

Laboratory	Nawal Analytical Laboratories, Plot No. 100, New SIDCO Industrial Estate, Srinagar, Hosur, Tamil Nadu		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Biological Testing	Issue Date	24.05.2014
Certificate Number	T-1615	Valid Until	04.04.2016
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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
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I. FOOD AND AGRICULTURAL PRODUCTS

1. Fruits and Vegetables (Raw and Processed)	Total Aerobic Microbial Count	IS 5402: 2012	≥ 10 cfu / gm
	Coliform	IS 5401 (Part-1): 2002	≥ 10 cfu / gm
	<i>Escherichia coli</i>	IS 5887 (Part-1):1976	Present or Absent /gm
	<i>Staphylococcus aureus</i>	IS 5887 (Part-2): 1976, RA 2005	Present or Absent/25 gm
	<i>Faecal streptococci</i>	IS 5887 (Part-2): 1976, RA 2005	Present or Absent /25 gm
	<i>Salmonella</i>	IS 5887 (Part-3):1999	Present or Absent /25 gm
	<i>Shigella</i>	IS 5887 (Part-7): 1999, RA 2005	Present or Absent /25 gm
	<i>Bacillus cereus</i>	IS 5887 (Part-6):2012	≥10 cfu / gm
	Yeast and mould	APHA 4 th Edition 2001, Chapter-34 (Cl-34.7)	Present or Absent /25 gm
2. Milk and Dairy Products (Raw and Processed)	Total Aerobic Microbial Count	IS 5403: 1999	≥10 cfu / gm
	Coliform	IS 5402: 2012	≥10 cfu / gm or ≥1 cfu /ml
	<i>Escherichia coli</i>	IS 5401 (Part-1): 2002	≥10 cfu / gm or ≥1 cfu /ml
	<i>Escherichia coli</i>	IS 5887 (Part-1):1976	Present or Absent/gm or ml

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		<i>Staphylococcus aureus</i>	IS 5887 (Part-2): 1976, RA 2005	Present or Absent /25 gm or ml
		<i>Faecal streptococci</i>	IS 5887 (Part-2): 1976, RA 2005	Present or Absent /25 gm or ml
		<i>Salmonella</i>	IS 5887 (Part-3): 1999	Present or Absent/25 gm or ml
		<i>Shigella</i>	IS 5887 (Part-7): 1999, RA 2005	Present or Absent/25 gm or ml
		<i>Bacillus cereus</i>	IS 5887 (Part-6):2012	≥10 cfu / gm or ≥1 cfu /ml
		<i>Clostridium perfringens</i>	APHA 4 th Edition 2001, Chapter-34 (CI-34.7)	Present or Absent/ 25 gm / ml
		Thermophillic bacteria	SMEDP, APHA 17 th Edition 2001, Chapter- 8 (CI-8.040)	≥10 cfu / gm or ≥1 cfu /ml
		Thermoduric bacteria	SMEDP, APHA 17 th Edition 2001, Chapter- 8 (CI-8.030)	≥10 cfu / gm or ≥1 cfu /ml
		Lactic acid bacteria	SMEDP, APHA 17 th Edition 2001, Chapter- 8 (CI-8.071)	≥10 cfu / gm or ≥1 cfu /ml
		Yeast and mould	IS 5403: 1999	≥10 cfu / gm or ≥1 cfu /ml

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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
3.	Meat & Meat Products (Raw and Processed)	Total Aerobic Microbial Count	IS 5402: 2012	≥10 cfu / gm
		Coliform	IS 5401 (Part-1): 2002	≥10 cfu / gm
		<i>Escherichia coli</i>	IS 5887 (Part-1): 1976	Present or Absent / gm
		<i>Staphylococcus aureus</i>	IS 5887 (Part-2): 1976, RA 2005	Present or Absent /25 gm
		<i>Faecal streptococci</i>	IS 5887 (Part-2): 1976, RA 2005	Present or Absent /25 gm
		<i>Salmonella</i>	IS 5887 (Part-3): 1999	Present or Absent /25 gm
		<i>Shigella</i>	IS 5887 (Part-7): 1999, RA 2005	Present or Absent /25 gm
		<i>Bacillus cereus</i>	IS 5887 (Part-6): 2012	≥10 cfu / gm
		<i>Clostridium perfringens</i>	APHA 4 th Edition 2001, Chapter-34 (CI-34.7)	Present or Absent /25 gm
4.	Fish and Marine Products (Raw and Processed)	Yeast and mould	IS 5403: 1999	≥10 cfu / gm
		Total Aerobic Microbial Count	IS 5402: 2012	≥10 cfu / gm
		Coliform	IS 5401 (Part-1): 2002	≥10 cfu / gm
		<i>Escherichia coli</i>	IS 5887 (Part-1): 1976	Present or Absent / gm
		<i>Staphylococcus aureus</i>	IS 5887 (Part-2): 1976, RA 2005	Present or Absent /25 gm
		<i>Faecal streptococci</i>	IS 5887 (Part-2): 1976, RA 2005	Present or Absent /25 gm

