No. D-14/15, Sector No. 6, New Panvel, Maharashtra

Accreditation Standard ISO/IEC 17025: 2017

Certificate Number TC-7330 Page 1 of 15

Validity 09.08.2019 to 27.05.2020 Last Amended on --

| SI. | Product / Material | Specific Test Performed | Test Method Specification | Range of Testing / | 1 |
|-----|--------------------|-------------------------|---------------------------|---------------------|---|
| | of Test | | against which tests are | Limits of Detection | |
| | | | performed | | |

BIOLOGICAL TESTING

| I. | FOOD & AGRICULT | URE PRODUCTS | | |
|----|-------------------------------------|--------------------------------------|---|----------------------|
| 1. | Fish & Sea Foods Frozen raw fish | Total Plate count | FSSAI Lab Manual 2017 Chapter 1 page no.1-5 | ≥10 cfu/g |
| | | E. coli | FSSAI Lab Manual 2017 Chapter 1.Page no.14-20 | Present/Absent per g |
| | | Staphyloccous aureus (Coagulase +ve) | FSSAI Lab Manual 2017 Chapter 1.Page no.39-43 | Present/Absent per g |
| | | Total Coliforms | FSSAI Lab Manual 2017 Chapter 1.Page no.14-20 | ≥10 cfu/g |
| | | Yeast & mould | FSSAI Lab Manual 2017 Chapter 1.Page no.50-52 | ≥10 cfu/g |
| 2. | Poultry & Poultry Products. Chicken | Total Plate count | FSSAI Lab Manual 2017 Chapter 1 page no.1-5 | ≥10 cfu/g |
| | chilly cold cuts | E. coli | FSSAI Lab Manual 2017 Chapter 1.Page no.14-20 | Present/Absent per g |
| | | Staphyloccous aureus (Coagulase +ve) | FSSAI Lab Manual 2017 Chapter 1.Page no.39-43 | Present/Absent per g |
| | | Total Coliforms | FSSAI Lab Manual 2017 Chapter 1.Page no.14-20. | ≥10 cfu/g/ml |
| | | Yeast & mould | FSSAI Lab Manual 2017 Chapter 1.Page no.50-52 | ≥10 cfu/g |
| 3. | Meat & Meat Products, Meat | Total Plate count | FSSAI Lab Manual 2017 Chapter 1 page no.1-5 | ≥10 cfu/g |
| | | E. coli | FSSAI Lab Manual 2017 Chapter 1.Page no.14-20 | Present/Absent per g |
| | | Staphyloccous aureus (Coagulase +ve) | FSSAI Lab Manual 2017 Chapter 1.Page no.39-43 | Present/Absent per g |
| | | Total Coliforms | FSSAI Lab Manual 2017 Chapter 1.Page no.14-20 | ≥10 cfu/g |
| | | Yeast & mould | FSSAI Lab Manual 2017 Chapter 1.Page no.50-52 | ≥10 cfu/g |

ISO/IEC 17025: 2017 **Accreditation Standard**

Certificate Number TC-7330 Page 2 of 15

Validity 09.08.2019 to 27.05.2020 Last Amended on --

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection |
|-----|------------------------------------|---|---|---|
| 4. | Milk & Dairy Products | Total Plate count | FSSAI Lab Manual 2017 Chapter 1 page no.1-5 | ≥10 cfu/g |
| | Milk Powder, Chach, Dahi, Lassi | E. coli | FSSAI Lab Manual 2017 Chapter 1.Page no.14-20 | Present/Absent per g |
| | | Total Coliforms | FSSAI Lab Manual 2017 Chapter 1.Page no.14-20 | ≥10 cfu/g |
| | | Yeast & mould | FSSAI Lab Manual 2017 Chapter 1.Page no.50-52 | ≥10 cfu/g |
| | | Staphyloccous aureus (Coagulase +ve) | FSSAI Lab Manual 2017 Chapter 1.Page no.39-43 | Present/Absent/g |
| 5. | Herbs, Spices & Condiments | Total Plate count | FSSAI Lab Manual 2017 Chapter 1 page no.1-5 | ≥10 cfu/g |
| | (Ground, Whole & Blended) | E. coli | FSSAI Lab Manual 2017 Chapter 1.Page no.14-20 | Present/Absent per g |
| | Mutton Masala | Staphyloccous aureus (Coagulase +ve) | FSSAI Lab Manual 2017 Chapter 1.Page no.39-43 | Present/Absent per g |
| | | Total Coliforms | FSSAI Lab Manual 2017 Chapter 1.Page no.14-20 | ≥10 cfu/g |
| | | Yeast & mould | FSSAI Lab Manual 2017 Chapter 1.Page no.50-52 | ≥10 cfu/g |
| 6. | Nut & Nuts Products, | Total Plate count | FSSAI Lab Manual 2017 Chapter 1 page no.1-5 | ≥10 cfu/g |
| | Crushed peanuts | E. coli | FSSAI Lab Manual 2017 Chapter 1.Page no.14-20 | Present/Absent per g |
| | | Staphyloccous aureus (Coagulase +ve) | FSSAI Lab Manual 2017 Chapter 1.Page no.39-43 | Present/Absent per g |
| | | Total Coliforms | FSSAI Lab Manual 2017 Chapter 1.Page no.14-20 | ≥10 cfu/g |
| | | Yeast & mould | FSSAI Lab Manual 2017 Chapter 1.Page no.50-52 | ≥10 cfu/g |
| 7. | Cereals & Pulses Besan | Total Coliforms | FSSAI Lab Manual 2017 Chapter 1.Page no.14-20 | ≥10 cfu/g |
| | | E. coli | FSSAI Lab Manual 2017 Chapter 1.Page no.14-20 | Present/Absent per g |

