

**Laboratory** Bhavan's Research Centre (Microbiology), 5th Floor, Palanji Sadan-SFC Building, Bhavan's College Campus, Andheri West, Mumbai, Maharashtra

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

**Certificate Number** TC-6421 (in lieu of T-1976)

Page 1 of 5

**Validity** 29.10.2017 to 28.10.2019

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
-----	----------------------------	-------------------------	---	--

**BIOLOGICAL TESTING**

<b>I.</b>	<b>WATER</b>			
<b>1.</b>	<b>Drinking Water</b>	Coliforms	IS: 1622: 1981 RA 2014	Present/ Absent/ 100ml
		E coli	IS: 1622: 1981 RA 2014	Present/ Absent/ 100ml
<b>2.</b>	<b>Packaged Drinking Water/ Packaged Natural Mineral Water</b>	Coliforms	IS: 15185:2016	Absent/ Present/ 250 ml
		E coli	IS: 15185:2016	Absent/ Present/ 250 ml
		Fecal Streptococci	IS: 15186:2002 RA 2014	Absent/ Present/ 250 ml
		Total Viable Colony Count @ 22° C for 72hrs	IS 5402: 2012	Min 1cfu / ml
		Total Viable Colony Count @ 37° C for 24hrs	IS 5402: 2012	Min 1cfu / ml
		Pseudomonas Aeruginosa	IS: 13428: 2005 RA 2014: Annex D	Absent/ Present/ 250 ml
		Salmonella spp	IS: 15187: 2016	Absent/ Present/ 250 ml
		Shigella spp	IS: 5887 (Part 7): 1999 RA 2013	Absent/ Present/ 250 ml
		S Aureus	IS:5887(Part 2) :1976 RA 2013	Absent/ Present/ 250 ml
		Sulphite Reducing Anaerobes	IS: 13428: 2005 RA 2014: Annex C	Absent/ Present/ 50 ml
		Vibrio Parahaemolyticus	IS 5887 (Part 5) 1976 RA 2013	Absent/ Present/ 250 ml
		Yeast and Mold Count	IS 5403: 1999 RA 2013	Absent/ Present/ 250 ml
<b>3.</b>	<b>Water for Processed Food Industry</b>	Coliforms	IS: 1622: 1981 RA 2014	Present/ Absent/ 100ml
		Standard Plate Count	IS: 1622: 1981 RA 2014	Min 1cfu / ml
		Proteolytic Organisms	IS: 4251: 1967 RA 2015	Min 1cfu / ml
		Lipolytic Organisms	IS: 4251: 1967 RA 2015	Min 1cfu / ml

**Laboratory** Bhavan's Research Centre (Microbiology), 5th Floor, Palanji Sadan-SFC Building, Bhavan's College Campus, Andheri West, Mumbai, Maharashtra

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

**Certificate Number** TC-6421 (in lieu of T-1976)

Page 2 of 5

**Validity** 29.10.2017 to 28.10.2019

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
<b>II.</b>	<b>COSMETICS AND ESSENTIAL OILS</b>			
<b>1.</b>	<b>Cosmetics and cosmetic raw materials</b>	Total Microbial Count	IS: 14648:2011	Min 10 cfu/ g/ml
		Gram Negative Enteric Pathogens	IS: 14648:2011	Present/ Absent/g /ml
		Staphylococcus Aureus	IS: 14648:2011	Present/ Absent/g/ml
		Pseudomonas Aeruginosa	IS: 14648:2011	Present/ Absent/g/ml
		Candida Albicans	IS: 14648:2011	Present/ Absent/g/ml
		Effectiveness of Antimicrobial Preservative / Challenge Test	AOAC Official Method of Analysis 998.10	Min 10 cfu/ g/ml
		Standard Test Method for Assessment of Antimicrobial Activity for water Miscible Compounds using Time- Kill Procedure	ASTM: E2783- 11	Log Reduction: -0.5 to 5.0
	Quantitative Suspension Test for the Evaluation of Basic Bactericidal Activity of Chemical Disinfectants and Antiseptics	BS EN 1040:2005: E	Log Reduction: -0.5 to 5.0	
<b>III.</b>	<b>ENVIRONMENT AND POLLUTION</b>			
<b>1.</b>	<b>Microbiological monitoring in air/surface area</b>	Microbial Count in Surface by Swab Test	In House method - FS 004 BRC In House method - CS 002 BRC	Min 10 cfu / 25 cm <sup>2</sup>
		Microbial Count in air by Settle Plate Method	Sedimentation method In House method - FA 002 BRC In House method - CA 001 BRC	Min 1 cfu/ 90 mm diameter plate/ 30 mins

