



ATLANTIC TRANSFORMER OIL INHIBITED PARAFFINIC – TO I 20

High Quality Electrical Insulating Oil

PRODUCT DESCRIPTION & APPLICATION

ATLANTIC TRANSFORMER OILS TO-I 20 are high quality electrical insulating oil manufactured from highly refined mineral oils oil enhanced with high-performance antioxidants. It offers good dielectric properties, provides efficient heat transfer and has excellent low temperature properties. This oil exceeds IEC 296 and Class I: 1982 performance criteria, ensuring long-term stability in electrical applications. It is ideally suited for use in transformers, oil-filled switchgear, capacitors, fuses, circuit breakers and other electrical equipment requiring inhibited oils.

FEATURES AND BENEFITS

- Excellent cooling properties due to good fluidity and heat transfer capacities
- Highly refined oil ensures chemical stability and durability in service
- Ultra efficient protection of equipment due to non corrosive nature and cleaning properties
- Improvement of safety and efficiency
- Extension of life time of the transformer and the oil
- Reduction of breakdowns and maintenance cost
- Outstanding resistance to oxidation
- Superior insulating properties due to: high dielectric breakdown voltage, volume resistivity, interfacial surface tension and absence of polar substances

PERFORMANCE STANDARDS

Conforms to IEC 296 and Class I: 1982 standards for inhibited transformer oils.

TYPICAL TECHNICAL PROPERTIES

PRODUCT CODE	NR-SL-DF-25001	
Characteristics	Specification	Typical Value
Function		
Density @20°C ,kg/dm3, ISO 3675 or ISO 12185	0.895 Max	0.876
Kinematic Viscosity, ISO 3104 @40°C ,mm2/sec @ -30°C ,mm2/sec	16.5 Max 1800 Max	7.6 Report
Pour Point ,°C, ISO 3016	-30 Max	-60
Breakdown Voltage, IEC 60156	Min. 30 kV as delivered Min. 70 kV after lab treatment	>30 >70
Dielectric Dissipation Factor @90°C & 40°C To 60 Hz, IEC-60247 OR IEC 61620	0.005 Max	<0.005
Refining/ Stability		
Appearance, Visual	Clear, Free from Sediment & Suspended Matter	Clear, Free from Sediment & Suspended Matter
Inter Facial Tension ,MN/m, EN 14210 OR ASTM D971	40 Min	>40
Corrosive Sulphur, DIN 51353	Non-Corrosive	Non-Corrosive
Potentially Corrosive Sulphur, IEC 62535	Non-Corrosive	Non-Corrosive
DBDS(Dibenzylsulphide) ,mg/kg, IEC 62697	Not Detectable(<5mg/kg)	Not Detectable
Metal Passivator Additives mg/kg, IEC 60666	Not Detectable	Not Detectable
2 Furfural Content ,mg/kg/gm, IEC-61198	Not Detectable	Not Detectable
Performance		
Oxidation Stability @120°C, 500 Hrs, IEC-74 A) Total Acidity ,mg KOH /gm B) Sludge ,%	0.4 Max 0.1 Max	0.01 0.005
Health, Safety and Environment		
Flash Point ,°C, ISO 2719	140 Min	144
PCA Content ,%, BS-2000 Part 346	3.0 Max	<3.0
PCB Content mg/kg/gm, IEC-61619	Not Detectable	Not Detectable

Note: These characteristics are typical of current production. While future production will conform to Atlantic's specification, variations in these characteristics may occur.

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* supersedes all previous versions

Packing: 208L