

**Laboratory** Cotecna Inspection India Pvt. Ltd., "Prosperity", 1st Floor, Unit No. 101 & 201, Plot No. 186-208, Sch. No. 114-Part I, A.B. Road, Indore, Madhya Pradesh

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

**Certificate Number** TC-7579 (in lieu of T-2988)

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**Validity** 05.07.2018 to 04.07.2020

**Last Amended on** 12.07.2018

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#### CHEMICAL TESTING

<b>I.</b>	<b>ANIMAL FOOD AND FEED</b>			
<b>1.</b>	<b>Soyabean DOC (De Oiled Cake)</b>	Moisture content	Gafta 130-2:1 (2018)	2.0 % to 18 %
	<b>Cotton Seed DOC (De Oiled Cake)</b>	Sand and silica	Gafta 130-12:0 (2018)	0.2 % to 12 %
	<b>Cotton Cake (De Oiled Cake)</b>	Crude protein	Gafta 130-4:1 (2018)	5.0 % to 65 %
	<b>Mustard DOC (De Oiled Cake)</b>	Crude fibre	Gafta 130-9:0 (2018)	1.0 % to 30 %
	<b>Mustard Cake (De Oiled Cake)</b>	Oil content	Gafta 130-3:0 (2018)	0.2 % to 10 %
	<b>Mustard DOC (De Oiled Cake)</b>	Total Ash	Gafta 130-11:0 (2018)	0.5 % to 1.0 %
	<b>Mustard Cake (De Oiled Cake)</b>	Protein solubility 0.2 % KoH	ISO 14244:2014	60 to 90
	<b>Rapeseed DOC (De Oiled Cake)</b>	Nitrogen solubility index	AOCS Ba 11-65 2017	15 to 70
	<b>Soya Flour</b>	Urease activity	Gafta 130-21:0 (2018)	0.05 to 1.0 mgN/gm/min at 30 °C
	<b>Soya Flaks</b>		CI A-2.1 of IS 7837:1975 (RA 2010) Amnd 1	0.3 to 3.0
	<b>De oiled Rice Bran</b>			
<b>II.</b>	<b>FOOD AND AGRICULTURAL PRODUCTS</b>			
<b>1.</b>	<b>Cereal Pulses &amp; Cereal Products</b>			
<b>a.</b>	<b>Wheat Flour, Atta, Suji, Rawa, Besan</b>	Moisture	IS 1155:1968 (RA 2010) Amnd 3 Appendix A of IS 1009:1979 (RA 2010) Appendix B of IS 1010:1968 (RA 2005)	2.0 % to 25 %
		Ash	Gafta 130-11:0 (2018) IS 1155:1968 (RA 2010) Amnd 3	0.2 % to 2.0 %

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		Acid insoluble ash	Gafta 130-12:0 (2018) IS 1155:1968 (RA 2010) Amnd 3	0.05 % to 2.0 %
		Crude protein	Gafta 130-4:1 (2018) IS 1155:1968 (RA 2010) Amnd 3	5 % to 45.0 %
		Crude fibre	Gafta 130-9:0 (2018) IS 1155:1968 (RA 2010) Amnd 3	0.2 % to 2.0 %
		Alcoholic acidity as H <sub>2</sub> SO <sub>4</sub>	IS 1155:1968 (RA 2010) Amnd 3 IS 2400:1975 (RA 2010)	0.01 % to 5 %
		Wet Gluten	IS 8162:1998 (RA 2009)	15 % to 40 %
		Gluten (on dry basis)	IS 1155:1968 (RA 2010)	2 % to 15 %
2.	<b>Food Grain- Maize, Wheat, Chick Peas, Rice, Barley, Soyabean Seed, Sorghum, Paddy, Oats. Millets. Bajra, Red Gram, Bengal Gram, Lentil, Pea, Mung, Green Gram</b>	Moisture content	IS 4333 (Part 2): 2017 ISO 712:2009 ISO 6540:1980	2.0 % to 25 %
		Foreign matter	IS 4333 (Part 1): 1996 (RA 2012)	0.01 % to 25 %
		Other food grain	IS 4333 (Part 1): 1996 (RA 2012)	0.01 % to 25 %
		Damaged	IS 4333 (Part 1): 1996 (RA 2012)	0.01 % to 25 %
		Discoloured	IS 4333 (Part 1): 1996 (RA 2012)	0.01 % to 25 %
		Insect damaged	IS 4333 (Part 1): 1996 (RA 2012)	0.01 % to 25 %
		Broken	IS 4333 (Part 1): 1996 (RA 2012)	0.01 % to 25 %
		Slightly damaged or touched	IS 4333 (Part 1): 1996 (RA 2012)	0.01 % to 25 %
		Chalky (in case of rice)	ISO 7301:2002	0.01 % to 25 %

