STA-CLEAN
ANTIFREEZE
THE ORIGINAL LONG LIFE ANTIFREEZE

Sta Clean Heavy Duty PG Antifreeze™ is a premium quality blend of propylene glycol and a specifically formulated inhibitor package designed for heavy-duty cooling system applications. Formulated to eliminate the pre-charge step of inhibitors in cooling system programs, it also provides a high degree of performance and durability. In addition, its inhibitor package - **Sta Clean BNT™,** provides superior balanced protection against liner pitting, hard water scale deposits and corrosion of all cooling system metals, including aluminum.

Sta Clean Heavy Duty PG Antifreeze™ is recommended for use in Heavy Duty cooling systems because of these features: Pre–Charged, Requires No Initial SCA. Not Listed as a Hazardous Substance or Air Pollutant. Low Silicate, No Phosphates. Extended Drain Periods. Premium quality Aluminum Protection. Superior Liner Pitting Protection.

Sta Clean Heavy Duty PG Antifreeze™ is sold in concentrated – ready to be diluted with water of low mineral content – or premixed, in situations where low-mineral water is not readily available.

Typical Physical Properties

Sta Clean Heavy Duty PG Antifreeze Composition (Percent by Weight)		
Propylene Glycol	----	97.0
Performance Additives	----	3
Color	Visual	Yellow-Green
Specific Gravity 60 °F	D1122	1.04 -1.05
pH (50% solution)	D1287	10.5
Reserve Alkalinity (min.)	----	10.5 ml
Water, wt %	D1123	4.0 approx.
Solubility % by Weight in Water	----	Complete
Ash Content, Mass %	D1119	1.0
Freeze Point (50% solution)	D1177	-29 F
Total silicate, wt. %	----	.20 Max
Foam Vol. (ml / break time)	D1881	125 / 5 Max

Performance Effects in Service	
Rubber Hose & Gasket Material	No Adverse Effect
Main & Rod Bearings	No Adverse Effect

Freeze/Boil Protection Chart *using a 15 PSI Pressure Cap in Good Condition

% of Cooling System Capacity	Protects From Freezing Down to	Protects From Boiling Up to
33 1/3	4 F	265 F
50	-29 F	270 F
60	-66 F	273 F

Corrosion Weight Loss in PPM

Copper	< 3
Solder	< 3
Brass	< 2
Steel	0
Cast Iron	0
Aluminum	0.5

Safety and Toxicity Information

Sta Clean Antifreeze is formulated with Propylene Glycol (PG) rather than Ethylene Glycol (EG) The traditionally used base in antifreeze. Sta Clean PG Antifreeze is less toxic, thereby safer than Ethylene glycol Antifreeze. EG antifreeze while providing adequate freeze & corrosion protection is poisonous to humans, animals and plant life. This poisoning danger of EG antifreeze is amplified by its sweet taste, which children and animals may be attracted to. Household pets and wild animals often consume antifreeze that has been improperly discarded, leaked or spilled.

Disposal

Propylene glycol is readily biodegradable in a biological waste-water treatment plant. Sta Clean Antifreeze (fully pre-charged) 96-Hr LC 50 test result is +3400 mg/liter. Check with appropriate wastewater treatment authority for local regulations regarding heavy metal limits for sewer disposal. Sta Clean Antifreeze can be recycled.

Packaging

Bulk, 55 Gallon, 30 Gallon and 1 Gallon Containers

Sta Clean™ Heavy Duty PG Coolant meets or exceeds ASTM D4985, Specification for Low Silicate Glycol Base Engine Coolant for Heavy Duty Engines Requiring a Pre-Charge of Supplemental Coolant Additive (SCA) , ASTM D6210 Standard Specification of Fully-Formulated Glycol Base Engine Coolant for Heavy Duty Engines. The Corrosion protection requirements of ASTM D4340 Corrosion of Aluminum. ASTM D1384 Standard Test Method for Corrosion Test for Engine Coolants in Glassware, and ASTM D2809 Specification for Cavitation Corrosion and Erosion-Corrosion Characteristics of Aluminum Pumps with Engine Coolant.