

<b>Laboratory</b>	<b>Central Petro QA/QC, Reliance Industries Limited, PMD, B-4, MIDC Industrial Area, Patalganga, Dist. Raigad, Maharashtra</b>		
<b>Accreditation Standard</b>	<b>ISO/IEC 17025: 2005</b>		
<b>Discipline</b>	<b>Chemical Testing</b>	<b>Issue Date</b>	<b>11.02.2014</b>
<b>Certificate Number</b>	<b>T-2155</b>	<b>Valid Until</b>	<b>10.02.2016</b>
<b>Last Amended on</b>	<b>-</b>	<b>Page</b>	<b>1 of 3</b>

<b>S.No.</b>	<b>Product / Material of Test</b>	<b>Specific Test Performed</b>	<b>Test Method Specification against which tests are performed</b>	<b>Range of Testing / Limits of Detection</b>
--------------	---------------------------------------	--------------------------------	--	---

#### **I. INDUSTRIAL AND FINE CHEMICALS**

<b>1.</b>	<b>Pure Terephthalic Acid</b>	DCM Y Colour	Licensor – Method / 280	8 to 12
		b – Value	Licensor – Method / 270	0.40 to 2.00
		Millipore	Licensor – Method / 410	0.70 to 0.99
		Water	Licensor – Method / 560	0.05 to 0.30%
		4–CarboxyBenzaldehyde (4– CBA )	Licensor – Method / C&P/DW/TA/6/2A	5 to 30 mg/kg
		Para Toluic acid	Licensor – Method/ C&P/DW/TA/27/1A	10 to 300 mg/kg
		Benzoic Acid	Licensor – Method/ C&P/DW/TA/27/1A	5 to 50 mg/kg
		Acid number	Licensor – Method / 140	625 to 725 mg KOH/gm
		Mean Particle Size	Licensor – Method / 400	70 to 120 micron
		Ash	Licensor – Method / 160	3 to 10 mg/kg
	Metals : Cobalt , Manganese , Chromium & Iron	Licensor – Method / C & P/DW/TA/11/1B	0.5 to 2 mg/kg	

<b>Laboratory</b>	<b>Central Petro QA/QC, Reliance Industries Limited, PMD, B-4, MIDC Industrial Area, Patalganga, Dist. Raigad, Maharashtra</b>		
<b>Accreditation Standard</b>	<b>ISO/IEC 17025: 2005</b>		
<b>Discipline</b>	<b>Chemical Testing</b>	<b>Issue Date</b>	<b>11.02.2014</b>
<b>Certificate Number</b>	<b>T-2155</b>	<b>Valid Until</b>	<b>10.02.2016</b>
<b>Last Amended on</b>	<b>-</b>	<b>Page</b>	<b>2 of 3</b>

<b>S.No.</b>	<b>Product / Material of Test</b>	<b>Specific Test Performed</b>	<b>Test Method Specification against which tests are performed</b>	<b>Range of Testing / Limits of Detection</b>
2.	<b>Para – Xylene (PX)</b>	Purity by GC		
		a) Ethyl Benzene	UOP 720 - 08	0.05 to 0.20% mass
		b) P - Xylene		99.50 to 99.85% mass
		c) m - Xylene		0.05 to 0.20% mass
		d) o - Xylene		0.01 to 0.10% mass
		e) Non aromatics		0.01 to 0.10% mass
		f) Toluene		0 to 0.050% mass
g) C9+Aromatics		0.010 to 0.050% mass		
		Specific Gravity at 15.5/15.5°C	ASTM D 4052 – 11	0.8600 to 0.8700
		Colour	ASTM D 1209 – 05	5 to 10
		Acid wash colour	ASTM D 848 – 09	0 to 5
		0		
		Bromine Index	ASTM D 2710 – 09	1 to 10 mg/100g
3.	<b>Linear Alkyl Benzene</b>	Specific Gravity at 15.5/15.5°C	ASTM D 4052 – 11	0.8500 to 0.8700
		Paraffin Content	UOP 698 – 04	0 to 0.2% mass
		Homologue distribution		
		a) <C10 LAB	UOP 698 – 04	0.1 to 1.5% mass
		b) C10 LAB		5.0 to 30.0% mass
		c) C11 LAB		20.0 to 40.0% mass
		d) C12 LAB		20.0 to 40.0% mass
e) C13 LAB		20.0 to 40.0% mass		
f) C14 LAB		0.1 to 2.0% mass		
g) C10 – C13 LAB		95.0 to 99.0% mass		

**Laboratory** Central Petro QA/QC, Reliance Industries Limited, PMD,  
 B-4, MIDC Industrial Area, Patalganga, Dist. Raigad, Maharashtra  
**Accreditation Standard** ISO/IEC 17025: 2005  
**Discipline** Chemical Testing **Issue Date** 11.02.2014  
**Certificate Number** T-2155 **Valid Until** 10.02.2016  
**Last Amended on** - **Page** 3 of 3

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	<b>Linear Alkyl Benzene</b>	Average Molecular weight	UOP 698 – 04	235 to 245
		2 – Phenyl Alkane	UOP 698 – 04	10.0 to 20.0% mass
		Normal LAB	UOP 698 – 04	85 to 95% mass
		SayboltColour	ASTM D 156 – 12	+25 to +30
		Bromine Index	ASTM D 2710 – 09	0 to 10 mg/100g
		Moisture	UOP 481– 10	25 to 200 mg/kg
<b>II. POLLUTION &amp; ENVIRONMENT</b>				
<b>1.</b>	<b>Treated Effluent Sample</b>	pH	APHA 4500-H <sup>+</sup> B - 11	0 to 14
		COD	APHA 5220-B - 11	25 to 500 mg/L
		Total Suspended Solids ( TSS )	APHA 2540-D - 11	10 to 500 mg/L

-X-X-X-X-X-X-X-X-X-X-X-X-