

Laboratory National Collateral Management Services Limited, CommGrade,
Testing & Certification, 14/573, F & G, HAG Arcade, Mariyappady,
UC College PO, Aluva, Ernakulam, Kerala

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7482

Page 1 of 10

Validity 29.06.2018 to 28.06.2020

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

I.	FOOD AND AGRICULTURAL PRODUCTS			
1.	Herbs, Spices and Condiments	Aerobic Plate Count / Total Plate Count	IS 5402 USFDA BAM	> 1Cfu/ml > 10 Cfu/g
		Coliforms	IS 5401 (Part 1) IS 5401 (Part 2)	> 1Cfu/ml > 10 Cfu/g ≥0.3 to ≤110MPN/g/ml
			USFDA BAM	> 1Cfu/ml > 10 Cfu/g ≥3 to ≤1100MPN/g/MPN/ml
		Escherichia coli	IS 5887 (Part 1)	> 1Cfu/ml > 10 Cfu/g ≥0.3 to ≤110MPN/g/ml
			USFDA BAM	> 1Cfu/ml > 10 Cfu/g ≥3 to ≤1100MPN/g/MPN/ml
		Staphylococcus aureus	IS 5887 (Part 8) Sec 1 USFDA BAM	> 1Cfu/ml > 10 Cfu/g
		Salmonella	IS 5887 (Part 3) USFDA BAM	Present or Absent/25g/ml
		Yeast & Mould	IS 5403 USFDA BAM	> 1Cfu/ml > 10 Cfu/g
2.	Nuts and Nut Products	Aerobic Plate Count / Total Plate Count	IS 5402 USFDA BAM	≥ 1Cfu/ml ≥ 10 Cfu/g
		Coliforms	IS 5401 (Part 1) IS 5401 (Part 2)	≥ 1Cfu/ml ≥ 10 Cfu/g ≥0.3to≤110MPN/g/ml

Laboratory

National Collateral Management Services Limited, CommGrade,
Testing & Certification, 14/573, F & G, HAG Arcade, Mariyappady,
UC College PO, Aluva, Ernakulam, Kerala

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7482

Page 2 of 10

Validity

29.06.2018 to 28.06.2020

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
			USFDA BAM	> 1Cfu/ml > 10 Cfu/g ≥3 to ≤1100MPN/g/MPN/ml
		Escherichia coli	IS 5887(Part 1)	> 1Cfu/ml > 10 Cfu/g ≥0.3to≤110MPN/g/ml
			USFDA BAM	> 1Cfu/ml > 10 Cfu/g ≥3 to ≤1100MPN/g/MPN/ml
		Salmonella	IS 5887 (Part 3) USFDA BAM	Present or Absent/25g/ml
		Yeast and Mould	IS 5403 USFDA BAM	> 1Cfu/ml > 10 Cfu/g
3.	Milk and Dairy Products	Aerobic Plate Count / Total Plate Count	IS 5402 USFDA BAM	> 1Cfu/ml > 10 Cfu/g
		Coliforms	IS 5401 (Part 1) IS 5401 (Part 2)	> 1Cfu/ml > 10 Cfu/g ≥0.3to≤110MPN/g/ml
			USFDA BAM	> 1Cfu/ml > 10 Cfu/g ≥3 to ≤1100MPN/g/MPN/ml
		Escherichia coli	IS 5887 (Part 1)	> 1Cfu/ml > 10 Cfu/g ≥0.3to≤110MPN/g/ml
			USFDA BAM	> 1Cfu/ml > 10 Cfu/g ≥3 to ≤1100MPN/g/MPN/ml

Pankaj Goyal
Convenor

N. Venkateswaran
Program Director

Laboratory

National Collateral Management Services Limited, CommGrade,
Testing & Certification, 14/573, F & G, HAG Arcade, Mariyappady,
UC College PO, Aluva, Ernakulam, Kerala

