

TRANSFORMER OIL

Petromin Transformer Oil is un-inhibited highly-refined transformer oil specifically manufactured for use in electric transformers and switchgears. It works as an insulating and heat transfer medium. It is a naphthenic blend of mineral oil having very low Sulphur content.

BENEFITS

- Good oxidation stability.
- High dielectric strength.
- Very low pour point.
- Free from acids and corrosive Sulphur.
- Compatible with transformer construction material.

SPECIFICATION & APPROVALS

Petromin Transformer Oil NGX Series meets or exceeds the requirements of:

- IEC 60296 (Edition 4 of 2012)
- BS 148 (1984)
- IEC Class II/I

APPLICATIONS

Petromin Transformer Oil conforms to IEC 60296 Edition 4 of 2012 as well as former B.S 148/1984 and IEC Specification 296 (82). This is used as an insulating and cooling medium where oil of high thermal and oxidation stability is required.

It is also suitable where good gas absorbing properties are necessary like transformer oil immersed switchgear, circuit breakers etc. Transformer Oil meets class I and class II of BS 148 and IEC 296 specification.



PRODUCT DATA SHEET

PRODUCT CHARACTERISTICS*

PROPERTIES	Min	Max	VALUE	TEST METHOD
Density @ 20 °C		0.895	0.824	ISO 12185
Viscosity @ 40°C mm ² /s		12.0	8.9	ISO 3104
Viscosity @ -30°C mm ² /s		1500	378	ISO 3104
Pour Point °C		-40	-42	ISO 3016
Water Content, mg/kg		30	15	IEC 60814
BDV, kV, Before treatment	30		45	IEC 60156
BDV, kV, After treatment	70		75	IEC 60156
DDF at 90 °C		0.005	0.0005	IEC 60247
Refining/ Stability				
Appearance	Clear, free from suspended matter		PASS	Visual
Total Sulfur, ppm		500	60	ISO 14596
Interfacial Tension, mN/m	40		45	ISO 6295
Corrosive Sulfur	Non Corrosive		Non Corrosive	DIN 51353
Corrosive Sulfur	Non Corrosive		Non Corrosive	ASTM 1275, B
2-Furfural Content, mg/Kg	Not detected (<5mg/kg)		Not detected	IEC 61198
DBDS	Not detected (<5mg/kg)		Not detected	IEC 62697-1
Inhibitors of IEC 60666	Not detected (<0.01 %)		Not detected	IEC 60666
Metal Passivator Additives	Not detected (<0.05mg/kg)		Not detected	IEC 60666
Performance				
Oxidation Stability at 120 °C				IEC 61125, C
Total Acidity, mg KOH/g		1.2	0.07	
Sludge, %		0.8	0.027	
DDF at 90 °C		0.5	0.004	IEC 60247
Health, Safety and Environment				
Flash Point, PMCC, °C	135		156	ISO 2719
PCA Content, %		3	0.2	BS2000 part 346
PCB Content, ppm	Not detected (< 2)		Not detected	IEC 61619
Product Code			5501	

*The information and figures given here are typical of current production and conform to specification, minor variations may occur.

