



TOTAL GLACELF ECO BS

Concentrate to dilute • O.A.T.



DESCRIPTION

TOTAL GLACELF ECO BS is an economical OAT concentrate providing frost and corrosion protection.

TOTAL GLACELF ECO BS, antifreeze, when mixed with an appropriate quantity of water, becomes a coolant fluid adapted to internal combustion engines in cars and vans, trucks, construction machinery and agricultural tractors (except the EURO 6 engines).

RECOMMENDATION: Drain the existing coolant and flush the cooling system with demineralised water before filling with GLACELF ECO BS based coolant.

SPECIFICATIONS

TOTAL GLACELF ECO BS meets the *international specifications* for antifreezes:

- BS 6580

TOTAL GLACELF ECO BS conforms to British Standard BS 6580:1992 and BS 6580:2010 as well as those of major manufacturers.

CHARACTERISTICS

COLOUR	VISUAL	BLUE
SPECIFIC GRAVITY AT 20°C, KG/L	ASTM D1122	1.131
PH DILUTION (33% VOL)	ASTM D1287	8.3
PH DILUTION (50% VOL)	ASTM D1287	8.4
ALKALINITY RESERVE (PH=5.5)	ASTM D1121	3.0

The typical characteristics mentioned represent mean values

TOTAL LUBRIFIANTS

Immeuble Spazio
562, avenue du Parc de l'île
92029 Nanterre cedex
France

TOTAL GLACELF ECO BS

Sheet updated: 01/16



This coolant 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.



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APPLICATIONS

DILUTION IN DEMINERALISED WATER

TOTAL GLACELF ECO BS needs to be 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 ECO BS** in the water.

MINIMUM 33%

% by vol. of GLACELF ECO BS	33	40	50
Freezing Point (Temperature at which crystals first appear, °C)	-17	-26	-37
Boiling Point	105	107	110

ENVIRONMENT

TOTAL GLACELF ECO BS is entirely safe to use in all cast iron or aluminium engines and in cooling systems containing aluminium or copper alloy radiators.

All antifreezes and coolants based upon monoethylene glycol are regarded as special industrial wastes and must be disposed of following the local regulations.

CUSTOMER BENEFITS

PROTECTION AGAINST METAL CORROSION

TOTAL GLACELF ECO BS offers the following benefits to the user:

- corrosion protection, also for nonferrous metals
- frost protection
- boiling protection
- miscibility
- seal compatibility
- hard water stability
- low cost

EXCELLENT PERFORMANCE

NO DEPOSITS

The organic additives prevent deposit formation, keep the surface clean and optimise the heat transfer.

PERFORMANCES

PROTECTION AGAINST CORROSION HOT IMMERSION GLASSWARE CORROSION TEST -BS 5117

	WEIGHT LOSS (MG/COUPON)					
	Brass	Copper	Solder	Steel	Cast iron	Aluminium
ASTM D3306 LIMITS	10	10	30	10	10	30
BS 6580 LIMITS	10	10	15	10	10	15
TOTAL GLACELF ECO BS	0.2	0.3	1.2	0.3	0.3	5.0

ALUMINUM HEAT TRANSFER TEST- ASTM D4340

	WEIGHT LOSS (MG/CM ² /WEEK)
ASTM D3306 LIMITS	1.0
BS 6580 LIMITS	1.0
TOTAL GLACELF ECO BS	- 0.2

STORAGE GUIDELINES The product should be stored indoors at ambient temperatures and periods of exposure to temperatures above 35°C should be minimized. It is not advisable to expose the coolant to direct sunlight and humidity. Use of galvanized steel is not recommended for the pipes or the components of the cooling system. This leads to deposit formation and there by affect the heat transfer properties of the coolant. Please refer to the Material Safety data sheet for further safety information.

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