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7482

Page 3 of 10

Validity

29.06.2018 to 28.06.2020

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
		Staphylococcus aureus	IS 5887 (Part 8) Sec 1 USFDA BAM	≥ 1 Cfu/ml ≥ 10 Cfu/g
		Salmonella	IS 5887 (Part 3) USFDA BAM	Present or Absent/25g/ml
		Bacillus cereus	IS 5887 (Part 6) USFDA BAM	≥ 1 Cfu/ml ≥ 10 Cfu/g
		Clostridium perfringens	IS 5887 (Part 4)	Present or Absent/1g/ml
		Listeria monocytogens	IS 14988 (Part 1)	Present or Absent/25g/ml
		Yeast and Mould	IS 5403 USFDA BAM	≥ 1 Cfu/ml ≥ 10 Cfu/g
4.	Beverages (Alcoholic/ Non- alcoholic)	Aerobic Plate Count	IS 5402 USFDA BAM	≥ 1 Cfu/ml ≥ 10 Cfu/g
		Coliforms	IS 5401 (Part 1) IS 5401 (Part 2)	> 1 Cfu/ml > 10 Cfu/g ≥ 0.3 to ≤ 110 MPN/g/ml
			USFDA BAM	> 1 Cfu/ml > 10 Cfu/g ≥ 3 to ≤ 1100 MPN/g/MPN/ml
		Escherichia coli	IS 5887 (Part 1)	≥ 1 Cfu/ml ≥ 10 Cfu/g ≥ 0.3 to ≤ 110 MPN/g/ml
			USFDA BAM	≥ 1 Cfu/ml ≥ 10 Cfu/g ≥ 3 to ≤ 1100 MPN/g/MPN/ml
		Salmonella	IS 5887 (Part 3) USFDA BAM	Present or Absent/25g/ml
		Yeast and Mould	IS 5403 USFDA BAM	≥ 1 Cfu/ml ≥ 10 Cfu/g

Pankaj Goyal
Convenor

N. Venkateswaran
Program Director

Laboratory

National Collateral Management Services Limited, CommGrade,
Testing & Certification, 14/573, F & G, HAG Arcade, Mariyappady,
UC College PO, Aluva, Ernakulam, Kerala

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7482

Page 4 of 10

Validity

29.06.2018 to 28.06.2020

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
5.	Bakery and Confectionery Products	Aerobic Plate Count / Total Plate Count	IS 5402 USFDA BAM	≥ 1 Cfu/ml ≥ 10 Cfu/g
		Coliforms	IS 5401 (Part 1) IS 5401 (Part 2)	≥ 1 Cfu/ml ≥ 10 Cfu/g ≥ 0.3 to ≤ 110 MPN/g/ml
			USFDA BAM	≥ 1 Cfu/ml ≥ 10 Cfu/g ≥ 3 to ≤ 110 MPN/g/MPN/ml
			Escherichia coli	IS 5887 (Part 1)
		USFDA BAM 8 th Edition: Chapter 4		≥ 1 Cfu/ml ≥ 10 Cfu/g ≥ 3 to ≤ 110 MPN/g/MPN/ml
		Staphylococcus aureus	IS 5887 (Part 8) Sec 1 USFDA BAM	≥ 1 Cfu/ml ≥ 10 Cfu/g
		Salmonella	IS 5887 (Part 3) USFDA BAM	Present or Absent/25g/ml
		Shigella	IS 5887 (Part 7)	Present or Absent/25g/ml
		Clostridium perfringens	IS 5887 (Part 4)	Present or Absent/1g/ml
		Listeria monocytogens	IS 14988 (Part 1)	Present or Absent/25g/ml
		Yeast and Mould	IS 5403 USFDA BAM	≥ 1 Cfu/ml ≥ 10 Cfu/g
6.	Cooked Food / Raw Food / Ready to Eat Food	Aerobic Plate Count / Total Plate Count	IS 5402 USFDA BAM	≥ 1 Cfu/ml ≥ 10 Cfu/g
		Coliforms	IS 5401 (Part 1) IS 5401 (Part 2)	≥ 1 Cfu/ml ≥ 10 Cfu/g ≥ 0.3 to ≤ 110 MPN/g/ml

Pankaj Goyal
Convenor

N. Venkateswaran
Program Director

Laboratory

National Collateral Management Services Limited, CommGrade,
Testing & Certification, 14/573, F & G, HAG Arcade, Mariyappady,
UC College PO, Aluva, Ernakulam, Kerala

