



AdvanceGuard™

HD 50 Natural Gas Engine Antifreeze Coolant

Product Description

AdvanceGuard™ HD 50 Natural Gas Engine Antifreeze Coolant is an ethylene glycol-based (EG) coolant-antifreeze specifically designed for large stationary natural gas engines and interstage coolers. It is formulated for extended life and corrosion protection in heavy-duty systems. It contains a **long-life inhibitor additive** using advanced hybrid (Nitrite/Molybdate) plus Organic Acid Technology (OAT) coolant inhibitor technology. The AdvanceGuard™ HD 50 Natural Gas Engine Antifreeze Coolant inhibitors protect against damaging rust and corrosion in stationary industrial engines and cooling systems. Mineral scale deposits are controlled by a high-performance scale inhibition polymer, which improves overall performance in operating systems that encounter poor water quality in the field.

Typical Physical Properties

Form@70°F	Blue-Green Liquid
Glycol Concentration, %	50 (Monoethylene Glycol)
Relative Density 60°F (15.5°C)	1.10 to 1.12
Density, (lbs/gal)	8.1 to 8.5 (typical)
Freeze Point, °F (°C)	-34 (-37) max
Boiling Point, °F (°C)	265 (129) min (29.7 psia)
pH, (10% Solution)	8.5 - 9.5
Dilution Water	Deionized Low TDS (<500 ppm)

Application Information

AdvanceGuard™ HD 50 Natural Gas Engine Antifreeze Coolant is ready-to-use and is not diluted further before being added to the coolant system. Existing coolant systems should be cleaned and flushed with **AdvanceClean™ EJC 100 or EJC 200** Engine Jacket Cleaner, followed by a flush to clear water with low TDS water before adding the **AdvanceGuard™ HD 50 Natural Gas Engine Antifreeze Coolant** into the compressor cooling system.

Performance & Compatibility

AdvanceGuard™ HD 50 Natural Gas Engine Antifreeze Coolants are formulated to meet or be compatible with the performance requirements of the following industry and OEM standards (based on additive performance).

ASTM D3306, D4985, D6210	SAE J1034, J1038
CAT ELC (EC-1) & Cummins 90T8-4	Detroit Diesel 7SE298
GM 1825M, 1899M, 6277M	Freightliner 48-22880, TMC RP329

Handling & Precautions

AdvanceGuard™ HD 50 Natural Gas Engine Antifreeze Coolant is available in 5-gal buckets, 55-gallon drums, 275-gal one-way tote tanks, and bulk truck volumes. **AdvanceGuard™ HD 50 Natural Gas Engine Antifreeze Coolant** is an industrial chemical and should only be handled by those persons who have read and are familiar with the handling precautions provided in the product's safety data sheet.

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Conventional Characteristics

Appearance	Blue/Green
Specific Gravity, (60/60F) ASTMD1122	1.110
pH (33% solution) ASTMD1287	8.3
Reserve Alkalinity ASTMD1121	5.5
Ash content, % max.	5.0
Freeze Protection (Pressure Independent, ASTMD1177) 60% EG 50% EG 40% EG 30% EG	-67 °F (-54 °C) -34 °F (-37 °C) -8 to -12 °F (-23 °C) 5 °F (-15 °C)
Boiling Protection 15 lb pressure cap (29.7 psia) 60% EG 50% EG 40% EG 30% EG Water	~ 270 - 275 °F (132 - 135 °C) ~ 265 °F (129 °C) ~ 262-267 °F (128-131 °C) ~ 270-275 °F (132-135 °C) ~250 °F (121 °C)
Nitrites	> 400 ppm
Molybdate	> 400 ppm
Silicate, %	- 0 -
Phosphate, %	- 0 -
Amine, %	- 0 -
Borate, %	- 0 -
Nitrates, %	- 0 -
<i>* These values are typical values and should not be used as a quality control parameter either to accept or reject product. Specifications are subject to change without notice.</i>	
Additive Technology	Carboxylic Acid Tolytriazole Nitrites Molybdate
SCA Required	No (optional)
Aluminum compatible	Yes

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