

JoshTrans

Ester FR Synthetic Transformer Fluid

Product Description

JoshTrans is a premium Synthetic Pentaerythritol Ester Synthetic Transformer Fluid designed for Indoor transformers, fire-sensitive locations, underground substations, wind turbines, eco-sensitive areas. Meets IEC 61099, IEC 62770, IEEE C57.147, FM Approved Less Flammable specifications and delivers exceptional performance in demanding conditions.

Technical Specifications

Appearance	Clear light green liquid
Density at 15°C	0.960-0.980 g/cm ³
Kinematic Viscosity at 40°C	28-35 cSt
Kinematic Viscosity at 100°C	5.5-6.5 cSt
Flash Point (COC)	275°C min
Fire Point	310°C min
Pour Point	-45°C max
Breakdown Voltage (BDV)	45 kV min (2.5mm gap)
Dielectric Dissipation Factor at 90°C	0.008 max
Resistivity at 90°C	10 ¹¹ Ω-cm min
Acidity (Neutralization Value)	0.03 mgKOH/g max
Water Content	50 ppm max
Water Saturation Limit	2500 ppm (high tolerance)
Biodegradability (OECD 301)	>90% in 28 days
Fire Classification	K Class (Less Flammable)
Moisture Tolerance	Excellent
Paper Life Extension	5-8x vs mineral oil

Applications

Indoor transformers, fire-sensitive locations, underground substations, wind turbines, eco-sensitive areas

Performance Standards

IEC 61099

Handling & Storage

- Store in a cool, dry place away from direct sunlight
- Keep container tightly closed when not in use
- Shelf life: 36 months from date of manufacture
- Do not mix with other lubricants