



## Extended Life Coolant

### Radiator Coolant, Anti-Freeze & Corrosion Inhibitor

Premium performance, environmentally sensitive coolant, anti-freeze and corrosion inhibitor, based on extended-life organic acid Carboxylate Technology in ethylene glycol which, when mixed at 50% by volume with water, provides long-term protection of the cooling systems of gasoline and light and heavy-duty diesel engines.

#### APPLICATIONS

- Passenger car gasoline and diesel engines
- Light-duty commercial vehicle gasoline and diesel engines
- Heavy-duty diesel engines fitted with “wet” or “dry” liners, in both on and off-highway service
- High temperature aluminium engine blocks
- Recommended maximum service intervals are:
 

Passenger car & light truck commercial vehicles	250,000 km or 5 years
Heavy-duty diesel, on-road	600,000 km or 4 years
Heavy-duty diesel, off-road	8,000 hrs or 4 years

#### PERFORMANCE STANDARDS

Extended Life Coolant has a wide range of approvals and recommendations, including:

- General Motors GM 6277M (DEX-COOL® license)
- Ford/Jaguar
- Volkswagen/Audi/SEAT
- Rover/Land Rover
- Mercedes-Benz trucks, Sheet 325.3
- MAN 324 Type SNF
- DAF trucks
- Leyland trucks
- Renault trucks
- Scania
- Isuzu
- Komatsu KES 07.892
- Liebherr MD 1-36-130
- MTU (MTL 5049) Series 2000/4000 engines
- Wärtsilä gas engines
- Meets the phosphate-free requirements of European manufacturers
- Meets the silicate-free requirements of Japanese manufacturers
- ASTM D4985
- ASTM D3306

#### BENEFITS

- ✦ **Complete cooling system protection**  
Unique Carboxylate Technology inhibitor system provides corrosion protection for all engine and cooling system metals, including aluminium, iron, steel, copper and solder alloys. Selective corrosion protection (only where it is needed) allows the remaining surfaces to be free of inhibitor film for unrestricted heat transfer.
- ✦ **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. Fewer abrasive dissolved solids means fewer water pump seal failures.
- ✦ **Saves time and money**  
One coolant does it all. Very low depletion rate and complete cooling system protection of the 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.

#### ENVIRONMENT, HEALTH and SAFETY

Information is available on this product in the Caltex Material Safety Data Sheet (MSDS) and Caltex 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.caltexoils.com](http://www.caltexoils.com).

#### KEY PROPERTIES

Color	Orange
Freezing Point, 50 vol % solution in water, °C	-36.5
pH, 33 vol % solution in water	8.3
Reserve Alkalinity	6.0
Nitrite, nitrate, amine, phosphate, borate content	Nil
Silicate Content, as Na <sub>2</sub> SiO <sub>3</sub> , m%	Nil

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 ChevronTexaco Global Lubricants

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## SERVICE CONSIDERATIONS

For optimum year-round protection, a solution of 50% by volume Extended Life Coolant in water is recommended. The product should not be used at concentrations greater than 67 percent, nor less than 40 percent.

Freezing and boiling protection provided by various concentrations of Extended Life Coolant are as follows:

Extended Life Coolant Volume % in Water	Freezing Protection down to (°C)	Boiling Point increase (°C)
60	-51	10
50	-36	8
40	-24	6

While Extended Life Coolant is compatible with hard water, it is recommended that water of the following quality is used to minimize scale deposits:

Chloride Ion content, max mg/kg	40
Sulfate content, max, mg/kg	100
Total Hardness (CaCO <sub>3</sub> & MgCO <sub>3</sub> ) max, mg/kg	170
pH at 25°C	5.5 to 9.0
Total Solids, max, mg/kg	340

Traditional phosphate and borate containing coolants exhibit higher pH and reserve alkalinity than the new organic acid based Carboxylate Technology. However, this difference bears no relationship to corrosion control potential. In comparison with conventional coolants, the different inhibitor mechanism of Extended Life Coolant means reserve alkalinity is of no relevance, and it is able to afford corrosion protection to aluminium and other system metals at much lower pH levels.

## FIRST AID

**WARNING:** Extended Life Coolant contains Ethanediol (Ethylene Glycol), which is harmful or fatal if swallowed. Avoid eye or skin contact.

If swallowed give large quantities of water to drink. DO NOT induce vomiting. Get medical attention immediately. Do not give anything by mouth to an unconscious person.

If eye contact occurs, flush the eye with fresh water for at least 15 minutes.