

# PRODUCT INFORMATION



## VALVOLINE™ ZEREX™ G48® ANTIFREEZE COOLANT

**Valvoline ZEREX G48 Antifreeze Coolant** is an ethylene glycol-based formulation suitable for passenger cars, light trucks and heavy-duty vehicles. The formulation is designed for both gasoline and diesel engines. Its low-silicate, low pH, phosphate free European technology protects all cooling system metals, including aluminum, from corrosion. The ASTM and other test data shown on this sheet reflect the high-performance corrosion inhibitor package.

When diluted 50% with water, **ZEREX G48** protects modern engine components from winter freezing and summer boil over. The chart at the below provides mixing information. A 50% to 70% concentration range is suggested for optimum corrosion protection. **ZEREX G48** is compatible with many brands of coolant commonly available. It contains a high quality defoamer system and will not harm hoses, plastics or original vehicle finishes.

Call 1-800- TEAM-VAL with questions.

**Valvoline ZEREX G48 Antifreeze Coolant** is an approved formula for the following specifications:

Audi TL-774-C	Opel/Vauxhall (until 2000) B040 0240
BMW GS 94000	Porche (until 1995)
(Certain Ford & Chrysler)	Rolls-Royce (from 1998)
Detroit Diesel 7SE298	BMW GS 94000
DEUTZ DQC CA-14 Approved	Saab 690 1599
Federal Specification A-A-870A	Seat TL-774-C
Jaguar	Škoda TL-774-C
Jenbacher TA-Nr. 1000-0201	Smart MB-Approval 325.0
Liebherr Minimum LH-00-COL3A	Tesla (from 2013)
MAN Diesel & Turbo Liste 3.3.7	TMC of ATA RP-302B
MAN MAN 324 NF	Van Hool
Maybach MB-Approval 325.0	Volvo 2015 (cars) and older
Mercedes-Benz 325.0 before 2017	Volvo Truck
Mini BMW GS 94000	VW TL-774-C
MTU MTL 5048	Zastava

**Valvoline ZEREX G48 Antifreeze Coolant** is formulated to meet or exceed the following antifreeze specifications:

ASTM D3306	SAE J1034
ASTM D4985	SAE J814
GM 1899M	SAE J1941
GM 1825M	Tesla (from 2013)

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.

<b>ZEREX G48</b>		
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.

Typical Physical Properties		
Antifreeze Glycols	mass %	93.0
Corrosion Inhibitors	mass %	4.0
Water	mass %	3.0
Flash Point	°F/°C	250/121
Weight per gallon @ 60°F/16°C	lbs./KG	9.381 / 4.255
Silicates	PPM	250
Phosphates	PPM	30 max.

Aluminum Water Pump Tests		
ASTM D2809 Pump Cavitation (Extended Test)		
Test Period	Results	Specification
100 hours	10	8

ASTM cavitation corrosion rating: 10 - perfect 1 – perforated

Water used for dilution should contain less than 100 PPM Cl and SO4. It should also be 0-20 ° dH or treated to conform to these limits

Characteristics	Specifications	Typicals	ASTM Method
Chloride	25 PPM, max.	<25	D3634
Silicon	180-230	250	-
Specific gravity, 60/60° F	1.110 – 1.1450	1.1260	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	8 - 9	8.1	D1287
pH, 100%	7.1 - 7.3	7.3	D1287
Reserve alkalinity*	10 min.	14.8	D1121
Water mass %	5 max.	2.5	D1123
Color	Distinctive	Blue	-
Effect on nonmetals	No Adverse Effect	No Adverse Effect	-
Storage stability	-	3 years	-
Foaming	150 ml Vol., max.	90 ml	D1881
	5 sec. Break, max.	2.8 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	1	D1384
Solder	30	0	
Brass	10	0	
Steel	10	1	
Castiron	10	1	
Aluminum	30	0	
Simulated Service Test			
Copper	20	4	D2570
Solder	60	0	
Brass	20	6	
Steel	20	1	
Castiron	20	0	
Aluminum	60	1	
Hot Surface Corrosion	mg/cm <sup>2</sup> /wk		
Specimen weight loss	1.0	0.25	D4340

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

Material/Product

<i>Part #</i>	<i>Product</i>
61583	ZEREX G48 Concentrate 6/1 GAL
ZXG482	ZEREX G48 Concentrate 55 GAL Drum
811877	ZEREX G48 Concentrate 275 GAL Tote
ZXG480	ZEREX G48 Concentrate Bulk
859537	ZEREX G48 Ready-To-Use 6/1 GAL

Effective Date:  
4/1/20

Author's Initials:  
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