ISO/IEC 17025: 2017 **Accreditation Standard**

Certificate Number TC-7330 Page 3 of 15

Validity 09.08.2019 to 27.05.2020 Last Amended on --

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection |
|-----|----------------------------|-------------------------|---|---|
| | | Staphyloccous aureus | FSSAI Lab Manual 2017 | Present/Absent per g |
| | | (Coagulase +ve) | Chapter 1.Page no.39-43 | |
| | | Yeast & mould | FSSAI Lab Manual 2017 | ≥10 cfu/g |
| | | | Chapter 1.Page no.50-52 | |
| | | Total Plate count | FSSAI Lab Manual 2017 | ≥10 cfu/g |
| | | <u> </u> | Chapter 1 page no.1-5 | |
| 8. | Fruit & Fruit | Total Plate count | FSSAI Lab Manual 2017 | ≥10 cfu/g |
| | Products | | Chapter 1 page no.1-5 | |
| | Frozen Lychee | Total Coliforms | FSSAI Lab Manual 2017 | ≥10 cfu/g |
| | pulp, Green peas, | <u></u> | Chapter 1.Page no.14-20 | |
| | Frozen Strawberry | E. coli | FSSAI Lab Manual 2017 | Present/Absent per g |
| | | | Chapter 1.Page no.14-20 | |
| | | Staphyloccous aureus | FSSAI Lab Manual 2017 | Present/Absent per g |
| | | (Coagulase +ve) | Chapter 1.Page no.39-43 | . 10 . 5 . 1 |
| | | Yeast & mould | FSSAI Lab Manual 2017 | ≥10 cfu/g |
| | | | Chapter 1.Page no.50-52 | 5 (10) |
| 9. | Bakery Products, | Staphyloccous aureus | FSSAI Lab Manual 2017 | Present/Absent per g |
| | Cookies | (Coagulase +ve) | Chapter 1.Page no.39-43 | 10.5.1 |
| | | Total Coliforms | FSSAI Lab Manual 2017 | ≥10 cfu/g |
| | | | Chapter 1.Page no.14-20 | . 10 . 5 . / |
| | | Yeast & mould count | FSSAI Lab Manual 2017 | ≥10 cfu/g |
| | | T-(-I Distance | Chapter 1.Page no.50-52 | >40 · f · / · |
| | | Total Plate count | FSSAI Lab Manual 2017 | ≥10 cfu/g |
| | | <u> </u> | Chapter 1 page no.1-5 | D (/A) |
| | | E. coli | FSSAI Lab Manual 2017 | Present/Absent per g |
| | Wanatah la O | | Chapter 1.Page no.14-20 | D (/A) |
| 10. | Vegetable & | Staphyloccous aureus | FSSAI Lab Manual 2017 | Present/Absent/g |
| | Vegetable Products | (Coagulase +ve) | Chapter 1.Page no.39-43 | >40 -5./- |
| | 1 1 2 3 3 3 3 3 | Total Coliforms | FSSAI Lab Manual 2017 | ≥10 cfu/g |
| | Tomato paste | Yeast & mould count | Chapter 1.Page no.14-20 | >10 of://a |
| | | reast & mould count | FSSAI Lab Manual 2017 | ≥10 cfu/g |
| | | E soli | Chapter 1.Page no.50-52 | Dropont/About nor a |
| | | E. coli | FSSAI Lab Manual 2017 | Present/Absent per g |
| | | | Chapter 1.Page no.14-20 | |

ISO/IEC 17025: 2017 **Accreditation Standard**

Certificate Number TC-7330 Page 4 of 15

Validity 09.08.2019 to 27.05.2020 Last Amended on --

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection |
|------|--|--|---|---|
| | | Total Plate count | FSSAI Lab Manual 2017 Chapter 1 page no.1-5 | ≥10 cfu/g |
| II. | DRUGS & PHARMA | CEUTICAL PRODUCTS | | |
| 1. | Water for Injection | Endotoxins | IP 2018 Vol I.2.2.3 | Passes/Fail |
| | • | Sterility | IP 2018 Vol I.2.2.11 | Passes/Fail |
| 2. | Talcum Powder Ambroxol | Total Bacterial Count Total Fungal Count | IP 2018 Vol I.2.2.9 IP 2018 Vol I.2.2.9 | ≥1 cfu/g ≥1 cfu/g |
| | Hydrochloride | Escherichia coli Staphylococcus aureus Salmonella spp. | IP 2018 Vol I.2.2.9 IP 2018 Vol I.2.2.9 IP 2018 Vol I.2.2.9 | Present/Absent per/g Present/Absent per/g Present/Absent per/10 g |
| | | Pseudomonas aeruginosa Baile tolerant gram negative bacteria | IP 2018 Vol 1.2.2.9 IP 2018 Vol 1.2.2.9 | Present/Absent per/gm Present/Absent per/10 g |
| 3. | Sterility Test Paclitaxel Inj. IP, Filgrastim 300mcg/ml, Prefilled syringe, Levocarnitine Inj., Dextrose Inj., Oxaplatin Inj., Water for Injection | Candida albicans Membrane Filtration Method | IP 2018 Vol I.2.2.9 IP 2018 Vol I.2.2.11 | Present/Absent per/g Passes/Fail |
| III. | WATER | | | |
| 1. | Drinking Water | Total Bacterial Count | IP 2018 Vol. I.2.2.9 or 22 nd Eddition APHA (9215.A & B) 2012 | ≥10 cfu/ml |
| | | Total Fungal Count E. coli | IP 2018 Vol. I.2.2.9 IP 2018 Vol. I.2.2.9 or 22 nd Eddition APHA (9221.F) 2012 | ≥10 cfu/ml Present/Absent per/ml |

