

Laboratory **Geo Chem Laboratories Pvt. Ltd., Plot No.125, Sector-8, Oslo Road, Gandhidham, Kutch, Gujarat**

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

Certificate Number **TC-6437**

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Validity **03.12.2018 to 13.10.2019**

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.	PETROLEUM AND PRODUCTS			
1.	Furnace oil	Density@15°C	ISO 3675 ASTM D1298-12b	0.8500 g/ml to 1.0000 g/ml
		Flash point(PMCC)	ISO 2719 ASTM D93-15a	50°C to 250°C
		K.Viscosity@50°C	ISO 3104 ASTM D445-15a	50 cSt to 500 cSt
		Micro Carbon Residue	ISO 10370 ASTM D4530-15	0.2% to 30%
		Conradson Carbon Residue	ASTM D189-06	0.2% to 30%
		Pour point	ISO 3016 ASTM D97-16	-33°C to +30°C
		Sulfur	ISO 8754:2003D ASTM D4294-16e1	0.03% to 5.0%
		Total Sediment Potential	ISO 10307 (Part 1 & Part 2), ASTM D4870-09	0.01% to 0.5%
		Sediment by Extraction Water	ASTM D473 -07 ISO 3733	0.01% to 0.50% 0.05% to 25%
		Ash	ISO 6245 ASTM D482-13	0.01% to 0.5%
		2.	Diesel (HSD)	Density@15°C
Flash Point (PMCC)	ISO 2719 ASTM D93-15a			40°C to 200°C
Flash Point (ABEL)	ISO 13736			20°C to 70°C
K.Viscosity@40°C	ISO 3104 ASTM D445-15a			0.1 cSt to 7.0 cSt
Micro Carbon Residue	ISO 10370 ASTM D 4530-15			0.01% to 10%

Pooja Singh
Convenor

Jitendra B. Vispute
Program Director

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		Pour Point	ISO 3016 ASTM D97-16	-30°C to +24°C
		Sulfur	ISO 8754 ASTM D4294-16e1	100 mg/kg to 2.0 mg/kg
		Total Sediment Potential	ISO 10307 (Part 1 & Part 2) ASTM D4870-09	0.005% to 0.5%
		Sediment by Extraction	ASTM D473 -07	0.01% to 0.3%
		Water	ISO 3733 ASTM D95-13	0.05% to 10% (v/v)
		Cloud Point	ISO 3015	+24°C to -30°C
		Ash	ISO 6245 ASTM D482-13	0.001% to 0.1%
II.	FOOD & AGRICULTURAL PRODUCTS			
1.	Edible and Non Edible Oils/Fats & Fatty Acids and their Derivatives	Specific Gravity	IS: 548 (Part-1)	0.8000 to 1.1000
		Acid Value	AOCS Cd 3d-63 IS: 548 (Part-1)	0.2 mgKOH/gm to 600 mgKOH/gm
		Iodine Value	AOCS Cd 1-25 AOCS Tg 1a-64 IS: 548 (Part-1)	0.25 gm I ₂ /100g to 200 gm I ₂ /100g
		Saponificatio Value	AOCS Cd 3-25 IS: 548 (Part-1)	80 mgKOH/gm to 300 mgKOH/gm
		Unsaponifiable Matter	AOCS Ca 6a-40 IS: 548 (Part-1)	0.1% to 15%
		Cloud Point	AOCS Cc-6-25	5°C to 30°C
		Peroxide Value	AOCS Cd 8-53 IS: 548 (Part-1)	0.25 meq/kg to 70 meq/kg
		Color	AOCS Cc 13e-92 IS: 548 (Part-1)	Y Up to 70.0 R Up to 70.0 B Up to 40.0
		Free Fatty Acid	AOCS Ca 5a-40 IS: 548 (Part-1)	0.01% to 95%

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		Insoluble Impurities	AOCS Ca 3a-46 IS: 548 (Part-1)	0.01% to 5%
		Moisture and Volatile Matter	AOCS Ca 2c-25 IS: 548 (Part-1)	0.01% to 5%
		Melting Point	AOCS Cc 1-25 IS: 548 (Part-1)	20°C to 150°C
2.	Non Edible Oil (Castor)	Clarity	SOP/GCGDM/OIL/001 Issue No.:01& Issue Date:19.07.2015	Qualitative Satisfactory/Unsatisfactory
3.	Non Edible Oil	Color gardner	AOCS Td 1a-64	1G to 18G
III.	SOLID FUELS			
1.	Coal & Coke	Total Moisture	ASTM-D3302/D3302M-15 IS:1350 (Part-1)	1% to 60%
		Moisture in Analysis Sample	ASTM-D3173-11 IS:1350 (Part-1)	0.2% to 20%
		Volatile Matter	ASTM-D3175-11 IS:1350 (Part-1)	1% to 70%
		Ash	ASTM-D3174-12 IS:1350 (Part-1)	0.3% to 60%
		Fixed Carbon	ASTM-D3172 IS:1350 (Part-1)	By Calculation
		Gross Calorific Value	ASTM D5865-13 IS:1350 (Part-2)	500 kCal/kg to 10000 kCal/kg
		Sulphur	IS:1350 (Part-3)	0.1% to 10%

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