Furlong Road, Guindy, Chennai, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6686 Page 1 of 17

Validity 10.10.2018 to 02.01.2020 Last Amended on --

,		q= === == == == == == == == == == == ==		
SI.	Product / Material	Specific Test	Test Method Specification	Range of Testing /
	of Test	Performed	against which tests are	Limits of Detection
			performed	

CHEMICAL TESTING

I.	WATER			
1.	Drinking Water (Raw water/	Colour	IS 3025 (Part4) APHA	1 Hazen Unit to 25 Hazen Unit
	Treated water/ Bore well water /	Odour	IS 3025 (Part 5) APHA	Qualitative Agreeable/ Disagreeable
	RO water/ Process water/	Taste	IS 3025 (Part 8) APHA	Qualitative Agreeable/ Disagreeable
	Tap water)	Turbidity	IS 3025 (Part10) APHA	1.0 NTU to 100 NTU
		Total Dissolved Solids	IS 3025 (Part16) APHA	1 mg/l to 10000 mg/l
		pH at 25°C	IS 3025 (Part11) APHA	2 to 12
		Copper as Cu	IS 3025 (Part 42) APHA	0.05 mg/l to 10 mg/l
		Iron as Fe	IS 3025 (Part 53) APHA	0.05 mg/l to 10 mg/l
		Manganese as Mn	IS 3025 (Part 59)	0.05 mg/l to 5 mg/l
		Nitrate as NO ₃	IS 3025 (Part 34) APHA	0.5 mg/l to 100 mg/l
		Nitrite as NO ₂	IS 3025 (Part 34) APHA	0.01 mg/l to 10 mg/l
		Fluoride as F	IS 3025 (Part 60) APHA	0.1 mg/l to 5.0 mg/l
		Chloride as Cl	IS 3025 (Part 32) APHA	1 mg/l to 2000 mg/l
		Sulphate as SO₄	IS 3025 (Part 24) APHA	1mg/l to 500 mg/l
		Total Alkalinity as CaCO ₃	IS 3025 (Part 23) APHA	1mg/l to 1000 mg/l

Furlong Road, Guindy, Chennai, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6686 Page 2 of 17

Validity 10.10.2018 to 02.01.2020 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
		Calcium as Ca	IS 3025 (Part 40) APHA	1mg/l to 500 mg/l
		Magnesium as Mg	IS 3025 (Part 46) APHA	1mg/l to 500 mg/l
		Sodium as Na	IS 3025 (Part 45) APHA	0.5mg/l to 1000 mg/l
		Residual free Chlorine	IS 3025 (Part 26) APHA	0.1 mg/l to 10 mg/l
		Phenolic compound as C6H5OH	IS 3025 (Part 43) APHA	0.001 mg/l to 1.0 mg/l
		Sulfide as S	IS 3025 (Part 29) APHA	0.02 mg/l to 2.0 mg/l
		Boron as B	IS 3025 (Part 57) APHA	0.1mg/l to 10 mg/l
		Nickel as Ni	IS 3025 (Part 54)	0.02 mg/l to 5 mg/l
		Ammonia as NH₃ or N	IS 3025 (Part 34) APHA	0.1 mg/l to 10 mg/l
		Total Hardness as CaCO3	IS 3025 (Part 21) APHA	1 mg/l to 5000 mg/l
		Chromium as Cr ⁶⁺	IS 3025 (Part 52) APHA	0.03 mg/l to 10 mg/l
		Total chromium as Cr	IS 3025 (Part 52)	0.03 mg/l to 10 mg/l
		Total Solids	IS 3025 (Part 15) APHA	5mg/l to 10000 mg/l
		Total Suspended solids	IS :3025 (Part 17) APHA	5mg/l to 200 mg/l
		Conductivity at 25°C	IS 3025 (Part 14) APHA	1μS/cm to 15000 μS/cm
2.	Construction Water	Organic Solids	IS 3025 (Part 18) APHA	5mg/l to 1000 mg/l
		Inorganic Solids	IS 3025 (Part 18) APHA	5mg/l to 10000 mg/l
		Sulphate as SO ₃	IS 3025 (Part 24) APHA	1mg/l to 5000 mg/l

