

Laboratory Cleanflo Research and Testing Centre, 403, Gupta Tower, Commercial Complex, Ring Road, Azadpur, Delhi

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7592

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
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BIOLOGICAL TESTING

I.	FOOD AND AGRICULTURAL PRODUCT			
1.	Milk and Dairy Products			
a.	Milk (Pasteurized Milk) Cream/Curd/ Paneer/Khoya/ Butter/Yogurt	Total Plate Count	IS 5402:2012	≥ 1 CFU/ml ≥ 10 CFU/gm ≥ 10 ⁶ CFU/gm
		Total Coli form	IS 5401 (Part 1): 2002 (RA 2012)	≥ 1 CFU/ml ≥ 10 CFU/gm
		Yeast & Mould	IS 5403:1999 (RA 2013)	≥ 1 CFU/ml ≥ 10 CFU/gm
		Escherichia Coli	IS 5887 (Part 1): 1976 (RA 2013)	Qualitative (Absent/Present) in 25gm/ml
2.	Spices and Condiments			
a.	Whole Powder (Gram Masala/ Chili Dhaniya/ Cardamom Amchoor	Total Plate Count	IS 5402:2012	≥ 10 CFU/gm
		Total Coli form	IS 5401 (Part 1): 2002 (RA 2012)	≥ 10 CFU/gm
		Yeast & Mould	IS 5403:1999 (RA 2013)	≥ 10 CFU/gm
		Escherichia Coli	IS 5887 (Part 1): 1976 (RA 2013)	Qualitative (Absent/Present) in 25gm/ml
3.	Vegetable and Vegetable Products			
a.	Sauce/Jelly/ Pickle Chutney/Vinega/ Jam/Juice	Total Plate Count	IS 5402:2012	≥ 1 CFU/ml ≥ 10 CFU/gm
		Total Coli form	IS 5401 (Part 1): 2002 (RA 2012)	≥ 1 CFU/ml ≥ 10 CFU/gm
		Yeast & Mould	IS 5403:1999 (RA 2013)	≥ 1 CFU/ml ≥ 10 CFU/gm
		Escherichia Coli	IS 5887 (Part - 1):1976 (RA -2013)	Qualitative (Absent/Present) in 25gm/ml

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4.	Beverages			
a.	Beverages (Alcoholic Non alcoholic/cold Drink/Soft Drink/ Beer/Wine/Whisky)	Total Plate Count	IS 5402:2012	≥ 1 CFU/ml
		Total Coli form	IS 5401 (Part 1): 2002 (RA 2012)	≥ 1 CFU/ml
		Yeast & Mould	IS 5403:1999 (RA 2013)	≥ 1 CFU/ml
		Escherichia Coli	IS 5887 (Part 1): 1976 (RA 2013)	Qualitative (Absent/Present) in 25gm/ml
5.	Animal Feed			
a.	Soybean Meal, Rapeseed Meal	Aerobic Microbial Count	IS 5402:2012	≥ 10 CFU/gm
		Total Coli form	IS 5401 (Part 1): 2002 (RA 2012)	≥ 10 CFU/gm
		Yeast & Mould	IS 5403:1999 (RA 2013)	≥ 10 CFU/gm
		Escherichia Coli (Isolation)	IS 5887 (Part 1): 1976 (RA 2013)	Qualitative (Absent/Present) in 25gm/ml
6.	Bakery and Confectionary Products			
a.	Biscuit/Bread/ Chocolate/ Namkeen/Mixture	Aerobic Microbial Count	IS 5402:2012	≥ 10 CFU/gm
		Total Coli form	IS 5401 (Part 1): 2002 (RA 2012)	≥ 10 CFU/gm
		Yeast & Mould	IS 5403:1999 (RA 2013)	≥ 10 CFU/gm
		Escherichia Coli	IS 5887 (Part 1): 1976 (RA 2013)	Qualitative (Absent/Present) in 25gm/ml
7.	Canned and Process Food			
a.	Thermally Processed Food & Canned Food	Total Plate Count	IS 5402:2012	≥ 10 CFU/gm
		Total Coli form	IS 5401 (Part 1): 2002 (RA 2012)	≥ 10 CFU/gm
		Yeast & Mould	IS 5403:1999 (RA 2013)	≥ 10 CFU/gm
		Escherichia Coli	IS 5887 (Part 1): 1976 (RA 2013)	Qualitative (Absent/Present) in 25gm/ml

