

<b>Laboratory</b>	<b>Chennai Mettex Lab Private Limited, Jothi Complex, No. 83, M.K.N. Road, Guindy, Chennai</b>		
<b>Accreditation Standard</b>	<b>ISO/IEC 17025: 2005</b>		
<b>Discipline</b>	<b>Biological Testing</b>	<b>Issue Date</b>	<b>16.06.2013</b>
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<b>S.No.</b>	<b>Product / Material of Test</b>	<b>Specific Test Performed</b>	<b>Test Method Specification against which tests are performed</b>	<b>Range of Testing / Limits of Detection</b>
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#### **I. FOOD & AGRICULTRAL PRODUCTS**

<b>1. Bakery &amp; Confectionery Products</b>	Total plate count/Aerobic Microbial Count / Total Bacterial Count	IS 5402:2002 R.2007 / ISO 4833 : 2003 USFDA (BAM)-Chapter-3(2001)	≤10 cfu/g
	Coliform count	IS 5401Part 1-2012/ ISO 4832:1991	≤10 cfu/g
	a.Enumeration Method	USFDA (BAM)-Chapter-4 (2002)	< 0.3 MPN/g
	b.MPN method	IS 5401Part 2-2002 R.2007/ ISO 4831:1991 USFDA (BAM)-Chapter-4 (2002)	< 3 MPN/g
	E. coli	IS 5887 Part 1-1976(Reaff 2009) USFDA (BAM)-Chapter-4 (2002)	≤10 cfu/g
	a. Enumeration Method		
	b. MPN method	IS 5887Part 1-1976(Reaff 2009) USFDA (BAM)-Chapter-4 (2002)	< 0.3 MPN/g < 3 MPN/g
	S. aureus	IS 5887Part 2-1976(Reaff 2009) USFDA (BAM)-Chapter-12 (2001)	≤10 cfu/g
	a. Enumeration Method		
	b. MPN method	USFDA (BAM)-Chapter-12 (2001)	< 3 MPN/g
Salmonella spp.	IS 5887Part 3-1999(Reaff 2009) ISO 6579:2002 USFDA (BAM)-Chapter-5(2006)	Present/Absent/25g	
Shigella spp.	IS 5887Part 7-1999(Reaff 2009) USFDA (BAM)-Chapter-6 (2001)	Present/Absent/25g	
Listeria monocytogenes	USFDA (BAM)-Chapter-10 (2001)	Present/Absent/25g	

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	<b>Bakery &amp; Confectionery Products</b>	Pseudomonas aeruginosa	IS 14843 :2000	Present/Absent/25g
		Yeast and Mould	IS 5403:1999(Reaff 2009) USFDA (BAM)-Chapter-18 (2009)	≤10 cfu/g
		Enterobacteriaceae	IS/ISO 7402: 1993 (Reaff. 2007) APHA 4th edn. 2001, Chapter 8	≤10 cfu/g
		Bacillus cereus a.Enumeration method	IS 5887 Pt.6/1999 (Reaff. 2007) / ISO 7932 -1993 USFDA(BAM) 8th edn-Chapter 14	≤10 cfu/g
		b.MPN Technique	USFDA (BAM) 8th edn. Chapter 14 APHA 4th edn. 2001, Chapter 32	≤10 cfu/g
		Clostridium perfringens	IS 5887 (Pt. 4)/1999 –Reaff.2005 USFDA (BAM) 8th edn. Chapter 16, 2001	≤10 cfu/g
<b>2.</b>	<b>Carbonated Beverages</b>	Total plate count/Aerobic Microbial Count / Total Bacterial Count	IS 5402:2002 R.2007 / ISO 4833 : 2003 USFDA (BAM)-Chapter-3(2001)	≤10 cfu/g
		Coliform count a.Enumeration Method	IS 5401Part 1-2012/ ISO 4832:1991 USFDA (BAM)-Chapter-4 (2002)	≤10 cfu/g
		b.MPN method	IS 5401Part 2-2002/ ISO 4831:1991 USFDA (BAM)-Chapter-4 (2002)	< 0.3 MPN/g < 3 MPN/g
		E. coli a. Enumeration Method	IS 5887 Part 1-1976(Reaff 2009) USFDA (BAM)-Chapter-4 (2002)	≤10 cfu/g