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7482

Page 5 of 10

Validity 29.06.2018 to 28.06.2020

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
		Escherichia coli	USFDA BAM	> 1Cfu/ml > 10 Cfug ≥3 to ≤1100MPN/g/MPN/ml
			IS 5887 (Part 1)	> 1Cfu/ml > 10 Cfug ≥0.3to≤110MPN/g/ml
		Staphylococcus aureus	USFDA BAM	> 1Cfu/ml > 10 Cfug ≥3 to ≤1100MPN/g/MPN/ml
			IS 5887 (Part 8) Sec 1 USFDA BAM	> 1Cfu/ml > 10 Cfug
		Salmonella	IS 5887 (Part 3) USFDA BAM	Present or Absent/25g/ml
		Shigella	IS 5887 (Part 7)	Present or Absent/25g/ml
		Clostridium perfringens	IS 5887 (Part 4)	Present or Absent/1g/ml
		Listeria monocytogens	IS 14988 (Part 1)	Present or Absent/25g/ml
		Yeast and Mould	IS 5403 USFDA BAM	> 1Cfu/ml > 10 Cfug
		7.	Poultry and Poultry Products	Aerobic Plate Count / Total Plate Count
USFDA BAM	> 10 Cfug			
Coliforms	IS 5401 (Part 1) IS 5401 (Part 2)			> 1Cfu/ml > 10 Cfug ≥0.3to≤110MPN/g/ml
	USFDA BAM			> 1Cfu/ml > 10 Cfug ≥3 to ≤1100MPN/g/MPN/ml

Pankaj Goyal
Convenor

N. Venkateswaran
Program Director

Laboratory

National Collateral Management Services Limited, CommGrade,
Testing & Certification, 14/573, F & G, HAG Arcade, Mariyappady,
UC College PO, Aluva, Ernakulam, Kerala

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7482

Page 6 of 10

Validity 29.06.2018 to 28.06.2020

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
		Escherichia coli	IS 5887 (Part 1)	≥ 1 Cfu/ml > 10 Cfu/g ≥ 0.3 to ≤ 110 MPN/g/ml
			USFDA BAM	≥ 1 Cfu/ml > 10 Cfu/g ≥ 3 to ≤ 1100 MPN/g/MPN/ml
		Staphylococcus aureus	IS 5887 (Part 8) Sec 1 USFDA BAM	≥ 1 Cfu/ml > 10 Cfu/g
		Salmonella	IS 5887 (Part 3) USFDA BAM	Present or Absent/25g/ml
		Shigella	IS 5887 (Part 7)	Present or Absent/25g/ml
		Clostridium perfringens	IS 5887 (Part 4)	Present or Absent/1g/ml
		Listeria monocytogens	IS 14988 (Part 1)	Present or Absent/25g/ml
		Yeast and Mould	IS 5403 USFDA BAM	≥ 1 Cfu/ml ≥ 10 Cfu/g
		II.	WATER	
1.	Drinking Water	Coliforms	IS 1622	< 2 to ≥ 1600 MPN/100ml
		Feacal Coliforms	IS 1622	< 2 to ≥ 1600 MPN/100ml
		Escherichia coli	IS 1622	< 2 to ≥ 1600 MPN/100ml

Pankaj Goyal
Convenor

N. Venkateswaran
Program Director

Laboratory **National Collateral Management Services Limited, CommGrade,
Testing & Certification, 14/573, F & G, HAG Arcade, Mariyappady,
UC College PO, Aluva, Ernakulam, Kerala**

