

MAGNUM TRANSFORMER OIL PTO01



By Millennium Group

TRANSFORMER OIL PTO01 is an Uninhibited Transformer Oil with lower sulfur content meeting the IEC 60296 – 2003 - 11, 3rd Edition Standard Specification. It also meets the ASTM D 1275 B Test requirement for Corrosive Sulphur.

Sr. No	Characteristics	Unit	Test Method	Guaranteed Data	
				Min.	Max.
1.	Appearance	-	Visual inspection of oil sample in transmitted light under a thickness of 10 cm at ambient temperature	Clear free from sediment and suspended matter.	
2.	Density at 20 o C	kg /dm ³	ISO 3675 or IEC 12185		0.895
3.	Kinematic Viscosity at 40 o C	mm ² / sec	ISO 3104		12
	at - 30 o C	mm ² / sec	ISO 3104		1800
4.	Flash Point, PMCC	°C	ISO 2719	135	- 40
5.	Pour Point	°C	ISO 3016		
6.	Inter Facial Tension at 25 o C	mN/m	ISO 6295 (Where it is used as general requirement)	No General Requirement 40 min	
7.	Acidity	mgKOH/ gm	IEC 62021-1		0.01
8.	Water Content, Bulk / Drum	mg/kg	IEC 60814		30 / 40
9.	Breakdown Voltage		IEC 60156		
	As Delivered / After Treatment	kV		30 / 70	
10.	Dielectric Dissipation Factor (Tan δ) at 90 oC & 40 to 60 Hz		IEC 60247 or IEC 61620		0.005
11.	Corrosive Sulphur Silver Strip, 100 o C, 18 Hrs Copper Strip, 150 o C, 48 Hrs		DIN 51353 ASTM D 1275 B	Non-Corrosive Non-Corrosive	
12.	Total Sulphur Content	%	BS 2000 Part 373 or ISO 14596		0.15
13.	Antioxidant Additives	%	IEC 60666	(U) Uninhibited Oil - Not Detectable	
14.	Oxidation Stability at 120 o C, 164 Hrs		IEC 61125 Method C		
	Total Acidity	mg KOH /gm			1.2
	Sludge	%			0.8
	DDF at 90 o C		IEC 60247		0.5
15.	Gassing Tendency	µL/min	IEC 60628 - A	No General Requirement	
16.	PCA Content	%	BS 2000 Part 346		3
17.	PCB Content	mg / kg	IEC 61619	Not Detectable	
18.	2 – Furfural Content	mg / kg	IEC 61198		0.1

Note: All figures may vary slightly.

Transformer oil is used to insulate high-voltage electrical infrastructure such as transformers, capacitors, switches and circuit breakers. Transformer oils are designed to operate effectively at very high temperatures, cooling, insulating, and stopping corona discharges and arcing.