

Laboratory **Quality Control Laboratory, Lube Blending Plant, #2, Ennore High Road, Tondiarpet, Chennai, Tamil Nadu**

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

Certificate Number **TC-6602**

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Validity **29.11.2017 to 28.11.2019**

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.	LUBRICANTS			
1.	<b>Lubricant Oils (Automotive &amp; Industrial Lubricants)</b>	Flash Point (COC)	ASTM D 92	80 °C to 400 °C
		Pour Point	ASTM D 97	-18 °C to 21 °C
		Kinematic Viscosity @40°C & 100°C	ASTM D 445	1 cSt to 4000 cSt
		Viscosity Index	ASTM D 2270	40 to 200
		Ash	ASTM D 482	0.001 mass % to 0.180 mass %
		Sulfated Ash	ASTM D 874	0.02 mass % to 10 mass %
		Foaming Characteristics	ASTM D 892	0 to 500 ml
		ASTM Colour Test	ASTM D 1500	0 to 8.0
		Density	ASTM D 4052	0.8000 gm/ml to 1.0000 gm/ml
		Additive Elements EDXRF	ASTM D 6481	
		Phosphorus		0.02 mass% to 0.10 mass%
		Sulfur		0.05 mass% to 1.0 mass%
		Calcium		0.02 mass% to 1.0 mass%
		Zinc		mass% 0.01 to 0.30 mass%
2.	<b>Lubricant Oils (Automotive Lubricants)</b>	CCS - Apparent Viscosity at -10 to - 35 °C	ASTM D 5293	900 Mpa.s to 15000 Mpa.s
		Viscosity	ASTM D 4683	1.2 mPa.s to 7.7 mPa.s
		Evaporation Loss	ASTM D 5800	0 to 30 %
		Flash Point	ASTM D-93	40 °C to 360 °C
		Total Base Number	ASTM D 2896	2 mg KOH/g to 300 mg KOH/g

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		Low Temperature Viscosity	ASTM D 2983	500 mPa.s to 900,000 mPa.s
<b>3.</b>	<b>Lubricant Oils (Industrial Lubricants)</b>	Refractive Index	ASTM D 1218	1.3300 to 1.5000
		Cu strip Corrosion	ASTM D 130	1 to 4
		Aniline Point	ASTM D 611	24 °C to 130 °C
		Rust Preventing Characteristics	ASTM D 665	Qualitative Pass/Fail
		Total Acid Number	ASTM D 974	0 to 250 mg KOH/g
		Water Seperability / Emulsion Characteristics	ASTM D 1401	0 to 60 minutes

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