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 20th 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 dematerialized or softened water

●**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.

Minimum 33%

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

% volume of GLACELF CLASSIC	33	40	50
Freezing Point, °C (temperature at which first crystals appear)	-20	-26	-37
Boiling Point, °C	105	107	110

These are mean values provided for indicative purposes only

Lifetime

● **<u>Recommended oil change interval:</u>**
It is recommended that the coolant fluid should be replaced **every year.**

Environment

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

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

Excellent quality/price ratio

●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.

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

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

The typical characteristics mentioned represent mean values

PERFORMANCES OF GLACELF CLASSIC

• ASTM D1384 : Glassware Corrosion Test (336hrs / 88°C / 33%vol)

	Weight loss (mg/coupon)					
	copper	solder	brass	steel	cast iron	aluminium
ASTM D3306 limits	10	30	10	10	10	30
AFNOR R 15-601 limits	-5 à 5	-5 à 5	-5 à 5	-2,5 à 2,5	-4 à 4	-10 à 20
Glacelf Classic	**-0.6**	**-0.6**	**0.2**	**1.4**	**0.9**	**0.0**

• BS 5177: Hot immersion Test

	Weight loss (mg/cm²)					
	copper	solder	brass	steel	cast iron	aluminium
BS 6580 limits	10	15	10	10	10	15
Glacelf Classic (hot)	**0.0**	**4.6**	**-0.1**	**-0.2**	**-0.3**	**-2.3**

• AFNOR R 15-602-8: Aluminium Heat Transfer Test

	Weight loss (mg/cm²/week)
Afnor R 15-601 limits	-1.0 à 1.0
Glacelf Classic	**0.63**

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