TOAP 335

TOAP 335 is an Uninhibited Transformer Oil meeting Bureau of Indian Standards: IS 335-1993 Specification.

Sr No	Characteristics	Unit	Test Method	Guaranteed Data	
				Min	Max
1	Appearance		Representative sample of the oil shall be examined in a 100mm thick layer at 27℃	Oil shall be clear, transparent and free from suspended matter or sediment	
2	Density at 29.5℃	g/ml	IS 1448 P 16-1997		0.89
3	Kinematic Viscosity at 27℃	cSt	IS 1448 P 25-1996		27
4	Flash Point, PMCC	℃	IS 1448 P 21-1970	140	
5	Pour Point	℃	IS 1448 P 10-1970		-6
6	Inter Facial Tension	N/m	IS 6104-1971	0.04	
7	Neutralization Value	mg KOH/gm	IS 1448 P 2-1967		
	a) Total Acidity				0.03
	b) Inorganic Acidity/ Alkalinity				NIL
8	Water Content	ppm	IS 13567-1992		50
9	Specific Resistance at a) at 90℃	ohm-cm	IS 6103-1971	35×10^{12}	
	Specific Resistance at b) at 27℃	ohm-cm		1500×10^{12}	
10	Breakdown Voltage	kV	IS 6792-1972		
	New Unfiltered/ After Filtratior			30/60	
11	Dielectric Dissipation Factor (Tanδ) at 90℃		IS 6262-1971		0.002
12	Corrosive Sulphur (Copper Strip,140℃,19Hrs)		IS 335 Annexure B	Non-corrosive	
13	Presence of Oxidation inhibitor	%	IS 13631-1982	The oil shall not contain antioxidant additive. Value of 0.05% max shall be treated as absence of DBPC	
14	Oxidation Stability at 100℃, 164 Hrs		IS 335 Annexure C		
	a) Total Acidity	mg KOH/gm			0.4
	b) Sludge	%			0.1
15	Ageing characteristics after accelerated ageing (open beaker method with copper catalyst)		IS 12177- 1987 Method A		
	Specific Resistance at 27℃	ohm-cm		2.5×10^{12}	
	(Resistivity) at 90℃	ohm-cm		0.2×10^{12}	
	Dielectric Dissipation Factor (Tanδ) at 90℃				0.20
	Total Acidity	mg KOH/gm			0.05
	Total Sludge	%			0.05