Long Life Coolant Red

Hi-Tec Long Life Coolant Red is an ethylene glycol based antifreeze/coolant concentrate incorporating an advanced formula technology with virtually non-depleting organic acid corrosion inhibitors. The product is dyed a distinctive red-orange colour for ease of identification.

It is silicate free for improved pump life and contains no environmentally harmful nitrates, borates, phosphates, amines or nitrites.

Hi-Tec Long Life Coolant Red is compatible with conventional coolants and can be used for top-up of conventional coolants. If the product is to be mixed with some heavy duty diesel coolants, the user must continue to add SCA’s (Supplementary Coolant Additives) for heavy-duty service until the next coolant change-out.

Hi-Tec Long Life Coolant Red satisfies or exceeds many major standards and is recommended for major European, Japanese and US car and heavy-duty diesel engines.

Hi-Tec Long Life Coolant Red can be added directly to the cooling system as a top-up adjustment of the freeze point of the cooling water.

Application

Hi-Tec Long Life Coolant Red is recommended for use in aluminium alloy petrol powered automotive engines, and in heavy duty diesel and natural gas mobile and stationary engines.

Provided the correct dosage of Hi-Tec Long Life Coolant Red is maintained, flush and change the passenger car/light duty commercial vehicle cooling system contents every 5 years or 250,000 kms. For heavy-duty diesel engines, Hi-Tec Long Life Coolant Red more than doubles the life of conventional coolants to 500,000 km / 6,000 hours / 5 years; at the same time providing excellent protection against cylinder liner cavitation corrosion/erosion.
Dosage Rate

<table>
<thead>
<tr>
<th>Long Life Coolant Red</th>
<th>Water</th>
<th>Freeze Protection</th>
<th>Boil Protection *</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 part</td>
<td>1 part</td>
<td>-37°C</td>
<td>129°C</td>
</tr>
<tr>
<td>1 part</td>
<td>2 parts</td>
<td>-20°C</td>
<td>121°C</td>
</tr>
</tbody>
</table>

* with a 103 kPa radiator pressure cap

**Hi-Tec Long Life Coolant Red** antifreeze/coolant must not be used neat to the engine cooling system but diluted up to minimum 33% or maximum 67% with good quality water. The dosage depends on the level of frost protection required and/or the manufacturer’s recommendation. For optimum year round protection against freezing, boiling and corrosion, 50 percent **Hi-Tec Long Life Coolant Red** coolant solution is recommended.

While **Hi-Tec Long Life Coolant Red** is compatible with hard water, the use of soft or deionised water is preferable to minimize scale deposits.

Do not mix **Hi-Tec Long Life Coolant Red** coolant with other coolant products as the extended life benefits will be reduced. If mixed with more than 15% of conventional coolant, treat the cooling system as if it contains the conventional coolant or drain and flush the system and refill with **Hi-Tec Long Life Coolant Red**.

**Changeover**

Always start off with a clean cooling system by using a radiator flush or similar commercial cleaner at the changeover (especially if previously using conventional coolants). After draining the cleaner, flush thoroughly with clean water.

Inspect the cooling system. Make necessary repairs and tighten all hose connections.

The coolant should be changed out at overhaul or 5 years. Always dispose of the used coolant in accordance with local, state and federal guidelines.

Because **Hi-Tec Long Life Coolant Red** is silicate free, the product can be stored for up to 8 years with no problem.
Product Benefits

Advantages of using **Hi-Tec Long Life Coolant Red** include:

- Can be used in most OEM diesel, petrol and natural gas engines allowing one coolant to be inventoried. The product lasts up to 3 times as long as conventional coolants.

- Reduces engine coolant cost by up to 60% over conventional coolants.

- Service life of up to 1,000,000 kms for truck engines, and up to 12,000 hours or 6 years (whichever comes first) for machine/commercial engines (when topped up with a once only coolant extender at the end of its initial service life).