**Laboratory** Bhavan's Research Centre (Microbiology), 5th Floor, Palanji Sadan-SFC Building, Bhavan's College Campus, Andheri West, Mumbai, Maharashtra

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

**Certificate Number** TC-6421 (in lieu of T-1976)

Page 3 of 5

**Validity** 29.10.2017 to 28.10.2019

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
IV.	<b>BIOCIDES</b>			
1.	<b>Antiseptics / Sanitizers</b>	Quantitative Suspension test for the Evaluation of Basic Bactericidal Activity of Chemical Disinfectants and Antiseptics	BS EN 1040:2005: E	Log Reduction: -0.5 to 5.0
		Quantitative Suspension test for the Evaluation of Bactericidal Activity of Chemical Disinfectants and Antiseptics Used in food, Industrial, Domestic and Institutional Areas	EN 1276: 2009 E	Log Reduction: -0.5 to 5.0
		Quantitative Non Porous Surface Test for the Evaluation of Bactericidal and / or Fungicidal Activity of Chemical Disinfectants and Antiseptics Used in Food, Industrial, Domestic and Institutional Areas	BS EN 13697: 2015	Log Reduction for bacterial cultures: -0.5 to 5.0 Log Reduction for fungal cultures: -0.3 to 4.0
		Standard Test Method for Assessment of Antimicrobial Activity for water Miscible Compounds using Time- Kill Procedure	ASTM: E2783- 11	Log Reduction: -0.5 to 5.0
		Quantitative Suspension test for the Evaluation of Sporicidal Activity of Chemical Disinfectants and Antiseptics Used in Food, Industrial, Domestic and Institutional Areas	EN 13704: 2002 E	Log Reduction: -0.5 to 3.0

**Laboratory** Bhavan's Research Centre (Microbiology), 5th Floor, Palanji Sadan-SFC Building, Bhavan's College Campus, Andheri West, Mumbai, Maharashtra

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

**Certificate Number** TC-6421 (in lieu of T-1976)

Page 4 of 5

**Validity** 29.10.2017 to 28.10.2019

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
		(Bacillus Subtilis ATCC 6633)		
		Turbidometric or Tube assay Method	IP 2014, Volume I, chapter No. 2.2 Biological methods	Min 0.0005 %
		Disc Diffusion Susceptibility test of Bauer Kirby	IP 2014, Volume I, chapter No. 2.2 Biological methods	Min 6 mm
		Cup plate Method	IP 2014, Volume I, chapter No. 2.2 Biological methods	Min 8 mm
		Phenol Coefficient Method- Testing Disinfectants Against Staphylococcus Aureus ATCC 6538	AOAC 2011, Official Method of Analysis 955.12	1 to 10
		Phenol Coefficient Method- Testing Disinfectants Against Pseudomonas Aeruginosa ATCC 15442	AOAC 2011, Official Method of Analysis 955.13	1 to 10
<b>V.</b>	<b>BIOLOGICAL TESTS ON OTHER MISCELLANEOUS TEST ITEMS</b>			
<b>1.</b>	<b>Water Purifier</b>	Evaluation of Drinking Water Treatment Technology for Microbiological Reduction Performance- Viruses- MS 2 Bacteriophage	National Sanitary Foundation (NSF) P248: 2008	Min 1 cfu/ 1 ml
		Evaluation of Drinking Water Treatment Technology for Microbiological Reduction Performance- Microspheres	National Sanitary Foundation (NSF)/ ANSI 53: 2011a / P231: 2003	Min 1 microsphere / 250 ml

**Laboratory** Bhavan's Research Centre (Microbiology), 5th Floor, Palanji Sadan-SFC Building, Bhavan's College Campus, Andheri West, Mumbai, Maharashtra

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

**Certificate Number** TC-6421 (in lieu of T-1976)

Page 5 of 5

**Validity** 29.10.2017 to 28.10.2019

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
		Evaluation of Drinking Water Treatment Technology for Microbiological Reduction Performance- Bacteria- Raoultella (Klebsiella) terrigena	National Sanitary Foundation (NSF) P231: 2003/ P248: 2008	Min 1 cfu/ 100 ml

**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.**