

Laboratory Central Laboratory - ITC Limited (Paper Boards & Speciality Papers Division) Unit: Bhadrachalam, Sarapaka Village, Bhadrachalam, Telangana

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-5924

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Validity 30.06.2017 to 29.06.2019

Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
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CHEMICAL TESTING

I.	WATER			
1.	Water / Bore Water / Process Water / Raw water	Color	IS 3025 (Part 4) 2120 B APHA 22 nd Edition Visual comparison method	1 to 500 Hazen Units
		pH @ 25°C	IS 3025 (Part 11) 4500 H+ - B APHA 22 nd Edition Electrometric method	2 to 13
		Electrical Conductivity	IS 3025 (Part 14) 2510 B APHA 22 nd Edition Laboratory Method	1 to 5,000 µS/cm
		Turbidity	IS: 3025 (Part 10) 2130-B APHA 22 nd Edition Nephelometric Method	0.1 to 100 NTU
		Total Dissolved Solids	IS 3025 (Part 16) 2540 C -APHA 22 nd Edition TDS dried at 105°C	5 to 5000 mg/L
		Total Suspended Solids	IS 3025 (Part 17) 2540 C APHA 22 nd Edition TSS dried at 105°C	1 to 2000 mg/L
		Chloride as Cl	IS 3025 (Part 32) 4500-Cl - B APHA 22 nd Edition Argentometric Method	1 to 1500 mg/L
		Sulfate as SO ₄	IS:3025 (Part 24) 4500-SO ₄ ²⁻ -E APHA 22 nd Edition Turbidimetric Method	1 to 1000 mg/L
		Total Hardness as CaCO ₃	IS 3025 (Part 21): 2009 2340 C APHA 22 nd Edition EDTA Titrimetric Method	2 to 1000 mg/L

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Program Director

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		Calcium Hardness as CaCO ₃	IS 3025 (Part 40) 3500-Ca-B APHA 22 nd Edition EDTA Titrimetric Method	1 to 1000 mg/L
		Magnesium Hardness as CaCO ₃	IS 3025 (Part 46) 3500-Mg- B APHA 22 nd Edition Calculation Method	1 to 600 mg/L
		P- Alkalinity as CaCO ₃	IS 3025 (Part 23)	1 to 500 mg/L
		M- Alkalinity as CaCO ₃	IS 3025 (Part 23)	5 to 5000 mg/L
			2320-B APHA 22 nd Edition Titration Method	
		Reactive Silica as SiO ₂	IS 3025 (Part 35) 4500- SiO ₂ APHA 22 nd Edition Heteropoly Blue Method	0.1 to 80 mg/L
2.	Drinking water / Potable water / Domestic Water	Color	IS 3025 (Part 4) 2120- B APHA 22 nd Edition Visual comparison method	1 to 100 Hazen Units
		pH @ 25°C	IS 3025 (Part 11) 4500 - H ⁺ - B APHA 22 nd Edition Electrometric method	4 to 12
		Electrical conductivity	IS 3025 (Part 14) 2510 B APHA 22 nd Edition Laboratory Method	5 to 5000 µS/cm
		Turbidity	IS: 3025 (Part 10) 2130-B APHA 22 nd Edition Nephelometric Method	0.1 to 50 NTU
		Total Dissolved Solids	IS 3025 (Part 16) 2540 C APHA 22 nd Edition TDS dried at 105°C	5 to 2500 mg/L

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		Chloride as Cl	IS 3025 (Part 32) 4500-Cl - B APHA 22 nd Edition Argentometric Method	1 to 1000 mg/L
		Sulfate as SO ₄	IS:3025 (Part 24) 4500-SO ₄ ²⁻ - E APHA 22 nd Edition Turbidimetric Method	1 to 100 mg/l
		Total Hardness as CaCO ₃	IS 3025 (Part 21) 2340 C APHA 22 nd Edition EDTA Titrimetric Method	2 to 1000 mg/L
		Calcium Hardness as CaCO ₃	IS 3025 (Part 40) 3500-Ca-B APHA 22 nd Edition EDTA Titrimetric Method	1 to 1000 mg/L
		Magnesium Hardness as CaCO ₃	IS 3025 (Part 46) 3500-Mg- B APHA 22 nd Edition Calculation Method	1 to 600 mg/L
		M- Alkalinity as CaCO ₃	IS 3025 (Part 23) 2320-B APHA 22 nd Edition Titration Method	5 to 100 mg/L
II.	POLLUTION & ENVIRONMENT			
1.	Liquid Effluents/ Waste Water/ ETP Water, STP Water	Color	IS 3025 (Part 4) 2120- B APHA 22 nd Edition Visual comparison method	400 to 800 Hazen Units
		pH @ 25°C	IS 3025 (Part 11) 4500 - H ⁺ - B APHA 22 nd Edition Electrometric method	2 to 13
		Total Dissolved Solids	IS 3025 (Part 16) 2540 C APHA 22 nd Edition TDS dried at 105°C	5 to 50000 mg/L

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		Total Suspended Solids	IS 3025 (Part 17) 2540 C APHA 22 nd Edition TSS_dried at 105 ^o C	5 to 10000 mg/L
		Chloride as Cl	IS 3025 (Part 32) 4500-Cl - B APHA 22 nd Edition Argentometric Method	10 to 5000 mg/L
		Electrical conductivity	IS 3025 (Part 14) 2510 B APHA 22 nd Edition Laboratory Method	1 to 10000 μS/cm
		Sulfate as SO ₄	IS:3025 (Part 24) 4500-SO ₄ ²⁻ - E APHA 22 nd Edition Turbidimetric Method	5 to 5000 mg/L
		Chemical Oxygen Demand (COD)	IS 3025 (Part 58) 5220-B- APHA 22 nd Edition Open Reflux Method	5 to 10000 mg/L
		BOD, 3 days @ 27 ^o C	IS 3025 (Part 44)	2 to 5000 mg/L
		Oil & grease	IS 3025 (Part 39) 5520 -D APHA 22 nd Edition Soxhlet Extraction Method	1 to 500 mg/L
III.	SOLID FUELS			
1.	Coal, Coke & Other Solid Fuel	Total Moisture	IS 1350 (Part 1)	5 to 60 %
		Moisture	IS 1350 (Part 1)	1 to 15 %
		Ash	IS 1350 (Part 1)	5 to 70 %
		Gross Calorific Value	IS 1350 (Part 2)	1500 to 6500 kcal/kg