

# **P999-G12PLUS**

Radiator protection, coolant additive concentrate Colour: pink/violet

## **Description:**

**P999-G12PLUS** 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).

**P999-G12PLUS** has been developed with high quality corrosion additives for motor and cooling system, and meets the current standard in the developement of engine-building.

P999-G12PLUS 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 coolong 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:

**P999-G12PLUS** 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.

**P999-G12PLUS** is especially recommended for light run motors where a special aluminium protection at higher temperatures is required.

Recommended working concentration 50 % **P999-G12PLUS** 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% **P999-G12PLUS** 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!

DAF	74002	
DEUTZ		
FORD	DQC-CB-14	
FORD	ESD M97B49-A	
FORD	ESE M97B49-A WSS-M97B44-D	
FORD FVV STANDARDS	Heft R443	
GM		
GME	1899 M, 6277 M QL 130100	
HYUNDAI	> 1982	
	> 1982	
ISUZU IVECO	> 01/2014	
JAGUAR	> 01/2014 > 1999	
JASO	M-325	
JENBACHER	TA 1000-0201	
JIS	K 2234 : 2206	
JOHN DEERE	JDM H5	
KIA	> 1991	
KOMATSU	2142	
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	
ΤΟΥΟΤΑ	> 1978	
UNE	26361-88/1	
VOLVO	VCS	
VW	TL 774 D (G12), TL 774 F (G12+)	

# Miscibility:

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**P999-G12PLUS** 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 **P999-G12PLUS**. For the preparation of mixtures softened water should be preferred.

Typical characteristics:		
Specific weight at 20°C	kg/m³	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)