



# TOTAL COOLELF SI-OAT

Ready-to-use coolant – SI-OAT



## DESCRIPTION

**TOTAL COOLELF SI-OAT** is a “very-long-life” coolant made of monoethylene glycol.

**TOTAL COOLELF SI-OAT** has fast, effective protective properties. It provides a high level of protection against damage caused by freezing, cavitation, corrosion and overheating.

**TOTAL COOLELF SI-OAT** coolant is especially recommended for certain ICEs both for light vehicles (MB and VW group Euro 6 engines), heavy vehicles (MB, MAN, Scania and Cummins Euro 6 engines), public works machinery (Liebherr Euro 6 engines) and agricultural tractors (MTU Claas engines).

## SPECIFICATIONS

**TOTAL COOLELF SI-OAT** *meets the international standards* on coolants:

- AFNOR NFR 15-601
- BS 6580 : 2010
- CUNA NC 956-16
- ASTM D 3306
- SAE J1034
- ASTM D 4985

**TOTAL COOLELF SI-OAT** is stringently *approved* by the following manufacturers:

- VW / AUDI / SEAT / SKODA / LAMBORGHINI/ BENTLEY/ PORSCHE / BUGATTI : VW TL 774-G
- DAIMLER / MERCEDES-BENZ : MB-APPROVAL 326.5 AND 326.6
- MAN 324 Type SI-OAT
- CUMMINS CES 14603

**TOTAL COOLELF SI-OAT** *meets the requirement level* of the following manufacturers:

- SCANIA TB 1451

## CHARACTERISTICS

APPEARANCE			CLEAR LIQUID
COLOUR			PINK
DENSITY AT 20°C	KG/L	ASTM D1122	1.075
REFRACTIVE INDEX AT 20°C		ASTM D1218	1.3871
AO	mL HCl 0.1N	ASTM D1121	9.9
PH AT 20°C		ASTM D1287	8.3
FREEZING POINT	°C	ASTM D1177	-38

Typical values given for information purposes.

### TOTAL LUBRIFIANTS

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

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Sheet updated: 02/16



This antifreeze presents no particular risks when used in accordance with our recommendations and as intended. Ask your local sales consultant for a safety datasheet showing compliance with current EC legislation.



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## APPLICATIONS

### MIXING

We strongly advise against mixing TOTAL COOLELF SI-OAT with any other coolant technologies.

If the manufacturer permits SI-OAT technology, any changes in technology must take place further to rinsing the whole cooling system.

### READY-TO-USE PRODUCT

TOTAL COOLELF SI-OAT, is a ready-to-use product, that is pre-mixed with demineralised water.

### YEAR-ROUND PROTECTION

It guarantees optimum protection against freezing, to -37°.

### LONGER SERVICE LIFE

Recommended oil change interval:

- **Professional: from 3 to 5 years** depending on the manufacturer's recommendations (refer to the vehicle's maintenance manual)
- **Light vehicles: up to 250,000 km**, depending on the manufacturer's recommendations (refer to the vehicle's maintenance manual).

### RETRO-APPLICABILITY

TOTAL COOLELF SI-OAT has been specifically designed to meet the most demanding mechanics of certain EURO 6 engines in various business areas, for both professionals and individuals.

Unless there are indications to the contrary from the manufacturer (see vehicle maintenance manual), the product is retro-applicable for generations prior to Euro 6, taking the necessary precautions, i.e. mandatory rinsing before the transition to Si-OAT technology.

TOTAL COOLELF SI-OAT is stringently MAN 324 (SI-OAT type) approved, and can be used on vehicles requiring MAN 324 type NF and type SNF approvals.

TOTAL COOLELF SI-OAT is stringently VW TL 774-G approved, and can be used on vehicles requiring VW TL 774-C, 774-D, 774-F, and 774-J approvals.

TOTAL COOLELF SI-OAT is strictly MB 326.5 and 326.6 approved and can be used on vehicles requiring MB 326.0 and MB 326.3 approvals.

TOTAL COOLELF SI-OAT is not recommended for OM 300 and 400 engines on MB Trucks (non-exhaustive list).

## 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.

## CUSTOMER BENEFITS

### EXCELLENT PROTECTION AGAINST METAL CORROSION, CAVITATION AND THE FORMATION OF DEPOSITS

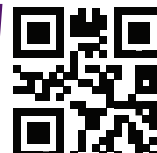
TOTAL COOLELF SI-OAT protects against all forms of corrosion, overheating and freezing. Protects aluminium water pumps against corrosion, erosion and cavitation, prevents the formation of deposits and leaves surfaces clean.

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## PERFORMANCES

### VW TL 774-G

	WEIGHT LOSS (G/M <sup>2</sup> )					
	Copper	Solder/Cast Iron	Brass	Steel	CuZn	Aluminium
COOLELF SI-OAT	0.1	0.1	-0.4	-0.1	-0.1	-0.4
VW TL 774-G LIMIT	3	3	3	3	3	2

### DIN 51 360-2

	CORROSION INDEX	
	20% vol % dilution	40% vol % dilution
VW TL 774-G LIMIT	4	2
COOLELF SI-OAT	4	2

### FOAMING CHARACTERISTICS (33% VOL DILUTION)

	Volume (ml)	Break time (s)
COOLELF SI-OAT VALUES	5	3
VW TL 774-G LIMIT	20	5
ASTM D1881 (PART OF ASTM D3306)	Max 150 ml	Max 5 sec

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