

<b>Laboratory</b>	<b>Microchem Silliker Private Limited, 8/41-A, 2<sup>nd</sup> Floor, Kirti Nagar Industrial Area, New Delhi</b>		
<b>Accreditation Standard</b>	<b>ISO/IEC 17025: 2005</b>		
<b>Discipline</b>	<b>Biological Testing</b>	<b>Issue Date</b>	<b>30.06.2014</b>
<b>Certificate Number</b>	<b>T-3013</b>	<b>Valid Until</b>	<b>29.06.2016</b>
<b>Last Amended on</b>	<b>-</b>	<b>Page</b>	<b>1 of 10</b>

<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>I. FOOD &amp; AGRICULTURAL PRODUCTS</b>				
<b>1.</b>	<b>Bakery &amp; Confectionery Products</b> (Biscuits, Cake, Rusk, etc.)	Aerobic Plate Count	IS: 5402 – 2012 ISO:4833-2003	≥ 10 cfu/g
		Yeast &Mould Count	IS: 5403-1999 (Reaff 2005)	≥ 10 cfu/g
		Coliform Count	IS: 5401 (Part 1) – 2002 ISO: 4832-1991	≥ 10 cfu/g
		Detection of <i>E. coli</i>	IS: 5887 (Part I) - 1976 (Reaff 2005)	Detected/ Not detected in 1g
		Detection of <i>S. aureus</i>	IS: 5887 (Part II) – 1976 (Reaff 2005)	Detected/ Not detected in 25g
		Detection of <i>Salmonella</i> spp	IS: 5887 (Part 3) - 1999 (Reaff 2005)/ ISO: 6579:1993	Detected/ Not detected in 25g
		<i>Enterobacteriaceae</i> Count	IS/ISO 7402 – 1993 (Reaff 2001)	≥ 10 cfu/g
<b>2.</b>	<b>Canned Products</b> (canned fruits, canned Vegetables etc.)	Aerobic Plate Count	IS: 5402 – 2012/ ISO: 4833-2003	≥ 10 cfu/g
		Yeast &Mould Count	IS: 5403-1999(Reaff 2005)	≥ 10 cfu/g
		Coliform Count	IS: 5401 (Part 1) – 2002 ISO: 4832-1991	≥ 10 cfu/g

<b>Laboratory</b>	<b>Microchem Silliker Private Limited, 8/41-A, 2<sup>nd</sup> Floor, Kirti Nagar Industrial Area, New Delhi</b>		
<b>Accreditation Standard</b>	<b>ISO/IEC 17025: 2005</b>		
<b>Discipline</b>	<b>Biological Testing</b>	<b>Issue Date</b>	<b>30.06.2014</b>
<b>Certificate Number</b>	<b>T-3013</b>	<b>Valid Until</b>	<b>29.06.2016</b>
<b>Last Amended on</b>	<b>-</b>	<b>Page</b>	<b>2 of 10</b>

<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>Canned Products</b> (canned fruits, canned Vegetables etc.)	Detection of <i>E. coli</i>	IS: 5887 (Part I) - 1976 (Reaff 2005)	Detected/ Not detected in 1g
		Detection of <i>S. aureus</i>	IS: 5887 (Part II) – 1976 (Reaff 2005)	Detected/ Not detected in 25g
		Detection of <i>Salmonella</i> spp	IS: 5887 (Part III) - 1999 (Reaff 2005)/ ISO: 6579:1993	Detected/ Not detected in 25g
		<i>Enterobacteriaceae</i> Count	IS/ISO 7402 – 1993 (Reaff 2001)	≥ 10 cfu/g
<b>3.</b>	<b>Cereal, Pulses &amp; Cereal Products</b> (Flour, Maida, Raw pulses, cereal etc)	Aerobic Plate Count	IS: 5402 – 2012 ISO: 4833-2003	≥ 10 cfu/g
		Yeast & Mould Count	IS: 5403-1999 (Reaff 2005)	≥ 10 cfu/g
		Coliform Count	IS: 5401 (Part 1) – 2002 ISO: 4832-1991	≥ 10 cfu/g
		Detection of <i>E. coli</i>	IS: 5887 (Part I) - 1976 (Reaff 2005)	Detected/ Not detected in 1g
		Detection of <i>S. aureus</i>	IS: 5887 (Part II) – 1976 (Reaff 2005)	Detected/ Not detected in 25g
		Detection of <i>Salmonella</i> spp	IS: 5887 (Part III) - 1999 (Reaff 2005)/ ISO 6579:1993	Detected/ Not detected in 25g
		<i>Enterobacteriaceae</i> Count	IS/ISO 7402 – 1993 (Reaff 2001)	≥ 10 cfu/g

