

S/no.		Vendor Response
1	Certification	
1.1	Should conform IS : 335 (Latest)	
1.2	Should be IS Marked	
1.3	BIS Licence Number	
2	Characteristics Of Transformer Oil	
2.1	Appearance: "The oil shall be clear transparent & free from suspended matter or sediments "	
2.2	Density Max (gm/cm ³ at 29 point 50°C): 0.89	
2.3	Kinematic viscosity (Cst) at 27°C,Max: 27	
2.4	Interfacial tension at 27°C Newtons/M,Min: 0.04	
2.5	Flash point Pansky/marten(Closed). Min(°C): 140	
2.6	Pour point,Max(°C): (-)6	
2.7	Neutralization value, Total acidity mg, Max,mg KOH/gm: 0.03	
2.8	Neutralization value, Inorganic acidity / Alkalinity: Nil	
2.9	Corrosive Sulphur (In terms of classification of copper strips): Non-corrosive	
2.10	Electric strength (Break down voltage), New untreated oil,Min (RMS) (in KV): 30	
2.11	Electric strength (Break down voltage), After treatment, Min (RMS) (in KV): 60	
2.12	Dielectric Dissipation vector (Tan delta) at 90°C ,Max: 0.002	
2.13	Specific resistance (Resistivity) at 90°C, Min,(in Ohm-cm):35x10 ¹²	
2.14	Specific resistance (Resistivity) at 27°C, Min,(in Ohm-cm):1500x10 ¹²	
2.15	Oxidation stability : Neutralization value after oxidation for 164 hrs at 100°C, Max,mg KOH/gm: 0.4	
2.16	Oxidation stability : Total sludge after oxidation for 164 hrs at 100°C, Max.% by weight: 0.1	
2.17	Presence of oxidation inhibitor: The oil shall not contain antioxidant additives	
2.18	Water content (PPM), Max: 50	
2.19	Ageing characteristics after accelerated ageing (open breaker method with copper catalyst : Specific resistance (Resistivity) at 27°C, Min,Ohm-cm: 2.5x10 ¹²	
2.20	Ageing characteristics after accelerated ageing (open breaker method with copper catalyst : Specific resistance (Resistivity) at 90°C, Min ,Ohm-cm: 0.2x10 ¹²	
2.21	"Ageing characteristics after accelerated ageing (open breaker method with copper catalyst : Dielectric Dissipation vector (Tan delta at 90°C, Max " : 0.2	
2.22	"Ageing characteristics after accelerated ageing (open breaker method with copper catalyst : Total acidity, Max ",mg KOH/gm: 0.05	
2.23	"Ageing characteristics after accelerated ageing (open breaker method with copper catalyst : Total sludge value, Max "% by weight: 0.05	
3.00	Packing , Marking And Labelling	
3.1	The Transformer oil is required to be supplied in brand new steel barrel ISI marked, with 210liters capacity and with suitable coating from inside and outside as per clause 6-1 of IS 335 : 1993 with latest amendment, if any	
3.2	Marking should be as per IS 335 :1993	
3.3	The container may also be marked with the IS1 Certification Mark	


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