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	<b>Carbonated Beverages</b>	b. MPN method	IS 5887Part 1-1976(Reaff 2009) USFDA (BAM)-Chapter-4 (2002)	< 0.3 MPN/g < 3 MPN/g
		Salmonella spp.	IS 5887Part 3-1999(Reaff 2009) ISO 6579:2002 USFDA (BAM)-Chapter-5(2006)	Present/Absent/25g
		Yeast and Mould	IS 5403:1999(Reaff 2009) USFDA (BAM)-Chapter-18 (2001)	≤10 cfu/g & above
		Enterobacteriaceae	APHA 4th edn. 2001, Chapter 8	≤10 cfu/g
		Vibrio cholerae	APHA 4th edn Chapter -40 USFDA(BAM) Chapter - 9 IS 5887 (part 5) 1976 (Reaff.2009)	Present/Absent/25g
		Vibrio parahaemolyticus	APHA 4th edn chapter 40 USFDA(BAM) Chapter - 9 IS 5887 (part 5) 1976 (Reaff.2009)	Present/Absent/25g
<b>3.</b>	<b>Ready to eat foods (Including Raw / Processed/ Semi – processed /Canned/ Thermally processed)</b>	Total plate count/ Aerobic Microbial Count / Total Bacterial Count	IS 5402:2002 R.2007/ ISO 4833 : 2003 USFDA (BAM)-Chapter-3(2001)	≤10 cfu/g & Above
		Coliform count a.Enumeration Method	IS 5401Part 1-2012/ ISO 4832:1991 USFDA (BAM)-Chapter-4 (2002)	≤10 cfu/g & Above
		b.MPN method	IS 5401Part 2-2002/ ISO 4831:1991 USFDA (BAM)-Chapter-4 (2002)	< 0.3 MPN/g < 3 MPN/g

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	<b>Ready to eat foods (Including Raw / Processed/ Semi – processed /Canned/ Thermally processed)</b>	E. coli	IS 5887 Part 1-1976(Reaff 2009) USFDA (BAM)-Chapter-4 (2002)	≤10 cfu/g & Above
		a. Enumeration Method		
		b. MPN method	IS 5887Part 1-1976(Reaff 2009) USFDA (BAM)-Chapter-4 (2002)	< 0.3 MPN/g < 3 MPN/g
		Salmonella spp.	IS 5887Part 3-1999(Reaff 2009) ISO 6579:2002 USFDA (BAM)-Chapter-5(2006)	Present/Absent/25g
		Yeast and Mould	IS 5403:1999(Reaff 2009) USFDA (BAM)-Chapter-18 (2001)	≤10 cfu/gm &Above
		Enterobacteriaceae	APHA 4th edn. 2001, Chapter 8	≤10 cfu/g & Above
		Vibrio cholerae	APHA 4th edn chapter - 40 IS 5887 (Part 5) 1976 (Reaff.2009)	Present/Absent/25g
		Vibrio parahaemolyticus	APHA 4th edn IS 5887 (Part 5) 1976 (Reaff.2005)	Present/Absent/25g
		Staphylococcus aureus	IS 5887 (Part 2) 1976 (Reaff.2005)	≤10 cfu/gm &Above
		a.Colony count technique	IS 5887 (Part 8/Sec 1)2002 ISO 6888-1/1999 USFDA (BAM) 8th edition Ch 12, APHA 4th edition 2001, Ch-39	≤10 cfu/gm &Above

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<b>S.No.</b>	<b>Product / Material of Test</b>	<b>Specific Test Performed</b>	<b>Test Method Specification against which tests are performed</b>	<b>Range of Testing / Limits of Detection</b>
	<b>Ready to eat foods (Including Raw / Processed/ Semi – processed /Canned/ Thermally processed)</b>	b.MPN technique	USFDA (BAM) 8th edition Ch 12, APHA 4th edition 2001, Ch-39	3MPN /g
		c.Isolation technique	IS 5887 (Part 2)/1976 (Reaff. 2005)	Present / Absent / 25g
		Shigella	IS 5887Part 7-1999(Reaff 2009) ISO 6579:2002 USFDA (BAM)-Chapter-6(2006) APHA 4th edn.2001 Chapter – 38	Present/Absent/25g
		Listeria monocytogens	IS 14988 (part 1) 2001 / ISO 11290-1/1996 USFDA (BAM)-Chapter-10 (2006) APHA 4th edn.2001Chapter – 36	Present/Absent/25g
		Bacillus cereus	IS 5887Part 6 1999 (Reaff 2005) ISO 7932:1993 USFDA (BAM)-Chapter-14 (2006)	≤10 cfu/g
		a.Colony count technique	APHA 4th edn.2001 Ch 32 USFDA (BAM)-Chapter-14 (2006)	3 MPN/g
		b.MPN technique	IS 5887 (Pt. 4)/1999 –Reaff.2009 USFDA (BAM) 8th edn. Chapter 16, 2001 APHA 4th edn. 2001, Chapter 34.	≤10 cfu/gm & Above Present/Absent/25g
		Clostridium perfringens	APHA 4th edn. 2001, Chapter 25	≤10 spores/g & Above
	Thermophilic flat sour spore formers			