Furlong Road, Guindy, Chennai, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6686 Page 3 of 17

Validity 10.10.2018 to 02.01.2020 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 as Cl	IS 3025 (Part 32) APHA	1mg/l to 1000 mg/l
		Suspended Matter	IS 3025 (Part 17) APHA	5mg/l to 500 mg/l
		pH @ 25°C	IS 3025 (Part 11) APHA	2 to 12
		Acidity	IS 3025 (Part 22)	0 to 25 ml 0.02N NaOH
		Alkalinity	IS 3025 (Part 23)	1 ml to 100 ml 0.02N H ₂ SO ₄
3.	Reagent Grade Water	Specific conductivity at 25°C	IS 3025 (Part 14)	1 μS/cm to 20 μS/cm
	(Distilled /	pH at 25°C	IS 3025 (Part 11)	2 to 12
	Demineralized Water)	Total solids or Non Volatile residue at 105°C	IS 3025 (Part15)	1 mg/l to 20 mg/l
		Silica as SiO ₂	IS 3025 (Part35)	0.1mg/l to 5 mg/l
		Colour Retention of KMnO4 at 27°C	Annex A of IS 1070	Qualitative Retains/ Does not Retain
4.	Swimming pool water	pH at 25°C	IS 3025 (Part 11) APHA	2 to 12
		Turbidity	IS 3025 (Part 10) APHA	1 NTU to 100 NTU
		Colour	IS 3025 (Part-4) APHA	1 Hazen Unit to 25 Hazen Unit
		Total Dissolved Solids	IS 3025 (Part 16) APHA	5mg/l to 10000 mg/l
		Chloride as Cl	IS 3025 (Part 32) APHA	1mg/l to 2000 mg/l
		Residual Free Chlorine	IS 3025 (Part 26) APHA	0.1 mg/l to 10 mg/l
		Total Alkalinity as CaCO₃	IS 3025 (Part 23) APHA	1mg/l to 1000 mg/l

Azodi Labs Private Limited, New No. 24, Old No. 74, First Floor, Five Furlong Road, Guindy, Chennai, Tamil Nadu Laboratory

Accreditation Standard ISO/IEC 17025: 2005

Page 4 of 17 **Certificate Number** TC-6686

Validity 10.10.2018 to 02.01.2020 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
		Iron as Fe	IS 3025 (Part 53) APHA	0.05mg/l to 10 mg/l
		Oxygen absorbed in 4hrs	IS 3025 (Part 63)	0 to 50 mg/l
II.	POLLUTION & ENVI	RONMENT		
1.	Waste Water (Effluents /	Colour	IS 3025 (Part-4) APHA	1 to 50 Hazen
	Sewage) (Effluent water,	Odour	IS 3025 (Part 5) APHA	Qualitative Agreeable/ Disagreeable
	STP water, ETP Water, Waste water		IS 3025 (Part 10) APHA	1.0 to 200 NTU
	Treated water, Industrial waste, Processed Food Industry Water)	Temperature	IS 3025 (Part 9) APHA	15°C to 60 °C
		pH at 25°C	IS 3025 (Part 11) APHA	2 to 14
		Conductivity at 25°C	IS 3025 (Part 14) APHA	10 μS/cm to 100000 μS/cm
		Total Dissolved Solids	IS 3025 (Part 16) APHA	10mg/l to 50000 mg/l
		Total Suspended Solids	IS 3025 (Part 17) APHA	5mg/l to 1000 mg/l
		Total Hardness as CaCO₃	IS 3025 (Part 21) APHA	1mg/l to 10000 mg/l
		Calcium as Ca	IS :3025 (Part 40) APHA	1mg/l to 5000 mg/l
		Magnesium as Mg	IS :3025 (Part 46) APHA	1 mg/l to 5000 mg/l
		Total solids	IS 3025 (Part-15) APHA	10 mg/l to 50000 mg/l
		Acidity as CaCO3	IS 3025 (Part22) APHA	1mg/l to 500 mg/l
		Phenolphthalein Alkalinity as CaCO₃	IS 3025 (Part 23) APHA	1mg/l to 5000 mg/l