<b>Laboratory</b>	<b>Microchem Silliker Private Limited, 8/41-A, 2<sup>nd</sup> Floor, Kirti Nagar Industrial Area, New Delhi</b>		
<b>Accreditation Standard</b>	<b>ISO/IEC 17025: 2005</b>		
<b>Discipline</b>	<b>Biological Testing</b>	<b>Issue Date</b>	<b>30.06.2014</b>
<b>Certificate Number</b>	<b>T-3013</b>	<b>Valid Until</b>	<b>29.06.2016</b>
<b>Last Amended on</b>	<b>-</b>	<b>Page</b>	<b>3 of 10</b>

<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>
4.	<b>Tea, Coffee &amp; Cocoa Products</b> (tea powder, Coffee powder, etc)	Aerobic Plate Count	IS: 5402 – 2012 ISO:4833-2003	≥ 10 cfu/g
		Yeast &Mould Count	IS: 5403-1999 (Reaff 2005)	≥ 10 cfu/g
		Coliform Count	IS: 5401 (Part 1) – 2002 ISO 4832-1991	≥ 10 cfu/g
		Detection of <i>E. coli</i>	IS: 5887 (Part I) - 1976 (Reaff 2005)	Detected/ Not detected in 1g
		Detection of <i>S. aureus</i>	IS: 5887 (Part II) – 1976 (Reaff 2005)	Detected/ Not detected in 25g
		Detection of <i>Salmonella</i> spp	IS: 5887 (Part III) - 1999 (Reaff 2005)/ ISO: 6579:1993	Detected/ Not detected in 25g
		<i>Enterobacteriaceae</i> Count	IS/ISO 7402 – 1993 (Reaff 2001)	≥ 10 cfu/g
5.	<b>Meat &amp; meat products</b> (Raw Chicken, Raw mutton etc)	Aerobic Plate Count	IS: 5402 – 2012 ISO:4833-2003	≥ 10 cfu/g
		Yeast &Mould Count	IS: 5403-1999 (Reaff 2005)	≥ 10 cfu/g
		Coliform Count	IS: 5401 (Part 1) – 2002 ISO: 4832-1991	≥ 10 cfu/g
		Detection of <i>E. coli</i>	IS: 5887 (Part I) - 1976 (Reaff 2005)	Detected/ Not detected in 1g

<b>Laboratory</b>	<b>Microchem Silliker Private Limited, 8/41-A, 2<sup>nd</sup> Floor, Kirti Nagar Industrial Area, New Delhi</b>		
<b>Accreditation Standard</b>	<b>ISO/IEC 17025: 2005</b>		
<b>Discipline</b>	<b>Biological Testing</b>	<b>Issue Date</b>	<b>30.06.2014</b>
<b>Certificate Number</b>	<b>T-3013</b>	<b>Valid Until</b>	<b>29.06.2016</b>
<b>Last Amended on</b>	<b>-</b>	<b>Page</b>	<b>4 of 10</b>

<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>Meat &amp; meat products</b> (Raw Chicken, Raw mutton etc)	Detection of <i>S. aureus</i>	IS: 5887 (Part II) – 1976 (Reaff 2005)	Detected/ Not detected in 25g
		Detection of <i>Salmonella</i> spp	IS: 5887 (Part III) - 1999 (Reaff 2005)/ ISO: 6579:1993	Detected/ Not detected in 25g
		<i>Enterobacteriaceae</i> Count	IS/ISO 7402 – 1993 (Reaff 2001)	≥ 10 cfu/g
<b>6.</b>	<b>Fresh &amp; processed Fruits &amp; vegetables products</b> (fresh cut fruits, salad, fruit juices, jam, etc)	Aerobic Plate Count	IS: 5402 – 2012 ISO: 4833-2003	≥ 10 cfu/g
		Yeast & Mould Count	IS: 5403-1999 (Reaff 2005)	≥ 10 cfu/g
		Coliform Count	IS: 5401 (Part 1) – 2002 ISO: 4832-1991	≥ 10 cfu/g
		Detection of <i>E. coli</i>	IS: 5887 (Part I) - 1976 (Reaff 2005)	Detected/ Not detected in 1g
		Detection of <i>S. aureus</i>	IS: 5887 (Part II) – 1976 (Reaff 2005)	Detected/ Not detected in 25g
		Detection of <i>Salmonella</i> spp	IS: 5887 (Part III) - 1999 (Reaff 2005)/ ISO: 6579:1993	Detected/ Not detected in 25g
		<i>Enterobacteriaceae</i> Count	IS/ISO 7402 – 1993 (Reaff 2001)	≥ 10 cfu/g

