

**Laboratory** RTDC-Oil Lab, Power Grid Corporation of India Ltd., 400/230 kV Sub-Station, 21<sup>st</sup> km Hosur-Krishnagiri Highway, Shoolagiri Post, Hosur, Tamil Nadu

**Accreditation Standard** ISO/IEC 17025: 2005

**Discipline** Electrical Testing **Issue Date** 24.04.2015

**Certificate Number** T-3378 **Valid Until** 23.04.2017

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
<b>I</b>	<b>ELECTRICAL MATERIALS – LIQUID DIELECTRIC MATERIALS</b>			
<b>1.</b>	<b>Mineral Insulating Oil</b>	Breakdown Voltage / Dielectric Strength	IS 6792: 1992 (RA 2003) IEC-60156:1995	Upto 100 kV AC
		Specific Resistance / Resistivity	IS 6103:1971(RA 2001) IEC 60247:2004	10 <sup>9</sup> Ωcm to 10 <sup>16</sup> Ωcm
		Dielectric Dissipation Factor / Tan-Delta	IS 6262:1971 (RA 2001) IEC 60247:2004	Upto 1.0
		Dissolved Gas Analysis H <sub>2</sub> & Hydrocarbons CO CO <sub>2</sub> N <sub>2</sub> O <sub>2</sub> Water Content	IS 9434: 1992 (RA 2003) IEC-60567: 2011  IS 13567: 1992 (RA 2003) IEC-60814: 1997	Upto 50000 µl/l 1 µl/l to 50000 µl/l 25 µl/l to 50000 µl/l 0.1 % to 20 % 0.1 % to 10 % 1 mg/kg to 200000 mg/kg
		Total Acidity	IS 1448 (Part 1): 2002 IEC 62021-1: 2003	Upto 3 mg KOH/g
		Inter Facial Tension	IS 6104: 1971(RA 1977) ASTM D971-12	Upto 999.9 mN/m
		Flash Point	IS 1448 (Part 21): 2012 ASTM D-1993 ASTM D-6450	40 °C to 360 °C
<b>-X-X-X-X-X-X-X-X-X-X-X-</b>				