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		Faecal streptococci	IS 5887 (Pt. 4)/1999 –Reaff.2005 APHA 4th edn. 2001, Chapter 9	≤10 cfu/gm & Above ≤10CFU/g & Above
<b>4.</b>	<b>Dairy &amp; Dairy Products (Raw &amp; Processed)</b>	Total Plate Count	IS 5402:2002 R.2007/ ISO 4833:1991 USFDA(BAM)-Chapter-3. 2001	≤10 cfu/g
		Coliform count: a.Enumeration Method	IS 5401Part 1-2012/ ISO 4832:1991 USFDA(BAM)-Chapter-4. 2002	≤10 cfu/g
		b.MPN method:	IS 5401Part 2-2007/ ISO 4831:1991. USFDA(BAM)-Chapter-4. 2002	< 0.3 MPN/g < 3 MPN/g
		E.coli: a.Enumeration Method	IS 5887 Part 1-1976(Reaff 2009) USFDA(BAM)-Chapter-4. 2002	≤10 cfu/g
		b.MPN method:	IS 5887Part 1-1976(Reaff 2009) USFDA(BAM)-Chapter-4. 2002	< 0.3 MPN/g < 3 MPN/g
		S.aureus: Enumeration Method	IS 5887Part 2-1976(Reaff 2009). USFDA(BAM)-Chapter-12 .2001	≤10 cfu/g
		b.MPN method	USFDA(BAM)-Chapter-12 2001	< 3 MPN/g
		Salmonella spp	IS 5887Part 3-1999(Reaff 2009) ISO 6579:2002 USFDA(BAM)-Chapter-5. 2006	Present/Absent/25g
		Shigella spp	IS 5887Part 7-1999(Reaff 2009) USFDA(BAM)-Chapter-6. 2001	Present/Absent/25g
		Listeria monocytogenes	USFDA(BAM)-Chapter-10. 2001	Present/Absent/25g

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		Yeast and Mould	IS 5403:1999(Reaff 2009) USFDA(BAM)-Chapter-18 .2001	≤10 cfu/g
<b>5.</b>	<b>Fruits and Vegetables Products (Raw &amp; Processed)</b>	Total plate count	IS 5402:2002 R 2007 USFDA(BAM)-Chapter-3. 2001	≤10 cfu/g
		Coliform count:	IS 5401 Part 1-2012/ ISO 4832:1991	≤10 cfu/g
		a.Enumeration Method:	USFDA(BAM)-Chapter-4. 2002	
		b.MPN method	IS 5401 Part 2 -2007/ ISO 4831:1991	< 0.3 MPN/g
			USFDA(BAM)-Chapter-4 .2002	< 3 MPN/g
		E.coli:	IS 5887 Part 1 -1976(Reaff 2009)	≤10 cfu/g
		a.Enumeration Method	USFDA(BAM)-Chapter-4 .2002	
		b.MPN method	IS 5887 Part 1-1976(Reaff 2009)	< 0.3 MPN/g
			USFDA(BAM)-Chapter-4 .2002	< 3 MPN/g
		Faecal coliforms	USFDA(BAM)-Chapter-4.2002	< 3 MPN/g
		S.aureus:	IS 5887 Part 2 -1976(Reaff 2009).	≤10 cfu/g
		a.Enumeration Method	USFDA(BAM)-Chapter-12 .2001	
		b.MPN method:	USFDA(BAM)-Chapter-12 .2001	< 3 MPN/g
		Salmonella spp	IS 5887Part 3-1999(Reaff 2009) ISO 6579:2002 USFDA(BAM)-Chapter-5.2006	Present/Absent/25g/50g
		Shigella spp	USFDA(BAM)-Chapter-6 .2001 IS 5887 Part 7-1999(Reaff 2009)	Present/Absent/25g/50g