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

Certificate Number **TC-7482**

Page 7 of 10

Validity **29.06.2018 to 28.06.2020**

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

CHEMICAL TESTING

I.	FOOD AND AGRICULTURAL PRODUCTS			
1.	Bakery & Confectionery	Total Fat	IS 12711	1.0 % to 25 %
		Protein	IS 7219	1.0 % to 50 %
		Sugar	IS 6287	5 % to 80 %
		Acid insoluble ash	IS 12711	0.1 % to 10 %
		Sulphated ash	IS 6287	0.1 % to 25 %
		Moisture	IS 12711	1 % to 20 %
		Total ash	IS 12711	1.0 % to 25 %
		Acidity of extracted fat	IS 12711	1.0 % to 20 %
		Crude fiber	IS 12711	1.0 % to 50 %
2.	Cereals Pulses & Cereal Products	Moisture	IS 1155	1.0 % to 20 %
		Total ash	IS 1155	1.0 % to 25 %
		Acid insoluble ash	IS 1155	0.1 % to 10 %
		Crude fibre	IS 1155	1.0 % to 50 %
		Alcoholic acidity	IS 1155	0.3 % to 10 %
		Gluten	IS 1155	1.0 % to 50 %
		Protein	IS 7219	2.0 % to 50 %
		Foreign Matter (Extraneous Matter)	IS 4333(Part 1)	0.4 % to 20 %
		Damaged grains	IS 4333(Part 1)	1.0 % to 20 %
		Other food grains	IS 4333(Part 1)	1.0 % to 20 %
		Insect damaged	IS 4333(Part 1)	0.08 % to 20 %
3.	Cereals Pulses & Cereal Products	Mycotoxin		
		Aflatoxin B1	STP - 101 Issue No:01 Issue Date: 12.02.2018	0.5 µg/kg to 500 µg/kg
		Aflatoxin B2		0.5 µg/kg to 500 µg/kg
		Aflatoxin G1		0.5 µg/kg to 500 µg/kg
		Aflatoxin G2		0.5 µg/kg to 500 µg/kg

Laboratory

National Collateral Management Services Limited, CommGrade,
Testing & Certification, 14/573, F & G, HAG Arcade, Mariyappady,
UC College PO, Aluva, Ernakulam, Kerala

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

TC-7482

Page 8 of 10

Validity

29.06.2018 to 28.06.2020

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
4.	Edible Oils and Fats	Moisture and other Volatile matter	IS 548 (Part 1)	0.1 % to 10 %
		Insoluble Impurities	IS 548 (Part 1)	0.06 % to 10 %
		Free Fatty Acid as Oleic acid	IS 548 (Part 1)	0.5 to 20
		Acid Value	IS 548 (Part 1)	0.5 to 20
		Iodine value	IS 548 (Part 1)	5 to 200
		Peroxide Value	IS 548 (Part 1)	1.0 millieq/kg to 20 millieq/kg
		Test for Mineral Oil	IS 548 (Part 2)	Qualitative
		Specific Gravity	IS 548 (Part 1)	0.8000 to 1.2000
		Saponification value	IS 548 (Part 1)	80 to 300
		Unsaponifiable Matter	IS 548 (Part 1)	0.5 % to 5 %
5.	Fruits & Vegetable Products	Moisture	FSSAI Manual	1.0 % to 20 %
		Total ash	FSSAI Manual	1.0 % to 25 %
		Ash Insoluble in dil. HCl	FSSAI Manual	0.1 % to 10 %
		Acidity as Citric acid / Acetic acid	FSSAI Manual	1.0 % to 10 %
		pH	FSSAI Manual	1.00 to 14.00
		Total sugar	IS 6287	5.0 % to 80 %
		Protein	IS 7279	1.0 % to 50 %
		Reducing Sugar	IS 6287	5 % to 80 %
		Salt	STP 102 Issue No:01	1.0 % to 20 %
		Peroxidase Test	FSSAI Manual	Qualitative
6.	Herbs, Spices & Condiments	Moisture	IS 1797	5.0 % to 20 %
		Total Ash	IS 1797	1.0 % to 10 %
		Acid Insoluble Ash	IS 1797	0.5 % to 10 %
		Crude Fibre	IS 1797	1.0 % to 40 %
		Non Volatile Ether Extract	IS 1797	1.0 % to 20 %
		Volatile Oil	IS 1797	0.1 % to 20 %
		Curcumin Content	ASTA Analytical Methods	1.0 % to 95 %
		Piperine	ASTA Analytical Methods	1.0 % to 95 %

Pankaj Goyal
Convenor

N. Venkateswaran
Program Director

Laboratory **National Collateral Management Services Limited, CommGrade, Testing & Certification, 14/573, F & G, HAG Arcade, Mariyappady, UC College PO, Aluva, Ernakulam, Kerala**