Furlong Road, Guindy, Chennai, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6686 Page 5 of 17

Validity 10.10.2018 to 02.01.2020 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 Alkalinity or Methyl orange Alkalinity as CaCO ₃	IS 3025 (Part 23) APHA	1mg/l to 10000 mg/l
		Organic Solids	IS 3025 (Part 18) APHA	1mg/l to 1000 mg/l
		Inorganic Solids	IS 3025 (Part 18) APHA	1mg/l to 10000 mg/l
		Carbonate hardness as CaCO ₃	IS 3025 (Part 21) APHA	1mg/l to 5000 mg/l
		Non Carbonate hardness as CaCO₃	IS 3025 (Part 21) APHA 23rd Edn.	1mg/l to 5000 mg/l
		Chloride as Cl	IS 3025 (Part 32) APHA	1mg/l to 10000 mg/l
		Oil & Grease	IS 3025 (Part 39) APHA	1 mg/l to 1000 mg/l
		Chemical Oxygen Demand	IS 3025 (Part 58) APHA	4 mg/l to 40000mg/l
		BOD at 27°C for 3 days BOD at 20°C for 5 days	IS 3025 (Part 44) APHA	2mg/l to 5000 mg/l
		Dissolved Oxygen	IS 3025 (part 38) APHA	0.2 mg/l to 8 mg/l
		Total Kjeldahl Nitrogen (Organic Nitrogen)	IS 3025 (Part 34) APHA	1 mg/l to 500 mg/l
		Nitrate as NO₃	IS 3025 (Part 34) APHA	0.5mg/l to 100 mg/l
		Nitrite as NO ₂	IS 3025 (Part 34) APHA	0.01 mg/l to 10 mg/l
		Free Ammonia as NH3	IS 3025 (Part 34) APHA	0.1 mg/l to 100 mg/l
		Ammonical Nitrogen as N	IS 3025 (Part 34) APHA	1 mg/l to 500 mg/l
		Fluoride as F	IS 3025 (Part 60) APHA	0.1 mg/l to 50.0 mg/l

Furlong Road, Guindy, Chennai, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6686 Page 6 of 17

Validity 10.10.2018 to 02.01.2020 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
		Residual Free Chlorine	IS 3025 (Part 26) APHA	0.1 mg/l to 10 mg/l
		Boron as B	IS 3025 (Part 57) APHA	0.1mg/l to 10 mg/l
		Phenolic compound as C ₆ H₅OH	IS 3025 (Part 43) APHA	0.001mg/l to 1.0 mg/l
		Total phosphate as PO₄	IS 3025 (Part 31) APHA	0.05mg/l to 20 mg/l
		Dissolved Phosphate as PO ₄	IS 3025 (Part 31) APHA	0.05 mg/l to 20 mg/l
		Reactive Silica as SiO ₂	IS :3025 (Part 35) APHA	0.1mg/l to 200 mg/l
		Sulphate as SO ₄	IS 3025 (Part 24) APHA	1mg/l to 5000 mg/l
		Sulphite as SO₃	APHA	2mg/l to 100 mg/l
		Sulphide as S	IS 3025 (Part 29) Iodometric method APHA	1.0 mg/l to 20mg/l
		Sodium as Na	IS 3025 (Part 45) APHA	0.5mg/l to 10000 mg/l
		Potassium as K	IS 3025 (Part 45) APHA	0.5mg/l to 1000 mg/l
		Percent Sodium	ALPL/WT /SOP/49, Issue No.& Dt: 01/10.10.2016	5 mg/l to 100%
		Sodium Adsorption Ratio	IS 11624	2 milli equivalents per liter to 1000 milli equivalents per liter
		Residual Sodium Carbonate	IS 11624	1.5 milli equivalents per liter to 25 milli equivalents per liter
		Iron as Fe	IS :3025 (Part 53) APHA	0.05 mg/l to 50 mg/l