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II.	WATER			
1.	Drinking/ Packaged/ Processed Water	Aerobic Microbial Count	IS 5402:2012	≥ 1 CFU/ml
		Total Coli form	IS 1622:1981 (RA 2014)	2 to 1600 MPN/100 ml
		Yeast & Mould	IS 5403:1999 (RA 2013)	≥ 1 CFU/ml
		Escherichia Coli	IS 5887 (Part 1): 1976 (RA 2013)	Qualitative (Absent/Present) in 250ml

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CHEMICAL TESTING

I.	WATER			
1.	Water (Ground, Surface, Drinking, Pool Water, Cooling Water, Boiler Water, Industrial Process Water, Packaged Drinking, Mineral Water)	Color	IS 3025 (Part-4):1983, RA 2017 Visual comparison Method	5 Hazen to 100 Hazen
		Odor	IS 3025 (Part-5):1983, RA 2017	Qualitative
		Taste	IS 3025 (Part-8):1984, RA 2017	Qualitative
		Temperature	IS 3025 (Part-9):1984, RA 2017	1 °C to 100 °C
		Turbidity	IS 3025 (Part-10):1984, RA 2017 Nephelometer Turbidity Method	1-100 NTU
		Total Dissolved Solids	IS 3025 (Part-16):1984, RA 2017 Gravimetric Method	10 mg/l to 50000 mg/l
		Calcium as CaCO ₃	IS 3025 (Part-40):1991, RA 2014 EDTA Titrimetric Method	2 mg/l to 500 mg/l
		Magnesium as CaCO ₃	IS 3025 (Part-46):1994, RA 2014 Titrimetric Method	2 mg/l to 500 mg/l
		Iron as Fe	IS 3025 (Part-53):2003, RA 2014 1,10 Phenanthroline Method	0.075 mg/l to 5 mg/l
		Residual Chlorine as Cl ₂	IS 3025 (Part-26):1986, RA 2014 Idometric Method	0.2 mg/l to 10 mg/l
	Acidity as CaCO ₃	IS 3025 (Part-22):1986, RA 2014 Titrimetric Method	2 mg/l to 200 mg/l	

Bhumi Rajyaguru
Convenor

Alok Jain
Program Manager

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		Alkalinity as CaCO ₃	IS 3025 (Part-23):1986, RA 2014 Titrimetric Method	2 mg/l to 500 mg/l
		pH Value	IS 3025 (Part-11):1983, RA 2017 Electrometric Method	2 to 14
		Chloride as Cl	IS 3025 (Part-32):1988, RA 2014 Argentometric Method	2 mg/l to 1000 mg/l
		Total Hardness	IS 3025 (Part-21):2009, RA 2014 EDTA Titrimetric Method	2 mg/l to 1000 mg/l
		Hexavalent Chromium	IS 3025 (Part-52):2003, RA 2014 Photometric	0.03 mg/l to 20 mg/l
		Dissolved Oxygen as O ₂	IS 3025 (Part-38):1989, RA 2014 Winkler Titrimetric	0.2 mg/l to 10 mg/l
		Phosphate as PO ₄	IS 3025 (Part-31):1988, RA 2014 Vanadomolybdo - Phosphoric Acid Method	0.2 mg/l to 20 mg/l
		Silica as SiO ₂	IS 3025 (Part-35):1988, RA 2014 Molybdosilicate method	0.8 mg/l to 20 mg/l
		Sulphate as SO ₄	IS 3025 (Part-24):1986, RA 2014 Gravimetric Method	10 mg/l to 1000 mg/l
		Ammonia as NH ₃	IS 3025 (Part-34):1988, RA 2014 Nesslerization Method	0.1 mg/l to 50.0 mg/l
		Nitrate as NO ₃	IS 3025 (Part-34):1988, RA 2014 Chromo tropic acid method	0.1 mg/l to 50.0 mg/l
		Nitrite as NO ₂	IS 3025 (Part-34):1988, RA 2014 Colorimetric Method	0.05 mg/l to 50.0 mg/l

