regularly test inhibitor level and add extra additive to maintain the inhibitor concentration.

Applications

- Automotive and transport engines.
- Construction, earthmoving, mining and quarrying equipment.
- Marine engines.
- Stationary power generation engines.
- High temperature aluminium engine blocks.

**Recommended maximum service intervals are:**

<table>
<thead>
<tr>
<th>Application</th>
<th>Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger car &amp; light truck vehicles</td>
<td>250,000 km or 5 years</td>
</tr>
<tr>
<td>Stationary power generation &amp; marine</td>
<td>32,000 hours</td>
</tr>
<tr>
<td>Heavy-duty diesel, on-road</td>
<td>600,000 km or 4 years</td>
</tr>
<tr>
<td>Heavy-duty diesel, off-road</td>
<td>8,000 hours or 4 years</td>
</tr>
</tbody>
</table>

Product features:

- **Havoline® Xtended Life Inhibitor Red - Premixed** is an environmentally sensitive, pre-diluted coolant and corrosion inhibitor based on extended-life organic acid Carboxylate Technology.

- **Havoline® Xtended Life Inhibitor Red - Premixed** is suitable for use in automotive cooling systems, stationary power generation engines and marine engines, where a glycol-based antifreeze is not required.

A Chevron company brand
Typical key properties

<table>
<thead>
<tr>
<th>HAVOLINE® XTENDED LIFE INHIBITOR RED - PREMIXED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product Code</strong></td>
</tr>
<tr>
<td><strong>Freezing Point, °C</strong></td>
</tr>
<tr>
<td><strong>Nitrate, amine, phosphate, borate content</strong></td>
</tr>
<tr>
<td><strong>Silicate Content, as Na₂SiO₃, m%</strong></td>
</tr>
<tr>
<td><strong>pH, undiluted</strong></td>
</tr>
<tr>
<td><strong>Inhibitor Content, vol %</strong></td>
</tr>
</tbody>
</table>

Performance standards

Havoline Xtended Life Inhibitor Red – Premixed is manufactured from Havoline XLI which has a wide range of approvals and recommendations, including:

- Detroit Diesel
- Mercedes Benz trucks, MB 312.0
- MAN 248
- Liebherr MD 1-36-130 (DCA)
- MTU MTL 5049
- Deutz (TR0199-99-2091) medium & large engines
- Wärtsilä, diesel/gas/dual fuel engines
- MAN B&W, 2 and 4-cycle engines
- MaK
- New Sulzer Diesel, 2-cycle engines
- Ulstein Bergen 2.13.01, diesel and gas engines
- Yanmar

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: www.havoline.com.

For more information, go to www.havoline.com

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