

Laboratory ENVIPRO Laboratories, 2nd Floor, Sy. No. 63/4, Site No. 5, P&T  
Layout Road, Ashwath Nagar, Srigandhada Kaval, Sunkadakatte,  
Bangalore, Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6325

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Validity 27.09.2017 to 26.09.2019

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.	Surface Water, Ground Water, Industrial Water, Drinking Water, Irrigation Water, Water From Purifiers & Swimming Pool Water	pH	IS:3025(Part-11) Electrometric Method	2 to 12
		Colour	IS:3025(Part-04) Platinum Cobalt (Visual Comparison Method)	1 Hazen to 15 Hazen
		Electrical Conductivity	IS:3025(Part-14)	1 $\mu$ S/cm to 40000 $\mu$ S/cm
		Total Dissolved Solids	IS:3025(Part-16) (Gravimetric Method)	20 mg/l to 10000 mg/l
		Turbidity	IS:3025(Part-10) (Nephelometric Method)	0.1 NTU to 100 NTU
		Total Hardness as CaCO <sub>3</sub>	IS:3025(Part-21) (EDTA Method) APHA 2340 C (EDTA Titrimetric Method)	2 mg/l to 25000 mg/l
		Calcium as Ca <sup>2+</sup>	IS:3025 (Part-40) (EDTA Titrimetric Method) APHA 3500-Ca B (EDTA Titrimetric Method)	1 mg/l to 10000 mg/l
		Magnesium as Mg <sup>2+</sup>	APHA 3500-Mg B Calculation Method	1 mg/l to 10000 mg/l
		Chloride as Cl	IS:3025(Part-32) (Argentometric Method)	1 mg/l to 25000 mg/l
		Total Alkalinity as CaCO <sub>3</sub>	IS:3025(Part-23) (Indicator Method )	2 mg/l to 5000 mg/l
	Sulphate as SO <sub>4</sub>	IS:3025(Part-24) (Turbidity Method)	1 mg/l to 1000 mg/l	
	Fluoride as F	APHA 4500- F <sup>-</sup> D (SPADNS Method)	0.1 mg/l to 10 mg/l	

Amit Kumar  
Convenor

N. Venkateswaran  
Program Director

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		Nitrate Nitrogen as NO <sub>3</sub>	IS:3025(Part-34) (Chromotropic Acid Method)	0.05 mg/l to 50 mg/l
		Carbonate as CO <sub>3</sub>	IS:3025(Part-51) (Titrimetric Method)	0 to 5000 mg/l
		Bicarbonate HCO <sub>3</sub>	IS:3025(Part-51) (Titrimetric Method)	2 mg/l to 5000 mg/l
		Dissolved Oxygen	IS:3025(Part-38) (Winkler Method)	0 to 10 mg/l
		Potassium as K	APHA 3500-K B (Flame Photometric Method)	1 mg/l to 1000 mg/l
		Sodium as Na	APHA 3500-Na (Flame Emission Photometric Method)	1 mg/l to 1000 mg/l
		Residual Free Chlorine	IS:3025(Part-26) (Iodometric Method)	0.1 mg/l to 50 mg/l
		Oil & Grease	IS:3025(Part-39) (Partition Gravimetric Method)	1 mg/l to 100 mg/l
		Total Iron	IS:3025(Part-53) (Phenonthraline Method)	0.1 mg/l to 10 mg/l
<b>II.</b>	<b>POLLUTION &amp; ENVIRONMENT</b>			
<b>1.</b>	<b>Waste Water (Sewage/ Effluent)</b>	pH	IS:3025(Part-11) (Electrometric Method)	1 to 14
		Turbidity	IS:3025(Part-10) (Nephelometric Method)	0.1 NTU to 1000 NTU
		Residual Free Chlorine	IS:3025(Part-26) Iodometric Method	0.1 mg/l to 50 mg/l
		Total Suspended Solids	IS:3025(Part-17) (Gravimetric Method)	2 mg/l to 200000 mg/l

