



MANNOL Antifreeze AF12+ Longlife 4112

A carboxylated (organic – OAT Organic Acid Technology) concentrated antifreeze intended for a year-round use in any modern cooling system for which the use of ethylene-glycol-based antifreeze is recommended. It ensures a reliable protection of any cooling system.

Product properties:

- It ensures a reliable protection of metals and alloys (brass, copper, alloy-treated steel, cast iron, aluminium) from all forms of corrosion, as well as prevents a high-temperature corrosion of aluminium surfaces of modern engines. It provides sufficient anti-corrosion properties from the concentration as low as 20%;
- It has an exceptional thermal stability. It protects from deposit formation;
- It has excellent heat conductivity properties and a resistance to foam formation;
- It is neutral to inserts and hoses, compatible with all types of rubber and plastic components of a cooling system;
- It has an excellent resistance to hard water and very low corrosion inhibitor depletion rates;
- The highly effective carboxylated additive package (OAT) ensures an exceptional stability of service qualities of the antifreeze throughout the entire service life;
- It does not contain silicates, nitrates, phosphates and amines (the NAP free technology);
- It has an extended service life in cooling systems: of passenger cars – up to 250 thousand km; of commercial vehicles – up to 500 thousand km; of stationary engines – up to 6 years.

It is recommended for engines requiring enhanced heat dissipation: highly accelerated engines, engines with a turbocharger and cooling systems of modern commercial vehicles.

Colour: red.

Service life: no less than 5 years.

Comply with the manufacturer's instructions provided in the user's manual!

SAE J1034

JASO M325

AFNOR FRANCE NF R15-601 (except for RA)

ASTM USA D3306

ASTM USA D4656

ASTM USA D4985

ASTM USA D6210

BSI GB BS 6580:2010

FW GERMANY Heft R443

KSM SOUTH KOREA 2142
 MIL BELGIUM BT-PS-606-A
 MIL FRANCE DCSEA 615/C
 MIL ITALY E/L-1415b
 MIL SWEDEN FSD 8704
 NATO S-759
 OENORM AUSTRIA V5123
 UNE SPAIN 26-361-88/1
 VOLKSWAGEN TL 774 D
 VOLKSWAGEN TL 774 F
 BERGEN ENGINES 2.13.01
 BMW GS 94000
 BRB BR 637
 CASE NEW HOLLAND MAT 3624
 CATERPILLAR MAK A4.05.09.01
 CUMMINS CES 14439
 CUMMINS CES 14603
 CUMMINS IS series N14
 DACIA 41-01-001 / 41-01-001-T
 DAF 74002
 DETROIT DIESEL DFS 93K217
 DEUTZ DQC CB-14
 FORD WSS-M97B44-D
 JAGUAR CMR 8229
 JAGUAR STJLR.651.5003
 JENBACHER TA 1000-0201
 JOHN DEERE JDM H5
 KOMATSU 07.892 (2009)
 LAND ROVER STJLR.651.5003
 LEYLAND TRUCKS DW03245403
 LIEBHERR MD1-36-130
 MACK 014 GS 17009
 MAN 324 Typ SNF
 MAN B W DIESEL AG D36 5600
 MAZDA MEZ MN 121 D
 MB 325.3
 MITSUBISHI MHI
 MTU MTL 5048
 MWM 0199-99-2091/11
 SEAT TL 774 D
 SEAT TL 774 F
 SKODA TL 774 D
 SKODA TL 774 F
 AUDI TL 774 D
 AUDI TL 774 F

PACKAGING

5L	MN4112-5		
1000L	MN4112-IBC		
208L	MN4112-DR	Drum	
60L	MN4112-60	Drum	
20L	MN4112-20	Plastic	
10L	MN4112-10		
1L	MN4112-1	Plastic	20 pcs/box