<b>Laboratory</b>	<b>Microchem Silliker Private Limited, 8/41-A, 2<sup>nd</sup> Floor, Kirti Nagar Industrial Area, New Delhi</b>		
<b>Accreditation Standard</b>	<b>ISO/IEC 17025: 2005</b>		
<b>Discipline</b>	<b>Biological Testing</b>	<b>Issue Date</b>	<b>30.06.2014</b>
<b>Certificate Number</b>	<b>T-3013</b>	<b>Valid Until</b>	<b>29.06.2016</b>
<b>Last Amended on</b>	<b>-</b>	<b>Page</b>	<b>5 of 10</b>

<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>
7.	<b>Herbs, spices &amp; condiments</b> (cinnamon seeds, powder etc)	Aerobic Plate Count	IS: 5402 – 2012 ISO:4833-2003	≥ 10 cfu/g
		Yeast &Mould Count	IS: 5403-1999 (Reaff 2005)	≥ 10 cfu/g
		Coliform Count	IS: 5401 (Part 1) – 2002 ISO: 4832-1991	≥ 10 cfu/g
		Detection of <i>E. coli</i>	IS: 5887 (Part I) - 1976 (Reaff 2005)	Detected/ Not detected in 1g
		Detection of <i>S. aureus</i>	IS: 5887 (Part II) – 1976 (Reaff 2005)	Detected/ Not detected in 25g
		Detection of <i>Salmonella</i> spp	IS: 5887 (Part III) – 1999 (Reaff 2005)/ ISO: 6579:1993	Detected/ Not detected in 25g
		<i>Enterobacteriaceae</i> Count	IS/ISO 7402 – 1993 (Reaff 2001)	≥ 10 cfu/g
8.	<b>Milk &amp; dairy products</b> (Milk, Paneer, Curd ,etc)	Aerobic Plate Count	IS: 5402 – 2012 ISO: 4833-2003	≥ 1 cfu/ml ≥ 10 cfu/g
		Yeast &Mould Count	IS: 5403-1999 (Reaff 2005)	≥ 1 cfu/ml ≥ 10 cfu/g
		Coliform Count	IS: 5401 (Part 1) – 2002 ISO: 4832-1991	≥ 1 cfu/ml ≥ 10 cfu/g
		Detection of <i>E. coli</i>	IS: 5887 (Part I) - 1976 (Reaff 2005)	Detected/ Not detected in 1g

<b>Laboratory</b>	<b>Microchem Silliker Private Limited, 8/41-A, 2<sup>nd</sup> Floor, Kirti Nagar Industrial Area, New Delhi</b>		
<b>Accreditation Standard</b>	<b>ISO/IEC 17025: 2005</b>		
<b>Discipline</b>	<b>Biological Testing</b>	<b>Issue Date</b>	<b>30.06.2014</b>
<b>Certificate Number</b>	<b>T-3013</b>	<b>Valid Until</b>	<b>29.06.2016</b>
<b>Last Amended on</b>	<b>-</b>	<b>Page</b>	<b>6 of 10</b>

<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>Milk &amp; dairy products</b> (Milk, Paneer, Curd ,etc)	Detection of <i>S. aureus</i>	IS: 5887 (Part II) – 1976 (Reaff 2005)	Detected/ Not detected in 25g
		Detection of <i>Salmonella</i> spp	IS: 5887 (Part 3) - 1999 (Reaff 2005)/ ISO 6579:1993	Detected/ Not detected in 25g
		<i>Enterobacteriaceae</i> Count	IS/ISO 7402 – 1993 (Reaff 2001)	≥ 10 cfu/g
<b>9.</b>	<b>Nuts &amp; nut products</b> (groundnut, walnut etc)	Aerobic Plate Count	IS: 5402 – 2012 ISO: 4833-2003	≥ 10 cfu/g
		Yeast &Mould Count	IS: 5403-1999 (Reaff 2005)	≥ 10 cfu/g
		Coliform Count	IS: 5401 (Part 1) – 2002 ISO: 4832-1991	≥ 10 cfu/g
		Detection of <i>E. coli</i>	IS: 5887 (Part I) - 1976 (Reaff 2005)	Detected/ Not detected in 1g
		Detection of <i>S. aureus</i>	IS: 5887 (Part II) – 1976 (Reaff 2005)	Detected/ Not detected in 25g
		Detection of <i>Salmonella</i> spp	IS: 5887 (Part III) - 1999 (Reaff 2005)/ ISO: 6579:1993	Detected/ Not detected in 25g
		<i>Enterobacteriaceae</i> Count	IS/ISO 7402 – 1993 (Reaff 2001)	≥ 10 cfu/g

