

Typical chemical and physical properties

Coolant SiC-4SC is a corrosion inhibitor for high performance Engine Coolant, free of phosphates, amines and nitrites.

Composition: aqueous solution of inhibiting salts. Super stabilized silicates solution.

Appearance	liquid
Colour	pale yellow
Density (20 °C)	1.35 ± 0.05 g/cm ³
Solubility in water	complete
Solidification temperature	- 8 °C
Storage stability	12 month

This information is intended as a guideline only. For specifications please consult the Certificate of Analyses.

Applications and typical treat level recommended

The requirement of ASTM D 3306 or ASTM D 4985 are fully met by adding 4% w/w of Coolant SiC-4SC to MEG or MPG.

In case higher reserve alkalinity is required or very diluted operative conditions are foreseen, it is advisable to add 5% of Coolant SiC-4SC to MEG or MPG.

Add Coolant SiC-4SC to the MEG and homogenize for 30 minutes.

Benefits

International, National and Military Standards met by Engine Coolant based on Coolant SiC-4SC:

BS 6580 (UK)	FVV Heft R 443 (D)	Afnor R 15/601 (F)(1)
SAE J 1034	JIS K 2234 (J)	KSM 2142 (K)
CUNA NC 956-16 (I)	UNE 26361-88 (E)	EMPA (CH)
ASTM D 3306 and 4985	NATO S 759	E/L 1415c (MIL Italy)

OEM Specifications met by Engine Coolant based on Coolant SiC-4SC:

Porsche/VW/Audi/Seat/Skoda TL 774 C * Mercedes DBL 7700 (1) * Ford ESD M97 B49-A * Man 324 * GM US 6277 M * Ford WSS-M97B44-C * Chrysler MS 9176 * BMW N 600 69.0 * VOLVO (Reg. N° 260) * FORD ESD M97 B49-A * OPEL GM QL 130100

(1) Except pH value

ADDAPT[®] Coolant SiC-4SC

Safety and Handling	Please read Material Safety Data Sheet (MSDS) before handling.
Product Specification	This information is available on request through our local representative.
Packaging	This information is available on request through our local representative.

Quality Policy The objective of our quality policy is the continuous fulfillment of the internal and external requirements agreed upon with our partners with regards to everybody's performance.

The Quality System of ADDAPT[®] Chemicals BV is based on the principles of the NEN-EN-ISO-Standard 9001:2015.

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ADDAPT[®] Coolant SiC-4SC

Typical characteristics of Engine Coolant manufactured with Coolant SiC-4SC

CHARACTERISTICS	Coolant SiC-4SC MEG	4% 96%	Coolant SiC-4SC MEG	5% 95%	ASTM D 3306 LIMITS
Appearance	Clear		Clear		***
Water, mass %	3,2		3,8		5 max.
Reserve alkalinity	15,4		19,1		***
pH (aqueous solution 50%)	9,4		9,5		7,5 – 11,0
Density 15/15 °C	1,125		1,127		1,110 – 1,145
Hard water resistance	Clear				***

ASTM D 1384 – Corrosion Test for Engine Coolant in Glassware

METALS	Coolant SiC-4SC MEG	4% 96%	Coolant SiC-4SC MEG	5% 96%	ASTM D 3306 LIMITS
	Weight loss – mg/specimen		Weight loss – mg/specimen		Weight loss – mg/specimen
Copper	0,8		0,8		10 max.
Solder	2,2		1,6		30 max.
Brass	0,8		0,7		10 max.
Steel	0,1		0,1		10 max.
Cast Iron	0,2		0,1		10 max.
Aluminium	0,6		0,4		30 max.

ASTM D 4340 – Corrosion of Cast Aluminium Alloys in Engine Coolants under Heat Rejecting Conditions

METALS	Coolant SiC-4SC MEG	4% 96%	Coolant SiC-4SC MEG	5% 95%	VW TL 774 Type C Limits
	Weight loss mg/cm ² / week		Weight loss mg/cm ² / week		Weight loss – mg/cm ² / week
Aluminium	0,6		0,4		1,0 max.

ADDAPT[®] Coolant SiC-4SC

ASTM D 2570 – Simulated Service Corrosion Testing of Engine Coolants

METALS	Coolant SiC-4SC 4% MEG 96%	Coolant SiC-4SC 5% MEG 95%	ASTM D 3306 LIMITS
	Weight loss – mg/specimen	Weight loss – mg/specimen	Weight loss – mg/specimen
Copper	1,1	0,9	20 max.
Solder	4,2	2,6	60 max.
Brass	1,0	0,8	20 max.
Steel	0,3	0,2	20 max.
Cast Iron	1,6	0,3	20 max.
Aluminium	2,2	1,8	60 max.

ASTM D 2809 – Cavitation Corrosion and Erosion Characteristics of Aluminium Pumps with Engine Coolants

METALS	Coolant SiC-4SC 4% MEG 96%	Coolant SiC-4SC 5% MEG 95%	ASTM D 3306 LIMITS
	Visual Rating	Visual Rating	Visual Rating
Aluminium	9	10	8 min.