

Laboratory	Cotecna Inspection India Pvt. Ltd., 730, Commodity Exchange Building, Sector-19, Turbhe, Vashi, Navi Mumbai, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	19.05.2014
Certificate Number	T-2941	Valid Until	18.05.2016
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S.No.	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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I. FOOD & AGRICULTURAL PRODUCTS

1.	Animal Feed	Moisture	IS 7874 (Part-I) 1975, RA 2004	0.5% to 40%
		Total ash	IS 7874 (Part-I) 1975, RA 2004	0.5% to 40%
		Acid Insoluble Ash	IS 7874 (Part-I) 1975, RA 2004	0.05% to 10%
		Crude Fat	IS 7874 (Part-I) 1975, RA 2004	0.1% to 20%
		Crude Protein	GAFTA 130 4 : 0-2003	0.5% to 60%
		Crude Fibre	IS 7874 (Part-I) 1975, RA 2004	0.5% to 25%
		Magnesium	GAFTA 130 18:1-2003	5 mg/kg to 500 mg/kg
		Calcium	GAFTA 130 16:1-2003	5 mg/kg to 500 mg/kg
		Urease activity	GAFTA 130 27 : 0-2003	0.05 mg to 4 mg of N/gm of sample
		pH	DGHS Lab Manual-5-2005	1 to 14
		Urea / Nitrogen	IS 7874 (Part-I) 1975, RA 2004	0.5% to 60%
		Salt as NaCl	IS 7874 (Part-II) 1975, RA 2004	0.5% to 15%
		Phosphorous	GAFTA 130 09: 0-2003	0.05 to 1g / 100g

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2.	Cereals, Pulses & by Products	Moisture	IS 4333 (Part-2) 2002	0.5% to 20%
		Ash	GAFTA 130 12: 0-2003, IS 1155:1968, RA 2005	0.5% to 40%
		Acid insoluble ash	GAFTA 130 13: 0-2003, IS 1155:1968, RA 2005	0.05% to 10%
		Fat	GAFTA 130 3 : 0-2003, IS 1155:1968, RA 2005	0.5% to 20%
		Crude protein	GAFTA 130 4 : 0-2003, IS 1155:1968, RA 2005	0.5% to 60%
		Crude fibre	GAFTA 130 12: 0-2003, IS 1155:1968, RA 2005	0.2% to 25%
		Alcoholic acidity	DGHS Lab Manual 3 IS 1155:1968, RA 2005	0.01% to 5%
		Magnesium	GAFTA 130 18:1-2003	0.5 mg/kg to 500 mg/kg
		Calcium	GAFTA 130 16:1-2003	0.5 mg/kg to 500 mg/kg
		Wet Gluten content	IS 15470:2004, DGHS Lab Manual 3-2005	0.5% to 40%
Dry Gluten content	IS 15470 : 2004, DGHS Lab Manual 3-2005 , IS 1155:1968, RA 2005	0.5% to 20%		

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	Cereals, Pulses & by Products	Granularity	IS 1155:1968, RA 2005	0.1% to 100%
		Acid value/ Acidity of extracted fat	DGHS Lab Manual 3-2005	0.1% to 10%
		1000 Kernel Weight	IS 4333 (Part- IV): 2002	0.5 gm to 1000 gm
		Refraction: a) Shrivelled/Shrunken b) Broken c) Insect / Weevilled Damaged d) Damaged and Discoloured e) Foreign Matter / Admixture f) Other Food/ Edible grains g) Chalky h) Red-Streaked Kernels i) Pecks, Immature Kernels j) Yellow kernels k) Paddy l) Bursted grain m) Deahusked n) Fragments	IS 4333 (Part- I): 1996, RA 2001	0.1% to 40%
		Starch contents	DGHS Lab Manual 10-2005	5% to 80%

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3.	Milk & Milk Products (Skimmed Milk Powder)	Moisture	DGHS Lab Manual 1-2005	0.1% to 98%
		Total Solids	IS 1479 (Part II): 1961, RA 2003, DGHS Lab Manual 1-2005	0.5% to 98%
		Milk Fat	IS 1479 (Part II): 1961, RA 2003 DGHS Lab Manual 1-2005	0.5% to 85%
		Milk Protein	IS 1479 (Part II): 1961, RA 2003, DGHS Lab Manual 1-2005	0.5% to 80%
		Carbohydrates	COT /SOP/TEST/03	0.5% to 80%
		Energy Value	COT /SOP/TEST/03	10 to 1000 Kcal/100g
		Titration Acidity	IS 1479 (Part-I): 1960, RA 2003 Amnd 4, DGHS Lab Manual 1-2005	0.01% to 5%
		Ash	IS 1479 (Part-II): 1961, RA 2003, DGHS Lab Manual 1-2005	0.1% to 30%
		Added starch	IS 1479 (Part-I): 1960 Amnd 4, RA 2003, DGHS Lab Manual 1-2005	Present / Absent
		Added Sugar	IS 1479 (Part-I): 1960 Amnd 4, RA 2003 DGHS Lab Manual 1-2005	Present / Absent
	Magnesium	IS 1479 (Part-II): 1961, RA 2003	5 mg/kg to 500 mg/kg	

