


# MANNOL Antifreeze AG13+ Advanced

## 4114

A hybrid (HOAT – Hybrid Organic Acid Technology) high-technology 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 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 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. 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 parts of the cooling system;
- It has an excellent resistance to hard water 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 contains a fluorescent dye allowing identifying even small leakages of the antifreeze in the UV light;
- The balanced additive package allows maximally extending the service life of the solution;
- It is a liquid with an elevated level of borates and silicates. It does not contain nitrates, phosphates and amines (the NAP free technology).

Colour: yellow.

Service life: on average 3 years, but under certain conditions even up to 5 years.

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

**Recommendation**
SAE J1034
AFNOR FRANCE NF R15-601
ASTM USA D3306
ASTM USA D4340
ASTM USA D4985
BSI GB BS 6580:2010
NATO S-759
BMW GS 94000
CHRYSLER MS-7170
FORD ESE-M978B4H-A
FORD AF Plus
GM 1825 M
GM 1899 M
GM SATURN
JAGUAR
JOHN DEERE
MAN 324 NF
MB 325.0
MINI GS 94000
MTU MTL 5048
OPEL GME L1301
OPEL GM QL130100
VAUXHALL GME L1301

## PACKAGING

| | | | |
|---|---|---|---|
| 5L | MN4114-5 | Plastic | |
| 1000L | MN4114-IBC | Pallet tank | |
| 208L | MN4114-DR | Drum | |
| 60L | MN4114-60 | Drum | |
| 20L | MN4114-20 | Plastic | |
| 1L | MN4114-1 | Plastic | 20 pcs/box |