

# SHELL DEX-COOL® ANTIFREEZE/COOLANT

# **Extended Life Antifreeze**

## **Product Description**

Shell DEX-COOL® Extended Life Antifreeze/Coolant is a single-phase, ethylene glycol based, extended life, universal automotive engine coolant based on a unique extended life carboxylate inhibitor system. Shell DEX-COOL® is suitable for a five year or 150,000 mile service life in automotive applications. In heavy-duty applications not requiring nitrite Shell DEX-COOL® is suitable for a service life of 400,000 miles or 8,000 hours. Shell DEX-COOL® Prediluted 50/50 is a 50/50 volume mixture of Shell DEX-COOL® with deionized water.

## **Applications**

- extended life universal automotive gasoline or diesel engine antifreeze/coolant
- extended life universal heavy-duty diesel antifreeze/coolant for systems not requiring nitrite
- extended life antifreeze/coolant meeting Japanese silicate free requirements
- extended life antifreeze/coolant meeting European phosphate free requirements

#### Features and Benefits

- meets GM6277M--General Motor's new Extended Life Coolant specification (DEX-COOL®)
- 5 year or 150,000 miles service interval
- provides effective, long term corrosion protection for aluminum, brass, cast iron, steel, solder and copper
- superior high temperature aluminum protection
- improved water pump life
- maintains good as new heat transfer due to no silicate containing formula
- reduces silicate gel formation in use or in storage
- storage stable for at least eight years
- 100% biodegradable in its pure unused form
- compatible with conventional antifreeze. Further dilution of a 50/50 mixture with more than 10% conventional coolant or water will reduce cooling system protection.
- all product bittered to help render product unpalatable

#### **Approvals**

- GM DEX-COOL® approval
- General Motors GM6277M
- General Motors GM1825M
- Concentrate meets ASTM D 3306 incl. D 4340 and ASTM D 4985
- Pre-dilute meets ASTM 4656

- Federal Specification A-A-870
- General Motors GM1899M (Performance corresponding to GM6038M)
- Chrysler MS-9769 (meets performance requirements)
- Ford ESE-M97B44-D1
- Volkswagen/Audi G-12

#### **Typical Characteristics**

Shell DEX-COOL® Extended Life Antifreeze/ Coolant	Typical Concentrate	Typical Pre-diluted 50/50
Code No.	94040	94070
Appearance	Orange	Orange
Specific gravity 60/60 °F	1.130	1.06
Freezing point, °F (ASTM D 1177)		
50 vol. % q.s. aqueous solution	-34	
Freeze point, °F, as purchased		-34
pH (ASTM D 1287), 1:2 dilution with water	8.3	8.3
Reserve Alkalinity (ASTM D 1121), as received	6.0	3.0
Silicate, % (as Anhydrous Alkali Metasilicate)	None	None

#### Recommended dilution for Shell DEX-COOL® Extended Life Antifreeze/Coolant concentrate

Boiling Protection, °F (C) (15 lb. pressure cap)	265 (129.4)
50% (1 part AF/1 part water)	
Freezing Protection, °F (C)	
40% (2 parts AF/3 parts water)	-12 (-24.4)
50% (1 part AF/1 part water)	-34 (-37.2)
60% (3 parts AF/2 parts water)	-61 (-51.7)

#### Note:

For optimum year round protection against freezing, boiling and corrosion, a 50 percent **Shell DEX-COOL® Extended Life Antifreeze/Coolant** concentrate solution (1 part AF/1 part water) is recommended. For maximum protection against freezing in extremely cold areas, a 60 percent solution (3 parts AF/2 parts water) can be used. Concentrations greater than 67 percent or less than 40 percent are not recommended. **Shell DEX-COOL® Extended Life Antifreeze/Coolant Pre-diluted 50/50** should be used as purchased. No further dilution is recommended. Dilution of a 50/50 mixture by more than 10% with conventional coolants or water will reduce corrosion and freeze point protection.

#### Handling and Safety Information

Shell DEX-COOL® Extended Life Coolant has a shelf life of at least 8 years. Concentrate product should be mixed before use. Always dispose of used coolant in accordance with local, state and federal guidelines. These products are not to be used to protect the inside of potable water systems against freezing. For information on the safe handling and use of this product, refer to its Material Safety Data Sheet at <a href="http://www.shell-lubricants.com/msds/">http://www.shell-lubricants.com/msds/</a>. For more information and availability, call 1+800-782-7852 or World Wide Web: <a href="http://www.shell-lubricants.com/">http://www.shell-lubricants.com/</a>.