PETROMIN

PRODUCT DATA SHEET

HEAVY DUTY COOLANT/ANTIFREEZE™

HEAVY DUTY COOLANT/ANTIFREEZE ™ is a low silicate, phosphate free formulation of ethylene glycol, nitrites, trialozes and benzoates. These additives work synergistically to protect all gasoline and diesel engines from damage caused by heat, cold and corrosion. Heavy Duty Coolant/Antifreeze **T** ™ is a ethylene glycol-based formulation suitable for passenger cars, light trucks, and heavy duty vehicles in all industries including Transport, Marine, Earthmoving and Mining.

Heavy Duty Coolant/Antifreeze ™ has been specifically formulated to perform to the International Standard ASTM D 3306 Specification: "Standard Specification for Glycol Base Engine Coolant fur Automobile and Light-Duty Service" and the International standard ASTM D 4985 "Standard Specification for Low Silicate Ethylene Glycol Base Engine Coolant for Heavy Duty Engines Requiring a Pre-Charge of Supplemental Coolant Additive". This product is available in %**40**, %**50**, %**70**, and %**100** glycol concentrations.

PRODUCT HIGHLIGHTS

- Heavy Duty Coolant/Antifreeze ™ is based on low silicate technology and contains anti-foaming agents that prevent foam buildup from occurring in vehicle engines.
- Heavy Duty Coolant/Antifreeze ™ is a low silica Formulation that prevents problems such as water pump weepage, solder bloom, and silica gel buildup in vehicle engines
- Heavy Duty Coolant/Antifreeze ™ is based on a specialized formula that is a highly effective corrosion inhibitor, prolonging the life of heavy duty and light utility vehicles
- Heavy Duty Coolant/Antifreeze ™ is a nitrite, silicate,, trialoze based formula that provides corrosion protection in cooling systems containing metals such as **copper, solder, brass, steel, cast iron, and aluminum**
- Heavy Duty Coolant/Antifreeze ™ is fully formulated - no additional SCA's required at initial fill or top-off.

KEY FEATURES

- Formulated to meet ASTM standards.
- Low Silicate and Phosphate Free.

- Inhibits corrosion and pitting.

PRODUCT DATA SHEET

- Heavy Duty Coolant/Antifreeze ™ is formulated to meet or exceed the performance requirements of the following antifreeze specification and/or recommended practices:

GM 1825M	Ford WSS-M97B510-A1
Ford ESE-M 97B18-C	Caterpillar 1 EO 535
Cummins Bulletin 3666132	Detroit Diesel Bulletin 7SE 298
GM 1825M	Mercedes Benz Sheet 325.3

WATER STANDARDS

Heavy Duty Coolant/Antifreeze ™ formulated with the finest quality of water as advised by the standard specification ASTM D 3306-08a mentioned below:

TYPICAL CHARACTERISTICS*

PROPERTY	VALUE	ASTM TEST METHOD
Chlorides, ppm	25 (max)	D 512, D 4327
Sulphate, ppm	50 (max)	D 516, D 4327
Total Hardness, ppm	20 (max)	D 1126
pH	7.5-11.5	D 1293
Iron, ppm	**1**(max)	E 394

PETROMIN

PRODUCT DATA SHEET

TYPICAL CHARACTERISTICS

VALUES	VALUES
Appearance	Neon Green liquid with slight odor
Density **(20°C)**	1.125 - 1.130
Antifreeze Glycols mass %	0-95%
Corrosion Inhibitors mass %	< 5%
pH	8.5-11
Silicon ppm	125 ppm max
Phosphates ppm	0

Coolant Boil/Freeze Protection

% Coolant	Freezing Point $^0F/^0C$	Boiling Point $^0F/^0C$
40	-10/-23	220/104
50	-30/-34	225/107
70*	-60/-51	240/116
100	-20/-29	285/140

*Maximum freeze protection is at 70%

*The information and figures given here are typical of current production and conform to specification, minor variations may occur.