

**Laboratory** Khapri Laboratory, Indian Oil Corporation Ltd., Wardha Road, Khapri, Nagpur, Maharashtra

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

**Certificate Number** TC-5742 (In lieu of T-1209) **Page 1 of 2**

**Validity** 05.06.2017 to 04.06.2019 **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.	<b>PETROLEUM AND PRODUCTS</b>			
1.	<b>Motor Gasoline, Kerosine, Automotive Diesel Fuel</b>	Colour (Visual)	LKPR/SOP/01/2017	Qualitative Orange/Blue Green/brown/Yellow
		Appearance (Visual)	LKPR/SOP/02/2017	Qualitative Free from un- dissolved water foreign material & visible impurities
		Copper Strip Corrosion Rating	IS1448[P:15]:2004 Reaffirmed on March-2016	Qualitative 1 a to 4 c
		Distillation	IS 1448 [P:18]:1991, Reaff: 2016/ASTM D-86	
		Temperature, °C		30 °C to 400 °C
		Volume, % Vol.		0 to 100 ml
		Sulphur, Total	ISO-20847:2004	30 mg/kg to 500 mg/kg
2.	<b>Automotive Diesel Fuel/Fuel Oils/ Light Diesel Oil</b>	Ash Content	IS1448[P:4]:2008 Reaffirmed on July-2013	0.001 % wt to 0.18 % wt
3.	<b>Lube Oil</b>	Sulphated Ash Content		0.4 % wt to 1.63 % wt
		Kinematic Viscosity		1 to 50 cSt at 100 °C
		Viscosity Index	P-56:2013	80 to 150
		Total Base Number (TBN)	IS 1448 P:86 1977 Reaff. 2011	3 mg KOH/gm to 12.5 mg KOH/gm
		Flash Point (COC)	IS 1448 - P : 69 Reaffirmed in 2013	66 °C to 350 °C
4.	<b>Motor Gasoline/ Kerosine/ Automotive Diesel Fuel/Fuel Oils/ Light Diesel Oil/ Lube Oil</b>	Density	IS1448 [P:16]:2014	700.0 kg/m <sup>3</sup> to 1000.0 kg/m <sup>3</sup>

**Gaurav Saini**  
Convenor

**N. Venkateswaran**  
Program Director

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5.	Motor Gasoline	Existent Gum	IS 1448 P:29: 2004 Reaffirmed on March-2016	0 to 50 gm/m <sup>3</sup>
6.	Kerosine/ Automotive Diesel Fuel	Flash Point (Abel)	IS 1448 P: 20:1998 Reaffirmed July-2013	19 °C to 70 °C
7.	Fuel Oils/Light Diesel Oil	Flash Point (PMCC)	IS 1448 P:21:2012	40 °C to 300 °C
8.	Automotive Diesel Fuel	Kinematic Viscosity	IS 1448 P 25:1976 Reaffirmed in July-2013	1 to 400 cSt, at 40 °C
9.	Fuel Oils	Kinematic Viscosity	IS 1448 P 25:1976 Reaffirmed in July-2013	100 to 400 cSt at 50 °C
10.	Automotive Diesel Fuel/Fuel Oils/ Light Diesel Oil	Sediments	IS 1448 P:30: Reaffirmed in July-2013	0 to 5 % by mass
		Water Content	IS 1448 P: 40:1987 Revision 3 2011	0 to 4 % by Vol.
11.	Fuel Oils/Light Diesel Oil	Sulphur, Total	ASTM D-4294 2016/IP-336-2004	0 .0017 % by mass to 5 % by mass

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