

EV-FLUIDS BATTERY THERMAL FLUID

Description

Biodegradable dielectric fluid with excellent heat removal capacity and high resistance to oxidation, especially suitable for direct cooling (immersion) through direct contact with electric vehicle components, such as batteries, electric motors or inverters that require good temperature control to optimize its performance.

Properties

- Readily biodegradable
- Excellent dielectric properties
- High resistance to oxidation.
- Given its good thermal properties, it has a very wide operating temperature range and shows exceptional behaviour at very low temperatures.
- Good fire-resistant properties, due to the fact that its ignition point is greater than 300°C

Quality levels, approvals and recommendations

- Classified as a K3 liquids according to IEC 61100
- IEC: 61099

Technical specifications

	UNIT	METHOD		
Colour	Hazen	ISO 2211	<200	30
Appearance	-	Visual	Clear and free of water and materials	
Density at 20 °C	g/mL	ISO 12185	<1.000	0.969
Kinematic viscosity at 40 °C	cSt	ISO 3104	<35	27.4
Kinematic viscosity at - 20 °C	cSt	ISO 3104	<3,000	1,196
Flash point	°C	ISO 2719	>250	255
Pour point	°C	ISO 2592	>300	308
Freezing point	°C	ISO 3016	<-45	-50
Specific heat at 25 °C	J/kg·K	ASTM E1269	>1,700	1,997
Thermal conductivity at 25 °C	W/m·K	ASTM D7896	>0.13	0.148
Dielectric breakdown voltage	kV	IEC 60156	>45	77
Resistance at 90°C	G Ohm.m	IEC 60247	>2	7.4
Biodegradability - 28 days	%	OECD 301B	>60	72

The above mentioned characteristics are typical values and should not be considered product specifications.