

COOLELF AUTO SUPRA -37°C



COOLELF AUTO SUPRA -37°C is a «very long life» coolant based on monoethylene glycol and organic inhibitors of corrosion.

TOTAL

COOLELF AUTO SUPRA -37°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.

In accordance with French Decree No. 95-326 of 20th March 1995 concerning the distribution of certain substances containing monoethylene glycol, **COOLELF AUTO SUPRA -37°C** contains **an additive to give it a bitter taste** as a guarantee against accidental ingestion by children or users.

COOLELF AUTO SUPRA -37°C is the **top-of-range product** of our cooling liquid range.

APPLICATIONS

Protection against freezing
(until -37°C)

Longer life

Environment

- COOLELF AUTO SUPRA -37°C is a permanent coolant that can be used during the whole year.
- COOLELF AUTO SUPRA -37°C is ready for use, as a mix with demineralised water.
- COOLELF AUTO SUPRA -37°C can be used for cast iron as well as aluminium engines, and also in engine radiators in aluminium or copper alloy.
- **Recommended oil change interval:**
 - 650,000 km/8000 hours/5 years when used in trucks
 - 250,000 km/5 years when used in cars.

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

Very long-term protection
against metals corrosion

No formation of deposits
leave surfaces clean

Excellent protection of
aluminium at high
temperature

- Excellent protection against corrosion, erosion, and cavitation, for aluminium water pumps.
- Heat transfer remains optimised: **fully organic additives allow avoiding any formation of deposits and leave surfaces clean.**
- The additives in **COOLELF AUTO SUPRA -37°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** (mainly instability of the foam that might form)
 - **Compatibility with hard water (maximum 40°F).**
- COOLELF AUTO SUPRA -37°C contains no silicates, phosphates, chromates, nitrites or boron.
- COOLELF AUTO SUPRA -37°C is inert to elastomeric seals and paints.

SPECIFICATIONS

<p>AFNOR NFR 15-601 ASTM d 3306 ASTM D 4656 ASTM D4985 BS 6580</p>	<ul style="list-style-type: none"> ● COOLELF AUTO SUPRA -37° meets the international specifications for antifreezes as well as those of major manufacturers. ● The antifreeze used in COOLELF AUTO SUPRA -37°C is officially approved by the following manufacturers: <ul style="list-style-type: none"> ▪ AUDI ▪ DAIMLER <ul style="list-style-type: none"> ○ MB-Approval 325.3 (concentrate) ○ MB-Approval 326.3 (Coolant –50% dilution) ▪ DEUTZ ▪ DEUTZ / MWM ▪ FORD ▪ MAN 324 Typ SNF ▪ SEAT ▪ SKODA ▪ VW TL 774D ● COOLELF AUTO SUPRA -37°C has been acknowledged as satisfactory for use in their engines by the following manufacturers: <ul style="list-style-type: none"> ▪ JAGUAR ▪ LEYLAND TRUCKS ▪ OPEL-GM 6277M ▪ RENAULT VI ▪ SCANIA ▪ SAAB
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CHARACTERISTICS OF COOLELF AUTO SUPRA –37°C

Colour		Pink to fluorescent orange
Density at 15 °C	ASTM D1122	1.068
pH	ASTM D1287	8.4
Alkalinity reserve(pH 3.5)	ASTM D1287	2.8ml HCl 0.1N
Temperature at which the first ice crystals occur	ASTM D1177	-38°C
Boiling temperature	ASTM D1120	108°C

The typical characteristics mentioned represent mean values

PERFORMANCES OF COOLELF AUTO SUPRA -37°C

• ASTM D1384 : Glassware Corrosion Test (336hrs / 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

• 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

• AGING TEST: very severe corrosion test

Test Conditions	Typical Conditions	Severe Conditions
Test duration	169 h	504 h
Fluid Content	5.0 l	6.0 l
Pressure	1.5 bar	2.5 bar
Flow	3.0 l/min	3.5 l/min
Heat input	5500 W	5000 W
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

	Weight loss (g/m ²)						
	Al (SAE 329)	AlMn	Cast Iron	Steel	Cu	CuZn	Solder CB
Reference Coolant							
<i>After initial cleaning</i>	82.10	64.02	-2.19	-1.68	3.62	2.90	21.45
<i>After final cleaning</i>	125.01	94.33	-0.36	0.11	4.99	5.66	25.83
Coolelf Auto Supra							
<i>After initial cleaning</i>	9.77	0.71	-0.07	0.17	1.44	1.62	0.43
<i>After final cleaning</i>	23.58	4.14	0.0	0.24	2.63	2.53	0.55