

Laboratory Cotecna Inspection India Pvt. Ltd., Khalsa Avenue, 1st & 2nd floor,
Plot No. 210, Sector-1/A, Gandhidham, Kutch, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6714

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Validity 03.01.2018 to 02.01.2020

Last Amended on --

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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CHEMICAL TESTING

I.	FOOD & AGRICULTURAL PRODUCTS			
1.	Food Grains	Moisture content	IS 4333-P-2, GAFTA-130:2.3	0.1% to 20.0%
	Wheat flour, Maida	Wet Gluten	IS 8162 GAFTA-130.26.1	0.5% to 40%
		Dry Gluten	IS 15470 ISO 6645	0.5% to 15%
	White raw rice, Parboiled rice, Non-basmati rice, Basmati rice, Maize	Heat Damaged grains, Yellow kernels/grains	IS 4333-P-1, IS 2813, ISO 7301	0.1% to 25%
		Chalky grains		
		Damaged		
		Immature		
		Red Streaked Kernel		
		Foreign matter, Extraneous matter		
		Broken – [Big, small, medium]		
		Broken (3/4 of size)		
		Varietal admixture		
		Shrivelled or immature		
		Kernels with husk		
		Slightly damaged or touched		
		Red grains		
		Other food grains		
		Insect Damaged		
	Discoloured			
	Weeviled grains			
	1000 Grain wt	IS 4333-P-1	10 g to 500 g	
	Dockage	IS 2813	0.1% to 25%	
	Average length	ISO 7301	4 mm to 9 mm	

Vinay Kumar Tyagi
Convenor

N. Venkateswaran
Program Director

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2.	Oil seeds Natural sesame seeds, Black sesame seeds, Hulled sesame seeds, soya bean seeds	Moisture content	IS 3579 GAFTA-130:2.2	0.1% to 15%
		Damaged and weevilled	IS 3579	0.1% to 25%
		Slightly damaged	IS 3579	
		Shrivelled and Immature	IS 3579	
		Split kernels	IS 3579	
		Broken kernels	IS 3579	
		Impurities	IS 3579	
		Oil Content	IS 3579	15.0% to 60%
Acid value (extracted oil)	IS 3579	0.1% to 5%		
3.	Spices & Condiments: Coriander seeds, Fenugreek seeds, Cumin	Total Ash	IS 1797	0.10% to 10.0%
		Acid Insoluble Ash	IS 1797	0.01% to 5.0%
		Moisture Content	IS 1797	4.0% to 30.0%
4.	Animal Feed Rapeseed DOC/Meal, G N DOC Soybean DOC, Soybean Hipro,	Crude Protein	GAFTA 130:4:1	2.0% to 70%
		Sand /Silica	GAFTA 130:12:0	0.10% to 15%
		Oil content	GAFTA 130:3:0	5.0% to 65.0%
		Fibre Content	GAFTA 130:9:0	0.2% to 20.0%
		Ash content	GAFTA 130:11:0	1.0% to 30%
		Moisture	GAFTA 130:2:1	5.0% to 15%
		Urease activity, mg N/g/min at 30 deg C	GAFTA 130:22:0	0.05 to 1.0
5.	Edible Oil: CPO (Crude palm oil) RBD Palm oil, Washed Cotton Seeds Oil, CDSBO (crude degummed soyabean oil), CSFO (Crude Sunflower oil), Ground nut Oil,	Free fatty acids	IS 548-P-1, AOCS Ca 5a-40	0.01% to 2%
		Mass per Unit Volume / Litre Weight/ Density	AOCS Cc 10c-95	0.8600 to 0.9500
		Acid value	IS 548-P-1,AOCS Cd 3d-63	0.1 to 30 mg KOH/g of sample
		Saponification Value	IS 548-P-1:1964, AOCS Cd 3-25	180 to 225 mg KOH/g of sample
		Iodine Value	IS 548-P-1,AOCS Cd 1d-92	10 to 190
		Slip Melting Point	IS 548-P-1, AOCS Cc 3-25	30 °C to 95 °C
Peroxide Value	IS 548-P-1,AOCS Cd 8b-90	0.1 meq/kg to 40 meq/kg		

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	Rape seed/ Mustard Oil. Castor Seed Oil	Moisture & Volatile Matter	IS 548-P-1, AOCS Ca 2c-25	0.01% to 20.0%
		Insoluble Impurities	IS 548-P-1, AOCS Ca 3a-46	0.01% to 0.15 %
		Phosphorus	AOCS Ca 12-55	10 mg/kg to 2000 mg/kg, 0.001% to 0.2%
6.	Sugar	Ash	IS 15279	0.01% to 1%
		Moisture	IS 15279	0.01% to 5%
II	SOLID FUEL			
1.	Coal	Volatile Matter	Clause 7.4 of IS 1350-P-1	0.1% to 50%
		Inherent Moisture	Clause 6.3.2.3 of IS 1350-P-1	0.20% to 30.0%
		Ash	Clause 8.0 of IS 1350-P-1	0.50% to 30.0%
		Total Moisture, One stage at 108 ± 2 °C	Clause 6.2 (a) IS 1350-P-1	0.5% to 50%
		Gross Calorific Value	IS 1350-P-2	3000 kcal/kg to 9000 kcal/kg
		Sulphur as S	IS 1350-P-3	0.1% to 3.0%
III.	ORES AND MINERALS			
1.	Rock Phosphate	Moisture	FCO-1985	0.30% to 5.0%
		Phosphorus Pentoxide as P ₂ O ₅	FCO-1985	20% to 36%
2.	Bauxite	Loss on ignition	IS 2000 (P-1)	0.5% to 30%
		Silica as SiO ₂	IS 2000 (P-2)	0.5% to 10%
		Alumina as Al ₂ O ₃	IS 2000 (P-3)	10% to 60%
		Ferric oxide, as Fe ₂ O ₃	IS 2000 (P-4)	1% to 30%
		Titania as TiO ₂	IS 2000 (P-5)	0.2% to 10%
		Phosphorus as P ₂ O ₅	IS 2000 (P-7)	0.1% to 1%