



Advanced Lubricants Technology

Page 1 of 2

PERENNIAL LONG LIFE COOLANT

## Product Data Sheet

### PERENNIAL LONG LIFE COOLANT

Organic Acid Technology (Free of Amine, Phosphate, Silicate, Borax, Nitrite)

---

#### PRODUCT FEATURES

**PERENNIAL LONG LIFE COOLANT** is designed to offer outstanding protection for the cooling system for 5 years or 240,000km that is an ethylene glycol-based formulation suitable for use in cooling system of all types of liquid cooled automotive like passenger cars, light trucks and heavy duty vehicles and industrial internal combustion engines. The formulation is designed for both gasoline and diesel engines.

**PERENNIAL Long Life Coolant** formula is especially recommended for use in all and newer GM vehicles as well as all other cars and light duty trucks. It's also recommended for all general aftermarket servicing of automobiles and has been also adopted by a number of OEMs for the aftermarket field.

When diluted 30-50% with water, **PERENNIAL Long Life Coolant** protects modern engine components from winter freezing and summer boil over. A 40% to 60% concentration range is suggested for optimum corrosion protection. **PERENNIAL Long Life Coolant** is compatible with other brands of coolant commonly available. It contains a high quality defoamer system and will not harm hoses, plastics or original vehicle finishes.

#### APPLICATION

- ◆ Automotive and transport engines.
- ◆ Construction, earthmoving, mining and quarrying equipment.
- ◆ Stationary power generation engines.
- ◆ Marine engines.

#### DIRECTIONS FOR USE

- ◆ Prepare demineralized or deionized water for dilution.
- ◆ Check the dilution water which should be a clear and free of suspended matter or solids.
- ◆ Dilute at 50% v/v of **PERENNIAL Long Life Coolant** and 50% v/v of water.
- ◆ Replace a used coolant by the diluted coolant.
- ◆ Do not dispose of the used coolant in nowhere and should be instructed by the regulations in your area.

This product is harmful or fatal if ingested. If split on skin, clothes and painted surface, flush with water.



Advanced Lubricants Technology

Page 2 of 2  
PERENNIAL LONG LIFE COOLANT

### PERFORMANCE LEVELS

- ◆ GM 6277M
- ◆ Ford WSS-M98B44-D
- ◆ GM 1825M
- ◆ GM1899
- ◆ Ford WSE-M97BB44-A
- ◆ Ford WSE-M97BB44-B
- ◆ Daimler Chrysler MS 7170 and MS 9769
- ◆ General Services Administration A-A-52624
- ◆ ASTM D3306
- ◆ SAE J 1034
- ◆ ASTM D 4895
- ◆ KS M 2142
- ◆ ASTM D-4985
- ◆ ASTM D-5216
- ◆ ASTM D-6210

The formulation of long life coolant has also been proved in laboratory to be compatible with all new extended/long life formulas at concentrations typically used in any newer vehicles coming of the line today. These automobile manufacturers included but not limited to:

Audi	General Motors	Suzuki
BMW	Honda	Toyota
Daewoo	Mercedes	Volvo
DaimlerChrysler	Mitsubishi	VW
Ford	Saab	Holden
Mazda	Subaru	Nissan

### TYPICAL SPECIFICATION

PROPERTY	UNIT	METHOD	LONG LIFE COOLANT SPECIFICATIONS
Antifreeze Glycols. Mass %	-	-	92.8
Corrosion Inhibitors (Anhydrous), mass %	-	-	4.9
Total Water, mass %	-	-	2.3
Ash, mass %	-	-	1.24
Dyes (Orange)	-	-	Trace
Silicon (Form Silicate)	-	-	Free
Phosphorus	-	-	Free
Boron	-	-	Free

*\*The above specifications are typical of current production, variation in these characteristics may occur, but will not affect the product performance.*