

PRODUCT INFORMATION

PRODUCT NAME VASOIL ANTIFREEZE VG 12 +

DESCRIPTION VASOIL ANTIFREEZE VG12 + is long life engine coolant concentrate (antifreeze) based on monoethylene glycol, containing no nitrites, amines, phosphates, borax, silicates and no other mineral additives, suitable for both petrol and diesel engines. The inhibitor package has been developed based upon latest organic acid technology to give long-term protection for all the metals presents in the modern engines, especially, aluminium and brass.

PRODUCT USE

VASOIL ANTIFREEZE VG12 +, protects cooling systems of automotive and industrial gasoline and diesel engines and give the following properties in aqueous mixtures:

1. Increased life time up to 240,000 kms or (5 years), allowing less frequent maintenance, thanks to the corrosion inhibitors which are little consumed in the time.
2. Thermal characteristics that permit effective engine cooling without boiling.
3. Elimination of deposit problems caused by the use of hard water.
4. Elimination of abrasives solids, which gives a better protection of the joints of the water pump.
5. Improved anticorrosion protection of all metals and alloys used in the cooling system of modern vehicles, more over the aluminium.
6. Protection against frost, depending on the concentration chosen.
7. Excellent antifoaming characteristics.
8. Meets most European and International Standards.

The freezing point of the new antifreeze adjusts as follows in aqueous solutions :

Concentration % by volume	33.3	40	50
Freezing Point, °C	-18	-25	-38

SPECIFICATIONS

VASOIL ANTIFREEZE VG12+, complies with the following quality standards and OEM specifications:

		OEM SPECIFICATIONS
• ASTM D3306 (USA)	• AFNOR NF R15-601 (France)	FORD WSS-M97B44-D
• ASTM D4656 (USA)	• FFV Heft R443 tests (Germany)	MB 325.3
• SAE J 1034 (USA)	• AS 2108 (Australia)	RENAULT 41-01-001
• BS 6580 (UK)	• UNE 26-361 (Spain)	VOLKSWAGEN VAG TL 774 D&F
• NATO S 759	• CUNA NC 956-16 (Italy)	GENERAL MOTORS GM 6277M
		MAN 324 SNF

CHARACTERISTICS (TYPICAL PROPERTIES)

<i>VASOIL ANTIFREEZE VG 12 +</i>	<i>ASTM</i>	
<i>Density at 20 °C, g/ml</i>	<i>D-4052</i>	<i>1.117</i>
<i>Refractive Index at 20 °C</i>	<i>DIN 53169</i>	<i>1.4325</i>
<i>Boiling Point, °C</i>	<i>D-1120</i>	<i>187</i>
<i>Flash Point, °C</i>	<i>DIN 51376</i>	<i>124</i>
<i>PH (50 volume per cent aqueous solution)</i>	<i>D-1287</i>	<i>8.9</i>
<i>Viscosity at 20 °C</i>	<i>CP</i>	<i>23</i>
<i>Water Content</i>	<i>DIN 1123</i>	<i>4.2%</i>
<i>Reserve Alkalinity N/10 HCl</i>	<i>D-1121</i>	<i>5.2 ml</i>