

BATTERY THERMAL FLUID



EV-FLUIDS

Lubricants

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

- Type K fluid according to IEC 61100.
- In compliance with IEC 61099 standard for organic and synthetic esters

Technical specifications

| | UNIT | METHOD | GUARANTEED VALUE | TYPICAL VALUE | |
|-------------------------------|----------|------------|---------------------------------------|---------------|------|
| Colour | - | ISSO 2211 | Max. 200 Hazen | 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 |
| | at -20°C | cSt | ISO 3104 | < 3000 | 1196 |
| Flash point | °C | ISO 2719 | > 250 | 255 | |
| Ignition point | °C | ISO 2592 | > 300 | 308 | |
| Pour point | °C | ISO 3016 | < -45 | -50 | |
| Specific heat at 25°C | J/kg·K | ASTM E1269 | >1700 | 1997 | |
| 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 over 28 days | % | OECD 301B | >60 | 72 | |

The aforementioned characteristics are standard values and should not be considered product specifications.

A product safety sheet is available upon request.

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