

# ISOVOLTINE P1



*Insulating oil*

**Trace inhibited mineral insulating oil.**

## APPLICATIONS

**Insulating oil**

- **ISOVOLTINE P1** oil is a trace inhibited mineral oil for transformers, switchgears, circuit breakers, welding set, and all high voltage electrical equipments.

## SPECIFICATIONS

**International specifications**

- IEC 60296: 2012 – Trace Inhibited
- BS 148 Class IA
- KS C 2301
- JIS C 2320 Class 1 Type IA, IIA
- Suitable for the equipments requiring ASTM D 3487 Type I fluid.

## ADVANTAGES

- Excellent resistivity, power factor and dielectric strength.
- Low viscosity for effective cooling.
- Very good oxidation resistance providing long life.
- Very low power point.
- No impurities such as dissolved gas, water or suspended solids.
- Does not contain DBDS.
- Does not contain PCB.

TYPICAL CHARACTERISTICS	METHODS	UNITS	ISOVOLTINE P1
Density at 20 °C	ISO 3675	g/cm <sup>3</sup>	0.825
Kinematic Viscosity at 40 °C	ISO 3104	mm <sup>2</sup> /s	7.70
Flash point (Pensky Martens, Closed Cup)	ISO 2719	°C	145
Pour point	ISO 3016	°C	- 45
Acidity	IEC 62021-1	mg KOH/g	< 0.01
Water content	IEC 60814	ppm	17
Antioxidant additives	IEC 60666	%wt	< 0.08
Corrosive Sulfur	DIN 51353	-	Non corrosive
Breakdown Voltage	IEC 60156	kV	> 30
DDF @ 90°C	IEC 60247	%	< 0.001
Oxidation Stability, 332 h			
- Sludge	IEC 61125-C	%wt	< 0.01
- Total Acidity		mg KOH/g	0.12

Above characteristics are mean values given as an information.

**TOTAL LUBRIFIANTS  
INDUSTRIE**  
14-03-2016  
ISOVOLTINE P1  
1/1



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](http://www.quick-fds.com).