ISO/IEC 17025: 2017 **Accreditation Standard**

Certificate Number TC-7330 Page 5 of 15

Validity 09.08.2019 to 27.05.2020 Last Amended on --

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection |
|----------|----------------------------|-------------------------|---|---|
| | | Staphylococcus aureus | IP 2018 Vol. I.2.2.9 | Present/Absent per/ml |
| | | Salmonella Spp | IP 2018 Vol. I.2.2.9 | Present/Absent per/10ml |
| | | Pseudomonas aeruginosa | IP 2018 Vol. I.2.2.9 | Present/Absent per/ml |
| | | Bile Tolerant gram- | IP 2018 Vol. I.2.9 or | Present/Absent per/10ml |
| | | Negative bacteria | 22 nd Eddition APHA | Present/Absent |
| | | | (9222.B) 2012 | per/100ml |
| | | Candida albicans | IP 2018 Vol. I.2.2.9 | Present/Absent per/ml |
| 2. | Packaged | Total Bacterial Count | IP 2018 Vol. I.2.2.9 | ≥10 cfu/ml |
| | Drinking Water | Total Fungal Count | IP 2018 Vol. I.2.2.9 | ≥10 cfu/ml |
| | | Escherichia coli | IP 2018 Vol. I.2.2.9 | Present/Absent per/ml |
| | | Staphylococcus aureus | IP 2018 Vol. I.2.2.9 | Present/Absent per/ml |
| | | Salmonella spp | IP 2018 Vol. I.2.2.9 | Present/Absent per/10ml |
| | | Pseudomonas aeruginosa | IP 2018 Vol. I.2.2.9 | Present/Absent per/ml |
| | | Bile tolerant gram- | IP 2018 Vol. I.2.2.9 | Present/Absent per/10ml |
| | | negative bacteria | | |
| <u> </u> | | Candida albicans | IP 2018 Vol. I.2.2.9 | Present/Absent per/ml |
| 3. | Purified Water | Total Bacterial Count | IP 2018 Vol. I.2.2.9 | ≥1 cfu/ml |
| | | Total Fungal Count | IP 2018 Vol. I.2.2.9 | ≥1 cfu/ml |
| | | Escherichia coli | IP 2018 Vol. I.2.2.9 | Present/Absent per/ml |
| | | Staphylococcus aureus | IP 2018 Vol. I.2.2.9 | Present/Absent per/ml |
| | | Salmonella spp | IP 2018 Vol. I.2.2.9 | Present/Absent per/10ml |
| | | Pseudomonas aeruginosa | IP 2018 Vol. I.2.2.9 | Present/Absent per/ml |
| | | Bile tolerant gram- | IP 2018 Vol. I.2.2.9 | Present/Absent per/10ml |
| | | negative bacteria | | |
| | | Candida albicans | IP 2018 Vol. I.2.2.9 | Present/Absent per/ml |
| 4. | Water for | Total Bacterial Count | IP 2018 Vol. I.2.2.9 | ≥1 cfu/ml |
| | Processed food | Total Fungal Count | IP 2018 Vol. I.2.2.9 | ≥1 cfu/ml |
| | Industries | Escherichia coli | IP 2018 Vol. I.2.2.9 | Present/Absent per/ml |
| | | Staphylococcus aureus | IP 2018 Vol. I.2.2.9 | Present/Absent per/ml |
| | | Salmonella spp | IP 2018 Vol. I.2.2.9 | Present/Absent per/10ml |
| | | Pseudomonas aeruginosa | IP 2018 Vol. I.2.2.9 | Present/Absent per/ml |
| | | Bile tolerant gram- | IP 2018 Vol. I.2.2.9 | Present/Absent per/10ml |
| | | negative bacteria | | |
| | | Candida albicans | IP 2018 Vol. I.2.2.9 | Present/Absent per/ml |

No. D-14/15, Sector No. 6, New Panvel, Maharashtra

Accreditation Standard ISO/IEC 17025: 2017

Certificate Number TC-7330 Page 6 of 15

Validity 09.08.2019 to 27.05.2020 Last Amended on --

| SI. | Product / Material | Specific Test Performed | Test Method Specification | Range of Testing / | 1 |
|-----|--------------------|-------------------------|---------------------------|---------------------|---|
| | of Test | | against which tests are | Limits of Detection | |
| | | | performed | | |

