

Laboratory **SGS India Private Limited, 1B, Press Complex, A.B. Road, Indore, Madhya Pradesh**

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

Certificate Number **TC-7620 (in lieu of T-1086)**

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Validity **01.09.2018 to 31.08.2020**

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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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CHEMICAL TESTING

I.	FOOD & AGRICULTURAL PRODUCTS			
1.	Meat and Meat Products	Moisture	GAFTA-130:2.1-2018, (ISO 6496:1999)	2 % to 18 %
		Crude Protein	GAFTA-130:4.1-2018, (ISO 5983-2:2009)	5 % to 65 %
		Crude Ash	GAFTA-130:11.1-2018 (ISO 5984:2002)	1 % to 10 %
		Ash Insoluble in HCl	GAFTA-130:12.0-2018 (ISO 5985:2002)	0.2 % to 12 %
		Fat, Crude Fat	GAFTA-130:3.0-2018 (ISO 6492:1999) IS 7874 (Part 1):1975	0.2 % to 10 %
		Crude Fibre	GAFTA-130:9.0-2018 (ISO 6865:2000)	1 % to 30 %
		Calcium	SO-IN-AFL-LAB-OT-016 Ver1.1/26.06.2018	0.2 % to 20 %
2.		Oil, Fats and Related Products (Crude, Refined, Degummed)	Moisture & Volatile	AOCS Ca-2c-25(17) AOCS Ja 2b-87(17)
	Insoluble Impurities		ISO 663:2017	0.01 % to 1 %
	Acid Value		AOCS Cd 3d-63 (17) AOCS Ja 6-55 (17)	0.3 to 40
	Acidity		AOCS Ca-5a-40 (17)	0.3 % to 15 %
	FFA expr. In oleic acid		AOCS Ca-5a-40 (17)	0.3 % to 15 %
	Unsaponifiable Matter		AOCS Ca-6a-40 (17)	0.35 % to 5 %
	Refractive Index		AOCS Cc-7-25 (17)	1.3 to 1.7
	Density		AOCS Cc-10c-95 (17)	0.85 to 1
	Specific Gravity		IS 548 (Part 1):1964	0.85 to 1.1
	Iodine Value (Wijs)		AOCS Cd 1d-92 (17) AOCS Ja 14-91 (17)	5 to 200
	Saponification Value	AOCS Cd-3-25 (17)	150 unit to 220 unit	

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		Peroxide Value	AOCS Cd 8b-90 (17) AOCS Ja 8-87 (17)	0.5 mEq/kg to 20 mEq/kg
		Colour (in Gardner Unit)	AOCS Ja 9-87 (17)	1 to 18
		Acetone Insoluble Matter	AOCS Ja 4-46 (17)	5 % to 70 %
		Hexane Insoluble Matter	AOCS Ja 3-87 (17)	0.01 % to 1 %
		Moisture	IS 5055:1996	0.01 % to 1.5 %
		Viscosity	AOCS Ja 10-87 (17)	5 poises to 150 poises
3.	Cereals, Pulses and By-Products			
A.	Rice	Moisture	IS 4333 (Part 2):2017 ISO 712:2009	2 % to 25 %
		Broken	IS 2813:1995	Upto 25 %
		Dehusked Grains	IS 4333 (Part 1):1996	
		Discoloured		
		Insect Damaged		
		Kernels with Husk		
		Other Food Grains		
		Slightly Damaged or Touched		
		Varietal Admixture		
		Weeviled		
		Fragments		
		Head Rice	CODEX STAN 198-1995	Upto 25 %
		Heat-Damaged (Yellow, Orange, Black)	ISO 7301:2011	
		Peck		
		Red-Streaked Kernel		
		Average Length	ISO 7301:2011	1 mm to 15 mm
		Large, Big Broken	CODEX STAN 198-1995	Upto 25 %
		Medium Broken	IS 2813:1995	
		Small Broken	IS 4333(Part 1):1996	
		Chalky	ISO 7301:2011	
		Damaged		
		Extraneous, Foreign Matter		