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		Conductivity	IS 3025 (Part-14):1984, RA 2013	0 to 100000 $\mu\text{s/cm}$
2.	Waste Water	Color	IS 3025 (Part-4):1983, RA 2017 Visual comparison Method	5 Hazen to 100 Hazen
		Odor	IS 3025 (Part-5):1983, RA 2017	Qualitative
		Turbidity	IS 3025 (Part-5):1983, RA 2017 Nephelometer Turbidity Method	1 NTU to 1000 NTU
		Total Solids	IS 3025 (Part-18):1984, RA 2017 Gravimetric Method	10 mg/l to 10000 mg/l
		Total Dissolved Solids	IS 3025 (Part-16):1984, RA 2017 Gravimetric Method	10 mg/l to 50000 mg/l
		Total Suspended Solids	IS 3025 (Part-17):1984, RA 2017 Gravimetric Method	10 mg/l to 1000 mg/l
		Iron as Fe	IS 3025 (Part-53):2003, RA 2014 1,10 Phenanthroline Method	0.075 mg/l to 5 mg/l
		Residual Chlorine as Cl_2	IS 3025 (Part-26):1986, RA 2014 Idometric Method	0.2 mg/l to 10 mg/l
		pH Value	IS 3025 (Part-11):1983, RA 2017 Electrometric Method	2 to 14
		Hexavalent Chromium	IS 3025 (Part-52):2003, RA 2014 Diphenylcarbazide Method	0.03 mg/l to 20 mg/l
		Biochemical Oxygen Demand (BOD) (3 Days at 27 °C)	IS 3025 (Part-44):1993, RA 2014 (3 Days incubation at 27 °C)	2 mg/l to 1000 mg/l

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		Phosphate as PO ₄	IS 3025 (Part-31):1988, RA 2014 Vanadomolybdo - Phosphoric Acid Method	0.2 mg/l to 40 mg/l
		Alkalinity as CaCO ₃	IS 3025 (Part-23):1986, RA 2014 Titrimetric Method	2 mg/l to 500 mg/l
		Dissolved Oxygen as O ₂	IS 3025 (Part-38):1989, RA 2014 Winkler Titrimetric Method	0.2 mg/l to 10 mg/l
		Total Hardness as CaCO ₃	IS 3025 (Part-21):2009, RA 2014 EDTA Titrimetric Method	2 mg/l to 1000 mg/l
		Silica as SiO ₂	IS 3025 (Part-35):1988, RA 2014 Molybdosilicate method	0.8 mg/l to 20 mg/l
		Nitrate as NO ₃	IS 3025 (Part-34):1988, RA 2014 Chromo tropic acid method	0.5 mg/l to 50.0 mg/l
		Nitrite as NO ₂	IS 3025 (Part-34):1988, RA 2014 Colorimetric Method	0.05 mg/l to 50.0 mg/l
		Total Nitrogen as N	IS 3025 (Part-34):1988, RA 2014 Kjeldhal Digestion Method	5 mg/l to 100 mg/l
		Chemical Oxygen Demand	IS 3025 (Part-58):2006, RA 2017	10 mg/l to 25000 mg/l
		Oil and Grease	IS 3025 (Part-39):1991, RA 2014 Gravimetric Method	4 mg/l to 100 mg/l
		Chloride as Cl	IS 3025 (Part-32):1988, RA 2014 Argentometric	2 mg/l to 1000 mg/l
3.	Construction Water	Sulphate as SO ₄	IS 3025 (Part-24):1986, RA 2014 Gravimetric Method	5 mg/l to 1000 mg/l