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	Milk & Milk Products (Skimmed Milk Powder)	Calcium	IS 1479 (Part II): 1961, RA 2003	5 mg/kg to 500 mg/kg
		Added Formaldehyde	IS 1479 (Part II): 1961, RA 2003, DGHS Lab Manual 1-2005	Present / Absent
		Urea	IS 1479 (Part II): 1961, RA 2003, DGHS Lab Manual 1-2005	Present/ Absent
		pH	IS 1479 (Part II): 1961, RA 2003, DGHS Lab Manual 1-2005	1 to 14
		Salt (Chloride)	IS 1479 (Part II): 1961, RA 2003, DGHS Lab Manual 1-2005	0.1% to 10%
4.	Tea (Tea Powder)	Moisture	IS 13853:1994, RA 1999 DGHS Manual 4-2005	1.0% to 40%
		Total ash	IS 13854:1994, RA 1999 DGHS Manual 4-2005,	0.1% to 40%
		Acid insoluble ash	IS 13857:1993, RA 1999 DGHS Manual 4-2005	0.1% to 10%
		Crude Fiber	IS10226 (Part 1): 1982, RA 2005 DGHS Manual 4-2005	2% to 40%
		pH	DGHS Lab Manual-5-2005	1 to 14
		Water extract	IS 13862:1993, DGHS Manual 4-2005	0.1% to 50%

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	Tea (Tea Powder)	Water-soluble ash of Total ash	IS 13855:1993, RA 1998 DGHS Manual 4-2005	0.5% to 98%
		Alkalinity of water-soluble ash (as K ₂ O ₂)	IS 13856:1993(RA 1998), DGHS Manual 4-2005	0.1% to 5%
		Iron particles	IS 3633:2003 Annex C	Present / Absent
5.	Spices & Condiments (Chilly & Chilly Powder, Turmeric Whole & Ground, Cumin Seed & Powder, Black Peper, Coriander seed, Fenugreek, Clove, Curry Powder, Cardamom)	Moisture	IS 1797: 2001, RA 2001	0.1% to 40%
		Extraneous matter/ refractions	IS 1797: 2001, RA 2001	0.1% to 40%
			IS 3579-1966 RA 2006	
		Total ash	IS 1797: 2001, RA 2001	0.1% to 40%
		Acid insoluble ash	IS 1797: 2001, RA 2001	0.01% to 10%
		Water insoluble ash	IS 1797: 2001, RA 2001	0.1% to 30%
		Crude fibre	IS 1797: 2001, RA 2001	0.1% to 60%
		Non volatile ether extract	IS 1797: 2001, RA 2001	0.5% to 30%
		Alcohol soluble extract	IS 1797: 2001, RA 2001	0.5% to 20%
		Salt	IS 1797: 2001, RA 2001	0.05% to 20%
		Calcium	DGHS Manual 10-2005, IS 1797: 2001, RA 2001	0.5 mg/kg to 500 mg/kg

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	Spices & Condiments (Chilly & Chilly Powder, Turmeric Whole & Ground, Cumin Seed & Powder, Black Peper, Coriander seed, Fenugreek, Clove, Curry Powder, Cardamom)	Starch	DGHS Manual 10-2005	0.1% to 80%
		Mineral oil in black pepper	DGHS Manual 10-2005	Present/Absent
		Pappya seeds in black pepper	DGHS Manual 10-2005	0.1% to 50%
		Light and heavy filth in spices and condiments	DGHS Manual 10-2005	0.1% to 50%
		Bulk density	DGHS Manual 10-2005	1.0 gm/l to 800 gm/l
		Cold water soluble extract	IS 1797: 2001, RA 2001	0.1% to 40%
		Volatile oil	IS 1797: 2001, RA 2001	0.1% to 40%
6.	Sugar – (White Sugar, Raw Sugar)	Moisture (Loss on drying)	IS 15279: 2003	0.01% to 40%
		Sucrose	IS 15279: 2003	0.5% to 100%
		pH	DGHS Lab Manual-5-2005	1 to 14
		Sulphated ash	IS 15279: 2003	0.1% to 10%
		Polarization value	IS 15279: 2003	10% to 200%
		ICUMSA colour	IS 15279: 2003, GS9/1/2/3/-8(2005), ICUMSA	10 to 1000
		Reducing sugar	IS 15279: 2003	0.5% to 95%

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7.	Oil Seeds (Soyabean Seed, Sunflower, Safflower, Groundnut, Sesame Seed, Cotton Seed, Niger Seed, Cashew)	Moisture	IS 3579:1966, RA 2006	0.2% to 20%
		Refraction:	IS 3579:1966, RA 2006	0.1% to 40%
		a) Damage		
		b) Weevilled		
		c) Slightly damage		
		d) Shrivilled		
		e) Immature		
		f) Split		
		g) Broken		
		h) Nooks		
		i) Impurities		
		Ash	GAFTA 130 12: 0-2003	0.5% to 40%
		Acid Insoluble Ash	GAFTA 130 13: 0-2003	0.05% to 10%
Oil content	IS 3579:1966, RA 2006	0.1% to 60%		
Protein	GAFTA 130 4: 0-2003	0.5% to 60%		
Fibre	GAFTA 130 12: 0-2003	0.5% to 25%		
Acid value/ free fatty acid of extracted oil	IS 3579:1966, RA 2006	0.1% to 10%		