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		<i>Salmonella</i>	IS 5887 (Part-3): 1999	Present or Absent /25 gm
		<i>Shigella</i>	IS 5887 (Part-7): 1999, RA 2005	Present or Absent /25 gm
		<i>Bacillus cereus</i>	IS 5887 (Part-6): 2012	≥10 cfu / gm
		<i>Clostridium perfringens</i>	APHA 4 th Edition 2001, Chapter-34(CI-34.7)	Present or Absent /25 gm
		Yeast and mould	IS 5403: 1999	≥10 cfu / gm
		<i>Vibrio cholerae</i>	IS 5887 (Part-5): 1976, RA 2005	Present or Absent /25 gm
		<i>Vibrio parahaemolyticus</i>	IS 5887 (Part-5): 1976, RA 2005	Present or Absent /25 gm
5.	Canned Foods	Total Aerobic Microbial Count	IS 5402: 2012	≥10 cfu / gm
		Coliform	IS 5401 (Part-1): 2002	≥10 cfu / gm
		<i>Escherichia coli</i>	IS 5887 (Part-1): 1976	Present or Absent / gm
		<i>Staphylococcus aureus</i>	IS 5887 (Part-2): 1976, RA 2005	Present or Absent /25 gm
		<i>Faecal streptococci</i>	IS 5887 (Part-2): 1976, RA 2005	Present or Absent /25 gm
		<i>Salmonella</i>	IS 5887 (Part-3): 1999	Present or Absent /25 gm
		<i>Shigella</i>	IS 5887 (Part-7): 1999, RA 2005	Present or Absent /25 gm
		<i>Bacillus cereus</i>	IS 5887 (Part-6): 2012	≥10 cfu / gm

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		<i>Clostridium perfringens</i>	APHA 4 th Edition 2001, Chapter-34 (CI-34.7)	Present or Absent /25 gm
		Yeast and mould	IS 5403: 1999	≥10 cfu / gm
6.	Fruit Juices	Total Aerobic Microbial Count	IS 5402: 2012	≥1 cfu / ml
		Coliform	IS 5401 (Part-1): 2002	≥1 cfu / ml
		<i>Escherichia coli</i>	IS 5887 (Part-1): 1976	Present or Absent / ml
		<i>Staphylococcus aureus</i>	IS 5887 (Part-2): 1976, RA 2005	Present or Absent / 25 ml
		<i>Faecal streptococci</i>	IS 5887 (Part-2): 1976, RA 2005	Present or Absent / 25 ml
		<i>Salmonella</i>	IS 5887 (Part-3): 1999	Present or Absent / 25 ml
		<i>Shigella</i>	IS 5887 (Part-7): 1999, RA 2005	Present or Absent / 25 ml
		<i>Bacillus cereus</i>	IS 5887 (Part-6): 2012	≥1 cfu / ml
		<i>Clostridium perfringens</i>	APHA 4 th Edition 2001, Chapter-34(CI-34.7)	Present or Absent / 25 ml
		Yeast and Mould	IS 5403: 1999	≥1 cfu / ml
7.	Nut & Nut Products	Yeast and Mould	IS 5403: 1999	≥ 10 cfu/gm
		Total aerobic Microbial Count	IS 5402: 2012	≥ 10 cfu/gm

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		Coliform	IS 5401 (Part-1): 2002	≥ 10 cfu/gm
		<i>Salmonella</i>	IS 5887 (Part-3): 1999	Present or Absent/ 25 gm
		<i>Escherichia coli</i>	IS 5887 (Part-1): 1976	Present or Absent / gm
8.	Cereals	Total Aerobic Microbial Count	IS 5402: 2012	≥ 10 cfu /gm
		Yeast and Mould	IS 5403: 1999	≥ 10 cfu/gm
		<i>Staphylococcus aureus</i>	IS 5887 (Part-2): 1976	Present or Absent /25 gm
		<i>Clostridium perfringens</i>	APHA 4 th Edition 2001, Chapter-34 (CI-34.7)	Present or Absent/25 gm
		Coliform	IS 5401 (Part-1): 2002	≥ 10 cfu/gm
		<i>Salmonella</i>	IS 5887 (Part-3): 1999	Present or Absent/25 gm
		<i>Escherichia coli</i>	IS 5887 (Part-1): 1976	Present or Absent /gm
9.	Bakery products	Total Aerobic Microbial Count	IS 5402: 2012	≥ 10 cfu/gm
		Yeast and Mould	IS 5403: 1999	≥ 10 cfu/gm
		<i>Staphylococcus aureus</i>	IS 5887 (Part-2): 1976	Present or Absent /25 gm
		<i>Clostridium perfringens</i>	APHA 4 th Edition 2001, Chapter-34(CI-34.7)	Present or Absent /25 gm