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

Certificate Number **TC-7482**

Page 9 of 10

Validity **29.06.2018 to 28.06.2020**

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
		Alcohol Soluble Extract	IS 1797	1.0 % to 50 %
		Cold water soluble extract	IS 1797	1.0 % to 50 %
		Extraneous Matter	IS 1797	1.0 % to 50 %
		Broken fruits, seeds & fragments/ Pinheads	IS 1797	1.0 % to 40 %
		Insect damaged matter	IS 1797	0.4 % to 20 %
		Light berries	IS 1798	0.5 % to 10 %
		Pinheads	IS 1798	0.70 % to 10 %
		Mineral Oil	IS 548(Part 2)	Qualitative
		Test for Lead Chromate	IS 3576	Qualitative
		Total Starch	IS 4706 (Part 2)	5.0 % to 80 %
		Mycotoxin		
		Aflatoxin B1	STP - 101	0.5 µg/kg to 500 µg/kg
		Aflatoxin B2	Issue No:01	0.5 µg/kg to 500 µg/kg
		Aflatoxin G1	Issue Date: 12.02.2018	0.5 µg/kg to 500 µg/kg
Aflatoxin G2		0.5 µg/kg to 500 µg/kg		
7.	Nut and Nut Products	Moisture	IS 3579	1.0 % to 25 %
		Protein	IS 7279	1.0 % to 70 %
		Total Ash	IS 12711	0.1 % to 20 %
		Acid Insoluble ash	IS 12711	0.10 % to 10 %
		Acidity of extracted fat expressed as Oleic acid	IS 12711	0.5 % to 20 %
		Mycotoxin		
		Aflatoxin B1	STP - 101	0.5 µg/kg to 500 µg/kg
		Aflatoxin B2	Issue No:01	0.5 µg/kg to 500 µg/kg
		Aflatoxin G1	Issue Date: 12.02.2018	0.5 µg/kg to 500 µg/kg
Aflatoxin G2		0.5 µg/kg to 500 µg/kg		
8.	Tea	Total Ash	IS 13854	1.0 % to 25 %
		Moisture	IS 13853	1.0 % to 20 %
		Alkalinity of water soluble ash	IS 13856	1.0 % to 10 %
		Acid insoluble ash	IS 13857	0.1 % to 10 %
		Water extract	IS 13862	5 % to 70 %

Laboratory National Collateral Management Services Limited, CommGrade,
Testing & Certification, 14/573, F & G, HAG Arcade, Mariyappady,
UC College PO, Aluva, Ernakulam, Kerala

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7482

Page 10 of 10

Validity 29.06.2018 to 28.06.2020

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
		Crude fibre	IS 10226 Part 1	5 % to 50 %
		Water soluble ash	IS 13854	10 % to 75 %
		Mycotoxin		
		Aflatoxin B1	STP - 101	0.5 µg/kg to 500 µg/kg
		Aflatoxin B2	Issue No:01	0.5 µg/kg to 500 µg/kg
		Aflatoxin G1	Issue Date: 12.02.2018	0.5 µg/kg to 500 µg/kg
		Aflatoxin G2		0.5 µg/kg to 500 µg/kg
II.	WATER			
1.	Drinking Water	Color	IS 3025 (Part 4)	1 Hazen to 500 Hazen
		pH value	IS 3025 (Part 11)	1.00 to 14.00
		Total hardness (as CaCO ₃)	IS 3025 (Part 21)	2.0 mg/l to 1000 mg/l
		Calcium (as Ca)	IS 3025 (Part 40)	2.0 mg/l to 1000 mg/l
		Iron (as Fe)	IS 3025 (Part 53)	0.1 mg/l to 1000 mg/l
		Chloride (as Cl ⁻)	IS 3025 (Part 32)	1.0 mg/l to 1000 mg/l
		Residual Free Chlorine	IS 3025 (Part 26)	1.0 mg/l to 100 mg/l
		Total Dissolved Solids	IS 3025 (Part 16)	10 mg/l to 5000 mg/l
		Alkalinity (as CaCO ₃)	IS 3025 (Part 23)	2 mg/l to 1000 mg/l