

swd PERMACOOL EXTRA

Antifreeze Silicate-inhibited

Discription and Application

swd PERMACOOL EXTRA is a antifreeze based on ethylenglycole. It is free of amines, nitrites and phosphates. The special inhibitor-package protects outstandingly the engine and the cooling circuit against frost, rust and excessive heat. It is also applicable for light metal motors.

swd PERMACOOL EXTRA is a antifreeze concentrate which only may be used water-mixed. It is miscible with tap water. In order to assure sufficient corrosion protection a minimum amount of antifreeze concentrate in tap water should not fall below a value of 35%, which especially should be regarded for the use in summer.

It is recommended to reniew the coolant at least after 5 years usage.

If the motor manufacturer has specified the use of silicate-free product the according user manual has to be regarded (VW, Audi, Seat, Skoda, Ford, GM/Opel from 1997).

Mixing figure :	protection down to	-10°C	-19°C	-28°C	-40°C
PERMACOOL EXTRA	% vol	20	30	40	50
Tap water	% vol	80	70	60	50

Qualification

swd PERMACOOL EXTRA meets the technical specifications of following manufacturers : BMW, Fiat, Ford, General Motors, Mercedes-Benz, Peugeot.

Furthermore it meets following standards:

* excepted reserve alkalinity

- ◆ ASTM D3306
- ◆ BS 6580
- ◆ NATO S 759
- ◆ ASTM D4985
- ◆ FFV Heft R443
- ◆ CUNA NC 956-16
- ◆ SAE J 1034
- AFNOR NF R15-601 *
- ◆ JIS K 2234

Technical Properties

swd PERMACOOL EXTRA	unit	value	
Density at 20°C	kg/m³	1122	
Colour		blue	
Reserve alkalinity	ml 0,1n HCl	min. 20	
Flash Point	°C	>120	
pH (35%)		8,2	
Boiling Point	°C	>165	
Article-N	Number: 2912	22	

Specification variations in these characteristics may occur. The instructions of manufacturer must be regarded. Further informations to be available by MSDS.

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