Furlong Road, Guindy, Chennai, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6686 Page 7 of 17

Validity 10.10.2018 to 02.01.2020 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
		Copper as Cu	IS 3025 (Part 42) APHA	0.05mg/l to 5.0 mg/l
		Hexavalent Chromium as Cr6+	IS 3025 (Part 52) APHA	0.03mg/l to 10 mg/l
ļ		Total chromium as Cr	IS 3025 (Part 52)	0.03mg/l to 10 mg/l
		Manganese as Mn	IS 3025 (Part 59)	0.05mg/l to 50 mg/l
		Nickel as Ni	IS 3025 (Part 54)	0.03mg/l to 5 mg/l
		Oxygen absorbed in 4hrs	IS 3025 (Part 63)	0 to 100 mg/l
III	FOOD AND AGRICU	ILTURAL PRODUCTS		
1.	Milk & Dairy Products (Raw, Processed Milk, Curd, Paneer,	Moisture	AOAC FSSAI Lab Manual-1, S.No.3.2,5.2,6.2,8.2,10.2,1 1.2,12.2,13.2,16.2,17.2,	0.5% to 90%
	Cheese, Dairy Based confections, Evaporated	Total ash	AOAC FSSAI Lab Manual-1. S.No 10.7, 14.6, 16.5, 17.7.	0.5% to 5%
	/Condensed Milk,& Milk Products, Butter, Ghee, Milk	Ash insoluble in Dil HCl	AOAC FSSAI Lab Manual-1. S.No 10.8	0.1% to 5%
	Fats and other dairy products, Skimmed Milk Powder, Flavored Milk, Bakery	Protein	AOAC FSSAI Lab Manual-1., S.No. 10.6,14.4,15.4,16.4, 17.4,19.1,19.4, IS 1479 (Part 2)	0.5% to 25%
	Products)	Fat	AOAC FSSAI Lab Manual-1., S.No .1.3.4,2.2,3.3,4.2,5.3, 6.3,7.4,9.3,10.3,11.3,12.3,1 4.3,15.3,16.3,17.3. IS 11721	0.5% to 50%
		Solid Not Fat (SNF)	AOAC IS 1479 (Part 2)	5%to 80%

Furlong Road, Guindy, Chennai, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6686 Page 8 of 17

Validity 10.10.2018 to 02.01.2020 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 solids	AOAC FSSAI Lab Manual-1. S.No 1.3.3,4.4,4.5,7.2,9.2. IS 11623	1% to 99%
		Salt as NaCl	AOAC FSSAI Lab Manual-1. S.No 12.4 IS 3507	0.5% to 5%
		Phosphorus as P	AOAC IS 1479 (Part-2)	0.05% to 5%
		Titratable acidity	AOAC FSSAI Lab Manual-1. S.No 9.5,10.4,14.5,15.5. IS 1165	0.1%to 3%
		pН	AOAC FSSAI Lab Manual-1. S.No 16.6 IS 3507	1 to 14
		Iron as Fe	ALPL/FD/SOP/68, Issue No.& Dt: 01/05.01.2017	0.4 mg/kg to 70 mg/kg
		Carbohydrate	Food Energy Methods of Analysis and Conversion Factors (FAO). ALPL/FD/SOP/65, Issue No.& Dt: 01/05.01.2017	0.1% to 80%
		Energy	ALPL/FD/SOP/67, Issue No.& Dt: 01/05.01.2017	10 kcal/100 g to 800 kcal/100 g
		ADULTERANTS Cane Sugar, Cellulose, Starch, Added Urea, Glucose, Ammonium sulfate, Glucose, Sodium Chloride, Nitrates.	FSSAI Lab Manual- 1. S.No 1.2 IS 1479 (Part-1)	Qualitative Present/Absent

Furlong Road, Guindy, Chennai, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6686 Page 9 of 17