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		Chloride as Cl	IS 3025 (Part-32):1988, RA 2014 Argentometric Method	2 mg/l to 10000 mg/l
		Total Suspended Solids, (TSS)	IS 3025 (Part-17):1984, RA 2017 Gravimetric Method	5 mg/l to 1000 mg/l
		To neutralize 100ml samples of water using 0.02N NaOH	IS 3025 (Part-22):1986, RA 2014 Titrimetric Method	0.1 ml to 50 ml
		To neutralize 100ml samples of water using 0.02N H ₂ SO ₄	IS 3025 (Part-22):1986, RA 2014 Titrimetric Method	0.1 ml to 100 ml
II.	FOOD & AGRICULTURAL PRODUCTS			
1.	Animal-Foods/ Cattle Feeds Compounded		IS : 2052-2009: RA 2014	
		Moisture	Moisture	Moisture
		Crude Protein	Crude Protein	Crude Protein
		Crude Fat	Crude Fat	Crude Fat
		Acid Insoluble Ash	Acid Insoluble Ash	Acid Insoluble Ash
2.	Bakery & Confectionery Biscuits		IS : 1011-2002, RA:2013	
		Moisture	Annex. B – IS 1011 – 2002	1 % to 10 %
		Acid Insoluble Ash	Annex. C – IS 1011 – 2002	0.03 % to 0.5 %
		Acidity of the Extracted Fat	Annex. D – IS 1011 – 2002	0.1 % to 2 %
3.	Hydrogenated Edible Vegetable Oils/Fats			
a.	Oils & Fats	Insoluble Impurities	IS: 548 (P-1)- 1964 RA 2015	0.004 % to 5 %
		Moisture Content	IS: 548 (P-1)- 1964 RA 2015	0.01 % to 5 %
		Saponification Value	IS: 548 (P-1)- 1964 RA 2015	50 to 200
		Refractive Index at 40°C	IS: 548 (P-1)- 1964 RA 2015	1.333 to 1.489
		Peroxide Value	IS: 548 (P-1)- 1964 RA 2015	0.1 Meq/l to 50 Meq/l

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4.	Cereal Products			
a.	Wheat Atta		IS: 1155 – 1968,RA:2015	
		Acid Insoluble Ash	Apdx. C – IS: 1155 – 1968	0.05 % to 0.2 %
		Gluten	Apdx. D – IS : 1155- 1968	5% o 20 %
		Alcoholic Acidity (as H ₂ SO ₄)	Apdx. F – IS :1155 – 1968	0.05 % to 0.5 %
		Granularity	Apdx. G – IS :1155 - 1968	Qualitative
		Insect Infestation	Visual – IS: 1009 – 1979	Visual
		Total Ash	Apdx. B – IS: 1155 – 1968	0.5 % to 3 %
		Moisture	Apdx. A – IS :1155 - 1968	5 % to 20 %
b.	Maida		IS :1009 – 1979,RA:2015	
		Moisture	Apdx. A - IS :1009 – 1979	5 % to 20 %
		Total Ash	Apdx. B - IS :1009 – 1979	0.2 % to 3 %
		Acid insoluble ash	Apdx. C - IS :1009 – 1979	0.02 % to 0.2 %
		Gluten	Apdx. D – IS: 1009 –1979	5 % to 20 %
		Alcoholic acidity	Apdx. F – IS: 1009 – 1979	0.05 % to 1 %
		Insect infestation	Visual – IS: 1009 – 1979	Qualitative
		Granularity	Apdx. G - IS :1009 – 1979	Qualitative
c.	Salmonela (Suji)		IS 1010 – 1968,RA:2015	
		Moisture	Apdx. B - IS 1010 – 1968	5 % to 20 %
		Total Ash	Apdx. C - IS 1010 – 1968	0.5 % to 3 %
		Acid insoluble ash	Apdx. D - IS 1010 – 1968	0.02 % to 0.2 %
		Gluten	Apdx. E - IS 1010 – 1968	5 % to 20 %
		Alcoholic acidity	Apdx. F - IS 1010 – 1968	0.05 % to 0.5 %
		Insect infestation	IS 1010 – 1968,RA:2015	Qualitative
5.	Cereals and Cereal Products Including Food Grains/ Whole and Split Pulses/ Flour			
a.	Barley		IS: 1156- 1957 RA 2015	
		Moisture Content	IS: 1156- 1957 RA 2015	0.5 % to 25 %
		Total Ash	IS: 1156- 1957 RA 2015	0.2 % to 10 %
		Acid Insoluble Ash	IS: 1156- 1957 RA 2015	0.01 % to 5 %
		Protein	IS: 1156- 1957 RA 2015	0.5 % to 25 %
		Alcoholic Acidity	IS: 1156- 1957 RA 2015	0.01 % to 0.5 %
b.	Besan		IS: 2400- 1976 RA 2015	
		Moisture Content	IS: 1009- 1968 RA 2015	0.2 % to 20 %