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		Immature Red Grains		
		Whole Kernels	CODEX STAN 198:1995 ISO 7301:2011	1 % to 100 %
		Paddy/kg.	ISO 7301:2011	Upto 100 unit
B.	Wheat	Moisture	IS 4333 (Part 2):2017 ISO 712:2009	2 % to 25 %
		Broken Damaged	ISO 7970:2011 CODEX STAN 199:1995	Upto 25 %
		Extraneous, Foreign Matter	IS 2813:1995 IS 4333 (Part 1):1996	
		Immature	ISO 7970:2011 IS 2813:1995 IS 4333 (Part 1):1996	
		Shrivelled, Shrunken	ISO 7970:2011; CODEX STAN 199:1995	
		Insect Damaged	IS 2813:1995	
		Other Food Grains	IS 4333 (Part 1):1996	
		Weeviled		
		Discolored		
		Insect Bored	CODEX STAN 199:1995	
		Heat Damaged	ISO 7970:2011	
		Unsound Grains		
		Mouldy		
		Grains Attacked by Pests		
		Sprouted Grains		
		Ergot		
		Other Cereals		
		Bunted Grains/kg		Upto 100 Unit
		Vitreous Grains	ICC 129:1980	Upto 100 %
		Gluten (Wet)	ISO 21415 (Part 1):2006	15 % to 35 %
		Gluten (Dry)	ISO 21415 (Part 3):2006	5 % to 15 %
		Bulk Density, Hectolitre Weight	ISO 7971 (Part 3):2009	40 kg/hl to 90 kg/hl

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C.	Other Grains (Chick Peas Maize Whole & Split Pulses Paddy Sorghum)	Moisture	ISO 24557:2009 ISO 6540:1980 IS 4333 (Part 2):2017 ISO 712:2009	2 % to 25 %
		Broken	ISO 605:1991	Upto 25%
		Damaged	IS 2813:1995 IS 4333 (Part 1):1996 EU 1272:2009	
		Discoloured	CODEX STAN 171-1989 ISO 5527:2015 IS 2813:1995 IS 4333 (Part 1):1996 EU 1272:2009	Upto 25%
		Extraneous, Foreign Matter, Impurities	ISO 605:1991 IS 2813:1995 IS 4333 (Part 1):1996 CODEX STAN 172-1989	
		Weeviled	CODEX STAN 172-1989	
		Insect Damaged, Grains Damaged by Pests	IS 2813:1995 IS 4333 (Part 1):1996 EU 1272:2009 CODEX STAN 172-1989,	
		Shrivelled or Immature	ISO 5527:2015 IS 2813:1995 IS 4333 (Part 1):1996	
		Worm Eaten	ISO 605:1991	
		Green, Brown Grains	CODEX STAN 171-1989	
		Aborted (Immature)		
		Stained		
		Smooth	SO-IN-AFL-LAB-OT-005/VER 1.2/20.06.2018	
Count per Ounce	SO-IN-AFL-LAB-OT-005/VER 1.2/20.06.2018	30 to 75		
Kernels of other Colors	CODEX STAN 153-1985	Upto 25 %		
Other Food Grains (Foreign Grains)	ISO 5527:2015 IS 2813:1995			

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		Heat Damaged	IS 4333 (Part 1):1996 ISO 5527:1995 IS 2813:1995 IS 4333 (Part 1):1996	
		Sprouted	ISO 5527:2015 EU 1272:2009	
		Immature	EU 1272:2009	
		Varietal Admixture	CODEX STAN 172-1989, IS 2813:1995 IS 4333 (Part 1):1996	
		Bulk Density, Hectoliter Weight	ISO 7971 (Part 3):2009	40 kg/hl to 90 kg/hl
D.	Wheat Flour	Moisture	ISO 712:2009	2 % to 20 %
		Crude Protein	ISO 1871:2009	5 % to 15 %
		Ash	ISO 2171:2007	0.1 % to 3 %
		Acid Insoluble Ash	ISO 735:1977 IS 1155:1968	0.05 % to 2 %
		Crude Fibre	IS 10226 (Part 1):1982 ISO 5498:1981	0.2 % to 2 %
		Gluten (Wet)	ISO 21415 (Part 1):2006	15 % to 35 %
		Gluten (Dry)	ISO 21415 (Part 3):2006	5 % to 15 %
E.	Rice Bran, Rice Polish, Rice Bran Extraction, De-Oiled Rice Bran (DORB)	Moisture	GAFTA-130:2.1-2018, ISO 6496:1999	2 % to 20 %
		Crude Protein	GAFTA-130:4.1-2018, ISO 5983 (Part 2):2009	5 % to 20 %
		Ash Insoluble in HCl	GAFTA-130:12.0-2018 ISO 5985:2002	0.5 % to 25 %
		Crude Fibre	GAFTA-130:9.0-2018 ISO 6865:2000 IS 7874 (Part 1):1975	1 % to 25 %
		Fat, Crude Fat	GAFTA-130:3.0-2018 ISO 6492:1999 IS 7874 (Part 1):1975	0.5 % to 45 %

