

DIELEKTRISCHE IMMERSIONSFLÜSSIGKEIT 1.0

DIELEKTRISCHE IMMERSIONSFLÜSSIGKEIT 1.0 is a dielectric immersion fluid for cooling batteries in electric vehicles.

Description

DIELEKTRISCHE IMMERSIONSFLÜSSIGKEIT 1.0 is a highly effective dielectric heat transfer fluid that has been specifically developed for use in electromobility. It allows direct cooling of battery cells and electronic components in electric vehicles, making conventional, complex cooling structures unnecessary. This offers completely new design possibilities and significantly increases the efficiency of battery systems.

Thanks to its outstanding thermal properties and low viscosity, DIELEKTRISCHE IMMERSIONSFLÜSSIGKEIT 1.0 provides an even temperature profile inside the battery. This reduces thermal stress, extends the service life of the batteries and improves performance, especially during fast charging processes. This significantly reduces the risk of short circuits, thermal runaway or fires.

With a high flash point of over 200 °C and a newly developed additive technology, DIELEKTRISCHE IMMERSIONSFLÜSSIGKEIT 1.0 not only offers excellent long-term corrosion protection for non-ferrous metals, but also exceptional material compatibility with plastics and battery casings. Its high resistance to ageing guarantees long-term and reliable use.

Advantages

- **Faster charging times:** Direct heat dissipation allows for shorter charging cycles, especially with fast charging
- **Longer battery life:** Even temperature distribution prevents overheating and increases the battery's life time
- **Maximum safety:** High flash point, low electrical conductivity and thermal stability minimize the risk of short circuits or fires
- **Space and weight saving:** Compact designs due to the elimination of cooling channels, pumps and hoses reduce vehicle weight and improve energy efficiency
- **Sustainability:** Easily biodegradable, non-toxic, halogen- and silicone-free



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	> 200
Pour point	ASTM D-97 / DIN EN ISO 3016	°C	-69
Corrosion effect on copper	DIN 51 811	Grad	1a
Color		visual	farblos
Biodegradability	OECD 301 B	%	leicht abbaubar
Thermal conductivity at 20 °C	ASTM D-7896-19	mW/(m*K)	145,1
Heat capacity at 20 °C	ASTM E1269	kJ/(kg*K)	1,92
Density at 20 °C	ASTM D-7042	g/mL	0,880
Electrical conductivity at 20 °C	DIN 51111	nS/m	0,155
Neutralization number	ASTM D-664	mg KOH/g	0,03
Oxidation stability	ASTM D-8206	min.	>2200

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).