<b>Laboratory</b>	<b>Microchem Silliker Private Limited, 8/41-A, 2<sup>nd</sup> Floor, Kirti Nagar Industrial Area, New Delhi</b>		
<b>Accreditation Standard</b>	<b>ISO/IEC 17025: 2005</b>		
<b>Discipline</b>	<b>Biological Testing</b>	<b>Issue Date</b>	<b>30.06.2014</b>
<b>Certificate Number</b>	<b>T-3013</b>	<b>Valid Until</b>	<b>29.06.2016</b>
<b>Last Amended on</b>	<b>-</b>	<b>Page</b>	<b>7 of 10</b>

<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>10.</b>	<b>Ready-to-eat- foods</b> (gravy, curries, pulav etc)	Aerobic Plate Count	IS: 5402 – 2012 ISO:4833-2003	≥ 10 cfu/g
		Yeast &Mould Count	IS: 5403-1999 (Reaff 2005)	≥ 10 cfu/g
		Coliform Count	IS: 5401 (Part 1) – 2002 ISO: 4832-1991	≥ 10 cfu/g
		Detection of <i>E. coli</i>	IS: 5887 (Part I) - 1976 (Reaff 2005)	Detected/ Not detected in 1g
		Detection of <i>S. aureus</i>	IS: 5887 (Part II) – 1976 (Reaff 2005)	Detected/ Not detected in 25g
		Detection of <i>Salmonella</i> spp	IS: 5887 (Part 3) – 1999 (Reaff 2005)/ ISO: 6579:1993	Detected/ Not detected in 25g
		<i>Enterobacteriaceae</i> Count	IS/ISO 7402 – 1993 (Reaff 2001)	≥ 10 cfu/g
<b>11.</b>	<b>Frozen foods</b> (frozen vegetables, frozen processed foods etc)	Aerobic Plate Count	IS: 5402 – 2012 ISO: 4833-2003	≥ 10 cfu/g
		Yeast &Mould Count	IS: 5403-1999 (Reaff 2005)	≥ 10 cfu/g
		Coliform Count	IS: 5401 (Part 1) – 2002 ISO: 4832-1991	≥ 10 cfu/g

<b>Laboratory</b>	<b>Microchem Silliker Private Limited, 8/41-A, 2<sup>nd</sup> Floor, Kirti Nagar Industrial Area, New Delhi</b>		
<b>Accreditation Standard</b>	<b>ISO/IEC 17025: 2005</b>		
<b>Discipline</b>	<b>Biological Testing</b>	<b>Issue Date</b>	<b>30.06.2014</b>
<b>Certificate Number</b>	<b>T-3013</b>	<b>Valid Until</b>	<b>29.06.2016</b>
<b>Last Amended on</b>	<b>-</b>	<b>Page</b>	<b>8 of 10</b>

<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>Frozen foods</b> (frozen vegetables, frozen processed foods etc)	Detection of <i>E. coli</i>	IS: 5887 (Part I) - 1976 (Reaff 2005)	Detected/ Not detected in 1g
		Detection of <i>S. aureus</i>	IS: 5887 (Part II) – 1976 (Reaff 2005)	Detected/ Not detected in 25g
		Detection of <i>Salmonella</i> spp	IS: 5887 (Part III) - 1999 (Reaff 2005) ISO: 6579:1993	Detected/ Not detected in 25g
		<i>Enterobacteriaceae</i> Count	IS/ISO 7402 – 1993 (Reaff 2001)	≥ 10 cfu/g
<b>II.</b>	<b>WATER</b>			
<b>1.</b>	<b>Drinking Water</b>	Standard Plate Count	IS: 1622 : 1981(Reaff 1996)	≥ 1 cfu/ml
		Coliform (MPN)	IS: 1622 : 1981 (Reaff 1996)	≥ 1 MPN/100ml ≥ 2 MPN/100ml
		Thermo tolerant Coliform (MPN)	IS: 1622 : 1981 (Reaff 1996)	≥ 1 MPN/100ml ≥ 2 MPN/100ml
		<i>E. coli</i> (MPN)	IS: 1622 : 1981 (Reaff 1996)	≥ 1 MPN/100ml ≥ 2 MPN/100ml
<b>2.</b>	<b>Raw Water (Borewell Water, Raw Water)</b>	Standard Plate Count	IS: 1622 : 1981 (Reaff 1996)	≥ 1 cfu/ml
		Coliform (MPN)	IS: 1622 : 1981(Reaff 1996)	≥ 1 MPN/100ml ≥ 2 MPN/100ml
		<i>E. coli</i> (MPN)	IS: 1622 : 1981 (Reaff 1996)	≥ 1 MPN/100ml ≥ 2 MPN/100ml



