

# COOLELF AUTO SUPRA

## -26°C



COOLELF AUTO SUPRA -26°C is a «**very long life**» coolant based on monoethylene glycol and **organic corrosion inhibitors**.

COOLELF AUTO SUPRA -26°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 20<sup>th</sup> March 1995 concerning the distribution of certain substances containing monoethylene glycol, **COOLELF AUTO SUPRA -26°C** contains **an additive to give it a bitter taste** as a guarantee against accidental ingestion by children or users.

COOLELF AUTO SUPRA -26°C is the **top-of-range product** of our cooling liquid range.

### APPLICATIONS

**Protection against freezing (until -26°C)**

- COOLELF AUTO SUPRA -26°C is a permanent coolant that can be used during the whole year.

**Longer life**

- COOLELF AUTO SUPRA -26°C is ready for use, as a mix with demineralised water.

- COOLELF AUTO SUPRA -26°C can be used for cast iron as well as aluminium engines, and also in engine radiators in aluminium or copper alloy.

**Environment**

- **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**

- Excellent protection against corrosion, erosion, and cavitation, for aluminium water pumps.

**No formation of deposits left surfaces clean**

- Heat transfer remains optimised: **wholly organic additives allow avoiding any formation of deposits and left surfaces clean.**

**Protection of aluminium at high temperature**

- The additives in COOLELF AUTO SUPRA -26° 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 -26° contains no silicates, phosphates, chromates, nitrites or boron.

- COOLELF AUTO SUPRA -26° is inert to elastomeric seals and paints.

## SPECIFICATIONS

**AFNOR NFR 15-601**  
**ASTM d 3306**  
**ASTM D 4656**  
**ASTM D4985**  
**BS 6580**

- **COOLELF AUTO SUPRA -26°** meets the international specifications for antifreezes as well as those of major manufacturers.
- The antifreeze used in **COOLELF AUTO SUPRA -26°C** is officially approved by the following manufacturers:
  - **AUDI**
  - **DAIMLER**
    - MB-Approval 325.3 (concentrate)
  - **DEUTZ**
  - **DEUTZ / MWM**
  - **FORD**
  - **MAN 324 Typ SNF**
  - **SEAT**
  - **SKODA**
  - **VW TL 774D**
- **COOLELF AUTO SUPRA -26°C** has been acknowledged as satisfactory for use in their engines by the following manufacturers:
  - **JAGUAR**
  - **LEYLAND TRUCKS**
  - **OPEL-GM 6277M**
  - **RENAULT VI**
  - **SCANIA**
  - **SAAB**

## CHARACTERISTICS OF COOLELF AUTO SUPRA -26°C

Colour		Pink to fluorescent orange
Density at 15°C	ASTM D1122	1.053
PH	ASTM D1287	8.6
Alkalinity reserve (pH 3.5)	GFC Pr L-110-03	2.2 ml HCl 0.1N
Temperature at which the first ice crystals occur	ASTM D1177	-27°C
Boiling temperature	ASTM D1120	106°C

The typical characteristics mentioned represent mean values

## PERFORMANCES OF COOLELF AUTO SUPRA –26°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 <sup>2</sup> /week)
ASTM D3306 limits	1.0
Coolelf Auto Supra	< 0.2

### • ASTM D2570: Simulated Service Test

	Weight loss (mg/cm <sup>2</sup> )					
	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 <sup>2</sup> )						
	Al (SAE 329)	AlMn	Cast Iron	Steel	Cu	CuZn	Solder CB
<b>Reference Coolant</b>							
<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
<b>Coolelf Auto Supra</b>							
<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