CHEMICAL TESTING

| I. | FOOD & AGRICULT | URAL PRODUCTS | | |
|----|-------------------------------------|---------------------------|--|---------------------------|
| 1. | Animal Feeds, Feeding Stuffs and | Moisture | IS 7874 (Part 1) 1975 (RA 2006) | 0.1 g/100 g to 30 g/100 g |
| | Food Products | Crude Protein | IS 7874 (Part 1) 1975 (RA 2006) | 1 g/100 g to 50 g/100 g |
| | | Crude fat | IS 7874 (Part 1) 1975 (RA 2006) | 1 g/100 g to 60 g/100 g |
| | | Crude Fibre | IS 7874 (Part 1) 1975 (RA 2006) | 0.5 g/100 g to 30 g/100 g |
| | | Total ash | IS 7874 (Part 1) 1975 (R.A 2006) | 0.1 g/100 g to 20 g/100 g |
| | | Acid insoluble ash | IS 7874 (Part 1) 1975 (RA 2006) | 0.5 g/100 g to 5 g/100 g |
| | | Phosphorous | IS 7874 (Part 2) 1975 (RA 2004) | 0.1 mg/kg to 50 mg/kg |
| | | Calcium | AOAC 985.01 (20 th Edition) | 1 mg/kg to 1000 mg/kg |
| | | Salt as NaCl | IS 7874 (Part 2) 1975 (RA 2004) | 0.5 g/100 g to 10 g/100 g |
| | | Naturally Occurring Toxii | ns (NOTS) | |
| | | Hyperciene | JPCLIN/ML-GUR/SOP- CHE-16, Issue date:22/09/2017 | 0.1 mg/kg to 10 mg/kg |
| | | Hydrocyanic Acid | AOAC 970.11,18th Edition | 0.1 mg/kg to 10 mg/kg |
| | | Agaric Acid | JPCL/SOP/GL-Food/14 & 16 Issue date:25/09/2017 | 0.1 mg/kg to 10 mg/kg |
| | | Saffarol | JPCL/GUR/GL-TOL/11 Issue date:26/09/2017 | 0.1 mg/kg to 10 mg/kg |
| | | Aflatoxin B1 | SOP/QC/51 Issue date:21/08/2017 | Qualitative |

Suman Kharayat Convenor

Jitendra B. Vispute Program Manager

ISO/IEC 17025: 2017 **Accreditation Standard**

Certificate Number TC-7330 Page 7 of 15

Validity 09.08.2019 to 27.05.2020 Last Amended on --

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection |
|----------|------------------------------------|----------------------------------|---|---|
| | | Aflatoxin B2 | SOP/QC/51 Issue date:21/08/2017 | Qualitative |
| | | Aflatoxin G1 | SOP/QC/51 Issue date:21/08/2017 | Qualitative |
| | | Aflatoxin G2 | SOP/QC/51 Issue date:21/08/2017 | Qualitative |
| 2. 3. | Cereals & Pulses & Its Products | Moisture | IS 7874 (Part 1) 1975 (RA 2014) | 1 g/100 g to 95 g/100 g |
| | | Total ash | IS 7874 (Part 1) 1975 (RA 2014) | 0.1 g/100 g to 20 g/100 g |
| | | Acid insoluble ash | IS 7874 (Part 1) 1975 (RA 2014) | 0.1 g/100 g to 5 g/100 g |
| | | Total Solids | IS 3882-1966 (RA 2001) | 5 g/100 g to 99 g/100 g |
| | | Salt as NaCl | IS 2860-1964 (RA 2003) | 0.1 g/100 g to 20 g/100 g |
| | | Crude Fiber | GAFTA 2003 [10:0] | 0.1 g/100 g to 30 g/100 g |
| | | Water Insoluble Solids | IS 13845-2003 | 0.1 g/100 g to 90 g/100 g |
| | | Total Sugar | AOAC Official Method 982.14 20 th Ed ⁿ | 0.5 g/100 g to 80 g/100 g |
| | | Description (Appearance, colour) | IS 5861-1993/ IS 4624-1978 (RA 2005) | Qualitative |
| | | Extraneous matter | IS 4624-1978 (RA 2005) | Qualitative |
| | | Bromate content | AOAC 956.03 | 0.5 mg/kg to 10 mg/kg |
| | | Foreign matter | IS 12711:2012 | Qualitative |
| | | Added colouring matter | IS 12711:1989 | Qualitative |
| | Food & Premix | Vitamin B1 | AOAC SMPR 2015.002 | 0.1 mg/kg to 100 mg/kg |
| | | Vitamin B2 | AOAC Int. 2016 20 th Edition | 0.1 mg/kg to 100 mg/kg |
| | | Vitamin B3 | AOAC Int. 2016 20 th Edition | 0.1 mg/kg to 100 mg/kg |
| | | Vitamin B5 | AOAC Int. 2016 20 th Edition | 0.1 mg/kg to 100 mg/kg |
| | | Vitamin B6 | AOAC Int. 2016 20 th Edition | 0.1 mg/kg to 100 mg/kg |
| | | Vitamin B7 | AOAC Int. 2016 20 th Edition | 0.1 mg/kg to 100 mg/kg |
| | | Vitamin B9 | AOAC Int. 2016 20 th Edition | 0.1 mg/kg to 100 mg/kg |
| | | Vitamin B12 | AOAC Int. 2016 20 th Edition | 0.1 mg/kg to 100 mg/kg |
| | | Vitamin D2 | AOAC SMPR 2012.004 20 th | 0.1 mg/kg to 100 mg/kg |
| | | <u> </u> | Edition | |

