ADDAPT® Coolant SiF-12SC Engine Coolant (Super Concentrate)

Typical chemical and physical properties

Coolant SiF-12SC is a corrosion inhibitor for high performance Engine Coolant, free of borates, phosphates, amines, nitrites and nitrates

Composition: aqueous solution of organic acids salts.

Appearance	liquid
Colour	pale yellow
Density (20 ºC)	1.20 g/cm³
Solubility in water	complete
Freezing point	- 18 °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 8% w/w of Coolant SiF-12SC to MEG or MPG.

Add Coolant SiF-12SC to the MEG and homogenize for 30 minutes.

Benefits

International, National and Military Standards met by Engine Coolant based on Coolant SiF-12SC:

BS 6580 (UK)	FVV Heft R 443 (D)	Afnor R 15/601 (1) (F)
SAE J 1034 (1)	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 SiF-12SC:

(1) Except reserve alkalinity

VW TL 774 G (G12++)

ADDAPT® Coolant SiF-12SC

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.

Liabilities

All recommendations for the use of our products, whether given by us in writing, orally, or to be implied from the results of tests carried out by us, are based on the current state of our knowledge. Notwithstanding any such recommendations, buyer or user remains responsible for satisfying himself that the products as supplied by us are suitable for his intended process or purpose. Since we cannot control the application, use or processing of the products, we cannot accept responsibility thereof. Buyer has to ensure that the intended use of the products will not infringe any third party's intellectual property rights. We warrant that our products are free from defects in accordance with, and subject to, our general conditions of sale and supply.

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ADDAPT® Coolant SiF-12SC

Typical characteristics of Engine Coolant manufactured with Coolant SiF-12SC

CHARACTERISTICS	Coolant SiF-12SC 8% MEG 92%	ASTM D 3306 LIMITS
Appearance	Clear	***
Water, mass %	2,3	5 max.
Reserve alkalinity	9,5	***
PH (aqueous solution 50%)	8,2	7,5 – 11,0
Density 15/15 °C	1,125	1,110 – 1,145
Hard water resistance VW PV 1426	No precipitates	***

ASTM D 1384 – Corrosion Test for Engine Coolant in Glassware

METALS	Coolant SiF-12SC 8% MEG 92% Weight loss – mg/specimen	ASTM D 3306 LIMITS Weight loss – mg/specimen
Copper	0,8	10 max.
Solder	1,4	30 max.
Brass	1,6	10 max.
Steel	1,1	10 max.
Cast Iron	1,9	10 max.
Aluminium	0,1	30 max.

ASTM D 1384 – Supplemental Corrosion Test on Light-Weight Metal Specimen

METALS	Coolant SiF-12SC 8% MEG 92% Weight loss – g/m^2	VW TL 774 Type G Limits Weight loss – g/m^2
AlSi12	0,4	2 max.
AlMn	0,3	2 max.
AlSi10Mg(Cu) for V8 engines	0,2	2 max.

ADDAPT® Coolant SiF-12SC

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

METALS	Coolant SiF-12SC 8% MEG 92% Weight loss – mg/cm^2 / week	ASTM D3306 Weight loss – mg/cm^2 / week
Aluminium	**0,4** (Note 1)	**1,0 max.**

(Note 1): No deposit according to VW TL 774 G

ASTM D 2570 – Simulated Service Corrosion Testing of Engine Coolants

METALS	Coolant SiF-12SC 8% MEG 92% Weight loss – mg/specimen	ASTM D 3306 LIMITS Weight loss – mg/specimen
Copper	**1,9**	**20 max.**
Solder	**3,2**	**60 max.**
Brass	**3,4**	**20 max.**
Steel	**2,8**	**20 max.**
Cast Iron	**3,9**	**20 max.**
Aluminium	**0,3**	**60 max.**

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

METALS	Coolant SiF-12SC 8% MEG 92% Visual Rating	ASTM D 3306 LIMITS Visual Rating
Aluminium	**10**	**8 min.**