Quality Assurance Department, Reliance Industries Limited, Nagothane Laboratory

Manufacturing Division, Nagothane, Dist: Raigad, Maharashtra

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

Discipline **Chemical Testing** Issue Date 04.07.2016

Certificate Number T-1152 Valid Until 03.07.2018

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
I.	PLASTICS & RES	SINS		
1.	Polypropylene	Melt Flow Index	ASTM D-1238-13-B	(0.5 g to 900 g)/10 min
		Xylene Soluble	ASTM D 5492-10	1.0 % to 7.0 %
2.	Polyethylene	Melt Flow Index	ASTM D-1238- 13 -B	(0.5 g to 900 g)/10 min
		Density	ASTM D-1505 -10	(0.9100 g to
II.	PETROLEUM & 1	PRODUCTS		$0.9600 \text{ g}/\text{cm}^3$
1.	Ethylene Oxide	Moisture	ASTM E: 203-08	25 mg/kg to 100 mg/kg
		Aldehyde as CH3CHO	SD DC-163A - 2006	2 mg/kg to 100 mg/kg
		Acidity as CH3COOH	ASTM D-1613-06	0.0002 % to 0.1%
2.	Mono ethylene	Moisture	ASTM E- 203-08	25 mg/kg to 1000 mg/kg
	Glycol	Aldehyde as HCHO	SD E0-502 - 2006	2 mg/kg to 100 mg/kg
		DEG in MEG	ASTM E-2409-08	5 mg/kg to 3000 mg/kg
		% UV Transmittance	ASTM E-2193-16	0 to 100 % T
		Iron as Fe	ASTM E-394 - 15	1.0 mg/kg to 100 mg/kg
		Acidity as CH3COOH	ASTM D-1613-12	0.0002 % to 0.1 %
		Specific Gravity @ 20 °C	ASTM D-4052-11	0.85 to 1.13
3.	Ethylene	Methane	ASTM D 2505-88: 2015	1 mg/kg to 500 mg/kg
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	Ethylene	Acetylene	ASTM D 2505-88: 2015	1 mg/kg to 500 mg/kg
		Carbon Monoxide	ASTM D 2504-88: 2015	0 to 20 mg/kg
		Carbon Dioxide	ASTM D 2505-88: 2015	1 mg/kg to 500 mg/kg
4.	Propylene	Ethane +Ethylene	ASTM D 2712-91: 2010	5 mg/kg to 500 mg/kg
		Propane	ASTM D 2712-91: 2010	100 mg/kg to 1000 mg/kg
		Propadiene	ASTM D 2712-91: 2010	1 mg/kg to 20 mg/kg
		Methyl Acetylene	ASTM D 2712-91: 2010	1 mg/kg to 20 mg/kg
		Butadiene	ASTM D 2712-91: 2010	1 mg/kg to 20 mg/kg
		Butenes	ASTM D 2712-91: 2010	1 mg/kg to 20 mg/kg
		Saturated Heavier (iC4 & nC4)	ASTM D 2712-91: 2010	1 mg/kg to 20 mg/kg each
		Carbon Monoxide	ASTM D 2504-88: 2015	0.05 mg/kg to 0.2 mg/kg
		Carbon Dioxide	ASTM D 2505-88: 2015	0.2 mg/kg to 5 mg/kg
III.	POLLUTION & E	NVIRONMENT		
1.	Treated Effluent Water	pH	APHA (22 nd Edition) 4500-H ⁺ B Electrometric method	1 to 12
		BOD	IS 3025 (Part 44): 1993 (RA 2009)	5 mg/l to 500 mg/l
		TSS	APHA (22 nd Edition) 2540-D	5 mg/l to 500 mg/l
		TDS (at 180°C)	APHA (22 nd Edition) 2540-C	10 mg/l to 2500 mg/l

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	Treated Effluent Water	Oil & Grease	NMD/QAD/IWWTP-1716	0.2 mg/l to 50 mg/l
		Sulphide	APHA (22 nd Edition) 4500-S ²⁻ -F Iodometric Method	0.1 mg/l to 250 mg/l
		COD	APHA (22 nd Edition) 5220-D- Closed Reflux, Colorimetric Method	5 mg/l to 2000 mg/l
		Chloride (as Cl)	APHA (22 nd Edition) 4500- Cl ⁻ B. Argentometric Method	5 mg/l to 500 mg/l
		Sulphate (as SO ₄ ²⁻)	APHA (22 nd Edition) 4500- SO ₄ ²⁻ - E. Turbidimetric Method	1 mg/l to 100 mg/l

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