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<b>S.No.</b>	<b>Product / Material of Test</b>	<b>Specific Test Performed</b>	<b>Test Method Specification against which tests are performed</b>	<b>Range of Testing / Limits of Detection</b>
	<b>Fruits and Vegetables Products (Raw &amp; Processed)</b>	Vibrio cholerae	IS 5887 Part 5 -1976(Reaff 2009) USFDA(BAM)-Chapter 9. 2004	Present/Absent/25g/50g
		Vibrio parahaemolyticus	IS 5887 Part 5-1976(Reaff 2009) USFDA(BAM)-Chapter 9. 2004	Present/Absent/25g/50g
		Bacillus cereus: a.MPN method	USFDA(BAM)-Chapter-14	< 3 MPN/g
		b.Enumeration method	IS 5887 Part 4-1999(Reaff 2009) USFDA(BAM)-Chapter-14 -2001	≤10 cfu/g
		Yeast and Mould	IS 5403:1999(Reaff 2009) USFDA(BAM)-Chapter-18	≤10 cfu/g
<b>6.</b>	<b>Sugar used in Preservation Industry</b>	Total plate count	IS 5402:2002 R 2007 USFDA(BAM)-Chapter-3. 2001	≤10 cfu/g
		Yeast and Mould	IS 5403:1999(Reaff 2009) USFDA(BAM)-Chapter-18. 2001	≤10 cfu/g
<b>7.</b>	<b>Alcoholic &amp; Non alcoholic Beverages</b>	Total plate count	IS 5402:2002 R 2007 USFDA(BAM)-Chapter-3 .2001	1cfu/ml &Above
		Coliform count: a.Enumeration Method:	IS 5401 Part 1 -2012/ ISO 4832:1991 USFDA(BAM)-Chapter-4. 2001	1cfu/ml & Above
		b.MPN method	IS 5401 Part 1 -2002/ ISO 4832:1991 USFDA(BAM)-Chapter-4.2001	< 3 MPN/ml
		Yeast and Mould	IS 5403:1999(Reaff 2005) USFDA(BAM)-Chapter-18 .2001	≤1 cfu/ml



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<b>8.</b>	<b>Cereal and cereals Products</b>	Total plate count	IS 5402:2002 R 2007 USFDA(BAM)-Chapter-3 .2001	≤10 cfu/g
		Coliform count: a.Enumeration Method:	IS 5401 Part 1-2012/ ISO 4832:1991 USFDA(BAM)-Chapter-4. 2001	≤10 cfu/g ≤10 cfu/g
		b.MPN method	IS 5401 Part 2 -2002/ ISO 4831:1991. USFDA(BAM)-Chapter-4. 2001	< 0.3 MPN/g < 3 MPN/g
		Faecal coliforms	USFDA(BAM)-Chapter-4. 2001	< 3 MPN/g
		E.coli: a.Enumeration Method: b.MPN method	IS 5887 Part 1-1976(Reaff 2009) USFDA(BAM)-Chapter-4. 2001	≤10 cfu/g
			IS 5887 Part 1-1976(Reaff 2009) USFDA(BAM)-Chapter-4. 2001	< 0.3 MPN/g < 3 MPN/g
		S.aureus: Enumeration Method:	IS 5887 Part 2 -1976(Reaff 2009) USFDA(BAM)-Chapter-12 .2001	≤10 cfu/g ≤10 cfu/g
		MPN Method:	USFDA(BAM)-Chapter-12 2001	< 3 MPN/g
		Salmonella spp	IS 5887 Part 3 -1999(Reaff 2009) ISO 6579:2002 USFDA(BAM)-Chapter-5 .2006	Present/Absent/25g
		Shigella spp	IS 5887 Part 7 -1999(Reaff 2009) ISO 6579:2002 USFDA(BAM)-Chapter-6 .2001	Present/Absent/25g
		Bacillus cereus MPN method	USFDS (BAM) Chapter 14.2001	< 3 MPN/g

