

# GLACELF CLASSIC



**GLACELF CLASSIC** is an antifreeze based on monoethylene glycol and selected inhibitors, and contains no amines, nitrites or phosphates.

**GLACELF CLASSIC** antifreeze, when mixed with an appropriate quantity of water, becomes a coolant fluid recommended for all cooling circuits in internal combustion engines.

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 CLASSIC** contains a **bittering agent to give it a bitter taste** as a guarantee against accidental ingestion by children or users.

**GLACELF CLASSIC** represents an excellent quality/price ratio in our range of antifreeze.

## APPLICATIONS

Diluted in demineralised  
or softened water

Minimum 33%

Lifetime

Environment

● **GLACELF CLASSIC** is used diluted in demineralised water (< 8F) and forms a **permanent cooling fluid** that can be used throughout the year.

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

● The protection against freezing depends upon the proportion of **GLACELF CLASSIC** in the water.

% volume of GLACELF CLASSIC	33	40	50	68
Temperature at which first crystals appear, °C (NFT 78 102)	-20	-26	-37	-69

These are mean values provided for indicative purposes only

● **Recommended oil change interval:**

It is recommended that the coolant fluid should be replaced **every year**.

*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

Protection against  
corrosion of metals

Excellent quality/price ratio

● **GLACELF CLASSIC** performs well in the corrosion tests required by the specifications: hot plate and *glassware* corrosion.

● The additives in **GLACELF CLASSIC** give the coolant fluid:

- A **reserve of alkalinity** (to neutralise the acids resulting from the combustion gases).
- A **resistance to foaming** (mainly instability of the foam that might form).
- A chemical neutrality (PH 7-8.5)

● The coolant fluids obtained by diluting **GLACELF CLASSIC** are also inert to elastomeric seals and paints.

TOTAL LUBRIFIANTS  
16, rue de la République  
F- 92800 PUTEAUX  
1/2

**Glacelf Classic**  
Sheet updated: 03/2008  
Sticker reference: MGP/08/04



This antifreeze used in accordance with our recommendations and for the application for which it is intended does not represent a special hazard. A safety data file conforming to the requirements of current EC legislation is available from your local trade consultant.

## SPECIFICATIONS

AFNOR NFR 15-601  
BS 6580  
ASTM Standards

- GLACELF CLASSIC meets the principal *international specifications* for antifreezes

## CHARACTERISTICS OF GLACELF CLASSIC

The typical characteristics mentioned represent mean values

Colour		Light Blue
Specific gravity at 15 °C	ASTM D1122	1.119
Alkalinity reserve (pH 5.5)	ASTM D 1121	11.5ml HCl 0.1N
Temperature at which crystals appear, 50% dilution by volume.	ASTM D1177	-37°C