

DIELEKTRISCHE IMMERSIONSFLÜSSIGKEIT 2.0

DIELEKTRISCHE IMMERSIONSFLÜSSIGKEIT 2.0 is a dielectric immersion fluid for cooling IT hardware in data centers.

Description

DIELEKTRISCHE IMMERSIONSFLÜSSIGKEIT 2.0 is a highly effective dielectric heat transfer fluid that has been specifically developed to meet the requirements of modern data centers and high-performance servers. It allows direct immersion cooling and replaces conventional air or water-based cooling systems. Direct heat transfer to the fluid maximizes cooling performance while significantly reducing energy consumption.

Thanks to its low viscosity and excellent thermal properties, DIELEKTRISCHE IMMERSIONSFLÜSSIGKEIT 2.0 provides constant temperature control - even under constant use. This extends the service life of sensitive components and enables a higher power density in server farms.

With a high flash point above 195 °C and a special additive technology, DIELEKTRISCHE IMMERSIONSFLÜSSIGKEIT 2.0 guarantees long-term corrosion protection for non-ferrous metals such as copper and excellent material compatibility with plastics and electronic components. The high resistance to ageing ensures long-term operational reliability, reduces maintenance costs and minimizes the risk of unexpected failures in critical IT infrastructures.

Advantages

- Maximum energy efficiency: Reduced power consumption for cooling significantly increases overall energy efficiency
- Constant thermal stability: Constant temperatures even under high continuous load extend the service life of servers and chips
- Space saving & scalability: Immersion cooling enables compact designs and flexible adaptation to growing IT infrastructures
- Sustainability: Lower energy requirements and extended hardware service life reduce the ecological footprint
- Silent operation: Fanless systems operate almost silently, which is a particular advantage in dense server environments



Typical characteristics

Property	Method	Unit	Value
Kinematic viscosity KV 40	ASTM D-7042	mm ² /s	7,4
Flash point	ASTM D-92 / DIN EN ISO 2592	°C	> 195
Pour point	ASTM D-97 / DIN EN ISO 3016	°C	< -75
Corrosion effect on copper	DIN 51 811	Grad	1a
Color		visual	farblos
Thermal conductivity at 20 °C	ASTM D-7896-19	mW/(m*K)	144,0
Heat capacity at 20 °C	ASTM E1269	kJ/(kg*K)	2,00
Density at 20 °C	ASTM D-7042	g/mL	0,840
Electrical conductivity at 20 °C	DIN 51111	nS/m	0,050
Neutralization number	ASTM D-664	mg KOH/g	0,04
Oxidation stability	ASTM D-8206	min.	>2600

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).