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	<b>Cereal and cereals Products</b>	Enumeration method	USFDS (BAM) Chapter 14.2001 IS 5887 Part 6-1999:Reaff 2005.	≤10 cfu/g
		Yeast and Mould	IS 5403:1999(Reaff 2009) USFDA(BAM)-Chapter-18. 2001	≤10 cfu/g
<b>9.</b>	<b>Meat and Meat Products, Fish &amp; Fishery Products &amp; others (Raw, Cooked, Frozen, dried &amp; Ready to eat food)</b>	Total plate count	IS 5402:2002 USFDA(BAM)-Chapter-3. 2001	≤10 cfu/g
		Coliform count: a.Enumeration Method:	IS 5401 Part 1-2012/ ISO 4832:1991 USFDA(BAM)-Chapter-4 .2002	≤10 cfu/g
		b.MPN method	IS 5401 Part 2-2002/ ISO 4831:1991. USFDA(BAM)-Chapter-4. 2002	< 0.3 MPN/g < 3 MPN/g
		E.coli: a.Enumeration Method:	IS 5887 Part 1-1976(Reaff 2009) USFDA(BAM)-Chapter-4 .2002	≤10 cfu/g
		b.MPN method	IS 5887 Part 1-1976(Reaff 2009) USFDA(BAM)-Chapter-4. 2002	< 0.3 MPN/g < 3 MPN/g
		Faecal coliforms	USFDA(BAM)-Chapter-4 .2001	< 3 MPN/g
		S.aureus a.Enumeration Method	IS 5887 Part 2-1976(Reaff 2009). USFDA(BAM)-Chapter-12 .2001	≤10 cfu/g
		b.MPN method	USFDA(BAM)-Chapter-12 .2001	< 3 MPN/g
		Salmonella spp	IS 5887 Part 3-1999(Reaff 2009) ISO 6579:2002 USFDA(BAM)-Chapter-5.2006	Present/Absent/25g

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	<b>Meat and Meat Products, Fish &amp; Fishery Products &amp; others (Raw, Cooked, Frozen, dried &amp; Ready to eat food)</b>	Shigella spp	USFDA(BAM)-Chapter-6 .2001 IS 5887 Part 7-1999(Reaff 2009)	Present/Absent/25g
		Vibrio cholerae	IS 5887 Part 5-1976(Reaff 2009) USFDA(BAM)-Chapter-9 .2004	Present/Absent/25g
		Vibrio parahaemolyticus	IS 5887 Part 5-1976(Reaff 2009) USFDA(BAM)-Chapter-9.2004	Present/Absent/25g Present/Absent/50g
		Bacillus cereus: a.MPN method	USFDA(BAM)-Chapter-14.2001	< 3 MPN/g
		b.Enumeration method	USFDA(BAM)-Chapter-14.2001 IS 5887 Part 6 1999 Reaff 2005	≤10 cfu/g
		Clostridium perfringens	USFDA(BAM)-Chapter-14 IS 5887 Part 4-1999(Reaff 2005)	≤10 cfu/g
		Listeria monocytogenes	USFDA(BAM)-Chapter-10. 2001	Present/Absent/25g
		Yeast and Mould	IS 5403:1999(Reaff 2009) USFDA(BAM)-Chapter 18,2001	≤10 cfu/g
<b>10.</b>	<b>Spices and condiments (Whole Ground &amp; Oleoresin)</b>	Total plate count	IS 5402:2002 R 2007 USFDA(BAM)-Chapter-3. 2001	≤10 cfu/g
		Coliform count: a.Enumeration Method:	IS 5401 Part 1-2012 ISO 4832:1991 USFDA(BAM)-Chapter-4 .2002	≤10 cfu/g
		b.MPN method :	IS 5401 Part 2-2002/ ISO 4831:1991. USFDA(BAM)-Chapter-4 .2002	≤10 cfu/g

