

Ester Oil Transformers

Ester dielectric fluids are a viable natural alternative providing environmental, fire, safety and performance and life extension benefits over and above traditional mineral oils.

Formulated from edible seed oils and food grade additives, ester dielectric fluid is bio-based, sustainable, renewable and recyclable providing sustainable environmental protections.

Ester dielectric fluids offer strong benefits for transformers in environmentally sensitive locations. In the event of an oil release, ester dielectric fluids quickly and thoroughly biodegrade in the environment and contain no harmful petroleum, halogens, silicones or other questionable materials.

With a high flash point of 330°C they also provide a high level of fire safety compared to a flash point of 145°C for petroleum-based mineral oil.

In asset life terms, the chemical properties of ester dielectric fluids enhance transformer insulation performance and life expectancy, minimising the impact of moisture. As a result, the insulation system can last up to three times longer than in a mineral oil filled transformer.

The fluids are entirely compatible with standard transformer insulating materials, components and with fluid processing equipment and procedures. It has been seen that insulating paper within ester dielectric fluids age at a much slower rate than in conventional transformer oil due to its ability to draw out and absorb retained water.

Product Detail

- Primary voltages - up to 132kV
- Secondary voltages – up to 66kV
- Tertiary windings – loaded or unloaded
- Ratings – 2MVA to 75MVA
- Temperature ranges – In accordance with IEC and AS60076 with designs for a higher ambient or higher operating temperatures on request
- On load, off circuit or multiple tap switches
- Dual ratio and reconnectable vector group
- Open bushings, cablebox or plug in terminals
- On line monitoring
- On line drying

Features

- + Biodegradable
- + High flash point of 330°C
- + Enhanced insulation performance and life expectancy
- + Aging resistivity
- + Available in transformers up to 132kV
- + Offering natural and synthetic oils
- + Reduced footprint