ISO/IEC 17025: 2017 **Accreditation Standard**

Certificate Number TC-7330 Page 8 of 15

Validity 09.08.2019 to 27.05.2020 Last Amended on --

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are | Range of Testing / Limits of Detection |
|----------|----------------------------|------------------------------|---|--|
| | or rest | | performed | Limits of Detection |
| | | Vitamin D3 | AOAC SMPR 2012.004 | 0.1 mg/kg to 100 mg/kg |
| | | <u> </u> | 20 th Edition | |
| İ | | Vitamin E | AOAC SMPR 2012.005 | 0.1 mg/kg to 100 mg/kg |
| | | Vitamin C | AOAC NEW First Action | 0.1 mg/kg to 100 mg/kg |
| | | | 2012 | |
| <u>.</u> | | Vitamin A | AOAC SMPR 2012.003 | 0.1 mg/kg to 100 mg/kg |
| 4. | Oils And Fats & | Moisture | AOCS Ca 2a-45, 6th | 0.01 g/100 g to 5 g/100 g |
| | Their By Products | | Edition 2009/IS 548 | |
| | | Maistan and aletin | (Part I) 1964 (RA 2010) | 0.04 = /4.00 = += 5 = /4.00 = |
| | | Moisture and volatile matter | AOCS Ca 2c-25, 6th Edition 2009 | 0.01 g/100 g to 5 g/100 g |
| | | Acid value | FSSAI Manual 2018 | 0.01 to 20 |
| | | Free fatty acids | AOCS Ca 5a-40, 6th | 0.01 to 10 |
| | | Free fally acids | Edition 2009 | 0.01 to 10 |
| | | Unsaponifiable matter | AOCS Ca 6a-40, 6th | 0.1 g/100 g to 10 g/100 g |
| | | Cricaporimable matter | Edition 2009 | 5.1 g, 100 g to 10 g, 100 g |
| | | Specific gravity | AOCS Cc 10a-25, 6th | 0.75 to 0.95 |
| | | , , | Edition 2009 | |
| | | Mass per unit volume | AOCS Cc 10c-95, 6th | 0.75 to 0.95 |
| | | | Edition 2009 | |
| | | lodine value (Wijs) | AOCS Cd 1-25, 6th | 1 to 200 |
| | | | Edition 2009 | |
| | | Saponification value | AOCS Cd 3-25, 6th | 80 to 300 |
| | | | Edition 2009 | |
| | | Peroxide value | AOCS Cd 8-53, 6th | 1 milli eq./kg to |
| | | | Edition 2009/IS 548 | 25 milli eq./kg |
| | | Description | (Part 1) 1964 (RA 2010) | Ovelitative |
| | | Description | IS 10633:1999 (RA 2004) | Qualitative |
| | | Slip Melting point | AOCS Cc 3-25, 6th | 10 deg C to 80 deg C |
| | | Cup Mounty point | Edition 2009 | . 5 409 5 10 00 409 5 |
| 5. | Nuts And Nut | Moisture | AOAC 925.40,20th Edition/ | 0.1 g/100 g to 30 g/100 g |
| _ | Products | | IS 4684:1995 (RA 2005) | 5 1 2 2 3 1 2 3 1 3 1 3 1 3 3 |
| | | | `, | |
| İ | | | | |

ISO/IEC 17025: 2017 **Accreditation Standard**

Certificate Number TC-7330 Page 9 of 15

Validity 09.08.2019 to 27.05.2020 Last Amended on --

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection |
|-----|----------------------------|----------------------------|---|---|
| | | Fat | AOAC 948.22, 20th Edition/IS 4684:1995 (RA 2005) | 1 g/100 g to 70 g/100 g |
| | | Protein | AOAC 950.48, 20th Edition/IS 4684:1995 (RA 2005) | 0.1 g/100 g to 50 g/100 g |
| | | Crude fiber | AOAC 935.53, 20th Edition/IS 4684:1995 (RA 2005) | 0.1 g/100 g to 50 g/100 g |
| | | Ash | AOAC 950.49, 20th Edition/IS 4684:1995 (RA 2005) | 0.1 g/100 g to 10 g/100 g |
| | | Acid Insoluble Ash | IS 4684:1995 (RA 2005) IS 4684:1995 (RA 2005) | 0.01 g/100 g to 10g/100 g |
| 6. | Milk & Dairy | Moisture | IS 1806:1975 Appendix A | 1 g/100 g to 90 g/100 g |
| | Product/Flavours | Total Protein | IS 1547:1968 Appendix B | 1 g/100 g to 50 g/100 g |
| | And Infant Foods | Milk Fat | IS 1547:1968 Appendix C | 0.1 g/100 g to 99 g/100 g |
| | (Panner, Chesse, | Total Ash | IS 1547:1968 Appendix E | 0.1 g/100 g to 10 g/100 g |
| | Skimmed Milk | Acid insoluble ash | IS 1547:1968 Appendix F | 0.01 g/100 g to 2 g/100 g |
| | Powder, Ice | Solid Non Fat | AOAC 990.21,20th Edition | 5 g/100 g to 15 g/100 g |
| | Cream) | Added Sugar | IS 1479(Part 2) (RA 2009) | Qualitative |
| 7. | Spices and | Moisture | IS 1797:1985 (RA 2003) | 0.1 g/100 g to 20 g/100 g |
| | condiments & | Total ash | IS 1797:1985 (RA 2003) | 0.1 g/100 g to 15 g/100 g |
| | flavours | Acid insoluble ash | IS 1797:1985 (RA 2003) | 0.01 g/100 g to 5 g/100 g |
| | (whole & powder, | Non volatile ether extract | IS 1797:1985 (RA 2003) | 0.1 g/100 g to 30 g/100 g |
| | chilly, asafoetida, | Volatile oil | IS 1797:1985 (RA 2003) | 0.1 g/100 g to 25 g/100 g |
| | cumin, ginger, | Cold water soluble extract | IS 1797:1985 (RA 2003) | 0.1 g/100 g to 30 g/100 g |
| | dhana powder) | Bulk Density | ASTA 25.0 4th Edition 1997 (RA 2013) | 0.1 g/ml to 8.0 g/ml |
| | | Calcium (as CaO3) | IS 1797:1985 (RA 2003) | 0.1 g/100 g to 10g/100 g |
| | | Salt (as NaCl) | IS 1797:1985 (RA 2003) | 0.1 g/100 g to 20 g/100 g |
| | | Crude fibre | IS 1797:1985 (RA 2003) | 1 g/100 g to 40 g/100 g |
| | | Total Nitrogen | IS 5453 (Part 1) 1996 (RA 2003) | 0.1 g/100 g to 20 g/100 g |

