



COOLELF AUTO SUPRA -50°C

Ready-to-use coolant • O.A.T.



DESCRIPTION

COOLELF AUTO SUPRA -50°C is the top-of-the-range product of our cooling liquid range.

COOLELF AUTO SUPRA -50°C is a «very long life» coolant based on monoethylene glycol and organic corrosion inhibitors.

COOLELF AUTO SUPRA -50°C is a cooling liquid, that can be used in all cooling systems of combustion engines in cars, vans, trucks, buses, constructing machines and agricultural tractors.

COOLELF AUTO SUPRA -50°C contains no silicates, phosphates, chromates, nitrites or boron.



SPECIFICATIONS

COOLELF AUTO SUPRA -50°C meets the **international specifications** for antifreezes:

- | | | |
|--------------------|--------------|-------------|
| • AFNOR NFR 15-601 | • ASTM D6210 | • SAEJ1034 |
| • ASTM D3306 | • BS 6580 | • NATOS-759 |
| • ASTM D4656 | • JASOM325 | |
| • ASTMD4985 | | |

COOLELF AUTO SUPRA -50°C is **officially approved** by the following manufacturers:

- | | | |
|--|----------------------------|-------------------------------|
| • VW SEAT AUDI SKODA PORSCHE :
VW TL 774 D/F (G12/G12+) | • GM6277M | • MTU MTL 5048 |
| • DAIMLER MB 326.3 | • GMW 3420 | • DAF 74002 |
| • FORDWSS-M97B44 | • GE Jenbacher TA1000-0201 | • RENAULT 41-01-001/ S Type D |
| • MAZDA MEZ MN 121D | • MWM2091/11 | |
| • JAGUAR LAND-ROVER STJLR651.5003 | • CAT2091/11 | |
| • MAN 324 TypSNF | • CUMMINS IS series u N14 | |
| • DEUTZ DQCCB-14 | • KOMATSU 07 892 (2009) | |
| | • LIEBHERRMD1-36-130 | |

COOLELF AUTO SUPRA -50°C **meets the requirements** of:

- | | | |
|------------------|--------------------------------|---------------------|
| • SAAB | • SCANIA | • CUMMINS CES 14439 |
| • LEYLAND TRUCKS | • FENDT; VALTRA | • CUMMINS CES 14603 |
| • Volvo VCS | • CASE; NEW HOLLAND
MAT3624 | • WARTSILLA 32-9011 |
| | | • CAT EC-1 |

CHARACTERISTICS

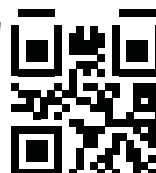
COLOUR	-	FLUORESCENTORANGE
DENSITY AT20 °C	ASTMD1122	1.078
PH	ASTMD1287	8.8
REFRACTIVEINDEX	ASTMD1218	1.392 -1.396
TEMPERATURE AT WHICH THE FIRST ICE CRYSTALSOCCUR	ASTMD1177	-50°C
BOILING TEMPERATURE	ASTMD1120	109°C

The typical characteristics mentioned represent mean values

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

COOLELF AUTO SUPRA -50°C

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.



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APPLICATIONS

- PROTECTION ALL YEARROUND**
COOLELF AUTO SUPRA -50°C ensures maximum protection against freezing, until -50°C.
- READY TO USE PRODUCT**
COOLELF AUTO SUPRA -50°C is ready for use, as a mix with demineralised water.
- MULTI-MATERIAL COMPATIBILITY**
COOLELF AUTO SUPRA -50°C can be used for cast iron as well as aluminium engines, and also in engine radiators in aluminium or copper alloy.
COOLELF AUTO SUPRA -50°C is inert to elastomeric seals and paints.
- LIFETIME**
Recommended interval of use:
 - 500 000 km/4 years when used in trucks
 - 250 000 km/5 years when used in cars.

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.
- MAXIMUM HEAT TRANSFER**
The additives in COOLELF AUTO SUPRA -50°C give to the coolant:
 - + Chemical neutrality (pH 7-8.5),
 - + A reserve of alkalinity to neutralise the acids resulting from the combustion gases,
 - + Resistance to foaming,
 - + Compatibility with hard water (maximum 40°F).Avoids formation of deposits (no risk of limescale) and leaves surfaces clean.

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.

PERFORMANCES

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

	WEIGHT LOSS (MG/COUPON)					
	copper	solder	brass	steel	cast iron	aluminium
ASTM D3306 LIMITS	10	30	10	10	10	30
COOLELF AUTO SUPRA	1.9	0.3	1.6	-0.5	-1.4	4.6

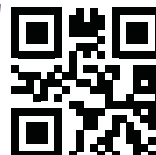
ASTM D4340: ALUMINIUM HEAT REJECTION TEST (25% VOL)

	WEIGHT LOSS (MG/CM ² /WEEK)
ASTM D3306 LIMITS	1.0
COOLELF AUTO SUPRA	<0.2

TOTAL LUBRIFIANTS
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PERFORMANCES

ASTM D2570: SIMULATED SERVICE TEST

	WEIGHT LOSS(MG/CM ²)					
	copper	solder	brass	steel	cast iron	aluminium
ASTM D3306 LIMITS	20	60	20	20	20	60
COOLELF AUTO SUPRA	2.0	1.0	2.0	1.0	-3.0	1.0

ASTM D6210: HEAVY DUTY ENGINE COOLANTS

As stated in latest revision of ASTM D6210: "coolants that have completed the Test Method D7583 (test method to demonstrate coolant cavitation protection performance) with a maximum pit count of 200 are regarded as passing ASTM D6210"

ASTM D7583 JOHN DEERE DIESEL ENGINE COOLANT CAVITATION TEST RESULT:

LINER NUMBER	1	2	3	4	5	6	TOTAL
PIT COUNT COOLELF AUTO SUPRA -50°C D7583	31	38	18	16	19	9	131
REQUIREMENT							<200

AGING TEST: VERY SEVERE CORROSION TEST

TEST CONDITIONS	TYPICAL CONDITIONS	SEVERE CONDITIONS
TEST DURATION	169 H	504 H
FLUID CONTENT	5.0L	6.0L
PRESSURE	1.5 BAR	2.5 BAR
FLOW	3.0L/MIN	3.5L/MIN
HEAT INPUT	5500W	5000W
TEMPERATURE IN HEATING VESSEL	95°C	115°C
TEMPERATURE IN COOLING VESSEL	75°C	95°C
CONCENTRATION OF COOLANT IN WATER	40% VOL	20% VOL

	AL (SAE329)	ALMN	CASTIRON	STEEL	CU	CUZN	SOLDERCB
REFERENCE COOLANT							
AFTER INITIAL CLEANING	82.10	64.02	-2.19	-1.68	3.62	2.90	21.45
AFTER FINAL CLEANING	125.01	94.33	-0.36	0.11	4.99	5.66	25.83
COOLELF AUTOSUPRA							
AFTER INITIAL CLEANING	9.77	0.71	-0.07	0.17	1.44	1.62	0.43
AFTER FINAL CLEANING	23.58	4.14	0.0	0.24	2.63	2.53	0.55

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