Validity 10.10.2018 to 02.01.2020 Last Amended on --

<u></u>	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		NEUTRALISERS Rosalic Acid, Ash	FSSAI Lab Manual- 1. S.No 1.2.13 IS 1479 (Part-1)	Qualitative Present/Absent
		PRESERVATIVES Formalin, Hydrogen Peroxide, Boric Acid & Borates, Salicylic Acid, Hypochlorite, chloramines	FSSAI Lab Manual- 1. S.No 1.3 IS 1479(Part-1)	Qualitative Present/Absent
		Sugar (as sucrose)	FSSAI Lab Manual- 1. S.No 9.4,11.5,14.7. IS 1479 (Part-2)	0.5 g/100g to 70 g/100g
		Starch	AOAC FSSAI Lab Manual-1. S.No 1.2.2,2.3.1,4.3,5.4,7.6,11.4.	0.1 g/100g to 25g/100g
		Urea	FSSAI Lab Manual- 1. S.No 1.2.4 IS 1479(Part-1)	100 mg/kg to 1000 mg/kg
		Lactose	AOAC FSSAI Lab Manual-1. 2016 S.No 16.7,17.6	1 g/100g to 20 g/100g
		Calcium	AOAC IS 1479 (Part-2)	0.1 g/100g to 3g/100g
		Magnesium	AOAC IS 1479 (Part-2)	0.05 g/100g to 3g/100g
2.	Fruits and vegetable products	pH	FSSAI Lab Manual -5, S.No 2.3	1 to 14
	(processed fruit and vegetable	Drained weight	FSSAI Lab Manual -5, S.No 1.4	10% to 90%
	product, canned fruit, perishable restaurant food,	Moisture	AOAC. FSSAI Lab Manual -5, S.No 4.1,6.1,7.1,17.2,20.1.	0.5%to 95%
	fruit concentrate, pulps, purees, Beverages, dehydrated and dry	Total Ash Ash insoluble in Dil HCl	AOAC AOAC FSSAI Lab Manual -5, S.No.7.2,17.4.	0.5% to 5% 0.1% to 2%

Furlong Road, Guindy, Chennai, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6686 Page 10 of 17

Validity 10.10.2018 to 02.01.2020 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
	fruits, Tomato ketchup, Sauce, Culinary Paste, Carbonated fruit Beverages, Drink,	Soluble solids	AOAC FSSAI Lab Manual -5, S.No 1.6,2.2,3.1,6.2,8.1, 9.1,11.1,12.1,15.1,16.1. IS 13815	10% to 85%
	Pickles, Jam, Jelly & Other Products)	Fruit Juice content	FSSAI Lab Manual -5, 2016 S.No 2.11	5%to 50%
		Acidity	AOAC FSSAI Lab Manual -5, 2016 S.No 5.2,8.2,12.2,13.2,14.5,16.2, 18.3,18.4,19.3.	0.1% to 5%
		Salt as NaCl	IS 3881, IS 2860. FSSAI Lab Manual -5, 2016 S.No 1.7,18.2,19.1	0.5% to 50%
		Calcium	AOAC IS 2860	0.01%to 5%
		Protein	AOAC IS 7219	0.5%to 20%
		Fat	ALPL/FD/SOP/22, Issue No.& Dt: 01/12.12.2016	0.1%to 10%
		Sulphur dioxide	AOAC FSSAI Lab Manual -5 2016 S.No 17.7	10 mg/Kg to 1000 mg/Kg
		Fibre	ALPL/FD/SOP/23, Issue No.& Dt: 01/12.12.2016	0.5%to 10%
		Iron as Fe	ALPL/FD/SOP/68, Issue No.& Dt: 01/05.01.2017	0.5 mg/kg to 500 mg/kg
		Carbohydrate	ALPL/FD/SOP/65, Issue No.& Dt: 01/05.01.2017. Food Energy Methods of Analysis and Conversion Factors (FAO)	5% to 80%
		Energy	ALPL/FD/SOP/67, Issue No.& Dt: 01/05.01.2017	10 kcal/100g to 100 kcal/100g