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		Red Grains	IS 4333 (Part 1): 1996 (RA 2012)	0.01 % to 25 %
		Kernels with husk	IS 4333 (Part 1): 1996 (RA 2012)	0.01 % to 25 %
		Shrivelled or Immature (wheat)	IS 4333 (Part 1): 1996 (RA 2012)	0.01 % to 25 %
		Weeviled	IS 4333 (Part 1): 1996 (RA 2012)	0.01 % to 25 %
		Varietal admixture	IS 4333 (Part 1): 1996 (RA 2012)	0.01 % to 25 %
		Paddy/kg (in case of rice)	ISO 7301:2002	0.01 % to 25 %
		Worm eaten	ISO 605:1991	0.01 % to 25 %
		Smooth	IS 4333 (Part 1): 1996 (RA 2012)	0.01 % to 25 %
		Split Kernels	IS 4333 (Part 1): 1996 (RA 2012)	0.01 % to 25 %
		Stained	QMS-PR-AGRI-LAB-TEC-005-1.0 issued no-1.0 issued date-01/06/2018	0.01 % to 25 %
		Aborted (Immature)	IS 4333 (Part-1):1996 (Reaff 2012)	0.01 % to 25 %
		1000 Kernel Weight	IS 4333:Part IV:2017	20 gm to 50 gm
		Count per Ounce	COT/SOP/OPR/15-1.0 issue no-1.0 issue date-01/06/2018	38 to 80
3.	Oilseed- Mustard Seed, Groundnut, Soybean, Cotton Seed, Sunflower Seed, Rapeseed, Sesame Seed, Linseed,	Moisture content	IS 3579:1966 (RA 2000)	0.01 % to 20 %
		Damaged	IS 3579:1966 (RA 2000) Cl. 4	0.01 % to 10 %
		Weeviled	IS 3579:1966 (RA 2000) Cl. 4	0.01 % to 10 %
		Shrivelled or Immature	IS 3579:1966 (RA 2000) Cl. 4	0.01 % to 10 %

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	<b>Safflower Seed</b>	Split Kernels	IS 3579:1966 (RA 2000) Cl. 4	0.01 % to 10 %
		Broken Kernels	IS 3579:1966 (RA 2000) Cl. 4	0.01 % to 10 %
		Impurities	IS 3579:1966 (RA 2000) Cl 4	0.01 % to 10 %
		Oil content	IS 3579:1966 (RA 2000) Cl 5.2	5 % to 50 %
		Acid value of the extracted oil	IS 3579:1966 (RA 2010) Annex C	0.10 to 5 mgKoH
<b>4.</b>	<b>Soya Lecithin</b>	Moisture	IS 5055:1996 (RA 2009) Annex C	0.01 % to 1 % ( by mass)
		Hexane insoluble matter	AOCS ja 3-87-2017	0.01 % to 1 %
		Benzene insoluble matter	IS 5055:1996 (RA 2009) Annex E & Amnd 1	0.01 % to 0.30 %
		Acid value	AOCS ja 6-55-2017	15 % to 50 %
		Peroxide value	AOCS ja 8-87-2017	0.1 Meg/kg to 1 Meg/kg
		Viscosity	AOCS Ja 10-87-2017	4000 centipoises to 15000 centipoises
<b>5.</b>	<b>Herbs, Spices and Condiments</b>			
<b>a.</b>	<b>Turmeric, Coriander, Red Chili, Fennel Seed, Black Pepper, Cumin, Cloves, Fenugreek, Nigella Seed</b>	Moisture content	IS 1797:2017, cl 9	1.00 % to 30.0 %
		Extraneous matter	IS 1797:2017, cl 9	0.01 % to 10 %
<b>6.</b>	<b>Edible oils &amp; fats</b>			
<b>a.</b>	<b>Crude Soyabean Oil, Refined</b>	Moisture content	IS 548 (Part 1): 1964 (RA 2010) Cl. 5.1 Amnd 5	0.5 % to 2.00 %

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	<b>Soyabean Oil, Cotton Seed Oil, Ground Nut Oil, Rice Bran Oil, Acid Oil, Coconut Oil, Linseed Oil, Mustard Oil, Palm Oil, Sunflower Oil</b>	Acid value	IS 548 (Part 1): 1964 (RA 2010) Cl. 7 Amnd 5	0.1 % to 40.0 %
		Peroxide value	IS 548 (Part 1): 1964 (RA 2010) Amnd 5	0.20 milli eg/kg to 20.0 milli eg/kg
		Iodine Value	IS 548 (Part 1): 1964 (RA 2010) Cl. 14 Amnd 5	10 to 180
		Free Fatty Acids	IS 548 (Part 1): 1964 (RA 2010) Cl. 17 Amnd 5	0.1 % to 25.0 %
<b>7.</b>	<b>Sugars &amp; Sugar Products</b>			
<b>a.</b>	<b>Row Sugar, Refined Sugar</b>	Loss on drying	IS 15279:2003 (RA 2008) Amnd 1	0.02 % to 20 %
<b>8.</b>	<b>Tea</b>			
<b>a.</b>	<b>Black Tea</b>	Loss in mass at 103°C	IS 13853:1994 (RA 2009)	1.0 % to 40 %
		Total Ash	IS 13854:1994 (RA 2009)	0.1 % to 40 %
		Acid insoluble ash	IS 13857:1993 (RA 2009)	0.1 % to 10 %
		Crude Fiber	IS 16041:2012	2.01 % to 40 %
		Water extract	IS 13862:1999 (RA 2009)	0.1 % to 50 %
		Water-soluble ash of Total ash	IS 13855:1994 (RA 2009)	0.5 % to 98 %
		Alkalinity of water-soluble ash	IS 13856:1993 (RA 2009)	0.1 % to 5 %
<b>9.</b>	<b>Milk &amp; Dairy Products</b>			
<b>a.</b>	<b>Skimmed Milk Powder</b>	Moisture	10.2 FSSAI manual milk and milk products 2016	1.0 % to 10 %
		Milk Protein	10.6 FSSAI manual milk and milk products 2016	15 % to 50 %
		Ash	10.7 FSSAI manual milk and milk products 2016	0.5 % to 10 %
		Total Solids	1.3.3 FSSAI manual milk and milk products 2016	90.0 % to 99 %