

Laboratory Nirmal Industries Private Limited-Laboratory, 4 A, M.I.A., Alwar, Rajasthan

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7686 (in lieu of T-3102)

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Validity 10.09.2018 to 09.09.2020

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.	Edible Oil	Moisture	IS 548 (Part 1):1964, (RA 2015) Clause 5.1	0.01 g/100g to 1.0 g/100g
		Colour (Y + 5R)	IS 548 (Part 1):1964, (RA 2015) Clause 13.0	30 Units to 100 Units
		Refractive Index at 40°C	IS 548 (Part 1):1964, (RA 2015) Clause 10.0	1.333 to 1.489
		Acid Value	IS 548 (Part 1):1964, (RA 2015) Clause 7.0	0.05 to 5.0
		Free Fatty Acid	IS 548 (Part 1):1964, (RA 2015) Clause 7.3.1	0.025 g/100g to 2.50 g/100g
		Iodine Value	IS 548 (Part 1):1964, (RA 2015) Clause 14.0	5.0 to 250.0
		Saponification Value	IS 548 (Part 1):1964, (RA 2015) Clause 15.0	10.0 to 250.0
		Unsaponifiable Matter	IS 548 (Part 1):1964, (RA 2015)	0.2 g/100g to 5.0 g/100g
		Specific gravity (at 30/30°C)	IS 548 (Part 1):1964, (RA 2015) Clause 11.3	0.850 to 0.920
		Peroxide Value	IS 548 (Part 1):1964, (RA 2015) Clause 20.0	0.1 meq/kg to 5.0 meq/kg
		Natural essential oil as allylisothiocynate	IS 548 (Part 1):1964, (RA 2015) Clause 17.0	0.05 g/100g to 0.80 g/100g
		Bellier Turbidity Test	IS 548 (Part II):1974, (RA 2015) Clause 13.0	10°C to 41°C
		Argemone Oil (By TLC)	FSSAI Lab manual:(2016) Page No. 70 Clause-30	Qualitative
		Test for Polybromide	FSSAI Lab manual:(2016) Page No. 21 Clause-20	Qualitative

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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
		Hydrocyanic Acid	IS 548 (Part 2) 1974, (RA 2016) Clause-11.0	Qualitative
		Flash Point	IS 1448 (Part 21) (RA 2012)	50 °C to 300°C
		Fatty acid Profile	IS 548 (Part 3) 1976, (RA 2012)	0.1 g/100g to 100 g/100g
		Phosphorous Content	FSSAI Lab manual:(2016) Clause-34, Page No. 78	Upto 1500 mg/Kg
		Test for presence of Mineral Oil	IS 548 (Part 2) (RA 2016) Clause-12	Qualitative (Present/Absent)
		Test for presence of Tricresyl Phosphate	FSSAI Lab manual:(2016) Page No. 76 Clause-33	Qualitative (Present/Absent)
		Test for presence of Castor Oil	IS 548 (Part 2) 1974, (RA 2016) Clause-15.1a	Present/Absent
2.	Oil Seed	Moisture	IS 3579:1966, (RA 2015) Clause 5.0	1.0 g/100g to 20.0 g/100g
		Oil Content	IS 3579:1966, (RA 2015) Clause 5.2	10.0 g/100g to 50.0 g/100g
		Acid Value	IS 3579:1966, (RA 2015) Clause 5.3	0.05 to 10.0
		Free Fatty Acid	IS 3579:1966, (RA 2015) Clause 5.3	0.025 g/100g to 5.0 g/100g
II.	ANIMAL FOOD & FEEDS			
1.	Oil Cake	Moisture	IS 7874 (Part 1):1975, (RA 2014) Clause 4.0	5.0 g/100g to 20.0 g/100g
		Total Ash	IS 7874 (Part 1):1975, (RA 2014) Clause 9.0	0.05 g/100g to 20.0 g/100g
		Acid Insoluble Ash	IS 7874 (Part 1):1975, (RA 2014) Clause 10.0	0.05 g/100g to 10.0 g/100g
		Oil Content	IS 7874 (Part 1):1975, (RA 2014) Clause 7.0	1.0 g/100g to 20.0g/100g

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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
		Acid Value (of extracted Oil)	IS 3579:1966, (RA 2014) Clause 5.3	0.05 to 20.0
		Free Fatty Acid (of extracted oil)	IS 3579:1966, (RA 2014) Clause 5.3	0.025 g/100g to 10.0 g/100g
		Determination of Castor Husk	IS 7874 (Part 1):1975, (RA 2014) Clause 11.0	Qualitative
		Determination of Crude Protein (on moisture free basis)	IS 7874 (Part 1):1975 (RA 2014) Clause 5.0	20.0 g/100g to 60.0 g/100g
		Determination of Crude Fiber	IS 7874 (Part 1):1975 (RA 2014) Clause 8.0	5.0 g/100g to 20.0 g/100g
III.	WATER			
1.	Industrial Water	pH	IS 3025:1983 (Part 11) (RA 2017)	1 to 14
		Total dissolved solids	IS 3025:1984 (Part 15) (RA 2017)	100 mg/l to 4000 mg/l
		Total hardness	IS 3025 (Part 21) (RA 2017)	1 mg/l to 300 mg/l