# PRODUCT INFORMATION



## **HIGHTEC ANTIFREEZE COOLANT AN-SF 12+**

Long service life coolant concentrate based on monoethylene glycol with high corrosion protection and frost protection. Nitrite-free, amine-free, phosphate-free and silicate-free. HIGHTEC ANTIFREEZE COOLANT AN-SF 12+ is 2-ethylhexanoic acid free.

## **Description**

HIGHTEC ANTIFREEZE COOLANT AN-SF 12+ is a modern long service life coolant concentrate based on monoethylene glycol with high corrosion protection and frost protection. It does not contain any nitrite, amine, phosphate and silicate and therefore provides reliable protection for aluminium engines and cast iron engines.

### **Application**

HIGHTEC ANTIFREEZE COOLANT AN-SF 12+ has been developed specifically to meet the requirements of modern aluminium and cast iron engines. It reliably protects against deposits and foam formation and thus ensures optimal heat dissipation. It is used in many internal combustion engines according to the manufacturer's specification.

### **Approvals**

MAN 324 SNF

### Equivalent quality in accordance with EU-law as per

- ASTM D3306/D4985
- AFNOR NF R 15-601
- BS 6580
- SAE J1034
- Deutz DQC CB-14
- Ford WSS-M 97B44-D
- GM 6277M/Opel B040 1065
- MB 325.3
- MTU MTL 5048
- VW TL-774 D (G12)/TL-774 F (G12+)

# This product is also recommended when the following filling instructions are required

- JIS K 2234
- Jaguar Land Rover STJLR.651.5003
- Mitsubishi Super Long Life Coolant
- PSA B 71 5110
- Scania TI 02-98 0813 T/B/M sv
- Volvo VCS

### **Advantages**

- It meets the VW specification VW TL 774-F (G12+)
- It is backward compatible with the former VW specifications G12 and G11 (TL 774 C/D)
- Additive technology without silicate
- Available for use in cast iron and aluminium engines
- · Prevention of deposits in a reliable manner
- Very good and permanent corrosion protection
- Unsurpassed protection against cavitation
- Minimal tendency to foam
- Miscible and compatible with other antifreeze concentrates of the same specification. However, in order to exploit the full product benefits of HIGHTEC ANTIFREEZE COOLANT AN-SF 12+, a complete coolant change is recommended.

### **Notes**

 HIGHTEC ANTIFREEZE COOLANT AN-SF 12+ is 2ethylhexanoic acid free.

> **ROWE MINERALÖLWERK GMBH** Langgewann 101, D-67547 Worms



# PRODUCT INFORMATION



# Mixing table

Frost protection up to [°C / °F]	ANTIFREEZE COOLANT	H2O
-37 / -35	1	1
-27 / -17	1	1,5
-20 / -4	1	2

### **Typical characteristics**

Property	Method	Unit	Value
Flash point	ASTM D-92 / DIN EN ISO 2592	°C	> 110
Color		visual	magenta
Boiling point	ASTM D 1120	°C	> 160
рН	ASTM D1287	-	7,9 - 8,6
Reserve alkalinity	ASTM D1121	ml 0,1 M HCl/10ml	≈ 4 - 5
Freezing point 1:1 AF:Water	ASTM D1177	°C / °F	-37 / -34,6
Density at 20 °C	ASTM D5931	g/cm³	1.121

These characteristics are typical for current production. The data does not constitute an assurance of properties or a guarantee of suitability for a specific application. Existing legal provisions and regulations that affect handling and usage of the products must be observed by the recipient of our products. ROWE products are continuously being developed. For this reason, ROWE retains the right to change all technical data in this product information at any time without prior announcement. Our current General Delivery and Payment Conditions apply (www.rowe-oil.com).

**ROWE MINERALÖLWERK GMBH** Langgewann 101, D-67547 Worms