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		Oil & Grease	IS:3025(Part-39) (Gravimetric Method)	1 mg/l to 100 mg/l
		Total Dissolved Solids	IS:3025(Part-16) (Gravimetric Method)	20 mg/l to 10000 mg/l
		Chemical Oxygen Demand	IS:3025(Part-58)	4 mg/l to 10000 mg/l
		Biochemical Oxygen Demand (3 days) 27°C	IS:3025(Part-44)	1 mg/l to 15000 mg/l
		Chloride as Cl	IS:3025(Part-32) (Argentometric Method)	0.5 mg/l to 10000 mg/l
		Total Alkalinity as CaCO <sub>3</sub>	IS:3025(Part-23) (Indicator Method)	2 mg/l to 5000 mg/l
		Ammonical Nitrogen	IS:3025(Part-34) (Titrimetric Method)	1 mg/l to 500 mg/l
		Nitrate Nitrogen as NO <sub>3</sub>	IS:3025(Part-34) (Chromotropic Acid Method)	1 mg/l to 1000 mg/l
		Nitrite nitrogen as NO <sub>2</sub>	IS:3025(Part-34) (Spectrophotometric Method)	0.01 mg/l to 50 mg/l
		Electrical conductivity @ 25° C	IS:3025(Part-14) (Instrumental Method)	1 µS/cm to 100000 µS/cm
		Fluoride as F	APHA 4500- F- D (SPADNS Method)	0.1 mg/l to 10 mg/l
		Calcium as Ca <sup>2+</sup>	IS:3025(Part-40) (EDTA Titrimetric Method) APHA 3500-Ca B (EDTA Titrimetric Method)	1 mg/l to 10000 mg/l
		Magnesium as Mg <sup>2+</sup>	APHA 3500-Mg B Calculation Method	1 mg/l to 10000 mg/l
		Total Hardness as CaCO <sub>3</sub>	IS:3025(Part-21) (EDTA Method) APHA 2340-C (EDTA Titrimetric Method)	2 mg/l to 25000 mg/l

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		Potassium as K	APHA 3500-K B. (Flame Photometric Method)	1mg/l to 1000 mg/l
		Sodium as Na	APHA 3500-Na B. (Flame Emission Photometric Method)	1 mg/l to 1000 mg/l
		Sulphate as SO <sub>4</sub>	IS:3025(Part-24) (Turbidity Method)	1 mg/l to 1000 mg/l
		Total Solids	IS:3025(Part-15) (Gravimetric Method)	20 mg/l to 5000 mg/l
		Dissolved Oxygen	IS:3025(Part-38) (Winkler Method)	0 to 7 mg/l
<b>2.</b>	<b>Soil</b>	pH @ 25° C	IS:2720(Part-26) (Electrometric Method)	1 to 14
		Electrical Conductivity	IS:14767 (Instrumental method)	1 µS/cm to 40000 µS/cm
		Sodium	EPL/TP/SQ/03, Issue No. 02 Dt. 01.04.2017	10 mg/kg to 5000 mg/kg
		Potassium	EPL/TP/SQ/04, Issue No. 02 Dt. 01.04.2017	10 mg/kg to 5000 mg/kg
		Total Soluble Solids	IS:2720(Part-21) (Gravimetric Method)	0 to 10 % w/w
		Organic Matter	IS:2720(Part-22) Section I	0.1 % w/w to 10 % w/w
		Water content	IS:2720(Part-2) Section I (Oven Drying Method)	0.1 % w/w to 10 % w/w
<b>III.</b>	<b>ATMOSPHERIC POLLUTION</b>			
<b>1.</b>	<b>Ambient Air</b>	Particulate Matter (PM <sub>10</sub> )	IS-5182(Part-23) (Gravimetric Method)	5 µg/m <sup>3</sup> to 5000 µg/m <sup>3</sup>
		Particulate Matter (PM <sub>2.5</sub> )	EPL/TP/AQ/02 , Issue No. 01 Dt. 01.04.2017	5 µg/m <sup>3</sup> to 1000 µg/m <sup>3</sup>
		Sulphur Dioxide	IS-5182(Part-2)	1 µg/m <sup>3</sup> to 100 µg/m <sup>3</sup>
		Oxides of Nitrogen	IS-5182(Part-6)	1 µg/m <sup>3</sup> to 100 µg/m <sup>3</sup>

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		Ammonia	EPL/TP/AQ/05, Issue No. 01 Dt. 01.04.2017	1 µg/m <sup>3</sup> to 1000 µg/m <sup>3</sup>
2.	Stack Emission	Particulate Matter	IS:11255 (Part-1) (Gravimetric Method)	5 mg/Nm <sup>3</sup> to 1000 mg/Nm <sup>3</sup>
		Sulphur Dioxide	IS:11255 (Part-2)	3 mg/Nm <sup>3</sup> to 500 mg/Nm <sup>3</sup>
3.	Ambient Noise Level	Equivalent Noise level L <sub>eq</sub> , L <sub>min</sub> , & L <sub>Max</sub>	EPL/NL/TP/01, Issue No. 01 Dt. 01.04.2017	30 dB(A) to 130 dB(A)

**NOTE:** The Laboratory has demonstrated competence for the stated scope for **WATER**. This however **does not fully cover** the specification requirements of **BIS for the Packaged Drinking Water as per IS:14543 and the Packaged Natural Mineral Water IS:13428.**