Furlong Road, Guindy, Chennai, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6686 Page 11 of 17

Validity 10.10.2018 to 02.01.2020 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
		Rodent Contamination	FSSAI, Lab Manual- 5, S.No.1.1.	Qualitative Present/Absent
		Added Colouring Matter	FSSAI, Lab Manual- 5, S.No 16.5	Qualitative Present/Absent
		Added Wax Coating	ALPL/FD/SOP/066, Issue No.& Dt: 01/05.01.2017	Qualitative Present/Absent
		Refractive Index @ 20°C	FSSAI, Lab Manual- 5, S.No 1.6	1.000mg/l to 1.600
		Sugar	AOAC FSSAI Lab Manual-5, S.No 2.6,10.1	0.5 mg/l to 60g/100g
! !		Specific gravity	IS 2860	0.8 to 1.5
3.	Herbs, Spices and Condiments (Whole and Ground or mixed	Extraneous matter	AOAC FSSAI Lab Manual-10. S.No 2.0 IS 1797	0.1% to 10%
	Chilly/ Turmeric/Curry	Insect damaged Matter	AOAC IS 2447	0.1% to 10%
	powder/	Headless Cloves	IS 4404	0.1%to 50%
	Cardamom/ Curry Masala/Poppy	Immature and Shriveled Capsules	IS 13446	0.1% to 20%
	seeds/Caraway/	Broken	IS 2443	0.1% to 20%
	Cassia/ Coriander/	Split fruits	IS 2443	0.1% to 20%
	Cloves/ Cumin/ Ginger/	Damaged/ Discolored Fruits	IS 2443	0.1% to 20%
	Fenugreek/ Mixed masala curry/ powdered dehydrated onion)	Moisture	AOAC FSSAI Lab Manual-10, S.No3.0,3.5,5.4,16.2,17.1. IS 1797	1.0% to 25%
		Total ash	AOAC 20th Edn. FSSAI Lab Manual- 10. S.No 4.0 IS 1797	0.5% to 20%

Furlong Road, Guindy, Chennai, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6686 Page 12 of 17

Validity 10.10.2018 to 02.01.2020 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
		Ash Insoluble in Dil HCl	AOAC FSSAI Lab Manual- 10. S.No 5.0 IS 1797	0.1% to 5%
		Total Nitrogen	AOAC IS 1797	1%to 15%
		Crude Fibre	AOAC FSSAI Lab Manual- 10. S.No 11.0,15.8 IS 1797	1% to 25%
		Calcium	FSSAI Lab Manual- 10. S.No 8.0 IS 1797	0.05% to 5%
		Salt as NaCl	AOAC IS 1797	0.1% to 200%
		Iron as Fe	ALPL/FD/SOP/68, Issue No.& Dt: 01/05.01.2017	1000 mg/kg to 10000 mg/kg
		Carbohydrate	ALPL/FD/SOP/65, Issue No.& Dt: 01/05.01.2017. Food Energy Methods of Analysis and Conversion Factors (FAO)	5% to 80%
		Energy	ALPL/FD/SOP/67, Issue No.& Dt: 01/05.01.2017. Food Energy Methods of Analysis and Conversion Factors (FAO)	100 kcal/100g to 500 kcal/100g
		Non-volatile ether extract	AOAC FSSAI Lab Manual- 10. S.No 9.0 IS 1797	1 g/100g to 30 g/100g

Furlong Road, Guindy, Chennai, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6686 Page 13 of 17