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		Acid Insoluble Ash	IS: 1009- 1968 RA 2015	0.01 % to 5 %
		Total Ash	IS: 1009- 1968 RA 2015	0.2 % to 10 %
		Protein	IS: 7219-1973 RA 2015	0.5 % to 50 %
6.	Macaroni/ Vermicelli		IS: 1485- 1993 RA 2015	
		Moisture	Annex C - IS 1485 –2015	2 % to 20 %
		Total Ash	Annex D - IS 1485 –2015	0.2 % to 2 %
		Acid Insoluble Ash	Annex E - IS 1485 –2015	0.02 % to 0.5 %
		Total Protein	Annex F - IS 1485 –2015	2 % to 20 %
		Free Acidity	Annex H - IS 1485 –2015	1 % to 10 %
7.	Milk & Dairy Products			
a.	Fresh Milk		IS 1479 (P I) & IS 1479 (P II): 2009,RA:2012	
		Milk Solids	IS 1479 (P I):2009	4 % to 15 %
		Fat	IS 1224 (P I): 1977 RA:2012	0.5 % to 10 %
		Solids Not Fat	IS 1479 (P II):2009	5 % to 20 %
b.	Chhaina	Moisture	Apdx. A - IS 2785 -1979	10 % to 75 %
		Milk Fat	Apdx. B - IS 2785 –1979	10 % to 50 %
		Protein	Apdx. A - IS 7219-1973-RA:2015	5 % to 25 %
		Ash	Apdx. A - IS 5162:1980, RA:2014	1 % to 10 %
c.	Curd	Acidity (as Lactic acid)	Clause 14 IS 1479 (P-1)-1960, RA:2012	0.1 % to 2 %
d.	Partly Skimmed/ Skimmed & Condensed Milk Powder		IS: 13334 (P-I)- 2014	
		Moisture	IS: 16072-2012	0.2 % to 20 %
		Total Solids	IS: 13334 (P-I)- 2014	5 % to 99.5 %
		Acidity	IS: 11766- 1986 RA 2012	0.01 % to 5 %
		Total Fat	IS: 11721- 2013	0.5 % to 70 %
		Total Ash	IS: 14433 (P-I)- 2002 RA 2012	0.05 % to 10 %
e.	Cream		IS: 4884- 1968 RA 2014	
		Fat	IS: 3509- 1966 RA 2012	0.1 % to 50 %
		Acidity as Lactic Acid	IS: 3509- 1966 RA 2012	0.2 to 20 %

