



ANTI - FREEZING



ANTI - BOILING



ANTI - CORROSION



Glacelf Neotech

Coolant Concentrate • O.A.T.

DESCRIPTION

Glacelf Neotech is a “very-long-life” premium engine antifreeze based on monoethylene glycol and Organic Additive Technology (OAT) that provides year-round frost and excellent corrosion, freeze and boil protection. The antifreeze can withstand high temperatures thanks to the increased oxidation stability and compensates the negative effects of potential flux contamination.

Glacelf Neotech is designed to cope with the most extreme engine conditions in both passenger cars and heavy-duty applications.

Glacelf Neotech contains no 2-EHA, nitrite and borate. It is also compliant with EU CO2 emission performance standards.

SPECIFICATIONS 1/2

Glacelf Neotech meets the **international specifications** for antifreezes:

- ASTM D3306-20
- ASTM D6210-17
- GB 27943.1-2022
- UNE 26 361 88/1
- JIS K2234 2018

Glacelf Neotech is **officially approved** by the following manufacturers:

- VOITH
- JAGUAR-LAND ROVER STJLR.03.5212

Glacelf Neotech **meets the requirements** of:

- VOLVO VCS-2
- RENAULT TRUCKS RTCS-2
- CATERPILLAR GCM34
- PERKINS
- CLAAS
- KUBOTA
- UD TRUCKS
- JOHN DEERE POWER SYSTEMS
- CASE NEW HOLLAND MAT 3624
- DETROIT DFS93K217
- DEUTZ DQC CB-14
- TATA

>>> *continued*



TotalEnergies

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

Glacelf Neotech | Sheet updated: 09/23

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SPECIFICATIONS 2/2

Glacelf Neotech is recommended for use for:

- CASE NEW HOLLAND MAT 3724
- DTFR 29C110 (former MB 325.3)
- FORD WSS-M97B44-D
- OPEL / VAUXHALL / CHEVROLET GMW 3420 / GMW 18270
- KOMATSU 07.892 (2017)
- FIAT 9,55523
- VW TL-774 D/F
- SKODA 61-0-0257
- MAN 324 TYP SNF
- CUMMINS CES 14439
- CUMMINS CES 14603

CUSTOMER BENEFITS

**VERY LONG-TERM
PROTECTION
AGAINST METALS
CORROSION**

**MAXIMUM HEAT
TRANSFER**

ENVIRONMENT

Organic technology ensures a long-term action to offer maximum protection against any type of corrosion, erosion and cavitation, even at high temperatures.

The organic additives in Glacelf Neotech give the coolant:

- Chemical neutrality (pH7.5 - 9)
- A reserve of alkalinity to neutralize the acids resulting from the combustion gases
- Resistance to foaming
- Excellent hard water stability avoiding the formation of insoluble deposits

Prevents the formation of gels or deposits in the cooling system.

Carefully selected additives to reduce environmental impact

HSE

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.



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CHARACTERISTICS

COLOUR	-	PINK TO ORANGE
Density at 20°C	ASTMD5931	1.125
pH	ASTMD1287	8.3
Alkalinity reserve (PH 5.5)	ASTMD1121	5.3 ml HCl 0.1N
Temperature at which the first ice crystals occur (50% vol.)	ASTMD1177	-37°C
Boiling Temperature	ASTMD1120	180°C

The typical characteristics mentioned represent mean values

APPLICATION

PROTECTION ALL YEAR ROUND

Glacelf Neotech ensures long-lasting protection thanks to the OAT backbone with virtually non-depleting organic corrosion inhibitors.

Suitable for use in combustion engines and Battery Electric Vehicles in automotive and heavy-duty applications if there is no requirement on electrical conductivity.

CONCENTRATED PRODUCT

Glacelf Neotech antifreeze is recommended to be diluted with deionised or distilled water to prepare the ready-to-use dilutions for optimal performance and controlled quality. It is recommended to use at least 33vol% of Glacelf Neotech in the coolant solution. This provides an initial freezing point of -18°C. Mixtures with more than 70 vol% Glacelf Neotech in water are not recommended.

MULTI-MATERIAL COMPATIBILITY

Glacelf Neotech can be used for cooling systems made of iron, steel, aluminium as well as copper alloy.

LIFETIME

Recommended coolant change interval*:
• 500 000 km/4 years when used in trucks
• 250 000 km/5 years when used in cars.

% Volume of Glacelf Neotech	33%	40%	50%
Freezing Protection	-18°C	-26°C	-37°C
Boiling Point	108°C min.	108°C min.	111°C min.

*It is recommended to refer to the vehicle's maintenance manual.



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PERFORMANCES

ASTM D1384: GLASSWARE CORROSION TEST (336H/88°C/33%VOL)

	WEIGHT LOSS(MG/COUPON) ¹					
	Copper	Solder	Brass	Steel	Cast Iron	Aluminium
ASTM D3306 LIMITS	10	30	10	10	10	30
Glacelf Neotech	1	3	0	1	0	5

¹ Weight loss AFTER chemical cleaning according to ASTM procedure. Weight gain is indicated by a (-) sign.

ASTM D4340: ALUMINIUM HEAT REJECTION TEST (25%VOL)

	WEIGHT LOSS(MG/CM ² /WEEK) ¹
ASTM D3306 LIMITS	1.0
Glacelf Neotech	0.44

¹ Weight loss AFTER chemical cleaning according to ASTM procedure. Weight gain is indicated by a (-) sign.

ASTM D2570: SIMULATED SERVICE CORROSION TEST

	WEIGHT LOSS(MG/COUPON) ¹					
	Copper	Solder	Brass	Steel	Cast Iron	Aluminium
ASTM D3306 LIMITS	20	60	20	20	20	60
Glacelf Neotech	7	6	8	2	0	2

¹ Weight loss AFTER chemical cleaning according to ASTM procedure. Weight gain is indicated by a (-) sign.

ASTM D2809: WATER PUMP CAVITATION TEST

	PUMP RATING*
ASTM D3306 Requirement	> / = 8
Glacelf Neotech	9

*ASTM D3306 requires a pump rating of 8 or higher on a scale of 10.

Glacelf Neotech trade name on tables represent either concentrated antifreeze or different dilutions of the concentrated product as per official test parameters.



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PERFORMANCES

ASTM D7820: OXIDATION STABILITY (air charged to 620 kPa gauge pressure, 150°C)

	GLYCOL OXIDATION PRODUCTS AFTER TESTING (ppm)			
	Glycolate	Formate	Oxalate	Total
REFERENCE COOLANT	4777	683	70	5530
Glacelf Neotech	2835	595	18	3448

HARD WATER STABILITY

	AMOUNT OF DEPOSIT (v/v%)
Glacelf Neotech	<0.05

DYNAMIC HEAT TRANSFER TEST (FVV-Heft R530/2005)

	WEIGHT LOSS (MG/COUPON) ¹			
	Cast Iron (EN-GJL-250)		Aluminium (EN AC-AISI6Cu4)	
	Heated coupon	Non-heated coupon	Heated coupon	Non-heated coupon
Glacelf Neotech (40 v% ²)	-28	-23	-19	-22
Glacelf Neotech (40 v% ³)	1	-17	-14	-3

¹ Weight loss AFTER chemical cleaning according to ASTM procedure. Weight gain is indicated by a (-) sign.

² 40% coolant dilution in deionised water, 105°C operating temperature

³ 40% coolant dilution in 10° dGH FVV water, 115°C operating temperature

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