



Antifreeze S 12++

Radiator protection, Si-OAT-coolant additive concentrate (Colour: pink/violet)

Description:

Antifreeze S 12++ is a full concentrate radiator guard and heat transfer medium based on ethylene glycol with a silicon additive package for both summer and winter operation that gives maintenance-free protection against frost, overheating and rust formation (long-life radiator protection).

Antifreeze S 12++ is the latest cooler protection and heat transfer medium with high-quality anti-corrosion additives for engine and cooling system. It corresponds to the current requirements of numerous OEMs and is superbly enhanced by organic and silicate technologies (Si-OAT-coolant).

Antifreeze S 12++ is free from borate, nitrite, amine and phosphates.

Properties:

- Long-life radiator protection
- Improved heat transfer
- Uniform and homogeneous protective layer
- Silicate stabilised, i.e. no gel formation or flocculation
- Suitable for mixed fleets: product for cars, trucks and construction machinery
- Kind to the environment due to an extended life cycle
- Avoidance of foaming
- Compatibility with hose and sealing materials
- Compatibility with varnishes

Application:

Antifreeze S 12++ is outstanding for engines made of cast iron, aluminium or a combination of both metals. It can also be used in cooling systems made from aluminium or copper.

Antifreeze S 12++ is particularly recommended for light metal engines which demand special aluminium protection at higher temperatures.

Recommended concentration for use 50% **Antifreeze S 12++** and 50% water which gives a frost protection of -37°C. Frost protection of up to -68°C is possible with maximum 69% **Antifreeze S 12++** and 31% water.

Antifreeze S 12++ meets the requirements pursuant to VW TL774 G (G12++) for passenger cars of the VW group from 2008; also recommended for build years after 2005.

Suitable for/ we recommend this product for:

We recommend this product for:	
AFNOR	NF-R 15-601 Type 1
AS	2108 : 2004
ASTM	D 3306 Type I, D 4985
AUDI, (BENTLEY, BUGATTI, LAMBORGHINI), SEAT, SKODA	G 12 ++
BS	6580
CHINA GB	29743-2013
CUMMINS	CES 14603
CUNA	NC 956-16
JIS	K 2234 : 2006
MAN	324 Typ Si-OAT
MB	325.5, 325.6
MTU	MTL 5048
NATO	S 759
SAE	J 1034
SANS	1251 : 2005, SH 0521-1999
SCANIA	TB 1451

Data are subject to change.

Attention: Service instructions should be observed!

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09/2016

UNE	26361 - 88
PORSCHE	
VW	TL 774-G (G12++)

Miscibility:

- **Antifreeze S 12++** is miscible with most coolants based on ethylene glycol (VW G11, G12 VW, VW G12 +). To achieve an optimal corrosion protection and to avoid sludge formation it is recommended to use pure **Antifreeze S 12++**. For the preparation of mixtures softened water should be preferred.

Antifreeze S 12++		
Article No.	Packaging unit	
510232	Can	1 L
510233	Can	1500 ml
510234	Can	5 L
510235	Can	20 L
510236	Drum	60 L
510238	Drum	200 L
510239	PE-Container	1000 L

Typical characteristics:

Specific weight at 20°C	kg/m³	1,110 - 1,12
Boiling point	°C	>170
ph-value	(40 Vol.)	8,4
Water content	%	max. 3
Pour point antifreeze/water=1:1 °C		-37
Refraction at 20°C		1,432
Reserve alkalinity		6,0
Colour		pink (violet)

