

Laboratory Sun Oil Company Pvt. Ltd., Department of Testing Laboratory, 238,
Rai Bahadur Road, Kolkata, West Bengal

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7357 (in lieu of T-2213)

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Validity 13.06.2018 to 12.06.2020

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.	LUBRICANTS			
1.	LUBES	Appearance	SOCPL/SOP/01 Rev. no.-01, Issue Dt. 07.02.2013	Qualitative
		Colour	SOCPL/SOP/02 Rev. no.-01, Issue Dt. 07.02.2013	Qualitative
		Colour (ASTM)	IS 1448 (Part 12): 2013	0 to 8.0
		Density	IS 1448 (Part 16): 2014	0.6500 g/ml to 1.1500 g/ml
		Flash Point (COC)	IS 1448(Part 69): 2013	79 to 400°C
		Flash Point (PMCC)	IS 1448 (Part 21): 2012	60 to 300° C
		Kinematic Viscosity 40 °C 60 °C 100 °C	IS 1448 (Part 25): 1976 (RA 2013)	1 cSt to 15000 cSt 50 cSt to 100 cSt 1 cSt to 1500 cSt
		Viscosity Index	IS 1448 (Part 56): 2013	20 to 200
		Total Acid No	ASTM D 974-2012	0.01 mg KOH/g to 200.0 mg KOH/g
		Aniline Point	IS 1448 (Part 3): 2007	40 °C to 130 °C
		Copper Strip Corrosion (ratings)	IS 1448 (Part 15): 2004 (RA 2013)	1 a to 4 c
		Pour Point	IS 1448 [Part 10 & Sec 2): 2013	+36 °C to (-) 48 °C
		Ash Content	IS 1448 (Part 4): 2008	0.01 to 10 (mass %)
		Foaming Characteristics	IS 1448 (Part 67): 1982 (RA 2010)	0 to 400 (ml)
		Saponification Value (of oil)	IS 1448 (Part 55 & Sec 1): 2004 (RA 2010)	0.1 mg KOH/g to 400 mg KOH/g
		Emulsion Characteristics	IS 1448 (Part 91): 1979 (RA 2002)	40-37-3 (30') to 40-40-0 (30') ml

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		Water content in Petroleum Products	IS 1448 (Part 40): 1967 (RA 2015)	0.1 to 10 (volume %)
2.	Speciality Products	ERBP	IS 8654:2001	120 °C to 260 °C
		pH Value	IS 8654:2001 (RA 2011) Appendix A (Electrometrical Method)	0 to 14
		Emulsion Stability Test	IS 1448 (Part 98): 1981 (RA 2008)	0 to 0.5 ml
3.	Greases	Appearance	SOCPL/SOP/01 Issue No.01, Dt. 11.10.2010	Qualitative
		Colour	SOCPL/SOP/01 Issue No. 01, Dt. 11.10.2010	Qualitative
		penetration at 25 °C Worked 60 X	IS 1448 (Part 60): 1994 (RA 2010)	35 to 475
		Worked 10,000 X		60 to 500
		Worked 10,0000 X		
		Copper Strip Corrosion @ 100 °C for 24 hrs	IS 1448 (Part 51): 1963 (RA 2008)	1 a to 4 c
		Drop Point	IS 1448 (Part 52): 1971 (RA 2007)	40 °C to 288 °C
		Leakage tendency of Wheel Bearing Grease	ASTM D 1263-94 (2005)	0 to 5 by mass (g)
	Thermal Stability @ 100 °C for 30 hrs	IS 1448 (Part 89): 1979 (RA 2007)	0 to 5 mass %	