

D17-LD
Blending Syrup for LD ELC / OAT Coolant

FEATURES

- Patent pending technology.
- Extended Life Coolant (ELC) additive provides a service life of 5 years / 150,000 miles.
- Applicable to both water only and glycol based coolants.
- Does not contain Nitrite, Amine, Phosphate, or Silicate (NAPS-Free).
- Safe for all common elastomers used in hoses and gaskets.
- A combination of many organic acids provides multi-metal corrosion protection, especially for aluminum.
- Multiple scale inhibitors/dispersants
- Convenient concentrated liquid for easy blending.
- Non foaming

DESCRIPTION AND USE

Dober D17-LD is a single component additive system used to blend light-duty, extended life coolants meeting ASTM D3306 standards. This additive package contains extended life corrosion inhibitors based on organic acids and provides maximum protection against damaging rust and corrosion in engine cooling systems. This inhibitor package is free of nitrite, amine, phosphate and silicate. This patent pending technology does not use 2EH acid nor any other organic acid that is aggressive to hoses and gaskets. Coolants made from D17-LD are suitable for use in late model passenger cars and light-duty trucks.

This additive package when blended with ASTM E-1177 grade glycol and following Dober's blending procedure is designed to meet the following industry and performance specifications:

ASTM D-3306
ASTM D-4340 Hot Surface Aluminum Protection
ASTM D-1384 Corrosion Protection
ASTM D-2809 Water Pump Cavitation
ASTM D-1881 Foaming Characteristics
ASTM D-2570 Simulated Service Testing

Recommended Applications:

Compatible with major coolant types for top-off and service.

Mercedes-Benz	Volkswagon
Toyota	Honda
Nissan	Hyundai
General Motors	Ford
Chrysler	

ADDITIVE TYPICAL PROPERTIES

Dosage	2.16% BV
Color	Pale Yellow
Specific Gravity @68F	1.184
Approximate Density	9.878 lbs/gallon
Approximate pH	10.0
Approximate pH at (Recommended dosage)	8.0 to 8.8

STORAGE AND HANDLING

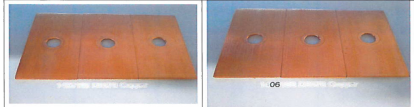
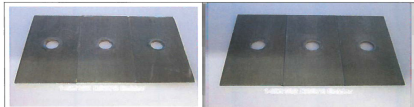
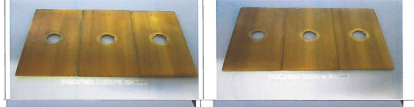
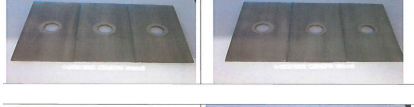
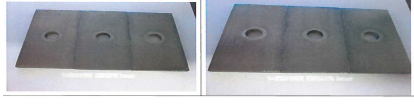
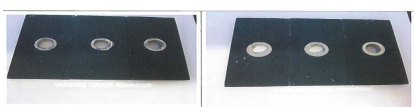
Store Dober D17-LD at moderate temperatures of 35° to 100°F (2° to 38°C). To ensure maximum activity this product should be used within two years. Keep containers closed when not in use.

SAFETY PRECAUTIONS

A Material Safety Data Sheet (MSDS) containing detailed information about this product is available upon request. The MSDS is also available online at <http://msds.dobergroup.com>



Antifreeze Premix 50/50 Typical Properties

<u>Test</u>	<u>Method</u>	<u>Result</u>	<u>ASTM Corrosion Test Results:</u>	<u>Coupon</u>
Specific Gravity	ASTM D-5961	1.0727		Copper
pH 50%vol in DI H2O	D-1287	8.2		Solder
Appearance/ Sediment	Visual	Clear/None		Brass
Reserve Alkalinity, mL	D-1121	1.2 Minimum		Steel
Foam (mL/Sec)	D-1881	50mL /1.2 sec		Cast Iron
				Cast Aluminum

<u>Test Parameter</u>	<u>ASTM Method</u>	<u>Pass/Fail</u>	<u>Result</u>
Effect on automotive finishes	D-1882	Pass	Pass
Freeze Point (°C)	D-1177	Pass	-35.2F / -37.3C
Boiling Point (°C)	D-1120	Pass	226.4F / 108.0C
Ash Mass %	D-1119	Pass	0.4
Glassware Corrosion Test	D-1384	Pass	Pass
Water Pump Cavitation Test	D-2809	Pass	9
Aluminum Corrosion Test	D-4340	Pass	Pass
Simulated Service Test	D-2570	Pass	Pass

