Product information
Fuel Cell Coolant FCF20

PI 9/06/16/2023

Description
Ready-to-use coolant for use in fuel cell systems such as PEMFC (Polymer Exchange Membrane Fuel Cell) systems. Developed on the basis of ethylene glycol, combined with nonionic additives. Combines very low electrical conductivity and optimum heat dissipation with outstanding material compatibility, excellent corrosion protection and excellent aging stability. Thanks to its special formulation, extends the service life of ion exchangers integrated in the cooling system.

Properties
- low conductivity over the entire service life
- excellent long-term stability
- outstanding corrosion protection
- designed for the high amounts of heat generated in fuel cells
- for cooling systems with and without ion exchanger
- high heat dissipation

Technical data

Color / appearance	clear, transparent
Flash point	> 63 °C DIN ISO 2592
Density at 20 °C	1,065 g/cm³
Density at 80 °C	1,029 g/cm³
Start of freezing	-35 °C
Boiling point	108 °C
Pour point	-42 °C
pH value	6,3
Kinematic viscosity at 20 °C	3,6 mm²/s
Kinematic viscosity at 80 °C	1,0 mm²/s
Thermal conductivity at 20 °C	0,391 W/m·K
Electrical conductivity at 25 °C	0,5 µS/cm
Electrical conductivity at 80 °C	2,2 µS/cm

Areas of application
For cooling systems of fuel cells that require low conductivity cooling media.

Comment
The fuel cell coolant becomes unusable if mixed with even the smallest amounts of conventional radiator antifreeze or other media containing salt. For this reason, the greatest possible care and cleanliness must be ensured when filling. Immediately tightly close the open container after use.

Application
Completely drain used coolant from the cooling circuit. Flush the cooling system with fuel cell coolant or ultra-pure water (conductivity <5 µS/cm). Avoid dirt, dust and the entry of any other foreign substances at all costs. Fill the undiluted fuel cell coolant into the cooling system and vent the cooling system.

If there are manufacturer's instructions for changing, strictly adhere to these.

The liquid heat transfer medium is designed for use in fuel cells. It is not intended for use in assemblies that require conventional cooling media with high or undefined electrical conductivity. Use with cast iron, iron and galvanized parts is not recommended.

Storage at max. 30 °C. The shelf life in the unopened original packaging is at least 12 months. When storing for longer than this, check the conductivity and pH value before use.

Available pack sizes

20 l Canister plastic	21684 D-GB

Our information is based on thorough research and may be considered reliable, although not legally binding.

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