



Valvoline™ MaxLife™ coolant is designed to meet the special needs of higher mileage applications, new cooling systems can also benefit from its unsurpassed freeze protection, enhanced corrosion protection, and excellent antiboil performance. Valvoline's MaxLife™ antifreeze coolant is an ethylene glycol based formulation which can be used in all makes and models of vehicles. It is formulated with Alugard® compatibility additive to improve performance when mixing with other coolant types. The patented\* chemistry protects all cooling system metals from corrosion including aluminum. The ASTM test data shown on this sheet reflects the high performance corrosion inhibitor package.

When diluted 50% with water, **MaxLife**<sup>TM</sup> 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. **MaxLife**<sup>TM</sup> with **Alugard**® is compatible with major American brands of ethylene glycol based coolant. It contains a high quality defoamer and will not harm gaskets, hoses, plastics or original vehicle finishes.

MaxLife<sup>TM</sup> engine coolant has been dyed yellow to assure color compatibility with a wide range of coolants. It has unsurpassed freeze and boil protection. Valvoline recommends the universal use of MaxLife coolant for all makes and all models of vehicles designed to use an ethylene glycol based engine coolant after ASTM D3306. MaxLife<sup>TM</sup> coolant can be used in gasoline and diesel engines.

Valvoline has conducted in-house testing to support MaxLife coolant performance for this application. However, it is important to note that, other than where we have formal approvals, vehicle manufacturers have neither evaluated nor approved MaxLife Coolant. Valvoline stands behind all of its products, including MaxLife<sup>TM</sup> Coolant. The universal use of MaxLife<sup>TM</sup> Coolant in automotive applications is recommended and supported by Valvoline. Many consumers have chosen to take advantage of this level of performance in newer applications.

Call 1-800-TEAM-VAL with questions

\*US Patents 4,548,787 and 6,203,719

## Valvoline<sup>TM</sup> MaxLife<sup>TM</sup> Antifreeze / Coolant

5 Years / 150,000 miles / 3,000 hours

MaxLife <sup>TM</sup> Antifreeze/Coolant Boil/Freeze Protection			
% Antifreeze	Freezing Point, °F/°C	Boiling Point**, °F/°C	
33	0/-17	256/123	
40 50	-12/-24	260/126	
60	-34/-36	265/128	
70*	-54/-48	271/133	
70"	-90/-67	277/135	

<sup>\*</sup> Maximum freeze protection is at 70%.

<sup>\*\*</sup> Boiling point shown using conventional 15 psig radiator cap.

MaxLife <sup>TM</sup> Typical Physical Properties			
Antifreeze Glycols	mass %	96.0	
Corrosion Inhibitors	mass %	2	
Water	mass %	2	
Flash Point	°F/°C	250/121	
Weight per gallon @ 60°F/16°C	lbs / KG	9. 363 / 4.247	

MaxLife <sup>™</sup> Aluminum Water Pump Tests			
ASTM D2809 Pump Cavitation (Extended Test)			
Test Period	Results	Specification	
100 hours	8	meets	

ASTM cavitation corrosion rating: 10 - perfect 1 - perforated

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.



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	325°F/162°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	1.1	D1119
pH, 50% V/V	7.5 - 11.0	10.4	D1287
Reserve alkalinity*	Report	11.4	D1121
Water mass %	5 max.	2	D1123
Color	Distinctive	Yellow	-
Effect on nonmetals	No Adverse Effect	No Adverse Effect	-
Storage stability	=	> 2 years	-
Foaming	150 ml Vol., max.	75 ml	D1881
	5 sec. Break, max.	2 sec.	D1881
Cavitation-erosion rating	8 - 10	8	D2809

<sup>\*</sup>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	
	Mg/Sp		
Glassware Corrosion Test	Spec.	Actual	ASTM Method
Copper	10	1	
Solder	30	2	D1384
Brass	10	1	
Steel	10	0	
Cast iron	10	2	
Aluminum	30	0	
Simulated Service Test			
Copper	20	2	
Solder	60	3	D2570
Brass	20	3	
Steel	20	1	
Cast iron	20	4	
Aluminum	60	2	
<b>Hot Surface Corrosion</b>	mg/cr	mg/cm <sup>2</sup> /wk	
Specimen weight loss	1.0	0.1	D4340

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

Part #	Product	Unit UPC	Carton UPC
719009	MaxLife AFC 6/1 GAL	0 28882-71909 4	0 28882-79009 3
719008	MaxLife AFC 55 GAL Drum	0 28882-71908 7	
733837	MaxLife AFC 275 GAL Tote	0 28882-00037 6	
719010	MaxLife Bulk		
719005	MaxLife Ready-To-Use AFC 6/1 GAL	0 28882-71905 6	0 28882-79009 5
719004	MaxLife Ready-To-Use 55 GAL Drum	0 28882-71904 9	
742932	MaxLife Ready-To-Use 275 GAL Tote	0 28882-00039 0	
719006	MaxLife Ready-To-Use AFC Bulk		

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