

## LDELC Antifreeze Concentrate

Technical Data Sheet

#### **Performance Fluids Benefits**

Extended service life.

All season formulation cools engine in summer, protects from freezing in winter.

Compatible with controlled atmospheric brazed (CAB) radiators.

Compatible for use in all cars, light duty trucks, and motorcycles.

Yellow color is neutral and will not significantly alter the color of the coolant when used for topoff.

Meets the performance requirements of:

ASTM D3306

#### Which include:

- ASTM D1384
- ASTM D4340
- ASTM D2570
- ASTM D2809

Low silicate formulation meeting ASTM D4985.

Recommended for use in the following applications but not limited to:

BMW, Chrysler MS12106, General Motors GM6277M, Honda, Hyundai, Nissan, VW TL774D, Mazda, Subaru, and Toyota/Lexus

#### **Features**

LDELC Antifreeze Concentrate contains a pure organic acid technology (OAT) inhibitor system that is significantly more durable than conventional additive systems for automotive, light-duty use, resulting in up to 5 year/150,000 mile service life. The antifreeze is suitable for use in foreign and domestic passenger cars, vans, SUVs and light trucks requiring extended life antifreeze.

The inhibitor technology used in this extended life antifreeze/coolant contains no borate, nitrate, nitrite, phosphates, or silicates. It is compatible with all major brands of OAT, hybrid and conventional coolants without precipitation problems under typical top off quantities. However, mixing different coolant types should be avoided because it will shorten the life of the "mixed" coolant.

Additionally, this antifreeze/coolant contains inhibitors that protect all cooling system metals. Together with the glycol base, these inhibitors and other additives give year-round protection against freeze-ups, boil-overs and engine cooling system corrosion.

### **Product Specifications**

PARAMETER	LIMIT
Appearance	clear yellow liquid*
Ethylene glycol (WT%)	95.0 min
pH (50% v/v)	8.0 - 9.5
Reserve alkalinity (ml)	6 min

<sup>\*</sup>Standard color. Custom color available upon request.

# **Typical Properties**\*

PROPERTY	VALUE
Corrosion inhibitors (WT%)	4.0 min
Water (WT%)	2.8 max
Boiling point (°F, 50% v/v, 15psi)	265 min**
Freezing point (°F, 50% v/v, 15psi)	-34
Specific gravity (60/60°F)	1.110 – 1.145
Density (PPG, 60°F)	9.4 min
Flash point (°F)	250
Chloride (ppm)	25 max
Ash content (WT%)	2.5 max
Silicates (WT%)	nil
Foam	150 ml max; 5 s break max
Effect on engine or vehicle finish	no effect

<sup>\*</sup>These values should not be construed as sales specifications.

Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. It is the ultimate responsibility of the user to ensure that the product is suited and the information is applicable to the user's specific application. Berryman Chemical Inc. does not make, and expressly disclaims, all warranties, including warranties of merchantability or fitness for a particular purpose, regardless of whether oral or written, express or implied, or allegedly arising from any usage of any trade or from any course of dealing in connection with the use of the information contained herein or the product itself. The user expressly assumes all risk and liability, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or the product itself. Further, information contained herein is given without reference to any intellectual property issues, as well as federal, state or local laws which may be encountered in the use thereof. Such questions should be investigated by the user.

<sup>\*\*</sup>Boiling point shown using conventional 15 psig radiator cap.