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4.	Oil Seeds	Moisture	ISO 665:2000 ISO 712:2009	0.5 % to 20 %
		Oil Content	IS 3579:1966 AOCS Am 2-93 (17) ISO 659:2009	5 % to 65 %
		Free Fatty Acid in Extracted Oil	AOCS Ab 5-49 (17) IS 3579:1966	0.2 % to 25 %
		Acid Value in Extracted Oil		
		Peroxide Value in Extracted Oil	ISO 3960:2017 AOCS Cd 8b-90 (17)	0.5 mEq/kg to 10 mEq/kg
		Damaged	IS 3579:1966	Upto 25 %
		Weevilled		
		Slightly Damaged		
		Shrivelled and Immature		
		Split Kernels		
		Broken Kernels		
Other Oil Seeds				
Impurities	IS 3579:1966 ISO 658:2002			
Green Seeds	SO-IN-AFL-LAB-OT-004/Ver 1.2/20.06.2018			
5.	Oil Seeds By-Products	Moisture	GAFTA-130:2.1-2018 ISO 6496:1999	2 % to 18 %
		Crude Protein	GAFTA-130:4.1-2018 ISO 5983-2:2009	5 % to 65 %
		Crude Ash	GAFTA-130:11.1-2018 ISO 5984:2002	1 % to 10 %
		Ash Insoluble in HCl	GAFTA-130:12.0-2018 ISO 5985:2002	0.2 % to 12 %
		Fat, Crude Fat	GAFTA-130:3.0-2018 ISO 6492:1999 IS 7874(Part 1):1975	0.2 % to 10 %
		Castor Seed Husk	GAFTA-130:23.0-2018 ISO 5061:2002	10 mg/kg to 10000 mg/kg

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		Crude Fiber	GAFTA-130:9.0-2018 ISO 6865:2000	1 % to 30 %
		Calcium	SO-IN-AFL-LAB-OT-016 Ver1.1/26.06.2018	0.2 % to 20 %
		Urease Activity	GAFTA-130:21.0-2018 ISO 5506:1998 IS 7835:2013 EEC Method 71/250:1971	0.05 to 3
II.	ANIMAL FOOD & FEED			
1.	Animal Feeds & Food	Moisture	GAFTA-130:2.1-2018 ISO 6496:1999	2 % to 18 %
		Crude Protein	GAFTA-130:4.1-2018 ISO 5983 (Part 2):2009	5 % to 65 %
		Crude ash	GAFTA-130:11.1-2018 ISO 5984:2002	1 % to 10 %
		Ash Insoluble in HCl	GAFTA-130:12.0-2018 ISO 5985:2002	0.2 % to 12 %
		Fat, Crude Fat	GAFTA-130:3.0-2018 ISO 6492:1999 IS 7874 (Part 1):1975	0.2 % to 10 %
		Castor Seed Husk	GAFTA-130:23.0-2018 ISO 5061:2002	10 mg/kg to 10000 mg/kg
		Crude Fiber	GAFTA-130:9.0-2018 ISO 6865:2000	1 % to 30 %
		Calcium	SO-IN-AFL-LAB-OT-016 Ver1.1/26.06.2018	0.2 % to 20 %
		Urease Activity	GAFTA-130:21.0-2018 ISO 5506:1998 IS 7835:2013 EEC Method 71/250:1971	0.05 to 3