

Samic Elect Oil-U Class-I Un-inhibited

High Quality Transformer Oil



Product Data Sheet

Product Description

Samic Elect Oil-U Class-I Un-inhibited Transformer oil is severely refined hydro-cracked / hydro-treated virgin un-inhibited Mineral insulating oils with highest degree of purity and stability. It is manufactured from judiciously selected blend of latest technology feed stocks, which is highly suitable for all grades of Power & distribution Transformers, Circuit Breakers, Oil filled switches and X-ray equipment.

Performance & Customer Benefits

- Low Pour point.
- High dielectric strength.
- Non corrosive as tested by all present methods, DIN & ASTM tests & New IEC 62535 method.
- Low viscosity oils offering excellent and fast heat transfer.
- Compatible with transformer construction material.

Main Application

Samic Elect Oil-U Class-I Un-inhibited Transformer oil is highly suitable for all grades of

- Power Transformers, Distribution Transformers
- Circuit Breakers
- Oil filled switches
- X-ray equipment.

Specifications & Recommendations

Samic Elect Oil-U Class-I Un-inhibited Transformer oil meets or exceeds following International and

Builder specifications:

- IEC 60296:2003
- ASTM D 3487 Type I

Typical Physical Characteristics

TEST DESCRIPTION	TEST METHOD	SPECIFICATION LIMITS
Function		
Kinematic Viscosity, mm ² /s (Max)	ISO 3104	
at 40 °C		12.0
at -30 °C		1800
Pour Point °C	ISO 3016	≤ -40
Water Content, Max mg/kg	IEC 60814	
a) Bulk		30
b) Drum	40	
Break Down Voltage, Min.	IEC 60156	
As Delivered (kv)		30
After treatment (kv)	70	
Density kg/dm ³ , @ 20 °C, Max	ISO 3675	0.895
DDF at 90 °C, Max	IEC 60247	0.005

The above figures are typical of blends with normal production tolerance and do not constitute a specification.

Refining/Stability		
Appearance	Visual	Clear, odourless liquid free from suspended impurities
Neutralization Value / Acidity, mg KOH/g, Max	IEC 62021-1 / 62021-2	0.01
Interfacial tension, mN/m, Min	ISO 6295	40
Total Sulphur Content, %, Max	IP 373 / ISO 14596	No General Requirement
Corrosive Sulphur, silver strip, 100 ⁰ C, 18 hrs	DIN 51353	Non Corrosive
Cu strip & Kraft Paper 150 ⁰ C, 72 hrs	IEC 62535	Non Corrosive
Anti-Oxidant Additives	IEC 60666	Not Detectable
2-Furfural content, mg/kg, Max	IEC 61198	0.1
Performance		
Oxidation Stability, 164 hrs	IEC 61125 METHOD- C	
-Total acidity, mg KOH/g, Max		1.2
- Sludge, %, Max		0.8
- DDF @ 90 ⁰ C, Max		0.5
Health, safety and environment (HSE)		
Flash Point °C, PMCC, Min	ISO 2719	135
Polycyclic Aromatics % mass, Max	IP: 346	3.00
Total PCB content mg/Kg	IEC 61619	Not Detectable
Conforms to Standards		
IEC 60296:2003 (U)		✓
ASTM D 3487 Type I		✓

The above figures are typical of blends with normal production tolerance and do not constitute a specification

Packaging Options:

Samic Elect Oil-U Class-I Un-inhibited Transformer oil is offered in 200-210 litres of steel drums and also in bulk in Flexi bags or ISO tanks.

Storage Precautions:

Extreme care is taken while packing these products, including filling of drums in inert atmosphere, as Electrical Insulating oils / Transformer oils are very sensitive to very minute concentrations of contaminants, such as moisture, particulate matter, fibers, etc. Hence, care should be taken to store Samic Elect Oil-U Class-I Un-inhibited Transformer oil in a clean and dry condition. It is strongly recommended that all storage tanks / drums be maintained such that oil is not in contact with atmospheric air. Also these oils should always be stored indoors in climate controlled environments.