

Product Data Sheet

Voltinol U

Description and Applications

Saheli Voltinol U is high performance inhibited electrical insulating oil specially designed for use in transformers, switchgears and other electrical equipment. **Saheli Voltinol U** is formulated with high quality severely hydro-processed naphthenic base oils and do not contain antioxidant or metal passivating additives.

Saheli Voltinol U possesses good dielectric properties and heat transfer characteristics due to the low viscosity and is free from detrimental traces of water, dust and fibrous material to provide reliable operation with reduced downtime and improved service life.

Saheli Voltinol U exceeds the performance requirements of major transformer and switchgear specifications.

Features and Benefits

- High dielectric strength ensures excellent insulation and quenching of electric arc between switchgear contacts when opening the switch.
- Low power-loss contributes to overall efficiency.
- Free from traces of water, dust and fibrous material and hence has no detrimental effects on the electric properties of the oil leading to maximizing oil and equipment life.
- Low viscosity and high interfacial tension ensures good wet ability of oil and removal of air gaps to insulate windings and dissipate heat.
- Effective long-term protection from rust and corrosion to critical system components.

Applications

- Insulating and cooling oil for electrical transformers, switchgears, circuit breakers, capacitors and automotive ignition coils.
- Used where inhibited insulating oils meeting IEC 60296: Uninhibited type (U) are required.

Specifications

IEC 60296 Inhibited Type U

Product Data Sheet

Voltinol U

Test Parameters	Test Method	Typical Results
Density @ 20°C gm/cm ³	ISO 12185	0.883
Acid Number, mg KOH/g	IEC 62021-1	<0.01
Viscosity @ 40°C (cSt)	ISO 3104	10
Viscosity @ -30°C (cSt)	ISO 3104	1222
Breakdown Voltage, kV, Before treatment	IEC 60156	59
Breakdown Voltage, kV, After treatment	IEC 60156	84
Water Content, mg/kg	IEC 60814	15
Pour Point °C	ISO 3106	-57
Flash Point PMCC, °C	ISO 2719	145
Interfacial Tension mN/m	ASTM D 971	50
Corrosive Sulphur	IEC 62535	Non Corrosive
Furfural Content, mg/kg	IEC 61198	<0.1
Antioxidant Additive, wt%	IEC 60666	Not Detected
DDF @ 90°C	IEC 60247	0.002
Oxidation Stability at 120°C 164hours <ul style="list-style-type: none"> • Total Stability, mg KOH/g • Sludge, % • DDF at 90°C 	IEC 61125,C	0.09 0.02 0.047