Transforma

Type II Uninhibited Electrical Insulating Oil

Product Description:

Veedol Transforma is a high quality mineral uninhibited electrical insulating oil manufactured from severely hydrotreated low aromatic oil and does not have inhibitors. It has very good dielectric property, excellent low temperature characteristics, and provides efficient heat transfer. Special care is taken to ensure a very low water content in the oil. It is noncorrosive towards copper and does not require passivation.

Veedol Transforma offers very high breakdown voltage and excellent resistance to thermal and chemical degradation, which extends the oil's lifespan.

Performance Specifications:

Veedol Transforma meets & exceeds the performance requirements of

- IS 335:2018 (Fifth revision) Type II – Uninhibited transformer oil.

Features/Benefits:

- Very high dielectric strength insulates and suppresses electrical discharges preventing electrical breakdown.
- Excellent thermal and chemical stability resists oxidation, prevents the formation of sludge and acids that can degrade oil quality over time.
- Extremely low water content helps retain high breakdown voltage and offers high resistance to oil oxidation.

Application:

- Oil-filled power transformers and distribution transformers.
- Circuit breakers and rectifiers.
- Oil filled switches and switchgears.
- Electrical equipment where oil is required for insulation and heat transfer.

Veedol Transforma is filled in an inert atmosphere with extreme care, as electrical insulating oils/transformer oils are highly sensitive to minute concentrations of contaminants such as moisture, particulate matter, and fibers. It is essential to store Veedol Transforma in a clean and dry environment. Drums should be maintained to prevent the oil from coming into contact with atmospheric air.

Typical Properties:

PROPERTIES	UNIT	TEST METHOD	SPECIFICATION LIMITS		TYPICAL DATA
			MIN	MAX	
A. Function					
Viscosity, at 40°C	mm^2/s	IS 1448 (Part 25)		15	8 -14
Viscosity, at 0°C	mm^2/s			1800	76
Pour point	°C	IS 1448 (Part 10/Sec 2)		-10	-24
Water content	mg/kg	IEC 60814		30/40	< 20
Break down voltage		IS 6792			
As delivered	kV		30		40- 60
After treatment	kV		70		> 70
Density, at 20°C	g/ml	IS 1448 (Part 16)		0.895	> 0.82
DDE at 90°C		IS 16086		0.005	< 0.001
Particle content		IS 13236	No general requirement		
B. Refining/Stability					
Appearance			Clear, free from sediment & suspended matter		Complies
Acidity	mg KOH/g	IEC 62021-1		0.01	< 0.01
Interfacial tension	mN/m	ASTM D 971	40		46
Total Sulphur content	%	ASTM D 4294 or ISO 14596	No general requirement		
Corrosive Sulphur		DIN 51353	Not corrosive		Not corrosive
Potentially corrosive Sulphur		IS 16310	Not corrosive		Not corrosive
DBDS	mg/kg	IEC 16497 (Part 1)	Not detectable (< 5)		Not detectable
Inhibitors (IS 13631 or IEC 60666)	%	IS 13631	Not detectable		Not detectable
Metal passivators (IS 13631 or IEC 60666)	mg/kg	IS 13631	Not detectable (< 5)		Not detectable
2-Furfural and related compounds content	mg/kg	IS 15668	Not detectable (<0.05)		Not detectable

Typical Properties:

C. Performance					
Oxidation stability at 120°C, 164 h		IS 12422 Method - C			
Total acidity	mg KOH/g	1.9.4 of IS 12422		1.2	0.4
Sludge	%	1.9.1 of IS 12422		0.8	0.1
DDF at 90°C		1.9.6 of IS 12422		0.5	0.01
Gassing tendency	mm3/m	IEC 60628 Method A	No general requirement		
ECT	nC	Clause 6.14	No general requirement		
D. Health, Safety and Environment (HSE)					
Flash point, PMCC	°C	IS 1448 (Part 21)	135		142
PCA content	%	IP 346		3	< 3
PCB content	mg/Kg	IS 16082	Not detectable (< 2)		Not detectable

The above typical properties are those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice.

STORAGE
All packages should be stored under cover. It should not be exposed to direct sunlight, intense cold and extreme temperature fluctuations. Where outside storage is unavoidable, drums should be laid horizontally or properly covered to avoid the possible ingress of water and damage to drum markings.

HEALTH, SAFETY AND ENVIRONMENT
The informtion on this product is available in the Material Safety Data Sheet (MSDS) as a guide to the precautions and safe handling of this product and its disposal. For further information, we recommend you review the MSDS. If handled correctly, there are no special precautions suggested.

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