



Great Western Glycol
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Titanium Antifreeze

- **Prediluted, 50/50, NAPS-Free, Heavy Duty Extended Life, Organic Acid Technology (OAT)**
- **Multi-Metal Corrosion Protection, Especially for Aluminum**
- **Formulated Specifically for Heavy Duty**

This prediluted, 50/50 antifreeze/coolant uses an advanced Organic Acid Technology (OAT), extended life, NAPS-Free (no Nitrite, Amine, Phosphate, or Silicate) additive package formulated for heavy duty diesel applications including on-highway, off-road, marine, agricultural, mining and construction equipment. This product was formulated to exceed requirements for ASTM D3306, D4985 and D6210/11 and provides maximum protection against rust and corrosion in heavy duty engine cooling systems. This coolant utilizes a combination of many organic acids to provide multi-metal corrosion protection with extra protection for aluminum. This NAPS-Free extended life antifreeze/coolant chemistry ensures trouble-free service and does not require Supplemental Coolant Additive (SCA) and is compatible for top-off and service with other modern OAT and NOAT formulations.

Best Use: Newer Heavy Duty Diesel Engines

Recommended Service Interval: In heavy-duty service applications this product will provide a service life of 6 years or 600,000 miles without the need for an extender.

BENEFITS

- Ethylene Glycol or Propylene Glycol Base
- Ready-to-Use (50/50 Pre-mix w/ DI Water) or Concentrated (Upon Request)
- Extended Life Coolant
- NAPS-Free Formulation
- Compatible with Modern OAT antifreeze / coolants

SPECIFICATIONS

- ASTM D6210 for Heavy-Duty Engines
- ASTM D3306 for Automobiles and Light-Duty Service
- CAAD A-A-52624A : Antifreeze, Multi-Engine Type
- Free from Amines, Phosphates, Silicates

MEETS REQUIREMENTS

- Caterpillar, and John Deere
- Cummins, Detroit Diesel, Freightliner, International, Mack, and Volvo
- Phosphate-free requirement of European OEMs
- Silicate-free requirement of Japanese OEMs
- TMC RP-329 (EG)
- TMC RP-330 (PG)

% Antifreeze	Freezing Point		Boiling Point*	
	°F	°C	°F	°C
40%	-12 Max	-24 Max	260 Min	126 Min
50%	-34 Max	-36 Max	265 Min	128 Min
60%	-90 Max	-67 Max	270 Min	135 Min

PHYSICAL PROPERTIES		
Antifreeze Glycols	Mass %	49.4 min
Corrosion Inhibitors	Mass %	5.6
Water	Mass %	45.0 max
Flash Point	°F	None
Weight per gallon At 60°F - 16°C	Lbs	8.9 min

* Boiling point shown using conventional 15 psi radiator cap.

Used antifreeze coolant in most states is not hazardous unless it contains more than 5 ppm of lead. Ethylene glycol can be reclaimed indefinitely. We recommend that spent coolant never be disposed of by dumping into a storm sewer or onto the ground. Instead contact Great Western Glycol at 303-287-4877 for info on how to properly dispose of this coolant and protect our environment.

**Table of Properties and Typical ASTM Test Results of Titanium
Blended with EG as 50% Pre-diluted Coolant**

Characteristic	ASTM Specifications	Company Typicals	ASTM Method
Specific gravity, 60/ 60°F	1.065, Min	1.065 – 1.083	D1122
Freezing point, 50% V/V	-34°F/-37°C, Min	-34°F/-37°C, Min	D1177
Boiling point, 50% V/V	226°F/107°C, Min	226°F/107°C, Min	D1120
Effect on engine or vehicle finish	No effect greater than DI water	No effect	-
Ash content, mass %	2.5, Max	<2	D1119
pH, 50% V/V	7.5 – 11.0	8.0 – 9.5	D1287
Reserve alkalinity*	None specified	6.0, Min	D1121
Water mass %	None specified	49.0, Max	D1123
Color	Distinctive	Dyed or Yellow	-
Foaming	150ml vol., Max 3 sec. break, Max	90ml 2.4 sec.	D1881 D1881
Storage stability	Pass	Pass	-
Glassware Corrosion Test	Pass	Pass	D1384
Aluminum Water Pump Cavitation Test	Pass	Pass	D2809
Aluminum Corrosion Test	Pass	Pass	D4340
Simulated Service Corrosion Test	Pass	Pass	D2570

*Reserve alkalinity (RA) is a term used to indicate the amount of alkaline inhibitors present in an antifreeze formulation. It is incorrect to relate a high RA with a high-quality antifreeze. Present, state-of-the-art antifreeze formulations contain many new inhibitors which give added protection to certain metals but do not raise the RA numbers

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