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<b>Discipline</b>	<b>Biological Testing</b>	<b>Issue Date</b>	<b>16.06.2013</b>
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<b>S.No.</b>	<b>Product / Material of Test</b>	<b>Specific Test Performed</b>	<b>Test Method Specification against which tests are performed</b>	<b>Range of Testing / Limits of Detection</b>
	<b>Spices and condiments (Whole Ground &amp; Oleoresin)</b>	E.coli: a.Enumeration Method:	IS 5887 Part 1-1976(Reaff 2009) USFDA(BAM)-Chapter-4. 2002	≤10 cfu/g
		b.MPN method	IS 5887 Part 1-1976(Reaff 2009) USFDA(BAM)-Chapter-4 .2002	< 3 MPN/g <0.3 MPN/g
		Faecal coliforms	USFDA(BAM)-Chapter-4 .2002	< 3 MPN/g
		S.aureus: a.Enumeration Method	IS 5887 Part 2-1976(Reaff 2005) USFDA(BAM)-Chapter-12. 2001	≤10 cfu/g
		b.MPN method	USFDA(BAM)-Chapter-12 .2001	< 3 MPN/g
		Salmonella spp	IS 5887 Part 3-1999(Reaff 2009) ISO 6579:2002 USFDA(BAM)-Chapter-5.2001	Present/Absent/25g
		Shigella spp	USFDA(BAM)-Chapter-6 .2001 IS 5887 Part 7-1999(Reaff 2009)	Present/Absent/25g
		Vibrio cholerae	IS 5887 Part 5-1976(Reaff 2009) USFDA(BAM)-Chapter-9 .2004	Present/Absent/25g
		Bacillus cereus: a.MPN method b.Enumeration method	USFDA(BAM)-Chapter-14.2001 USFDA(BAM)-Chapter-14.2001 IS 5887 Part 6 1999 Reaff 2007	< 3 MPN/g ≤10 cfu/g
		Yeast and Mould	IS 5403:1999(Reaff 2009) USFDA(BAM)-Chapter 18,2001	≤10 cfu/g
<b>11.</b>	<b>Coconut and Coconut Products</b>	Total plate count	IS 5402:2002 R 2007 USFDA(BAM)-Chapter-3. 2001	≤10 cfu/g

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<b>S.No.</b>	<b>Product / Material of Test</b>	<b>Specific Test Performed</b>	<b>Test Method Specification against which tests are performed</b>	<b>Range of Testing / Limits of Detection</b>
	<b>Coconut and Coconut Products</b>	Coliform count: a.Enumeration Method:	IS 5401 Part 1-2012/ ISO 4832:1991 USFDA(BAM)-Chapter-4 .2002	≤10 cfu/g
		b.MPN method :	IS 5401 Part 2-2002/ ISO 4831:1991. USFDA(BAM)-Chapter-4 .2002	< 0.3 MPN/g < 3 MPN/g
		E.coli: a.Enumeration Method:	IS 5887 Part 1-1976(Reaff 2009) USFDA(BAM)-Chapter-4. 2002	≤10 cfu/g
		Faecal coliforms	USFDA(BAM)-Chapter-4 .2002	< 3 MPN/g
		S.aureus: Enumeration Method:	IS 5887 Part 2-1976(Reaff 2009). USFDA(BAM)-Chapter-12. 2001	≤10 cfu/g
		MPN Method:	USFDA(BAM)-Chapter-12 2001	< 3 MPN/g
		Salmonella spp	IS 5887 Part 3-1999(Reaff 2009) ISO 6579:2002 USFDA(BAM)-Chapter-5.2001	Present/Absent/25g
		Shigella spp	USFDA(BAM)-Chapter-6. 2001 IS 5887 Part 7-1999(Reaff 2005)	Present/Absent/25g
		Bacillus cereus: a.MPN method	USFDA(BAM)-Chapter-14.2001	< 3 MPN/g
		b.Enumeration method	USFDA(BAM)-Chapter-14.2001 IS 5887 Part 6-1999(Reaff 2005)	≤10 cfu/g
	Yeast and Mould	IS 5403:1999(Reaff 2005) USFDA(BAM)-Chapter 18,2001	≤10 cfu/g	

