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TECHNICAL PRODUCT SHEET

RADIATOR LL (G12+)

DESCRIPTION

RADIATOR LL (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

RADIATOR LL (G12+) 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.

SPECIFICATIONS

BS 6580:2010
SAE J1034
NATO S-759
FVV Heft R443
CUNA NC 956-16
AS 2108
Meets:
VW Group TL-774D (G12)
MAN 324 Type SNF
Ford WSS-M97-B44D
DAF 74002
MB 325.3
GM 6277M

AFNOR NF R15-601:2020
SDFG EC-1599A
JIS K2234
UNE 26361-88
ASTM D3306, D4656, D4985, D6210 Type III-FF

VW Group TL-774F (G12+)
MTU MTL 5048
Volvo 1286083,
Scania TI 02-98 0813 T/B/M sv
Renault 41-01-001
Volvo VCS (STD 418-0001)

PROPERTIES

RADIATOR LL (G12+) delivers long-lasting corrosion and frost protection for modern engines using aluminum and ferrous alloys, while preventing sludge formation to maintain efficient heat transfer. Its formulation protects aluminum water pumps from cavitation-related erosion, remains compatible with hard water, and ensures reliable performance with elastomers and plastics used throughout cooling systems.

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APPLICATION TABLE

RADIATOR LL (G12+)	Protection down to...
33%	-16 °C
40%	-23 °C
54%	-40 °C
68%	-69 °C

RADIATOR LL (G12+)	Ambient temperature (°C)			
	-10	-15	-20	-40
Capacity (liters)		*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

PHYSICAL-CHEMICAL CHARACTERISTICS

RADIATOR LL (G12+)	METHOD	
Density at 20°C, g/cm^3	ASTM D5931	1.113
pH (33% v/v. solution)	ASTM D1287	8.6
Boiling point, °C	ASTM D1120	161
Color		Magenta

The abovementioned characteristics represent mean values.

STORAGE

All packages must be stored in covered, well-ventilated areas. If outdoor storage cannot be avoided, barrels must be placed horizontally to prevent water ingress and to protect labels and markings from damage. Products must not be stored at temperatures above 60 °C and must not be exposed to direct sunlight, freezing conditions, or extreme temperature fluctuations.

HEALTH & SAFETY

This product is not considered to pose significant risks to health or safety when used as intended and in accordance with recommended personal hygiene practices. It must not be applied for purposes other than those for which it has been formulated. For detailed guidance on safe handling and use, refer to the Safety Data Sheet (SDS).

USED OILS

Used lubricants must be collected at designated collection points to prevent environmental contamination. They must not be mixed with solvents, brake fluids, or antifreeze.