



Mobilect™ 44

Mobil Industrial , Singapore

Electrical insulating oils

Product Description

Mobilect™ 44 is a premium high grade inhibited naphthenic mineral insulating oil with high dielectric strength and reliable oxidation stability intended for transformers, switchgears and other electrical equipment.

Mobilect 44 meets the IEC 60296 (04) specifications and ASTM D1275 / IEC 62535 / DIN 51353 corrosion tests requirements.

Features and Benefits

- Mobilect 44 has reliable oxidation stability, low sludge and acid formation, in both ageing and oxidation test. It is high resistance to thermal and chemical degradation in the presence of iron and copper. This reduces tendencies to produce sludges and oil-soluble oxidation products.
- The high dielectric strength of Mobilect 44 is a measure of the resistance of the oil to electric stress and is expressed in kV across a specified gap under test conditions. This is not a measure of the quality of the oil but of the absence of contaminants - especially moisture, fibres and polar chemicals.
- Mobilect 44 excellent low temperature properties is free from wax even at low temperatures and thus circulates freely in outdoor applications. Its low viscosity is excellent for heat transfer and also low evaporation loss.
- The low pour point of Mobilect 44 ensures a free flow in most conditions between the transformer and the conservator and maintains the reliability of tap changers at the lowest temperatures.
- Very low in sulphur, Mobilect 44 is DBDS and PCB free.
- Mobilect 44 is metal passivator and deactivator free.

Applications

- Mobilect 44 is recommended for use in power/distribution transformers, circuit breakers, rectifiers, switches and switchgears in which the oil is required as an insulation medium or as a heat transfer medium.
- Mobilect 44 is to be used in applications requiring IEC 60296 (4) and ASTM D1275 specifications.

Specifications and Approvals

This product meets or exceeds the requirements of:

IEC 60296 :2012 Special Applications

Properties and Specifications

Property	
Interfacial Tension, mN/m, ISO 6295	47
Oxidation Stability, Total Acid Number, mgKOH/g, IEC 61125-METC	0.08
Dissipation Factor, after Oxidation, 90 C, IEC 60247	0.003
Oxidation Stability, Sludge, mass%, IEC 61125-METC	0.02

Property	
Breakdown Voltage, after Treatment, kV, IEC 60156	>70
Corrosive Sulphur, DIN 51353	Non Corrosive
Acidity, mgKOH/g, IEC 62021	<0.01
Flash Point (PMCC), deg C, ISO 2719	144
Kinematic Viscosity @ 40C, cSt, ISO 3104	7.5 - 11
Breakdown Voltage, kV, IEC 60156	40-60
Pour Point, deg C, ISO 3016	<-45
Density @ 20C, kg/L, ISO 12185	>0.85

Health and safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ <http://www.msds.exxonmobil.com/psims/psims.aspx>

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