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		Total solid Content	IS: 1479(P- II)-1961 RA 2012	5 % to 60 %
		Moisture Content	IS: 1479(P- II)-1961 RA 2012	1 % to 80 %
f.	Paneer		IS: 10484- 1983 RA 2014	
		Moisture	IS: 10484- 1983 RA 2014	1 % to 100 %
		Acidity	IS: 10484- 1983 RA 2014	0.1 % to 10 %
		Fat	IS: 10484- 1983 RA 2014	1 % to 70 %
g.	Cheese		IS: 2785- 1979 RA 2016	
		Moisture	IS: 2785- 1979 RA 2016	1 % to 100 %
		Total Fat	IS: 2785- 1979 RA 2016	1 % to 70 %
h.	Ghee & Milk Fats		IS: 3508- 1966 RA 2012	
		Moisture Content	IS: 3508- 1966 RA 2012	0.05 % to 5%
		Free Fatty Acid (as Oleic Acid)	IS: 3508- 1966 RA 2012	0.05 % to 5%
i.	Butter		IS: 3507-1966 RA 2012	
		Moisture Content	IS: 3507-1966 RA 2012	0.1 % to 16 %
		Free Fatty Acid (as Oleic Acid)	IS: 3508- 1966 RA 2012	0.05 % to 5 %
		Total Fat	IS: 3507-1966 RA 2012	1 % to 70 %
		pH Value	IS: 3507-1966 RA 2012	2 to 13
		Salt	IS: 3507-1966 RA 2012	0.1 % to 20 %
		Curd	IS: 3507-1966 RA 2012	0.1 % to 5 %
		Titration Acidity (as Lactic Acid)	IS: 3507-1966 RA 2012	0.01 % to 10 %
8.	Spices & Condiments			
a.	Garam Masala		IS 13545-1992: RA:2012	
		Moisture	CI 9 - IS 1797 : 2017	2 % to 25 %
		Total Ash	CI 6 - IS 1797 : 2017	1 % to 15 %
		Acid Insoluble Ash	CI 8 - IS 1797, RA: 2017	0.02 % to 2 %
		Non-Volatile Ether Extract	CI 14 - IS 1797, RA: 2017	5 % to 25 %
		Volatile Oil per 100g	CI 15 - IS 1797, RA: 2017	0.2 ml to 4 ml
		Salt (as NaCl)	CI 16 - IS 1797, RA: 2017	0.5 % to 2 %

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		Chromium Salt	Annex. B - IS 13545-1992, RA:2012	Qualitative
b.	Black Pepper Powder		IS 1798 - 2010, RA:2015	
		Moisture	CI 9 – IS 1797 – 2017	2 % to 15 %
		Total Ash	CI 6 – IS 1797 – 2017	0.5 % to 10 %
		Acid Insoluble Ash	CI 8 – IS 1797 – 2017	0.5 % to 2 %
		Non Volatile Ether Extract	CI 14 – IS 1797 – 2017	1 % to 10 %
c.	Tumeric Powder		CI 9, IS 1797 : 2017	2 % to 15 %
		Moisture	CI 6, IS 1797 : 2017	1 % to 15 %
		Total Ash	CI 8 IS 1797 : 2017	0.02 % to 2 %
		Acid Insoluble Ash	Annex A of IS 3576:2010, RA:2015	Qualitative
		Presence of Chromates		
9.	Spices/ Condiments and its Products (Whole & Grounded)			
a.	Coriander		IS: 2443-2008 RA 2013	
		Moisture	IS: 1797- 2017	0.1 % to 25 %
		Total Ash	IS: 1797- 2017	0.1 % to 10 %
		Acid Insoluble Ash	IS: 1797- 2017	0.01 % to 5 %
b.	Ginger (Sonth/ Adrak)		IS: 1908-2008 RA 2013	
		Moisture	IS: 1797- 2017	0.1 % to 25 %
		Total Ash	IS: 1797- 2017	0.1 % to 10 %
		Acid Insoluble Ash	IS: 1797- 2017	0.01 % to 5 %
		Water Insoluble Ash	IS: 1797- 2017	0.5 % to 5 %
c.	Cumin (Jeera)		IS: 2447-2010 RA 2015	
		Moisture	IS: 2639-1999 RA 2015	0.2 % to 20 %
		Total Ash	IS: 2639-1999 RA 2015	0.5 % to 20 %
		Acid Insoluble Ash	IS: 1797- 2017	0.01 % to 5 %
d.	Cinnamon (Dalchini)		IS: 1908-1992 RA 2013	
		Moisture	IS: 1797- 2017	0.1 % to 25 %
		Total Ash	IS: 1797- 2017	0.1 % to 10 %
		Acid Insoluble Ash	IS: 1797- 2017	0.1 % to 10 %
e.	Cardamom (Elaichi)		IS: 13446-2009 RA 2013	
		Moisture	IS: 1797- 2017	0.1 % to 25 %
		Total Ash	IS: 1797- 2017	0.1 % to 10 %
		Acid Insoluble Ash	IS: 1797- 2017	0.5 % to 5 %

