



# Top X 12 Plus

**Radiator protection, coolant additive concentrate Colour: pink/violet**

## Description:

**Top X 12 Plus** is a concentrate based on 1.2-ethanediole (mono-ethylene glycol), radiator protection and heat exchanger agent for operation both, summer and winter with permanent frost and rust protection (for all-season use).

**Top X 12 Plus** has been developed with high quality corrosion additives for motor and cooling system, and meets the current standard in the development of engine-building.

**Top X 12 Plus** is free of nitrites, amines, phosphates and silicate.

## Characteristics:

- Longer and outstanding corrosion protection
- Improved heat transfer
- Decreased right to compensation regarding repairs at the cooling system
- Suitable for mixed fleets, one product for cars, trucks and construction machinery
- Ecologically desirable because of longer working life
- Avoidance of foaming
- Compatibility with hose and sealing materials
- Compatibility with varnishes

## Usage:

**Top X 12 Plus** is excellently suitable for motors being made of cast iron, aluminium or of a combination of both the metals and at cooling systems being made of aluminium or copper alloyage.

**Top X 12 Plus** is especially recommended for light run motors where a special aluminium protection at higher temperatures is required.

Recommended working concentration 50 % **Top X 12 Plus** and 50% water, radiator protection up to -37 °C can be achieved. Antifreeze protection down to -68°C is possible with a maximum of 69% **Top X 12 Plus** and 31% water.

## Use-duration:

Commercial vehicles to 500.000 km (ca. 8.000 hours)

Passenger cars to 250.000 km (ca. 2.000 hours)

Stationary engines to 32.000 hours (or 5 years)

It is recommended, the coolant of radiators , to change all 5 years at the earliest, or if necessary with the achievement of the named stand-times.

## Usable for:

We recommend this product for:	
AFNOR	NF-R 15-601 Type 1
AS	2108-2004
ASTM	D 3306 Type I
ASTM	D 4985
ASTON MARTIN	
AUDI	TL 774-D/F
BENTLEY	TL 774-D/F
BS	6580 : 2010
CHRYSLER	MS 9176
CHINA GB	29743-2013
CLAAS	
CNH	MAT 3624
CUMMINS	85T8-2, 90T8-4
CUMMINS	CES 14603
CUNA	NC 956-16

Data are subject to change.

Attention: Service instructions should be observed!

STL/WINTER/-  
09/2020

DAF	74002
DEUTZ	DQC-CB-14
FORD	ESD M97B49-A
FORD	ESE M97B49-A
FORD	WSS-M97B44-D
FVV STANDARDS	Heft R443
GM	1899 M, 6277 M
GME	QL 130100
HYUNDAI	> 1982
ISUZU	
IVECO	> 01/2014
JAGUAR	> 1999
JASO	M-325
JENBACHER	TA 1000-0201
JIS	K 2234 : 2206
JOHN DEERE	JDM H5
KIA	> 1991
KOMATSU	
KSM	2142
LAND ROVER	> 1998
LEXUS	> 1994
LEYLAND TRUCKS	LTS 22 AF 10
LIEBHERR	MD1-36-130
MACK	EC1 (A4.05.09.01)
MAN	324 SNF (when using with black coolant hoses, not for silicone coolant hoses - coloured blue)
MAN	B&W D 36 5600
MAZDA	MEZ MN 121 D
MB	325.3
MINI	BMW LC-07
MITSUBISHI	> 1982
MTU	MTL 5048
NISSAN	> 1982
ÖNORM	V 5123
OPEL	GM QL130100
PEUGEOT	> 1993
PORSCHE	TL 774-D/F
RENAULT	Type D
SAAB	> 2001
SAE	J 1034
SANS	1251 : 2005
SCANIA	TB 1451
SEAT	TL 774-D/F
SETRA	MB 325.3
SKODA	TL 774-D/F
SMART	> 11/2014
SUBARU	> 1977
SUZUKI	> 1981
TOYOTA	> 1978
UNE	26361-88/1
VOLVO	VCS
VW	TL 774 D (G12), TL 774 F (G12+)

#### Miscibility:

- **Top X 12 Plus** can be mixed with the most of the coolants based on ethylene glycol. To achieve an optimal corrosion protection and to avoid sludge formation it is recommended to use pure **Top X 12 Plus**. For the preparation of mixtures softened water should be preferred.

**Top X 12 Plus**

Article No.	Packaging unit	
STL 3100 202	Can	1 L
STL 3100 203	Can	1500 ml
STL 3100 204	Can	5 L
STL 3100 205	Can	20 L
STL 3100 206	Drum	60 L
STL 3100 208	Drum	200 L
STL 3100 209	PE-Container	1000 L

## Typical characteristics:

Specific weight at 20°C	kg/m <sup>3</sup>	1.100 - 1.140
Boiling point	°C	> 175
pH-value	(50 Vol.%)	8,5
Water content	%	3,7
Pour point antifreeze/water=1:1	°C	-37
Reserve alkalinity		> 5,0
Colour		pink (violet)

