



Product Data Sheet

PolarZone™ SCA Pre-Charged Antifreeze & Coolant Heavy Duty Diesel Engine Antifreeze & Coolant

DESCRIPTION

Nemco PolarZone™ Supplemental Coolant Additive (SCA) Pre-Charged Heavy Duty Diesel Antifreeze and Coolant is a high quality ethylene glycol (EG) based engine coolant that is formulated to provide superior engine protection for heavy duty cooling systems. It is pre-charged with a high quality SCA, and there is no need to add additional SCA's at initial fill or when topping off to compensate for SCA dilution. When used as a 60% solution in water, it will provide the freeze protection and boiling point elevation demanded by these hard working engines.

PolarZone™ SCA Pre-Charged Heavy Duty Diesel Antifreeze and Coolant has a carefully balanced phosphate-free additive package that affords corrosion protection for cast iron, steel, solder, copper and brass. It also offers a degree of aluminum compatibility and will protect aluminum elbows, thermostat housings and water pumps but is not recommended for use in engines with either aluminum heads or blocks. PolarZone™ SCA Pre-Charged Antifreeze has been subjected to a wide variety of recognized industry tests designed to measure the coolant's ability to protect an engine from corrosion. This quality antifreeze has a low silicate formulation and incorporates nitrate to provide superior wet sleeve liner cavitation corrosion protection. This product is compatible with all nationally distributed water filters and liquid supplemental coolant additives (SCA).

Advantages

- Protects against winter freezing and summer boil over
- Prevents pitting caused by cavitation and corrosion of brass, copper, solder, steel, cast iron and aluminum
- Low silicate
- Aluminum compatible
- Available in concentrate, or in 50/50 or 60/40 premix concentrations

Meets and/or exceeds

Heavy Duty Engines

- RP-329 Maintenance Council, American Trucking
- ASTM D-4985
- ASTM D-5345 (50% Blend)
- ASTM D-6210
- Caterpillar
- Cummins 90T8-4
- Detroit Diesel 7SE298
- Freightliner 48-22880
- GM 1899M
- John Deere H24A1 C1
- Mack Truck
- SAE J1941
- White/GMC, division of Volvo

Automobile Engines

- ASTM D-3306
- ASTM D-4340
- CID A-A-52624
- Chrysler MS 7170 Sec. A & B 1-4
- Ford ESE-M97B44-A Sec. 3.1.1 & 3.1.2
- GM 1825M
- SAE J1034

Typical Characteristics – SCA Antifreeze

Test	Performance			Test Method
	Pure	50/50	60/40	
pH (50% water solution)	9 - 11			ASTM D1287
Appearance/colour	Clear / Green			
Specific gravity (15.6°C / 60°F)	1.1214	1.07	1.090	ASTM D1122
Freeze point °C (°F)	-15 (5)	-37 (-34)	-52 (-62)	ASTM D1177
Boiling point °C (°F)	173 (343)	108 (226)	110 (230)	ASTM D1120
Foam Height (ml), 33% solution Break time (sec), 33% solution	50 max 3 max			ASTM D1881
Shelf life	5 years			
Total glycol (wt. %)	95.0 min	50 min	60 min	
Inhibitors and water (wt. %)	5 max	50 max	40 max	

Physical characteristics shown in the table are typical and may vary slightly.