



# SPECIAL RADIATOR LONGLIFE (G12+)



## DESCRIPTION

RADIATOR LONGLIFE G12+ is a nitrite-, amine-, phosphate-, silicate- and borate-free, organic acid technology (OAT) coolant based on monoethylene glycol. It provides long life protection against frost, corrosion and overheating in all modern engines, especially in highly loaded aluminum ones, throughout the year, winter and summer. It effectively protects against deposits the vital parts of cooling system, the block and cylinder head, the radiator and the water pump. It protects cooling systems of commercial vehicles for at least 650,000 km (8,000 hours) and of passenger cars for 250,000 km (2,000 hours). It is recommended to drain RADIATOR LL when reaching these mileage limits or every 5 years (whichever occurs first).

## APPLICATIONS

It surpasses the requirements of all major OEMs' such as GM, FORD, VW, etc. The product must be diluted. To achieve the minimum possible anti-corrosion protection, a 33% dilution is the minimum requirement. Maximum anti-frost protection at -69°C is achieved with a 68% dilution. Concentrations of less than 33% and more than 70% are not recommended. Not to be used in drinking water systems.

## CHARACTERISTICS-BENEFITS

CHARACTERISTICS	APPLICATION TABLE																																		
Long life corrosion and frost protection in all modern engines including aluminum and ferrous alloys; extends life of engine and makes maintenance simpler.	<table border="1"> <thead> <tr> <th>Antifreeze % v.v.</th> <th>Protection down to...</th> </tr> </thead> <tbody> <tr> <td>33%</td> <td>-16 °C</td> </tr> <tr> <td>40%</td> <td>-23 °C</td> </tr> <tr> <td>54%</td> <td>-40 °C</td> </tr> <tr> <td>68%</td> <td>-69 °C</td> </tr> </tbody> </table>	Antifreeze % v.v.	Protection down to...	33%	-16 °C	40%	-23 °C	54%	-40 °C	68%	-69 °C																								
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Superior protection against sludge formation; keeps surfaces clean improving heat transfer properties.																																			
Protection of the aluminium water pump against corrosion and erosion on cavitations problems.																																			
Hard water compatible; non-toxic inhibitor.	<table border="1"> <thead> <tr> <th rowspan="2">Radiator Capacity (Litres)</th> <th colspan="4">Ambient temperature (°C)</th> </tr> <tr> <th>-10</th> <th>-15</th> <th>-20</th> <th>-40</th> </tr> </thead> <tbody> <tr> <td></td> <td colspan="4">Antifreeze litres</td> </tr> <tr> <td>5</td> <td>1.1</td> <td>1.4</td> <td>1.7</td> <td>2.7</td> </tr> <tr> <td>8</td> <td>1.7</td> <td>2.2</td> <td>2.7</td> <td>4.3</td> </tr> <tr> <td>14</td> <td>3.0</td> <td>3.2</td> <td>4.7</td> <td>7.6</td> </tr> <tr> <td>18</td> <td>3.8</td> <td>5.0</td> <td>6.1</td> <td>9.7</td> </tr> </tbody> </table>	Radiator Capacity (Litres)	Ambient temperature (°C)				-10	-15	-20	-40		Antifreeze litres				5	1.1	1.4	1.7	2.7	8	1.7	2.2	2.7	4.3	14	3.0	3.2	4.7	7.6	18	3.8	5.0	6.1	9.7
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Improved compatibility with elastomers & plastics used in the cooling system.																																			

## PHYSICAL-CHEMICAL CHARACTERISTICS

RADIATOR LONG LIFE	METHOD	
Density at 15°C, g/cm <sup>3</sup>	ASTM D1298	1.113
pH (33%v.v. solution)	ASTM D1287	8.6
Boiling point, °C	ASTM D1120	180
Color	-	Magenta

The above mentioned characteristics represent mean values.

## SPECIFICATIONS

BS 6580:2010; AFNOR NF R15-601:2020; ASTM D3306, D4656, D4985, D6210 Type III-FF; SAE J1034; SDFG EC-1599A; CUNA NC 956-16; NATO S-759; JIS K2234; AS 2108; FVV Heft R443; UNE 26361-88  
Meets: VW Group (VW, Audi, Skoda, SEAT) TL-774D, TL-774F; MB 325.3; MAN 324 Type SNF; MTU MTL 5048; GM 6277M; Ford WSS-M97-B44D; Volvo 1286083, VCS (STD 418-0001); Renault 41-01-001; DAF 74002; Scania TI 02-98 0813 T/B/M sv.