

PRODUCT INFORMATION



VALVOLINE™ ZEREX™ PRE-CHARGED ANTIFREEZE COOLANT

Valvoline ZEREX Pre-Charged Heavy-Duty Antifreeze Coolant is a complete ethylene glycol-based formulation specifically designed for heavy duty diesel engines. The formulation is fully formulated with specific chemical inhibitors to protect diesel engines from liner pitting and hard water scale deposits. The patented inhibitor chemistry protects all cooling system metals from corrosion including aluminum. **ZEREX Pre-Charged Heavy Duty** can be used in gasoline engines and passenger cars as well. The ASTM test data shown on this sheet reflects the high-performance corrosion inhibitor package.

When diluted 50% with water, **ZEREX Pre-Charged Heavy Duty** protects modern engines from winter freezing and summer boil over. The chart at the top right provides mixing information. Clean tap water or demineralized water is recommended for dilution. A 40% to 70% concentration range is suggested for optimum corrosion protection. **ZEREX Pre-Charged Heavy Duty** is compatible with major brands of ethylene glycol-based coolant. It contains a high quality defoamer and will not harm gaskets, hoses, plastics or original vehicle finishes.

ZEREX Pre-Charged Heavy Duty is a universal engine coolant that meets the performance requirements of ASTM specification D3306 for automobiles and light trucks and D6210 for heavy duty engines. It meets the low silicate formulation requirements of GM6038 and contains less than 250 parts per million of silicate as required by the heavy-duty trucking industry.

Call 1-800- TEAM-VAL with questions

ZEREX Pre-Charged Heavy Duty is formulated to meet or exceed the following antifreeze specifications:

ASTM D3306	GM 1825M
ASTM D6210	GM 1899M
Case New Holland	John Deere
CAT	Mack
Cummins	Navistar MPAPS B1
Dae Woo	Paccar
Detroit Diesel	SAE J1034
Federal Specification A-A-52624	SAE J941
Federal Specification A-A-870-A	SAE J814
Ford before 2002	TMC of ATA RP-302B
Freightliner	TMC of ATA RP-329B
	Waukesha

Valvoline recommends that spent coolant never be disposed of by dumping into a septic system, storm sewer or onto the ground. Instead, contact your state or local municipality for instructions on where to and how to properly dispose of this coolant and protect our environment.

If any coolant is spilled onto the ground, contain the spill, and call the state authorities and ask for proper instruction on how to clean up the spill.

ZEREX Pre-Charged Heavy-Duty Antifreeze/Coolant Boil/Freeze Protection		
% Antifreeze	Freezing Point, °F/°C	Boiling Point**, °F/°C
40	-12/-24	260/126
50	-34/-36	265/128
60	-54/-48	271/133
70*	-90/-67	277/135

* Maximum freeze protection is at 70%.

** Boiling point shown using conventional 15 psig radiator cap.

ZEREX Pre-Charged Heavy Duty Typical Physical Properties		
Antifreeze Glycols	mass %	94.3
Corrosion Inhibitors	mass %	2.7
Water	mass %	3.0
Flash Point	°F/°C	250/121
Weight per gallon @ 60°F/16°C	lbs / KG	9.415 / 4.271
Silicates	PPM	250 max.

ZEREX Pre-Charged Heavy Duty Aluminum Water Pump Tests		
ASTM D2809 Pump Cavitation (Extended Test)		
Test Period	Results	Specification
100 hours	9	8

Characteristics	Specifications	Typicals	ASTM Method
Chloride	25 PPM, max.	<<25	D3634
Silicon	250 PPM, max.	<250	-
Specific gravity, 60/60° F	1.110 – 1.145	1.1305	D1122
Freezing point, 50% V/V	-34°F/-36°C	-34°F/-36°C	D1177
Boiling point, undiluted	325°F/162°C	330°F/164°C	D1120
Boiling point, 50% V/V	226°F/107°C	226°F/107°C	D1120
Effect on engine or vehicle finish	No Effect	No Effect	-
Ash content, mass %	5 max	<3	D1119
pH, 50% V/V	7.5 – 11.0	10.7	D1287
Reserve alkalinity*	Report	14.3	D1121
Water mass %	5 max.	3.5	D1123
Color	Distinctive	Green	-
Effect on nonmetals	No Adverse Effect	No Adverse Effect	-
Storage stability	-	>1 year	-
Foaming	150 ml Vol., max.	45 ml	D1881
	5 sec. Break, max.	1 sec.	D1881
Cavitation-erosion rating	8 min.	9	D2809

*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 number.

Typical ASTM Corrosion Test Results			
	Weight Loss Mg/Specimen		
Glassware Corrosion Test	Spec.	Actual	ASTM Method
Copper	10	3	D1384
Solder	30	5	
Brass	10	3	
Steel	10	3	
Cast iron	10	0	
Aluminum	30	0	
Simulated Service Test			
Copper	20	7	D2570
Solder	60	2	
Brass	20	4	
Steel	20	1	
Cast iron	20	0	
Aluminum	60	0	
Hot Surface Corrosion	mg/cm ² /wk		
Specimen weight loss	1.0	0.1	D4340

This information only applies to products manufactured in the following location(s): USA, Canada, and Mexico

Part #	Product
ZXPC0	ZEREX Green HD Pre-Charged AFC Bulk
ZXPC2	ZEREX Green HD Pre-Charged AFC 55 GAL Drum
ZXPCRU1	ZEREX Green HD Pre-Charged RTU AFC 6/1 GAL
ZXPCRU2	ZEREX Green HD Pre-Charged RTU AFC 55 GAL Drum
808138	ZEREX Green HD Pre-Charged RTU AFC 255 GAL Tote
ZXPCRU0	ZEREX Green HD Pre-Charged RTU AFC Bulk

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8/10/21

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