ISO/IEC 17025: 2017 **Accreditation Standard**

Certificate Number TC-7330 Page 10 of 15

Validity 09.08.2019 to 27.05.2020 Last Amended on --

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection |
|-----|-------------------------------------|--------------------------|---|---|
| 8. | Turmeric and | Curcumin content | IS 10925:1984 (RA 2007) | 1 g/100 g to 15 g/100g |
| | Curcumin Powder | Starch (on dry basis) | IS 4706 (Part 2) 1978 (RA 2005) | 40 g/100 g to 60 g/100g |
| | | Presence of chromates | IS 3576-1994 (RA 2003) | Qualitative |
| 9. | Bakery Products, Bread, Biscuit, | Energy | FAO Food & Nutrition Paper 77,2003 | 50 Kcal/100g to 700 Kcal/100g |
| | Noodles, Snacks | Carbohydrate | IS 12711:1989 (RA 2005) | 1 g/100 g to 90 g/100 g |
| | & Confectionary | Fat | IS 12711:1989 (RA 2005) | 0.1 g/100 g to 60 g/100 g |
| | Products | Protein | IS 7219:1973 (RA 2005) | 0.05 g/100 g to 50g/100 g |
| | | Crude Fiber | IS 12711:1989 (RA 2005) | 0.5 g/100 g to 30g/100 g |
| | | Moisture | IS 12711:1989 (RA 2005) | 0.2 g/100 g to 50g/100 g |
| | | Ash | IS 12711:1989 (RA 2005) | 0.1 g/100 g to 10g/100 g |
| | | Acidity of extracted fat | IS 12711:1989 (RA 1994) IS 1011-2002 | 0.1 g/100 g to 3.0 g/100 g |
| | | Total solids | IS 12711:1989 (RA 2005) | 5.0 g/100 g to 99g/100 g |
| | | Reducing sugar | AOAC Official Method 939.03 | 1 g/100 g to 90g/100g |
| | | Starch | IS 4706 (Part 2) 1978 (RA 2005) | 0.2 g/100 g to 50g/100 g |
| | | Sulphated ash | IS 6287:1985 (RA 2005) AOAC 900.02 | 0.01 g/100 g to 2g/100 g |
| | | Sugar | IS 4079:1967 (RA 2005) | 1 g/100 g to 70.0g/100 g |
| | | Salt | ISO 1841-1:1996 (RA 2005) | 0.1 g/100 g to 30g/100 g |
| | | Sodium | AOAC 985.01, 975.03, 990.08 by ICP-MS/ IS 12711:1989 (RA 1994), FSSAI LAB MANUAL 9 | 1 mg/kg to 100 mg/kg |
| | | Potassium | AOAC 985.01, 975.03, 990.08 by ICP-MS/ IS 12711:1989 (RA 1994) FSSAI LAB MANUAL 9 | 1 mg/kg to 100 mg/kg |
| | | Calcium | AOAC 985.01, 975.03, 990.08 by ICP-MS/ IS 12711:1989 (RA 1994) | 1 mg/kg to 100 mg/kg |

No. D-14/15, Sector No. 6, New Panvel, Maharashtra

Accreditation Standard ISO/IEC 17025: 2017

Certificate Number TC-7330 Page 11 of 15

Validity 09.08.2019 to 27.05.2020 Last Amended on --

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection |
|-----|----------------------------|-------------------------|--|---|
| | | | FSSAI LAB MANUAL 9 | |
| | | Iron | AOAC 985.01, 975.03, 990.08 by ICP-MS/ IS 12711:1989 (RA 1994) FSSAI LAB MANUAL 9 | 1 mg/kg to 100 mg/kg |
| | | Copper | AOAC 985.01, 975.03, 990.08 by ICP-MS/ IS 12711:1989 (RA 1994) FSSAI LAB MANUAL 9 | 1 mg/kg to 100 mg/kg |
| | | Zinc | AOAC 985.01, 975.03, 990.08 by ICP-MS/ IS 12711:1989 (RA 1994) FSSAI LAB MANUAL 9 | 1 mg/kg to 100 mg/kg |
| | | Magnesium | AOAC 976.09, 20 th Edition, FSSAI lab manual 9 | 1 mg/kg to 100 mg/kg |
| | | Phosphorous | ISO 13730:1996, FSSAI lab manual | 1 mg/kg to 100 mg/Kg |
| | | Manganese | AOAC 985.35, 20 th Edition, FSSAI | 1 mg/kg to 100 mg/kg |
| | | Lead | AOAC 972.25, 20 th Edition, FSSAI | 1 mg/kg to 100 mg/kg |
| | | Mercury | FSSAI Lab manual 9 (Part 18), FSSAI | 1 μg/Kg to 500 μg/Kg |
| | | Arsenic | EPA METHOD 200.2, FSSAI | 1 μg/Kg to 500 μg/Kg |
| 10. | Alcoholic | Residue on evaporation | IS 3752:2005 (RA 2008) | 0.1 g/100 g to 25g/100 g |
| | Beverages | Volatile acidity | IS 3752:2005 (RA 2008) | 1 g/100L to 150 g/100L |
| | (Rum, Whisky, | рН | IS 3752:2005 (RA 2008) | 3 to 12 |
| | Brandy, Gin, Beer) | Ash content | IS 3752:2005 (RA 2008) | 0.01 g/100 g to 2.0 g/100 g |
| | | Methyl alcohol | IS 3752:2005 (RA 2008) | Qualitative |
| | | Ethanol | IS 3752:2005 (RA 2008) | 1 g/100 g to 60 g/100 g |

