

ISOVOLTINE BIO VE



Insulating Fluid



Biodegradable insulating fluid based on vegetable oils

APPLICATIONS

Insulating fluid

- **ISOVOLTINE BIO VE** oil is a biodegradable oil. It has been developed based on high performance natural esters.
- **ISOVOLTINE BIO VE** is dedicated for applications requiring an insulating fluid and a very high fire point.
- **ISOVOLTINE BIO VE** is an environmentally friendly alternative to replace mineral and silicone oils used in transformers, rheostats and circuit breakers.

SPECIFICATIONS

International specifications

- IEC 62770
- IEC 61039 – K2 class
- OECD 301B : Readily biodegradable

ADVANTAGES

- High insulating capability.
- Increased water absorption, enabling a longer lifetime of the insulating paper
- No corrosive Sulfur.
- Excellent oxidation resistance in comparison with same category fluids.
- Very high flash and fire point to improve fire safety compared to mineral oils and synthetic esters.

TYPICAL CHARACTERISTICS	METHODS	UNITS	ISOVOLTINE BIO VE
Density at 20 °C	ISO 12185	kg/m ³	920
Viscosity at 40 °C	ISO 3104	mm ² /s	39
Pour point	ISO 3016	°C	- 24
Flash point Cleveland (Open Cup)	ISO 2592	°C	> 300
Fire point	ISO 2592	°C	> 350
Acidity	IEC 62021-2	mg KOH/g	< 0.06
Water content	IEC 60814	ppm	< 200
Breakdown Voltage	IEC 60156	kV	> 70
DDF @ 90°C	IEC 60247	-	< 0.05
Biodegradability – 28 days	OECD 301B	-	83%

Above characteristics are mean values given as an information.

Product developed in partnership with A. & A. Fratelli Parodi s.p.a.

TOTAL LUBRIFIANTS
INDUSTRIE

26-05-2016 (supersedes 05-04-2016)

ISOVOLTINE BIO VE

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This lubricant used as recommended and for the application for which it has been designed does not present any particular risk.

A material safety data sheet conforming to the regulations in use in the E.C. can be obtained from your local commercial adviser or down loaded from www.quick-fds.com