

PRODUCT DATA SHEET

POWER TRANSFORMER OIL

Petromin Power Transformer Oil is an un-inhibited transformer oil that derived from highly-refined & severely hydro treated mineral base oil. This is specially manufactured for both power & distribution transformer and for use in electric switchgears as an insulating and heat transfer medium.

BENEFITS

- Excellent oxidation stability, that effectively preventing formation of acidic material and sludge
- Compatible with transformer construction material.
- Outstanding electrical insulation property, effectively preventing occurrence of discharge in electric field
- Good heat conductivity, ensuring effective cooling of transformer core and coiling

SPECIFICATION & APPROVALS

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

- IEC 60296 (Edition 4 of 2012)
- Former BS 148 (1984) Class II/I
- GB 2536-90

APPLICATIONS

Petromin Power Transformer Oil is manufactured exclusively to be used as insulating oil and cooling media for bigger as well as for small transformer 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.



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PRODUCT CHARACTERISTICS*

PROPERTIES	Min	Max	VALUE	TEST METHOD
Density @ 20 °C		0.89	0.845	ISO 12185
Viscosity @ 40°C mm ² /s		12.0	10.3	ISO 3104
Viscosity @ -30°C mm ² /s		1800	615	ISO 3104
Pour Point °C		-33	-36	ISO 3016
Water Content, mg/kg		25	14	IEC 60814
BDV, kV, Before treatment	30		40	IEC 60156
BDV, kV, After treatment	70		70	IEC 60156
DDF at 90 °C		0.005	0.001	IEC 60247
Refining/ Stability				
Appearance	Clear, free from suspended matter		PASS	Visual
Total Sulfur, ppm		500	< 100	ISO 14596
Interfacial Tension, mN/m	40		44	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	0.3	
Sludge, %		0.8	0.26	
DDF at 90 °C		0.5	0.09	
Health, Safety and Environment				
Flash Point, PMCC, °C	135		155	ISO 2719
PCA Content, %		3	<0.3	BS2000 part 346
PCB Content, ppm	Not detected (< 2)		Not detected	IEC 61619
Product Code			5361	

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