ISO/IEC 17025: 2017 **Accreditation Standard**

Certificate Number TC-7330 Page 12 of 15

Validity 09.08.2019 to 27.05.2020 Last Amended on --

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection |
|-----|----------------------------|--------------------------|---|---|
| 11. | Fruits and | Moisture | AOAC 930.28, 20th Edition | 0.1 g/100 g to 95 g/100 g |
| | Vegetable | Ash | AOAC 940.26, 20th Edition | 0.1 g/100 g to 20g/100 g |
| | Products, Food & | Total solids | AOAC 920.51, 20 th Edition | 1 g/100 g to 95 g/100 g |
| | Processed Food | Protein | AOAC 2001.,20th | 0.5 g/100 g to 90g/100 g |
| | | | Edition/SOP/QC/52 Issue | |
| | | | date:27/08/2017 | |
| | | Sugar | AOAC 925.36, 20 th Edition, | 0.5 g/100 g to 95g/100 g |
| | | | IS 6287-1985 (RA 1999) | |
| | | Acidity (as citric acid) | AOAC 942.15, 20 th Edition | 0.1 g/100 g to 10 g/100 g |
| | | Volatile acidity | AOAC 925.34, 20 th Edition | 0.1 g/100 g to 5g/100 g |
| | | Energy/Calories | FAO Food & Nutrition | 40 Kcal/100g to |
| | | | Paper 77,2003 | 900 Kcal/100g |
| | | Carbohydrates | AOAC 986.25, 20 th Edition | 0.5 g/100 g to 99 g/100 g |
| | | Total Fat | IS 1164-1986 (RA 2012) | 1.0 g/100 g to |
| | | | | 60.0 g/100 g |
| 12. | Caramel | Lead | IS 4467:1996 (RA 2001); | 1 mg/kg to 20 mg/kg |
| ļ | | ļ | AOAC 972.25 20th Edition | |
| İ | | Arsenic | IS 4467:1996 (RA 2001) | 0.1 mg/kg to 20 mg/kg |
| İ | | Solid content | IS 4467:1996 (RA 2001) | 1 g/100 g to 100 g/100 g |
| İ | | Ammonical nitrogen, | IS 4467:1996 (RA 2001) | 0.1 g/100 g to 0.5 g/100 g |
| | | Total Sulphur | IS 4467:1996 (RA 2001) | 0.1 g/100 g to 2.0 g/100 g |
| | | Sulphur dioxide | IS 4467:1996 (RA 2001) | 0.1 g/100 g to 0.5 g/100 g |
| | | Total Nitrogen | IS 4467:1996 (RA 2001) | 1.0 g/100 g to |
| İ | | ļ | 10.4407.4000.(D.A.0004) | 10.0 g/100 g |
| | \4/4.TED | Copper | IS 4467:1996 (RA 2001) | 0.1 mg/kg to 20 mg/kg |
| II. | WATER | | | |
| 1. | Packaged | Colour | APHA 22nd Edition 2012 | 5 Hu to 100 Hu |
| | Drinking Water, | | (2120B)/usual comparison | |
| | Packaged Natural | | method (pt-cobalt) | |
| | Mineral Water | Total solid | APHA 22nd Edition 2012 | 10 mg/L to 10000 mg/L |
| | Drinking Waters, | [| (2540B) | |
| | Water for | Total Dissolved Solid | IS 3025 (Part 16) 1984 | 5 mg/L to 10000 mg/L |
| | Processed Food | | (RA 2002) | |

Accreditation Standard ISO/IEC 17025: 2017

Certificate Number TC-7330 Page 13 of 15

Validity 09.08.2019 to 27.05.2020 Last Amended on --

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection |
|-----|----------------------------|---|---|---|
| | Industry | Total suspended Solid | IS 3025 (Part-17) (RA 2012) | 5 mg/L to 1000 mg/L |
| | | pН | APHA 22nd Edition 2012 (4500H&B)/IS 3025 (Part 11), (RA 2002) | 3 to 12 |
| | | Electrical Conductivity | APHA 22nd Edition 2012 2510B | 1 μs/cm to 3000 μs/cm |
| | | Copper | APHA 22nd Edition 2012 (3500-Cu)/by ICP-MS | 0.1 mg/L to 100 mg/L |
| | | Iron | APHA 22nd Edition 2012 (3500-Fe)/by ICP-MS | 0.1 mg/L to 100 mg/L |
| | | Manganese | APHA 22nd Edition 2012 (3500-Mn)/by ICP-MS | 0.5 mg/L to 100 mg/L |
| | | Nitrate | APHA 22nd Edition 2012 (4500-NO3 B) | 0.1 mg/L to 50 mg/L |
| | | Nitrite | APHA 22nd Edition 2012 (4500-NO2 B)/ | 0.1 mg/L to 100 mg/L |
| | | Fluoride | APHA 22nd Edition 2012 (4500-FD) | 0.1 mg/L to 100 mg/L |
| | | Boron | IS (Part 29) of 3025:1964)/by ICP-MS | 0.1 mg/L to 100 mg/L |
| | | Chromium (as Cr +6) | APHA method 22 nd 3500-B | 0.1 mg/L to 10.0 mg/L |
| | | Total Hardness (as CaCO ₃) | IS 3025 (Part 21) 1983 (RA 2009) | 1 mg/L to 1000 mg/L |
| | | COD | IS 3025 (Part 58)- 2006/APHA 22nd Edition 2012 5220 | 5 mg/L to 25000 mg/L |
| | | Phosphate | APHA 22nd Edition 2012 (4500-P D) | 0.1 mg/L to 50 mg/L |
| | | Oil & Grease | IS 3025 (Part 39) 1991partial gravimetric method | 0.1 mg/L to 100 mg/L |
| | | Zinc | IS 3025 (Part 49) 1994 (RA 2009)/by ICP-MS | 0.5 mg/L to 100 mg/L |