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<b>S.No.</b>	<b>Product / Material of Test</b>	<b>Specific Test Performed</b>	<b>Test Method Specification against which tests are performed</b>	<b>Range of Testing / Limits of Detection</b>
<b>12.</b>	<b>Nuts and Nut Products:</b>	Total plate count	IS 5402:2002 USFDA(BAM)-Chapter-3. 2001	≤10 cfu/g
		Coliform count: a.Enumeration Method:	IS 5401 Part 1-2012/ ISO 4832:1991 USFDA(BAM)-Chapter-4 .2002	≤10 cfu/g
		b.MPN method :	IS 5401 Part 2-2002/ ISO 4831:1991. USFDA(BAM)-Chapter-4. 2002	< 3 MPN/g <0.3 MPN/g
		E.coli: a.Enumeration Method:	IS 5887 Part 1-1976(Reaff 2009) USFDA(BAM)-Chapter-4. 2002	≤10 cfu/g
		b.MPN method	IS 5887 Part 1-1976(Reaff 2009) USFDA(BAM)-Chapter-4 .2002	< 3 MPN/g <0.3 MPN/g
		Faecal coliforms	USFDA(BAM)-Chapter-4. 2002	< 3 MPN/g
		S.aureus: a.Enumeration Method	IS 5887 Part 2-1976(Reaff 2009) USFDA(BAM)-Chapter-12. 2001	≤10 cfu/g
		b.MPN method	USFDA(BAM)-Chapter-12 .2001	< 3 MPN/g
		Salmonella spp	IS 5887 Part 3-1999(Reaff 2009) ISO 6579:2002 USFDA(BAM)-Chapter-5.2001	Present/Absent/25g
		Shigella spp	USFDA(BAM)-Chapter-6. 2001 IS 5887 Part 7-1999(Reaff 2009)	Present/Absent/25g
Vibrio cholerae	IS 5887 Part 5-1976(Reaff 2009) USFDA(BAM)-Chapter-9 .2004	Present/Absent/25g		

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<b>S.No.</b>	<b>Product / Material of Test</b>	<b>Specific Test Performed</b>	<b>Test Method Specification against which tests are performed</b>	<b>Range of Testing / Limits of Detection</b>
	<b>Nuts and Nut Products:</b>	Bacillus cereus a.Enumeration method b.MPN method	USFDA(BAM)-Chapter-14.2001 IS 5887 Part 6-1999(Reaff 2005) USFDA(BAM)-Chapter-14.2001	≤10 cfu/g
		Yeast and Mould	IS 5403:1999(Reaff 2009) USFDA(BAM)-Chapter 18,2001	≤10 cfu/g
<b>13.</b>	<b>Egg and Egg Products</b>	Total plate count	IS 5402:2002 R 2007 USFDA(BAM)-Chapter-3 .2001	≤10 cfu/g
		Coliform count: a.Enumeration Method:	IS 5401 Part 1-2012/ ISO 4832:1991 USFDA(BAM)-Chapter-4 .2002	≤10 cfu/g
		b.MPN method :	IS 5401 Part 2-2002/ ISO 4831:1991. USFDA(BAM)-Chapter-4. 2002	< 3 MPN/g <0.3 MPN/g
		E.coli: a.Enumeration Method:	IS 5887 Part 1-1976(Reaff 2009) USFDA(BAM)-Chapter-4 .2002	≤10 cfu/g
		b.MPN method	IS 5887 Part 1-1976(Reaff 2009) USFDA(BAM)-Chapter-4. 2002	< 3 MPN/g <0.3 MPN/g
		Faecal coliforms	USFDA(BAM)-Chapter-4. 2002	< 3 MPN/g
		S.aureus: a.Enumeration Method	IS 5887 Part 2-1976(Reaff 2009) USFDA(BAM)-Chapter-12 .2001	≤10 cfu/g
		b.MPN method	USFDA(BAM)-Chapter-12. 2001	< 3 MPN/g
	Salmonella spp	IS 5887 Part 3-1999(Reaff 2009) ISO 6579:2002 USFDA(BAM)-Chapter-5.2001	Present/Absent/25g	

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<b>S.No.</b>	<b>Product / Material of Test</b>	<b>Specific Test Performed</b>	<b>Test Method Specification against which tests are performed</b>	<b>Range of Testing / Limits of Detection</b>
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	<b>Egg and Egg Products</b>	Shigella spp	USFDA(BAM)-Chapter-6. 2001 IS 5887 Part 7-1999(Reaff 2009)	Present/Absent/25g
		Vibrio cholerae	IS 5887 Part 5-1976(Reaff 2009) USFDA(BAM)-Chapter-9 .2004	Present/Absent/25g
		Bacillus cereus: a.MPN method	USFDA(BAM)-Chapter-14.2001	< 3 MPN/g
		b.Enumeration method	USFDA(BAM)-Chapter-14.2001 IS 5887 Part 6-1999(Reaff 2009)	≤10 cfu/g
		Yeast and Mould	IS 5403:1999(Reaff 2009) USFDA(BAM)-Chapter 18,2001	≤10 cfu/g

