

Laboratory Cipy Research & Development Lab, T-127, M.I.D.C Bhosari, Pune, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-5366

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Validity 27.03.2017 to 26.03.2019

Last Amended on 13.04.2018

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.	PAINTS & SURFACE COATINGS			
1.	Polyurethane Epoxy based products	Color	IS:101(Part4/Sec2)-1989 (RA 2009)	Qualitative
		Mass	IS:101(Part1/Sec7)-1987 (RA 2009), ASTM D 1475 - 13	8.00 kg to 25.00 kg/10 lt/Density
		Consistency	IS:101(Part1/Sec5)-1989 (RA 2009)	20 sec to 200 sec
		Viscosity	IS:9162 - 1979 (RA 2011), ASTM D 2196 - 15	100 cPs to 100000 cPs
		Drying Time	IS:101(Part3/Sec1)-1986, (RA 2012), ASTM D 1640 - 14	1.00 min to 24.00 hrs
		Fineness of Grind	IS:101(Part3/Sec5)-1987 (RA 2009), ASTM D1210 - 05 (Reapproved 2014)	Qualitative
		Dry Film Thickness	IS:101(Part3/Sec2)-1989 (RA 2009), ASTM D 7091 - 13	25 µm to 1500 µm
		Wet Film Thickness	IS:101(Part3/Sec2)-1989 (RA 2009), ASTM D 4414 - 95 (Reapproved 2013)	25 µm to 2000 µm
		Volume solids	IS:101(Part8/Sec6)-1993 (RA 2009), ASTM D 2697 - 03 (Reapproved 2014)	30.0 % to 100.0%

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		Volatile Matter	IS:101(Part2/Sec2)-1986 (RA 2012), ASTM D 2369 - 10 (Reapproved 2015)	0.01 % to 60.00 %
		Finish	IS:101(Part3/Sec4)-1987 (RA 2009)	Qualitative
		Flash point	IS:101(Part1/Sec6)-1987 (RA 2009)	15.1 °C to 90.1° C
		Water Absorption	ASTM D 570 - 98 (Reapproved 2010)	0.01% to 5.00 %
		Keeping Properties/Package stability	IS:101(Part6/Sec2)-1989 (RA 2009), ASTM D 1849 - 95 (Reapproved 2014)	Qualitative
		Resistance to Liquids(acid ,alkali)	IS:101(Part7/Sec2)-1990 (RA 2011)	Qualitative
		Accelerated weathering /QUV	ASTM G 154 - 16	Qualitative
		Moisture content	ASTM E 203 - 16	0.01% to 1.00%
		Pot life/Gel Time	IS:9162 - 1979 (RA 2011), ASTM D 2471 - 99	5.00 min to 24.00 hrs
		Resistance to Heat	IS:101(Part7/Sec3)-1990 (RA 2011)	Qualitative
		Water vapor transmission	IS:101(Part6/Sec3)-1990 (RA 2010), ASTM D 1653 - 13	Qualitative
		Water resistance coatings/Resistance to water	IS:101(Part7/Sec1)-1989 (RA 2009), ASTM D 2247 - 15	Qualitative
		Adhesion by tape	ASTM D 3359 - 17	Qualitative
		Gloss at 60°	IS:101(Part4/Sec4)-1990 (RA 2012), ASTM D 523-14	4.0 to 95.0

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MECHANICAL TESTING

I.	PLASTICS AND POLYMERS			
1.	Polyurethane Epoxy based products	Hardness	ASTM D 2240 - 15	20 to 90 Shore A
			ASTM D 2240 - 15	20 to 90 Shore D
		Impact Resistance	IS:101(Part5/Sec3)-1999 (RA 2009)	Qualitative
		Adhesion Pull off	ASTM D 4541 - 17	0.5 MPa to 25.0 MPa
		Abrasion resistance	ASTM D 4060 - 14	5.0 mg to 200.0 mg
		Elongation	ASTM D 638 - 14	10 % to 1000%
		Flexural strength	ASTM D 790 - 17	0.5 MPa to 50.0 MPa
		Compressive strength	IS:9162 - 1979 (RA 2011)	10.0 N/mm ² to 100.0 N/mm ²
		Flexibility	ASTM D 522 - 17	Qualitative
		Resistance to salt spray	IS:101(Part6/Sec1)-1988 (RA 2010), ASTM B 117 - 16	Qualitative
		Scratch Hardness	IS:101(Part5/Sec2)-1988 (RA 2009)	Qualitative