

# UNIVERSAL ANTIFREEZE

## PRESENTATION

**Bardahl Universal Antifreeze** is based on ethylene glycol concentrate, which uses Organic Acid Inhibitor Technology and is free from nitrites, amines, phosphates, borates and silicates.

## AVANTAGES

- ✓ Excellent performance in corrosion tests on copper, steel, cast iron, aluminium, brass and solder
- ✓ Chemical neutrality ( pH : 8)
- ✓ Good reserve of alkalinity allowing to neutralize the acidity coming from combustion gases
- ✓ Excellent resistance against the formation of foam
- ✓ Excellent hard water stability
- ✓ Very low inhibitor depletion rates
- ✓ Does not damage paintwork and elastomer gaskets
- ✓ Contains inhibiting agents in conformity with EU regulation

## APPLICATION

- ✓ Automotive : cooling systems of any type of passenger cars, trucks, busses and industrial vehicles
- ✓ Industries : anti-corrosion protection of closed circuits

## SPECIFICATIONS

**Bardahl Universal Antifreeze** exceeds the requirements of most European and International standards including:

- ✓ AFNOR NF R 15-601
- ✓ ASTM D 3306 and D 4985
- ✓ BS 6580 (1992)
- ✓ SAE J 1034
- ✓ NATO S 759

**Bardahl Universal Antifreeze** meets the requirements of the following OEM specifications:

- ✓ VW TL 774 D (G12+)
- ✓ CHRYSLER MS 9176

- ✓ CUMMINS 85T8-2 & 90T8-4
- ✓ Renault 41-01-001
- ✓ Mercedes MB 325.3
- ✓ GM 1899 M
- ✓ VOLVO

**TECNICAL DATA**

Method	Caracterics	Bardahl antifreeze
NFR 15-602.1	Density at 20°C	1.13
NFT 78-102	Freezing point	- 89,7°C
NFT 78-103	PH	7,0 - 8,0
NFR 15-602.4	Boiling point	+ 177°C
NFT 78-101	Alcalinity reserve	10-12
NFR 15-602.5	Foaming	50ml /5sec.maxi
Colour	Visual	Yellow

Figures given as indications – do not constitute a specification

**DILUTION RATE AND INSTRUCTIONS FOR USE**

Drain used coolant and rinse cooling system. Clean cooling system with Bardahl Colling System Fast Flush, if necessary.

Pour antifreeze in radiator or expansion tank, add demineralized water, respecting the following dilution rates (according to protection temperature needed) :

<u>ANTIFREEZE</u>	<u>DEMINERALIZED WATER</u>	<u>PROTECTION</u>
<b>1 L</b>	<b>2 L</b>	<b>-20°C</b>
<b>1 L</b>	<b>1,5 L</b>	<b>-25°C</b>
<b>1 L</b>	<b>1 L</b>	<b>-35°C</b>

Compatible with any other ethylene glycol based coolants. Please read MSDS for storage and manipulation information.

**AVAILABILITY**

- Reference 7111 – 12x1L
- Reference 7113 – 3x5L
- Reference 7115 – 20L
- Reference 7118 – 200L