- For automotive engines, drain at 250,000 kms or 5 years, whichever comes first.

- Contains no silicates or environmentally harmful borates, phosphates, amines or nitrates.

- Hard water deposits and scale from silicate drop out in the cooling system are practically eliminated.

- The low level of total dissolved solids improves water pump seal life and prevents gel formation.

- Excellent heat transfer and superior aluminium protection at high operating temperatures.

- The combination of organic carboxylate inhibitors offers excellent protection against cast iron cylinder liner and block pitting and cavitation corrosion-erosion.
Recommendations

Hi-Tec Long Life Coolant Red is recommended for all heavy duty engines manufactured by Cummins, Caterpillar, Detroit Diesel, Mack-RVI, Mercedes Benz, Scania, MTU, Komatsu and other OEM’s.

It is recommended where the following performance levels are cited:

- ASTM D3306 (and D4656)
- ASTM D4985 (and D5345)
- ASTM D6210
- BS 6580 (British Standard)
- UNE 26-361-88/1
- FVV Heft R443 (Germany)
- NATO S-757
- BT-PS-606A (MIL-Belgium)
- E/L-1415b (MIL-Italy)
- SAE J1034
- JIS K2234 (Japan) LLC
- JASO M325 (Japan) LLC
- Afnor R15-601
- Onorm V5123
- BR 637
- DCEA 615 (MIL-France)
- FSD 8704 (MIL-Sweden)
- AS/NZS 2108.1:1997 (Australian Standard) Type A
- Navistar
- Mitsubishi ES-X64216
- Honda
- Hyundai
- MAN 324 (Diesel Engines)
- Volvo
- Scania (Tech Info. TI 02-98)
- Mercedes-Benz Sheet 325.3
- Mack-RVI
- Caterpillar EC-1
- Cummins 90 T8-4
- Detroit Diesel/Perkins
- Komatsu
- General Motors GM 6277M
- General Motors GM 1899M
- Ford WSS-M97B44-C
- Volkswagen VW TL774D
- Audi/SEAT/Skoda
- ISUZU
- Mazda MES 121C
- Toyota TS K2601 G
- Daihatsu
- Subaru
### Typical Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Red-orange</td>
</tr>
<tr>
<td>pH Neat</td>
<td>6.0 – 9.0</td>
</tr>
<tr>
<td>Ethylene Glycol content, wt % typical</td>
<td>93.0</td>
</tr>
<tr>
<td>g/L typical</td>
<td>1060</td>
</tr>
<tr>
<td>Reserve Alkalinity, ml (pH 5.5)</td>
<td>5</td>
</tr>
<tr>
<td>Density, g/ml @ 20°C</td>
<td>1.11 - 1.14</td>
</tr>
<tr>
<td>Boiling Point, °C</td>
<td>172</td>
</tr>
<tr>
<td>Freezing Point, °C Max. (50% vol solution)</td>
<td>&lt; - 37</td>
</tr>
</tbody>
</table>

The performance and physical property data described for this product is typical results not sale specifications except where maximum or minimum is indicated.

### Safety and Handling

The product contains ethylene glycol and is a Schedule 5 poison.

Read the Material Safety Data Sheet (MSDS) before opening the container and using the product.

**Item Code:** HI8-3250-

**Available in:** 200 Litres, 20 Litres

"Hi-Tec Oil Traders Pty Ltd (Hi-Tec Oils) has endeavoured to ensure that all information, representations and specifications contained in this product data sheet are accurate at the time of publication. This general information should be used in conjunction with appropriate inquiries by users of the product including consultation with the vehicle or equipment manufacturers published information.

It is the responsibility of users of the product to use the product safely. Users should consult the safety data sheets for each product at www.hi-tecoils.com.au.

Hi-Tec Oils takes no responsibility for injury or damage if the product is used in an inappropriate or unsafe manner. Our product warranty and product quality statement can be viewed at www.hi-tecoils.com.au"