

SCHEDULE OF CHARACTERISTICS

Characteristics (1)	Requirement (2)	Method of Tests (3)	Remarks (4)
i. Appearance.	The oil shall be clear & transparent and free from suspended matter or sediments.	A representative sample of the oil shall be examined in a 100 mm thick layer at 27 degree C.	
ii. Density at 29.5° C, Max.	0.89 g /cm ³ .	IS: 1448(Part-16) : 1977	See Note-1
iii. Kinematic Viscosity, Max at 27° C.	27 cSt.	IS: 1448(Part-25) : 1976	
iv. Interfacial tension at 27° C Min.	0.04 N/m.	IS: 6104 : 1971	
v. Flash point Pensky Marten	140° C	IS: 1448(Part-21) : 1970	
vi. Pour point, Max.	-6° C.	IS: 1448(Part-10) : 1970	
vii. Neutralisation value. a) Total Acidity, Max. b) Inorganic acidity/alkalinity.	0.03 mg KOH/G Nil	IS: 1448(Part-2) : 1967 --Do--	Alcoholic KOH solution of 0.02 N should be used in place of 0.1 N indicated
viii. Corrosive Sulphur.	Non-Corrosive.	Annex-B of IS :	
ix. Electric strength. (Break down voltage) a) New unfiltered oil, Min. b) After filtration, Min.	30 Kv (rms) If the above value is not attained the oil	IS: 6792 : 1972	See Note 2 in IS: 335/1993.
x. Dielectric Dissipation Factor at 90° Max.	0.002	IS: 6262 : 1971	See Note in IS: 335/1993.
xi. Specific Resistance. (Resistivity) a) at 90° C, Min. b) at 27° C, Min.	35 x 10 ¹² ohm-cm. 1500 x 10 ¹² ohm-cm.		
xii. Oxidation stability a) Neutralisation value after oxidation, Max. b) Total sludge after oxidation, Max.	0.4 mg KOH/g. 0.1 % by weight.	Annex C of IS : 335/1993	
xiii. Ageing characteristics after accelerated ageing (open beaker method with copper catalyst) a) Specific resistance (resistivity) 1) at 27° C, Min. 2) at 90° C, Min. b) Dielectric Dissipation Factor at 90° Max.	2.5 x 10 ¹² ohm-cm. 0.2 x 10 ¹² ohm-cm. 0.20	IS: 12177: 1987 Method-A IS: 6262 : 1971 IS: 1448(Part-2) : 1967	
xiv. Presence of oxidation Inhibitor	The oil shall contain anti-oxidant additives.	IS: 13631 : 1992	See Note 3 in IS: 335/1993.
xv. Water content, Max.	50 ppm	IS: 13567 : 1992	
NOTES :- The notes of the 'Schedule of Characteristics' spelled in IS : 335/1993 will be followed in achieving the test results mentioned above.			