



Valvoline™ OEM Advanced 48 Concentrate Coolant

(Previously Zerex G-48 Concentrate)

Valvoline™ OEM Advanced 48 Concentrate Coolant is a multi-use ethylene glycol-based formulation suitable for passenger cars, light trucks and heavy-duty vehicles. The formulation is designed for both petrol and diesel engines. Its low-silicate, low pH, phosphate free European technology protects all cooling system metals, including aluminium, from corrosion. The ASTM and other test data shown on this sheet reflect the high performance corrosion inhibitor package.

A 50% dilution with demineralized water is recommended for optimum performance. Valvoline™ OEM Advanced 48 Concentrate Coolant is compatible with major long life and conventional brands of ethylene glycol based coolant. However, long life characteristics may be diminished by mixing with light duty or conventional fully formulated coolants. It contains a high quality defoamer system and will not harm hoses, plastics or original vehicle finishes.

Valvoline™ OEM Advanced 48 Concentrate Coolant is an **approved** formula for the following specifications:

BMW LC-87	MB-Approval 325.0
Deutz DQC CA-14	MB-Approval 326.0
MAN 324 NF	MTU MTL 5048

Valvoline™ OEM Advanced 48 Concentrate Coolant is formulated to meet or exceed the following specifications:

ASTM D3306	SAE J1034
ASTM D4985	SAE J814
Audi TL-774-C	SAE J1941
Detroit Diesel 7SE298	Saab 690 1599
GM 1899M	Seat TL-774-C
GM 1825M	Skoda TL-774-C
Federal Specification A-A-870A	Smart MB 325.0/326.0 (until 2014)
Jaguar	Tesla (from 2013)
Jenbacher TA-Nr. 1000-0201	TMC of ATA RP-302B
Liebherr Minimum LH-00-COL3A	Van Hool
MAN Diesel & Turbo Liste 3.3.7	Volvo 2015 (cars) and older
Maybach MB 325.0/326.0 (until 2014)	Volvo Truck (until 2005)
Opel/Vauxhall (until 2000) B040 0240	VW TL-774-C
Porsche (until 1995)	Zastava
Rolls-Royce (from 1998)	

¹Check owners' manual before use

Applications:

Valvoline™ OEM Advanced 48 Concentrate Coolant is designed for use in passenger car, light duty and commercial petrol and diesel engines. Please consult the owners' manual before use.

Mixture Ratio Guide

Refer to vehicle cooling system requirements for

Antifreeze Boil/Freeze Protection		
Antifreeze %	Freezing Point, °C	Boiling Point**, °C
50	-36	128

correct mixture ratio

**Typical 15psi radiator pressure cap

Note: Complete drain and flush of cooling system is always recommended. Mixing with light duty or conventional fully formulated coolants may diminish optimum performance and cooling system protection

PRODUCT INFORMATION



Features and Benefits

- Multi-purpose application, designed for petrol and diesel engines
- Utilises hybrid organic acid technology to minimize inhibitor depletion
- Low silicate, low pH and phosphate free formula
- Help prevents rust and corrosion
- Help prevent hot weather boil-over and cold weather freeze protection
- Protects mixed cooling system metals including aluminium

Keeping the world moving since 1866™

Serving more than 100 countries around the globe, Valvoline is a leading marketer, distributor and producer of quality branded automotive and industrial products and services. Products include automotive lubricants including MaxLife™, the first motor oil specifically formulated for higher-mileage vehicles; transmission fluids; gear oils; hydraulic lubricants; automotive chemicals; specialty products; greases, and cooling system products.

For more information on Valvoline products, programs and services please visit www.valvoline.com.au or contact the Technical Hotline on 1800 804 658 for product recommendations.

Typical Properties and Characteristics

Typical property characteristics are based on current production. Whilst future production will conform to Valvoline™ specifications, variations in these characteristics may occur.

Valvoline™ OEM Advanced 48 Concentrate Coolant		
Physical Properties	Unit	Typical
Antifreeze Glycol	Mass %	93.0
Corrosion Inhibitor	Mass %	4.0
Water	Mass %	3.0
Flash Point (Concentrate)	°C	121
Weight per gallon @ 16 °C	Lbs./KG	9.381/4.255
Silicate	PPM	250
Phosphates	PPM	30 max.

Valvoline™ OEM Advanced 48 Concentrate Coolant*			
Characteristic	Specifications	Typical	ASTM Method
Chloride	25 PPM, max.	<25	D3634
Silicon	250 PPM, max.	250	-
Specific gravity, 15.6° C	1.110 - 1.145	1.1260	D1122
Freezing point, 50% V/V	-36 °C	-36 °C	D1177
Boiling point, undiluted	162 °C	164 °C	D1120
Boiling point, 50% V/V	107 °C	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	-
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. 5 sec. break, max.	90 ml 2.8 sec.	D1881 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

PRODUCT INFORMATION



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	
Cast Iron	10	1	
Aluminium	30	0	
Simulated Service Test			
Copper	20	4	D2570
Solder	60	0	
Brass	20	6	
Steel	20	1	
Cast Iron	20	0	
Aluminium	60	1	
Hot Surface Corrosion	mg/cm ² /wk		
Specimen weight loss	1.0	0.1	D4340

Valvoline™ OEM Advanced 48 Concentrate Coolant Aluminium 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

This information only applies to products manufactured in the following location(s): Australia

Part Number	Pack Size
0957.20	20L
0957.28	208L

For more information on Valvoline products, programs and services please visit www.valvoline.com.au or contact the Technical Hotline on 1800 804 658 for product recommendations.

Health and Safety

This product is not likely to present any significant health or safety hazards when used correctly in the right application. A Material and Safety Data Sheet (MSDS) is available on request via your local sales office or 1800 804 658 or through our website www.valvoline.com.au

Protect the Environment

Take used oil to an authorized collection point. Do not discharge into drains, soil or water.

Author:

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