## **II.POLLUTION AND ENVIRONMENT**

<b>1.</b>	<b>Water, Waste water and Treated water</b>	Total plate count	APHA-9215 B	1 cfu/ml & Above
		Total coliforms	APHA-9221-B	< 1.8 MPN/100 ml
		Faecal coliforms	APHA-9221-E	< 1.8 MPN/100 ml
		E.coli	APHA-9221-F	< 1.8 MPN/100 ml
		Faecal streptococci	APHA-9230-A	< 1.8 MPN/100 ml
		Salmonella spp	APHA-9260-B	Present/Absent /250 ml
		Shigella spp	APHA-9260-E	Present/Absent/250 ml
		V.cholerae	APHA-9260-H	Present/Absent/250 ml



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<b>S.No.</b>	<b>Product / Material of Test</b>	<b>Specific Test Performed</b>	<b>Test Method Specification against which tests are performed</b>	<b>Range of Testing / Limits of Detection</b>
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## II. WATER:

<b>1.</b>	<b>Water for Swimming Pool. (IS 3328:1993)</b>	Standard Plate Count	IS 1622:1981(Reaff 2009)	1 cfu/ml
		Coliform a.MPN method:	IS 1622:1981(Reaff 2009)	< 2 MPN/100 ml
		b.Membrane filtration Method	IS 1622:1981(Reaff 2009)	Present/Absent/100 ml
<b>2.</b>	<b>Drinking Water (IS 10500-2012)</b>	Coliform a.MPN method:	IS 1622:1981(Reaff 2009)	< 2 MPN/100 ml
		b.Membrane filtration Method	IS 1622:1981(Reaff 2009)	Present/Absent/100 ml
		Faecal Coliform a.MPN method:	IS 1622:1981(Reaff 2009)	< 2 MPN/100 ml
		b.Membrane filtration Method	IS 1622:1981(Reaff 2009)	Present/Absent/100 ml
		Thermotolerant coliform or E.coli a.MPN method:	IS 1622:1981(Reaff 2009)	< 2 MPN/100 ml
		b.Membrane filtration Method	IS 1622:1981(Reaff 2009)	Present/Absent/100 ml
<b>3.</b>	<b>Water for Processed Food industry (IS 4251:1967)</b>	Standard plate count	IS 1622:1981(Reaff 2009)	1 cfu/ml & above
		Coliform a.MPN method:	IS 1622:1981(Reaff 2009)	< 2 MPN/100 ml
		b.Membrane filtration Method-Coliforms	IS 1622:1981(Reaff 2009)	Present/Absent/100 ml
		Proteolytic bacteria count	IS 4251-1967 R 2009	1 cfu/ml & above
		Lipolytic bacteria count	IS 4251-1967 R 2009	1 cfu/ml & above

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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
		Thermophilic bacterial Count	IS 4251-1967 R 2009	1 cfu/ml & above
4.	<b>Packaged Drinking Water. (Other than Packaged Mineral Water. (IS 14543:2004) Packaged Natural Mineral Water. (IS 13428:2005)</b>	Total viable colony count@ 37°C for 24 hrs.	IS 5402:2002 R.2007	1 cfu/ml & above
		Total viable colony count at 22°C for 72 hrs.	IS 5402:2002 R.2007	1 cfu/ml & above
		Coliforms	IS 15185:2002 R 2009	Present/Absent/250 ml
		E.coli	IS 15185:2002 R 2009	Present/Absent/250 ml
		Faecal streptococci	IS 15186:2002 R 2009	Present/Absent/250 ml
		S.aureus	IS 5887 Part 2-1976(Reaff 2005)	Present/Absent/250 ml
		Shigella spp	IS 5887 Part 7-1999(Reaff 2005)	Present/Absent/250 ml
		Salmonella spp	IS 15187:2002 R 2009	Present/Absent/250 ml
		Pseudomonas aeruginosa	IS 13428:Annex D 2005 R 2009	Present/Absent/250 ml
		Sulphite reducing anaerobes	IS 13428:Annex C 2005	Present/Absent/50 ml
		Vibrio cholera	IS 5887 Part 5-1976(Reaff 2009)	Present/Absent/250 ml
		Vibrio parahaemolyticus	IS 5887 Part 5-1976(Reaff 2009)	Present/Absent/250 ml
		Yeast and Mould	IS 5403:1999(Reaff 2009)	Present/Absent/250 ml

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**\*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**.