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f.	Cloves (Laung)		IS: 4404-2010 RA 2015	
		Moisture	IS: 1797- 2017	0.1 % to 25 %
		Total Ash	IS: 1797- 2017	0.1 % to 10 %
		Acid Insoluble Ash	IS: 1797- 2017	0.01 % to 5 %
g.	Fennel (Saunf)		IS: 3796-2011 RA 2013	
		Moisture	IS: 1797- 2017	0.1 % to 25 %
		Total Ash	IS: 1797- 2017	0.1 % to 10 %
		Acid Insoluble Ash	IS: 1797- 2017	0.01 % to 5 %
h.	Fenugreek (Methi)		IS: 3795-2010 RA 2015	
		Moisture	IS: 1797- 2017	0.1 % to 25 %
		Total Ash	IS: 1797- 2017	0.1 % to 10 %
		Acid Insoluble Ash	IS: 1797- 2017	0.01 % to 5 %
i.	Ajowain (Bishops Seed)		IS: 4403-2010 RA 2015	
		Moisture	IS: 1797- 2017	0.1 % to 25 %
		Total Ash	IS: 1797- 2017	0.1 % to 10 %
		Acid Insoluble Ash	IS: 1797- 2017	0.01 % to 5 %
j.	Asafoetida (Hing)		IS: 7807-1975 RA 2013	
		Moisture	IS: 1797- 2017	0.1 % to 25%
		Total Ash	IS: 1797- 2017	0.1 % to 10 %
		Acid Insoluble Ash	IS: 1797- 2017	0.01 % to 5 %
10. a.	Stimulant Food Tea		IS 3633-2003, RA:2013	
		Moisture Total Ash	Clause 3-9, IS 13853 - 1994, RA:2014	2 % to 20%
		Acid Insoluble Ash	Clause 3-9, IS 13854- 1994, RA:2014	0.5 % to 15 %
		Water Extract	Clause 4-9, IS 13857- 1993, RA:2014	0.5 % to 2.5 %
b.	Chocolate		IS 1163 – 1992, RA:2014	
		Acid Insoluble Ash	Annex E- IS 1163 – 1992, RA:2014	0.05 % to 2 %
		Total Fat	Annex A & B - IS 1163 – 1992, RA:2014	5 % to 40 %

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
11.	Starch Foods			
a.	Corn Flakes		IS : 1158 - 1973,RA:2015	
		Moisture	Apdx. A - IS 1158 – 1973,RA:2015	2 % to 20 %
		Total Ash(Excluding Sodium Chloride)	Apdx. B - IS 1158 – 1973,RA:2015	0.2 % to 2.5 %
		Acid Insoluble Ash	Apdx. C - IS 1158 – 1973,RA:2015	0.02 % to 0.2 %
		Alcoholic Acidity	Apdx. E - IS 1158 – 1973,RA:2015	0.05 % to 0.5 %
b.	Custard Powder		IS 1007-1984,RA:2017	
		Moisture	Clause 4 – IS 4706 (P 2) – 1978, RA:2015	2 % to 20 %
		Total Ash	Clause 6 – IS 4706 (P 2) – 1978, RA:2015	0.2 % to 2 %
		Acid Insoluble Ash	Clause 8 – IS 4706 (P 2) – 1978, RA:2015	0.02 % to 2.5 %
		Gelling Power	Apdx. A, IS 1007-1984,RA:2017	Qualitative
c.	Chewing Gum/ Bubble Gum		IS 6747-1981,RA:2015	
		Moisture	Clause 4, IS :6287-1985,RA:2015	5 % to 20 %
		Gum Base	Appd. B - IS 6747-1981,RA:2015	5 % to 30 %
		Sulphated Ash	Clause 5 – IS-6287-1985,RA:2015	2 % to 20 %
12.	Fruits & Vegetables Products			
a.	Fruits & Vegetable Chutney		IS: 3500 – 1966 RA, 2013	
		Salt as NaCl	IS: 2860 – 1964 RA, 2013	0.1 % to 50 %
		Acidity	IS: 3500 – 1966 RA, 2013	0.2 % to 30 %
		pH value	IS: 3500 – 1966 RA, 2013	2 % to 13 %
		Total Ash Content	IS: 3500 – 1966 RA, 2013	0.1 to 10
		Acid Insoluble Ash	IS: 2860 – 1964 RA, 2013	0.01 % to 5%
b.	Fruits Vegetable		IS: 3881- 1993 RA, 2013	