<b>Laboratory</b>	<b>Microchem Silliker Private Limited, 8/41-A, 2<sup>nd</sup> Floor, Kirti Nagar Industrial Area, New Delhi</b>		
<b>Accreditation Standard</b>	<b>ISO/IEC 17025: 2005</b>		
<b>Discipline</b>	<b>Biological Testing</b>	<b>Issue Date</b>	<b>30.06.2014</b>
<b>Certificate Number</b>	<b>T-3013</b>	<b>Valid Until</b>	<b>29.06.2016</b>
<b>Last Amended on</b>	<b>-</b>	<b>Page</b>	<b>9 of 10</b>

<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>Raw Water (Borewell Water, Raw Water)</b>	Yeast & Mould Count	IS: 5403 : 1999 (Reaff 2005) IS: 15188:2012 ISO: 8199:2005	≥ 1 cfu/ml Detected/ Not detected in 100 ml
		<i>Detection of Salmonella spp</i>	IS: 15187 : 2002	Detected/ Not detected in 100 ml
		<i>Detection of Staphylococcus aureus</i>	IS: 5887 (Part II) - 1976 (Reaff 2005) / ISO: 6579:1993 IS: 15188:2012 ISO: 8199:2005	Detected/ Not detected in 100 ml
<b>3</b>	<b>Swimming Pool Water</b>	Standard Plate Count	IS: 1622 : 1981 (Reaff 1996)	≥ 1 cfu/ml
		Coliform (MPN)	IS: 1622 : 1981 (Reaff 1996)	≥ 1 MPN/100ml ≥ 2 MPN/100ml
<b>4</b>	<b>Water for Processed Food Industry</b>	Standard Plate Count	IS: 1622 : 1981 (Reaff 1996)	≥ 1 cfu/ml
		Coliform (MPN)	IS: 1622 : 1981 (Reaff 1996)	≥ 1 MPN/100ml ≥ 2 MPN/100ml
<b>5</b>	<b>Packaged/Natural Mineral Water</b>	Total Viable Count	IS: 5402 – 2012 ISO:4833-2003	≥ 1 cfu/ml
		Detection of Coliform	IS: 15185:2002 ISO: 9308-1: 2000	Detected/ Not detected in 250 ml

**Laboratory** Microchem Silliker Private Limited, 8/41-A, 2<sup>nd</sup> Floor, Kirti Nagar Industrial Area, New Delhi  
**Accreditation Standard** ISO/IEC 17025: 2005  
**Discipline** Biological Testing **Issue Date** 30.06.2014  
**Certificate Number** T-3013 **Valid Until** 29.06.2016  
**Last Amended on** - **Page** 10 of 10

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	<b>Packaged/Natural Mineral Water</b>	<i>Detection of E. coli (Thermotolerant Bacteria)</i>	IS: 15185:2002 ISO: 9308-1: 2000	Detected/ Not detected in 250 ml
		Detection of Yeast & Mould	IS: 5403 : 1999 (Reaff 2005) IS: 15188:2012 ISO: 8199:2005	Detected/ Not detected in 250 ml
		<i>Detection of Salmonella spp</i>	IS: 15187 : 2002 ISO: 6340:1995	Detected/ Not detected in 250 ml
		<i>Detection of Staphylococcus aureus</i>	IS: 5887 (Part II) - 1976 (Reaff 2005)/ ISO: 6579:1993/ IS: 15188:2012 ISO: 8199:2005	Detected/ Not detected in 250 ml

-X-X-X-X-X-X-X-X-X-X-X-X-

**\*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.**