

GLACELF T



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

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

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

APPLICATIONS

Diluted in dematerialized or softened water

Minimum 33%

Lifetime

Environment

● **GLACELF T** 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 T** in the water.

% volume of GLACELF T	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

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

● The additives in **GLACELF T** 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 T** are also inert to elastomeric seals and paints.

SPECIFICATIONS

AFNOR NFR 15-601
BS 6580
ASTM Standards

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

CHARACTERISTICS OF GLACELF T

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 T

● 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 T	-0.6	-0.6	0.2	1.4	0.9	0.0

● BS 5177: Hot immersion Test

	Weight loss (mg/cm ²)					
	copper	solder	brass	steel	cast iron	aluminium
BS 6580 limits	10	15	10	10	10	15
Glacelf T (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/cm ² /week)
Afnor R 15-601 limits	-1.0 à 1.0
Glacelf T	0.63