



MANNOL Antifreeze AF13++ 4115

A low-hybrid (LOBRID) high-technology top-grade latest-generation ecological concentrated antifreeze with excellent operating characteristics intended for a year-round use in any modern cooling system for which the use of mono-ethylene-glycol-based antifreeze is recommended. It ensures a reliable protection of any cooling system.

Product properties:

- It ensures an excellent 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 30%;
- The non-organic additive package protects the surface at once and the organic part starts to act only when corrosion sources appear thus a maximum protection is reached from the start of use and the service life of the engine is extended;
- It has an exceptional thermal stability, reliably protects the engine from overheating. 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 due the employed complex technology of silicate stabilization and very low corrosion inhibitor depletion rates;
- The high-efficiency additive package ensures an exceptional stability of operating properties of the antifreeze throughout the entire service life;
- It is a low silicate liquid. It does not contain nitrates, phosphates and amines (the NAP free technology and OAT – Organic Acid Technology);
- The balanced additive package allows maximally extending the service life of the antifreeze;
- It surpasses requirements of international standards and the majority of European car manufacturers.

It is recommended for engines of passenger cars and engines 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
 AFNOR FRANCE NF R15-601 (except for RA)
 ASTM USA D3306
 ASTM USA D4656
 ASTM USA D4985
 BSI GB BS 6580:2010
 CUNA ITALY NC 956-16
 FV GERMANY Heft R443
 NATO S-759
 UNE SPAIN 26-361-88/1
 VOLKSWAGEN TL 774 G
 VOLKSWAGEN TL 774 J
 CUMMINS CES 14603
 DEUTZ DQC CC-14
 IRIZAR
 LIEBHERR Minimum LH-01-COL3A
 MAN 324 Si-OAT
 MB 325.5
 MB 325.6
 SCANIA
 SMART MB 326.0

PACKAGING

5L	MN4115-5	Plastic	
1000L	MN4115-IBC	Pallet tank	
208L	MN4115-DR	Drum	
60L	MN4115-60	Drum	
20L	MN4115-20	Plastic	