ISO/IEC 17025: 2017 **Accreditation Standard**

Certificate Number TC-7330 Page 14 of 15

Validity 09.08.2019 to 27.05.2020 Last Amended on --

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection |
|-----|----------------------------|---------------------------------------|--|---|
| | | Chloride | IS 3025(Part 32) | 1 mg/L to 1000 mg/L |
| | | Selenium | APHA 22nd Edition 2012 (3500-Se)/IS 3025 (Part 56)/by ICP-MS | 0.1 mg/L to 100 mg/L |
| | | Sulphate | APHA 22nd Edition 2012 (4500-SO4 E)//IS 3025 (Part 24) | 0.1 mg/L to 500 mg/L |
| | | Total Alkalinity | IS 3025 (Part 23) 1986 (RA 2003) | 1 mg/L to 500 mg/L |
| | | Alkalinity M-alkalinity) | IS 3025 (Part 23) | 1 mg/L to 1000 mg/L |
| | | Alkalinity (As CaCO₃) p-alkalinity | APHA 22nd Edition 2012 (2320 B)/IS 3025 (Part 23) | 1 mg/L to 1000 mg/L |
| | | Calcium | APHA-22 nd Edition 2012 (3500Ca-B) | 1 mg/L to 1000 mg/L |
| | | Magnesium | APHA-22 nd Edition 2012 (3500Mg-B) | 1 mg/L to 1000 mg/L |
| | | Phenolic Compound | APHA 22nd Edition 2012 (5530-C +D) | 0.05 mg/L to 10 mg/L |
| | | Free Residual chlorine | IS 3025 (Part 26)-1986 (RA 2003) | 0.1 mg/L to 10 mg/L |
| | | Cyanide | APHA 22nd Edition 2012 (4500-CNC&E)/IS 3025 (Part 27) | 0.02 mg/L to 3 mg/L |
| | | Arsenic | APHA 22 nd Edition 2012 (3500-As A)/by ICP-MS | 0.01 mg/L to 100 mg/L |
| | | Lead | APHA 22nd Edition 2012 (3500-Pb)/by ICP-MS | 0.05 mg/L to 10 mg/L |
| | | Chromium | APHA 22nd Edition 2012 (3500-Cr)/by ICP-MS | 0.05 mg/L to 100 mg/L |
| | | Nickel | APHA 22nd Edition 2012 (3500-Ni)/by ICP-MS | 0.01 mg/L to 100 mg/L |
| | | Sulphide | APHA 4500 Suphides E-lodometric | 0.1 mg/L to 8 mg/L |

No. D-14/15, Sector No. 6, New Panvel, Maharashtra

Accreditation Standard ISO/IEC 17025: 2017

Certificate Number TC-7330 Page 15 of 15

Validity 09.08.2019 to 27.05.2020 Last Amended on --

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection |
|------|----------------------------|-------------------------------------|--|---|
| | | Ammonical Nitrogen | IS 3025(Part 34) 2003 | 0.1 mg/L to 50 mg/L |
| | | Reactive silica | APHA 22nd Edition 2012- 4500C | 0.1 mg/L to 5 mg/L |
| | | Sodium | APHA 22nd Edition 2012 (3500-Na A)/IS 3025 (Part 45)/by ICP-MS | 0.01 mg/L to 100 mg/L |
| | | Potas sium | APHA 22nd Edition 2012 (3500-K A)/IS 3025 (Part 45)/by ICP-MS | 0.01 mg/L to 100 mg/L |
| | | Mercury | APHA 22nd Edition 2012 (3500-Hg)/IS 3025 (Part 48)/by ICP-MS | 0.01 mg/L to 100 mg/L |
| | | Cadmium | APHA 22nd Edition 2012 (3500-Cd A)/IS 3025 (Part 41)/by ICP-MS | 0.01 mg/L to 100 mg/L |
| III. | AMBIENT AIR | | | |
| 1. | Ambient Air Monitoring | Sulphur dioxide (SO ₂) | IS 5182 (Part 2) (RA 2001) | 1 μg/m³ to 100 μg/m³ |
| | _ | Nitrogen dioxide (NO ₂) | IS 5182 (Part 6) 2006 (RA 2012) | 1 μg/m³ to 100 μg/m³ |
| | | RSPM (PM10) | SOP/QC/47 Issue Date:25/08/2017 | 5 μg/m³ to 1000 μg/m³ |
| | | Noise Level/Source Monitoring | SOP/QC/53 Issue Date:27/08/2017 | 40 db to 130 db |
| | | Ambient Ammonia | IS 5182 (Part 6) 2006 (RA 2012) | 1 μg/m³ to 100 μg/m³ |

NOTE: The Laboratory has demonstrated competence for the stated scope for WATER. This however <u>does not fully cover</u> the specification requirements of BIS for the Packaged Drinking Water as per IS:14543 and the Packaged Natural Mineral Water IS:13428.

| Suman Kharayat | Jitendra B. Visp |
|----------------|------------------|
| Convenor | Program Manag |