



GLACELF MDX

Coolant to dilute • Hybrid



DESCRIPTION

GLACELF MDX is a “long life” antifreeze based upon monoethylene glycol and contains no amines, nitrites or phosphates.

When **GLACELF MDX** antifreeze is mixed with an appropriate quantity of water it becomes a coolant recommended for all cooling circuits in internal combustion engines, especially MTU (all engines), MB (except EURO 6) and MAN systems.

GLACELF MDX figures as a “speciality” in our antifreeze range.



SPECIFICATIONS

GLACELF MDX meets the *international specifications* for antifreezes as well as those of major manufacturers

- AFNOR NFR 15-601
- BS 6580

GLACELF MDX is *officially approved* by the following manufacturers:

- AUDI TL-774 C (G11)
- VW TL-774 C (G11)
- Skoda TL4-774 C (G11)
- Seat TL-774 C (G11)
- GM-OPEL
- BMW GS 94000
- MB 325.0
- MTU - MTL 5048
- MAN 324 Type NF
- CATERPILLAR MWM 0199-99-2091/9
- Opel-GM GMW 3420
- Vauxhall GM 6277M (+B040 1065)
- Porsche TL-774 C (G11)
- Van Hool

GLACELF MDX has been *acknowledged as satisfactory* for use in their engines by the following manufacturers:

- Volvo Cars 128 6083/002
- Volvo Construction 128 6083/002
- Volvo Trucks 128 6083/002

CHARACTERISTICS

COLOUR	-	GREEN
SPECIFIC GRAVITY AT 15 °C	ASTM D1122	1.122
PH, 50% DILUTION BY VOLUME	ASTM D1287	8.15
ALKALINITY RESERVE (PH 5.5)	ASTM D 1121	14.6ML HCl 0.1N
TEMPERATURE AT WHICH CRYSTAL APPEAR (50% DILUTION BY VOLUME)	ASTM D1177	-37°C
BOILING POINT (UNDILUTED)	ASTM D1120	160°C

The typical characteristics mentioned represent mean values

TOTAL LUBRIFIANTS

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

GLACELF MDX
Sheet updated: 01/19



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.



GLACELF MDX

Coolant to dilute • Hybrid



APPLICATIONS

DILUTION IN DEMINERALISED OR SOFTENED WATER (MINIMUM 33%)

GLACELF MDX is used diluted in demineralised water (< 8F) and forms 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 on the proportion of **GLACELF MDX** in the water.

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

These are mean values provided for indicative purposes only

It is recommended that the final solution should contain at least 33% by volume of **GLACELF MDX**. Do not use concentrations above 70%.

LIFETIME

Recommended oil change interval:

It is recommended that the coolant fluid should be replaced every two years.

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 THE CORROSION OF METALS, ESPECIALLY ALUMINIUM

GLACELF MDX provides an effective solution to the problems of corrosion affecting all materials used in cooling circuits.

GLACELF MDX performs well in the corrosion tests required by the specifications: hot plate and glassware corrosion

HOMOLOGATION PROFILE COMPATIBLE WITH MTU MATERIALS

The additives in **GLACELF MDX** gives 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 compatibility with hard water (maximum 40°F).

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

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

GLACELF MDX
Sheet updated: 01/19



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.