Validity 10.10.2018 to 02.01.2020 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
		Volatile Oil / Essential Oils	AOAC FSSAI Lab Manual- 10. S.No 10.0 IS 1797	0.1%to 20%
		Alcohol soluble extract	FSSAI Lab Manual- 10. S.No 7.0 IS 1797	1% to 25%
		Cold water soluble extract	FSSAI Lab Manual- 10. S.No 6.0 IS 1797	1%to 25%
4.	Cereals, Pulses,	Foreign matter	AOAC	0.1% to 20%
	Flour and their	Mineral Matter	FSSAI Lab Manual-3, S.No.	0.1% to 10%
	products Any edible food grain whole, split	Organic Matter	1.1,1.2,1.3,1.5. IS 4333	0.01%to 10%
		Other Edible Grain		0.1% to 20%
	or ground [raw	Rodent hair & excreta		Qualitative
	and processed			Present/Absent
	flour and flour	Damaged grains		0.01%to 20%
	based product,	Discoloured grains		0.05% to 20%
	whole grains,	Insect damaged grains		0.1% to 20%
	premixes,	Weevilled grains		0.1%to 20%
	breakfast cereals, papad, rice, rice based product, chappattis, rottis,	Moisture	AOAC FSSAI Lab Manual-3, S.No 2.0,8.1,14.3,15.2,16.1 IS 4333, IS 1155, IS 1158.	1% to 20%
	nans, and any other food grains,	Total ash	AOAC IS 1155	0.5% to 10%
	Black matpe, Green Peas,	Ash insoluble in dilute HCl	IS 1155, IS 1009	0.1% to 5%
	Green Mung bean, Toor whole, Oats, Wheat, atta)	Acidity of extracted fat	FSSAI Lab Manual-3, 2016 S.No 14.5	0.1% to 5%
	vviigat, attaj	Protein	AOAC IS 7219	1% to 25%

Furlong Road, Guindy, Chennai, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6686 Page 14 of 17

Validity 10.10.2018 to 02.01.2020 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 fat	AOAC	1% to 20%
		Crude Fibre	AOAC	0.1%to 5%
		Sulphated ash	IS 6287	0.01% to 5%
		Sulphur dioxide	AOAC	10 mg/kg to 1000 mg/kg
		Carbohydrate	ALPL/FD/SOP/065, Issue No.& Dt: 01/05.01.2017.	5% to 80%
		Energy	ALPL/FD/SOP/067, Issue No.& Dt: 01/05.01.2017	100 kcal/100g to 500 kcal/100g
		Gluten (on dry basis)	IS 1155, IS 1009, IS 1010.	1 g/100g to 15 g/100g
		Gluten (on wet basis)	IS 1155, IS 1009, IS 1010.	10 g/100g to 50g/100g
5.	Bakery and confectionaries	Total fat	AOAC IS 1163, IS 12711.	0.1 g/100g to 50 g/100g
	(Chocolates, Breads, Cakes,	Protein	IS 6287	0.5 g/100g to 30 g/100g
		Sugar	IS 1163, IS 6287	10 g/100g to 60g/100g
	Biscuits, Toffees, Pizzas, Cookies,	Acid insoluble ash	IS 1163, IS 12711, IS 1011	0.01 g/100g to 2g/100g
	Rusk, Snacks, Sauces, Jaggery,	Total ash	IS 1011, IS 12711, IS 3633, IS 6287	0.1 g/100g to 10g/100g
	Pappad)	Sulphated ash	IS 6287	0.1 g/100g to 10g/100g
ļ	- арраа,	Moisture	IS 1011, IS 12711, IS 6287	1 g/100g to 30g/100g
ļ		рН	IS 12711	4 to 10
		Acidity of extracted fat	IS 1011, IS 12711	0.1 g/100g to 15 g/100g
		Crude fiber	IS 12711	0.1 g/100g to 5g/100g
		Total Dietary fiber	AOAC IS 11062. ALPL/FD/SOP/069, Issue No.& Dt: 01/05.01.2017	0.1 g/100g to 20g/100g
		Energy in Kcal/100g	ALPL/FD/SOP/067, Issue No.& Dt: 01/05.01.2017	100 Kcal/ 100g to 700 Kcal/ 100g
		carbohydrate	ALPL/FD/SOP/065, Issue No.& Dt: 01/05.01.2017	5% to 80%

Furlong Road, Guindy, Chennai, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6686 Page 15 of 17

