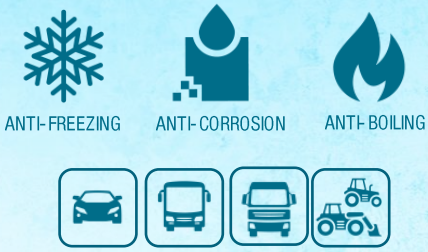

Coolelf Plus Evo -37°C

Coolant Ready to Use • SI-P-OAT

DESCRIPTION

Coolelf Plus Evo -37°C is a "very-long-life" next generation premium engine antifreeze based on monoethylene glycol and containing cutting-edge silicate inhibitor technology with phosphate supported by a robust organic backbone (OAT - Organic Additive Technology).

Coolelf Plus Evo -37°C is a versatile and multifunctional coolant designed to cope with the most extreme engine conditions for Internal Combustion Engines and Battery Electric Vehicles by providing hard water and oxidation stability.

Coolelf Plus Evo -37°C is free from nitrites, borates, amines and 2-ethylhexanoic acid (2-EHA).

SPECIFICATIONS

The antifreeze used for **Coolelf Plus Evo -37°C meets the international standards** on coolants:

- ASTM D3306-20
- JIS K2234-2018
- FVV R 530:2005
- NF R15-601-20
- BS 6580.2010
- GB 29743-2013
- Önorm V5123
- UNE 26-361-88/1

The antifreeze used for **Coolelf Plus Evo -37°C meets the requirements** of:

- BMW LC 87, LC 97, LC 18
- VW TL 774-C, D, F, G, J, L (G11, G12, G12+, G12++, G13, G12 evo)
- Tesla
- Alfa Romeo / Fiat / Lancia 9,55523
- Chrysler MS 7170
- Volvo Cars 128 6083/002
- Opel / Vauxhall GME L1301
- Toyota
- MB 326.0
- DTFR 29D120 (former MB 326.5)
- Deutz DQC CA-14
- MAN 324NF / 324 Si-OAT
- Iveco 18-1830
- Cummins 85T8-2
- MWM
- Jenbacher
- MTU MTL 5048
- Case JIC-501
- Ford ESD-M97B49-A

Coolelf Plus Evo -37°C is recommended for use for:

- MB 326.6

TotalEnergies

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

Coolelf Plus Evo -37°C | Sheet updated: 02/23

CHARACTERISTICS

COLOUR	-	LIGHT RED
Density at 20°C	ASTMD5931	1.072
pH	ASTMD1287	8.25
Alkalinity reserve (to inflection point)	ASTMD1121	17 ml HCl 0.1N
Temperature at which the first ice crystals occur	ASTMD1177	<-36°C
Boiling Temperature	ASTMD1120	109°C

The typical characteristics mentioned represent mean values

APPLICATION

PROTECTION ALL YEAR ROUND

Coolelf Plus Evo -37°C ensures year-round frost and corrosion protection.

The coolant can be used in a wide range of drivetrains. It is especially designed for use in modern Internal Combustion Engines (ICE), Hybrids and indirect cooling systems of Battery Electric Vehicles (BEV).

READY TO USE PRODUCT

Coolelf Plus Evo -37°C coolant is ready for use, as a mix with demineralised water.

MULTI-MATERIAL COMPATIBILITY

Coolelf Plus Evo -37°C can be used for cooling systems made of iron, steel, aluminium as well as copper alloy. It is compatible with rubbers and engineering (thermo)plastics.

LIFETIME

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

RETRO-APPLICABILITY

Coolelf Plus Evo -37°C is compatible with most other coolants based on ethylene glycol such as (former) Si-OAT coolant generations. Exclusive use of product is however recommended for optimum performance.

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

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CUSTOMER BENEFITS

VERY LONG-TERM PROTECTION AGAINST METALS CORROSION	Organic technology ensures a long-term action to offer maximum protection against any type of corrosion, erosion and cavitation, even at high temperatures.
ADVANCED PERFORMANCE FEATURES	• Thermal oxidative stability • Controlled Atmosphere Brazing (CAB) flux compatibility • State-of-the-art silicate stabilisation
WIDE COMPATIBILITY AND REDUCED COMPLEXITY	• Outstanding aluminium passivation • Excellent hard water stability
ENVIRONMENT	Prevents the formation of gels or deposits in the cooling system. Replaces/compatible with former Si-OAT and hybrid Si-OAT generation coolants. Carefully selected additives to reduce environmental impact

HSE

Any antifreeze made with monoethylene glycol is considered to be special industrial waste, and, to respect the environment, must be disposed of in certified centres.

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PERFORMANCES

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

	WEIGHT LOSS(MG/COUPON)[1]					
	Brass	Copper	Solder	Steel	Cast Iron	Aluminium
ASTM D3306 LIMITS	10	10	10	10	10	10
Coolelf Plus Evo	0	0	1	0	0	0

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/CM²/WEEK)[1]
ASTM D3306 LIMITS	1.0
Coolelf Plus Evo	-0.1

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]					
	Brass	Copper	Solder	Steel	Cast Iron	Aluminium
ASTM D3306 LIMITS	20	20	60	20	20	60
Coolelf Plus Evo	2	3	20	0	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
Coolelf Plus Evo	8

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

pH	**Coolelf Plus Evo**
Before test	8.01
After test	7.60

Coolelf Plus Evo trade name on tables represent either concentrated antifreeze or different dilutons of the concentrated product as per official test parameters.

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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.

PERFORMANCES

JIS K2234-2018 Circulating Corrosion Properties (88°C/1000 Hrs)

	WEIGHT CHANGE in MG/COUPON[1]					
	Brass	Copper	Solder	Steel	Cast Iron	Aluminium
JIS K2234-2018	0.30	0.30	0.60	0.30	0.30	0.60
Coolelf Plus Evo	0.03	0.03	-0.07	0.00	0.22	0.04

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

pH	**JIS K2234-2018**	**Coolelf Plus Evo**
After test	6.55 to 11	8.06
Change	+/- 1.0	-0.01

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