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		Coliform	IS 5401 (Part-1): 2002	≥ 10 cfu/gm
		<i>Salmonella</i>	IS 5887 (Part-3): 1999	Present or Absent /25 gm
		<i>Escherichia coli</i>	IS 5887 (Part-1): 1976	Present or Absent / gm
10.	Spice & Spice Products	<i>Salmonella</i>	IS 5887 (Part-3): 1999	Present or Absent /25 gm
		<i>Total Aerobic Microbial Count</i>	IS 5402: 2012	≥ 10 cfu/gm
		<i>Staphylococcus aureus</i>	IS 5887 (Part-2): 1976	Present or Absent /25 gm
		<i>Yeast & mould count</i>	IS 5403: 1999	≥ 10 cfu/gm
11.	Coffee	Yeast and Mould	IS 5403: 1999	≥ 10 cfu/gm
		Total Aerobic Microbial Count	IS 5402: 2012	≥ 10 cfu/gm
		Coliform	IS 5401 (Part-1): 2002	≥ 10 cfu/gm
		<i>Salmonella</i>	IS 5887 (Part-3): 1999	Present or Absent /25gm
		<i>Escherichia coli</i>	IS 5887 (Part-1): 1976	Present or Absent / gm
12.	Tea	Yeast and Mould	IS 5403: 1999	≥ 10 cfu/gm
		Total aerobic Microbial Count	IS 5402: 2012	≥ 10 cfu/gm
		Coliform	IS 5401 (Part-1): 2002	≥ 10 cfu/gm

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		<i>Salmonella</i>	IS 5887 (Part-3): 1999	Present or Absent / 25gm
		<i>Escherichia coli</i>	IS 5887 (Part-1): 1976	Present or Absent / gm
13.	Ready to eat foods	<i>Salmonella</i>	IS 5887 (Part-3): 1999	Present or Absent / 25gm
		<i>Escherichia coli</i>	IS 5887 (Part-1): 1976	Present or Absent / gm
		<i>Staphylococcus aureus</i>	IS 5887 (Part-2): 1976	Present or Absent / 25gm
		<i>Bacillus cereus</i>	IS 5887 (Part-6): 2012	≥ 10 cfu/gm
		Total Aerobic Microbial Count	IS 5402: 2012	≥ 10 cfu/gm

II. WATER

1.	Packaged Drinking Water, Packaged Natural mineral Water & Drinking Water	Total Aerobic Microbial Count	IS 5402: 2012	≥1 cfu / ml
		Total Aerobic Microbial Count	IS 1622: 1981, RA 1987	2 to 1600 MPN/100 ml
		Coliform	IS 5401 (Part-1): 2002	≥1 cfu / ml
		Coliform	IS 15185: 2002	Present or Absent/250 ml
		Coliform	IS 1622: 1981, RA 1987	2 to 1600 MPN / 100 ml
		<i>Escherichia coli</i>	IS 15185: 2002	Present or Absent/250 ml
		<i>Escherichia coli</i>	IS 5887(Part-1): 1976	Present or Absent/250 ml

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	Packaged Drinking Water, Packaged Natural mineral Water & Drinking Water	<i>Escherichia coli</i>	IS 1622: 1981, RA 1987	2 to 1600 MPN / 100 ml
		<i>Faecal streptococci</i>	IS 5887 (Part-2): 1976, RA 2005	Present or Absent/250 ml
		<i>Faecal streptococci</i>	IS 15186: 2002	Present or Absent/250 ml
		<i>Staphylococcus aureus</i>	IS 5887 (Part-2): 1976, RA 2005	Present or Absent/250 ml
		<i>Salmonella</i>	IS 5887(Part-3): 1999	Present or Absent/250 ml
		<i>Salmonella</i>	IS 15187: 2002	Present or Absent/250 ml
		<i>Shigella</i>	IS 5887 (Part-7): 1999, RA 2005	Present or Absent/250 ml
		<i>Pseudomonas aeruginosa</i>	IS 13428: 2005 (Annex-D)	Present or Absent/250 ml
		Sulphite reducing anaerobes	IS 13428: 2005 (Annex-C)	Present or Absent /50 ml
		<i>Vibrio cholerae</i>	IS 5887 (Part-5): 1976, RA 2005	Present or Absent/250 ml
		<i>Vibrio parahaemolyticus</i>	IS 5887 (Part-5): 1976, RA 2005	Present or Absent/250 ml
		Yeast and Mould	IS 5403: 1999	≥1 cfu / ml or present or absent/250 ml
		Faecal coliform	IS 1622: 1981, RA 1987	2 to 1600 MPN / 100 ml

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