

HIGHTEC ANTIFREEZE COOLANT FCC 5

Description

HIGHTEC ANTIFREEZE COOLANT FCC 5 is specifically designed to meet the requirements of modern and future fuel cell technologies and other applications where low electrical conductivity is required. It provides stable and low conductivity, protection against corrosion, frost and overheating and offers maximum compatibility with a wide range of materials.

In addition to use in fuel cell systems, HIGHTEC ANTIFREEZE COOLANT FCC 5 is ideal for other applications such as the cooling of charging cables for electric vehicles, electric drives or other high-tech components where low electrical conductivity is required to ensure system integrity.

Technical properties

- Electrical conductivity: < 5 µS/cm (under operating conditions)
- pH value: Stable in the range between 5.5 and 6 over the product's service life
- Compatibility: Optimised for use with ion exchangers
- Frost protection: Down to -35 °C
- Viscosity: Low, reduces the pumps power requirement

Application

HIGHTEC ANTIFREEZE COOLANT FCC 5 was developed for:

- Fuel cell systems in electric vehicles
- Cooling of charging cables for electric vehicles
- Electric drives and high-performance components
- Other applications where low electrical conductivity is required

Not intended to use for traditional engine cooling systems.

Before (re)filling the system, it is recommended to flush the cooling system with ultra-pure water (conductivity lower than 5 µS/cm) or HIGHTEC ANTIFREEZE COOLANT FCC 5, followed by full draining. We also recommend checking the pH value and conductivity before using the product, especially after long storage. Mixtures with conventional engine coolants (conductivity higher than 2,500 µS/cm) must be strictly avoided as they can cause damage to the system.

Advantages

- Stable electrical conductivity: constant values below 5 µS/cm even during long-term operation, suitable for fuel cells, charging cable cooling and other electrical systems
- Innovative inhibitor system: patented formulation for effective protection without impairing the electrical properties
- Material compatibility: safe to use with common metals (e.g. steel, aluminium, copper), elastomers and thermoplastics
- Easy application: ready to use without dilution, ideal for a wide range of industrial and mobile applications
- Durability: High thermal stability significantly decreases the frequency of maintenance

Notes

- Laboratory tests prove that HIGHTEC ANTIFREEZE COOLANT FCC 5 remains stable even under intensive thermal impact and has no significant increase in conductivity as a result. Test metals such as copper and aluminium remain corrosion-free, even in long-term tests under rough conditions.
- HIGHTEC ANTIFREEZE COOLANT FCC 5 is at least 60 % biodegradable according to OECD 301 B
- Store in unopened containers at max. 30 °C, protected from direct sunlight
- Do not store in zinc or cast iron containers
- Shelf life: 18 months in unopened containers



Typical characteristics

Property	Method	Unit	Value
pH	ASTM D1287	-	5,5 - 6,0
Freezing point	ASTM D1177	°C / °F	-42 / -43,6
Density at 20 °C	ASTM D5931	g/cm ³	1,05 - 1,07
Electrical conductivity at 20 °C	ASTM D1125	μS/cm	< 5

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).