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	& Tomato Juice	Moisture Content	FSSAI Manual :2016- 3)	0.5 % to 95 %
		Acidity as Acetic acid/ Citric acid	IS: 13844 – 2003 ,RA:2013	0.2 % to 35 %
		Total Soluble Solids	IS: 13815 – 2009	1 % to 90 %
		pH value	IS: 3881- 1993 RA ,2008	2 to 13
c.	Tomato Ketchup & Tomato Sauce		IS: 3882- 1966 RA, 2013	
		Moisture Content	FSSAI Manual :2016- 3)	1 % to 99.9 %
		Total Fat	IS: 3500 – 1966, RA 2013	0.01 % to 10 %
		Total Protein	IS: 13844 – 2003 RA, 2013	0.1 % to 20 %
		Total Ash	IS: 13815 – 2009 RA, 2013	0.05 % to 10 %
		Total Soluble Solid	IS: 3881- 1993 RA, 2013	1 % to 90 %
		Acidity	IS: 2860 – 1994 RA, 2013	0.2 % to 30 %
d.	Soya Sauce	Moisture Content	FSSAI Manual :2016- 3)	1 to 90 %
		Total Fat	IS: 1479(P-2)-1961 RA12	0.1 % to 10 %
		Total Protein	IS: 7219-1973 RA 2015	0.2 % to 20 %
		Total Ash	IS: 3500 – 1966 RA 2013	0.1 % to 10 %
e.	Vegetable Soup Powders	Total Soluble Solid	IS: 2860 - 1994 RA 2013	1 % to 90 %
		Total Ash	IS: 3500 – 1966 RA 2013	0.1 % to 10 %
		Acidity	IS: 13844 – 2003 RA 2013	0.2 % to 30 %
		Moisture	FSSAI Manual :2016- 3)	1.0 % to 20 %
f.	Squashes/ Crushes Syrups/ Sherbets	Total Soluble Solid	IS : 13815-2010 RA 2015	1 % to 90 %
		Total Solids	FSSAI Manual :2016- 3)	1 % to 95 %
		Acidity	IS: 13844 – 2003 RA 2013	0.2 % to 30 %
		pH value	FSSAI Manual :2016- 3)	2 to 13
		Moisture	FSSAI Manual :2016- 3)	1.0 % to 50 %
g.	Concentrated Fruit & Vegetable Pulp/ Puree/ Paste	Total Soluble Solid	IS : 13815-2010 RA 2015	1 % to 90 %
		Total Solids	IS : 14703-1999 RA 2013	1 % to 95 %
		pH value	FSSAI Manual :2016- 3)	2 to 13
		Acidity	IS: 13844 – 2003 RA 2013	0.2 % to 30 %
h.	Murabba/ Marmalades/ Fruit Jelly/ Jam		IS: 5861 - 1993 RA 2013	
		Total Soluble Solid	IS : 13815-2010 RA 2013	1 % to 90 %
		Total Solids	IS : 14703-1999 RA 2013	1 % to 95 %
		Acidity	IS: 13844 – 2003 RA 2013	0.2 % to 30 %