

# GLACELF AUTO SUPRA



**GLACELF AUTO SUPRA** is a “**very long life**” antifreeze based on high purity monoethylene glycol and **organic corrosion inhibitors**.

**GLACELF AUTO SUPRA** antifreeze, when mixed with an appropriate quantity of water, becomes a *coolant fluid* recommended for all internal combustion engines in cars and vans, trucks, construction machinery and agricultural tractors.

In accordance with French Decree No. 95-326 of 20<sup>th</sup> March 1995 concerning the distribution of certain substances containing monoethylene glycol, **GLACELF AUTO SUPRA** contains a **bittering agent to give it a bitter taste** as a guarantee against accidental ingestion by children or users.

In our range of antifreezes, **GLACELF AUTO SUPRA** is the **top-of-the-range** product.

## APPLICATIONS

**Dilution in demineralised or softened water**

**Minimum 33%**

**Longer life**

**Environment**

● **GLACELF AUTO SUPRA** is diluted in demineralised water (< 8°F) to form a **permanent coolant** that can be used throughout the year.

● To obtain a coolant perfectly mixed, it is recommended to **mix mechanically** the antifreeze with the water.

● Protection against freezing depends upon the proportions of **GLACELF AUTO SUPRA** in the water.

% by vol. of <b>GLACELF AUTO SUPRA</b>	33	40	50
Temperature at which crystals first appear, °C, (NF T 78 102)	-20	-26	-37

These are mean values provided for indicative purposes only

● It is recommended that **at least 33%** of the final solution should be **GLACELF AUTO SUPRA**. **Do not use in proportions above 70%**

● **GLACELF AUTO SUPRA** is entirely safe to use in all cast iron or aluminium engines and in cooling systems containing aluminium or copper alloy radiators.

● **Recommended oil change interval:**

- **650,000 km/8000 hours/5 years** when used in trucks
- **250,000 km/5 years** when used in cars.

● *All antifreezes and coolants based upon monoethylene glycol are regarded as special industrial wastes and must be disposed of in approved centres for environmental reasons.*

## CUSTOMER BENEFITS

**Very long-term protection against metals corrosion**

**No formation of deposits leave surfaces clean**

**High temperature protection of aluminium**

- Excellent protection against corrosion, erosion, and cavitation, for aluminium water pumps.
- Heat transfer remains optimised: **fully organic additives allow avoiding any formation of deposits and leave surfaces clean.**
- The additives in **GLACELF AUTO SUPRA** give to the coolant:
  - **Chemical neutrality** (pH 7-8.5),
  - **A reserve of alkalinity** to neutralise the acids resulting from the combustion gases,
  - **Resistance to foaming** (mainly instability of the foam that might form)
  - **Compatibility with hard water (maximum 40°F).**
- **GLACELF AUTO SUPRA** contains no silicates, phosphates, chromates, nitrites or boron.
- The coolant fluids obtained by diluting **GLACELF AUTO SUPRA** are also inert to elastomeric seals and paints.

## SPECIFICATIONS

**AFNOR NFR 15-601  
ASTM D 3306  
ASTM D4656  
ASTM D4985  
BS 6580**

- **GLACELF AUTO SUPRA** meets the international specifications for antifreezes as well as those of major manufacturers.
- **GLACELF AUTO SUPRA is officially approved** by the following manufacturers:
  - AUDI
  - DAIMLER CHRYSLER : Approval page 325.3
  - DEUTZ
  - DEUTZ MWM
  - FORD
  - SEAT
  - SKODA
  - MAN 324 SNF
  - VW TL 774 D
- **GLACELF AUTO SUPRA has been acknowledged as satisfactory** for use in their engines by the following manufacturers:
  - JAGUAR
  - OPEL-GM 6277M
  - LEYLAND TRUCKS
  - RENAULT VI
  - SCANIA
  - SAAB

## CHARACTERISTICS OF GLACELF AUTO SUPRA

The typical characteristics mentioned represent mean values

Colour		Pink to fluorescent orange
Specific gravity at 15 °C	ASTM D1122	1.112
PH, dilution 50% by vol.	ASTM D1287	8.6
Alcalinity reserve(pH 5.5)	GFC Pr L-110-03	6.2ml HCl 0.1N
Temperature at which crystal appear, 50% dilution by volume	ASTM D1177	-38°C
Boiling point(undiluted)	ASTM D1120	180°C
Boiling point(diluted)	ASTM D1120	110°C