Validity 10.10.2018 to 02.01.2020 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
6.	Edible Oils and Fats (Ground nut/	Moisture	FSSAI Lab Manual- 2. S.No 3.0 IS 548 (Part 1)	
	Sesame/ Coconut / Corn/ Rice bran/ Sunflower / Mustard oil/Soya bean Oil/ Ghee/Fish oil/ Crude palm oil)	Insoluble Impurities	IS 548 (Part 1)	0.05 g/100g to 2g/100g
		Acid Value	FSSAI Lab Manual- 2. S.No 11.0 IS 548 (Part 1)	0.03 to 20
		Saponification Value	FSSAI Lab Manual- 2. S.No 9.0 IS 548 (Part 1)	50 to 300
		Unsaponifiable Matter	FSSAI Lab Manual- 2. S.No 10.0 IS 548 (Part 1)	0.1 g/100g to 15g/100g
		lodine value	FSSAI Lab Manual- 2. S.No 12.0 IS 548 (Part 1)	5 to 250
		Refractive Index	FSSAI Lab Manual- 2 S.No 5.0 IS 548 (Part 1)	1.33 to 1.50
		Specific Gravity	FSSAI Lab Manual- 2. S.No 4.0 IS 548 (Part 1)	0.800 to 2.000
		Energy in Kcal/100g	ALPL/FD/SOP/67, Issue No.& Dt: 01/05.01.2017	500 Kcal/ 100g to 1000 Kcal/ 100g
		Flash point	FSSAI Lab Manual- 2. S.No 6.0	25°C to 300°C
		Test for Mineral oil	FSSAI Lab Manual- 2. S.No 28.0 IS 548 (Part 2)	Qualitative Present/Absent
		Test for Ground nut oil	IS 548 (Part 2)	Qualitative Present/Absent

Furlong Road, Guindy, Chennai, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6686 Page 16 of 17

Validity 10.10.2018 to 02.01.2020 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
		Test for Sesame oil	FSSAI Lab Manual- 2. S.No 15.0 IS 548 (Part 2)	Qualitative Present/Absent
7.	Tea, Coffee and	Moisture	AOAC	1.0 g/100g to 20 g/100g
	Cocoa Products (Coffee / Coffee Powder / Chicory / Tea)	Water extract	AOAC IS 13862	5 g/100g to 50g/100g
		Total ash	AOAC IS 3633, IS 13854	5 g/100g to 60g/100g
		Water soluble ash	AOAC IS 3633, IS 13855	20 g/100g to 75g/100g
		Water insoluble ash	AOAC IS 3633, IS 13855	0.1 g/100g to 5.0 g/100g
		Acid insoluble ash	AOAC IS 3633, IS 13857	0.05 g/100g to 5g/100g
		Crude fiber	AOAC IS 3633, IS 10226 (Part-1)	1.0 g/100g to 30.0g/100g
		Solubility in Hot Water	IS 2791	Qualitative Present/Absent
		Solubility in Cold Water	IS 2791	Qualitative Present/Absent
8.	Beverages	рН	AOAC	2.0 to 12
	(Fruit Beverages / Non-Alcoholic / Alcoholic/ Wine)	Fruit Content	AOAC	5 g/100g to 50 g/l00g
		Protein	AOAC	0.1 g/100g to10g/l00g
		Fat	AOAC FSSAI Lab Manual- 4. S.No. A.8	0.1 g/100g to 10g/l00g
		Carbohydrates	IS 1656 ALPL/FD/SOP/066, Issue No. & Dt: 01/05.01.2017.	1 g/100g to 70g/l00g
		Acid value	AOAC IS 548 (Part-1)	1 to 10

Furlong Road, Guindy, Chennai, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6686 Page 17 of 17

Validity 10.10.2018 to 02.01.2020 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
[7	Brix	AOAC	4 g/100g to 50g/100g
		Sucrose	FSSAI Lab Manual- 4.	0.2 g/100g to 40g/l00g
			S.No.6.4.4	
		Sugar (as% invert sugar)	AOAC	5 g/100g to 20g/100g