

Laboratory **Quality Assurance Laboratory, Ultramarine & Pigments Ltd., 25-B, SIPCOT Industrial Complex, Ranipet, Tamil Nadu**

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

Certificate Number **TC-6610 (in lieu of T-2757)**

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Validity **17.12.2017 to 16.12.2019**

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.	SOAP, DETERGENT AND TOILETRIES			
1.	Anionic Surfactant-AOS	Active matter	IS 4956:2002	25 % to 40 %
		Active matter	WI /UPLQA /45 (Based on IS 4956:2002 Dt. 05.05.2013)	68 % to 72 %
		Active matter	WI /UPLQA /45 (Based on IS 4956:2002 Dt. 05.05.2013)	87 % to 90 %
		Active matter	WI /UPLQA /45 (Based on IS 4956:2002 Dt. 05.05.2013)	93 % to 97 %
		Free alkalinity as sodium hydroxide	IS 15072:2002	0.01 % to 5 %
		Total inorganic salts	IS 15072:2002	0.1 % to 6.0 %
		Free oil	IS 15072:2002	0.1 % to 3.0 %
		Colour	IS 15072:2002	1 klett to 1000 klett
		pH of 1% solution	IS 4956:2002	6 to 11
2.	Anionic Surfactant-LABSA (Linear Alkyl Benzene Sulphonic Acid)	Active matter	ASTM D-3049	90 % to 98 %
		Free acidity	IS 8401:1994 (RA 2000)	0.1 % to 3.0 %
		Free Oil	IS 8401:1994 (RA 2000)	0.5 % to 2.0 %
		Colour	IS 8401:1994 (RA 2000)	1 klett to 1000 klett
3.	Anionic Surfactant-SLS (Sodium Lauryl Sulphate)	Active matter	IS 3986:1988 (RA 2009)	27 % to 70 %
		Active matter	IS 3986:1988 (RA 2009)	92 % to 96 %
		Sodium chloride	IS 3986:1988 (RA 2009)	0.1 % to 1.5 %
		Sodium sulphate	IS 3986:1988 (RA 2009)	0.1 % to 6.0 %
		Unsulphated fatty alcohol	IS 3986:1988 (RA 2009)	0.5 % to 3.0 %
		pH of 1% solution	IS 3986:1988 (RA 2009)	7.0 to 9.5

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4.	Anionic Surfactant-SLES (Sodium Lauryl Ether Sulphate)	Active matter	IS 11487:1985 (RA 2006)	28 % to 30 %
		Active matter	WI / UPL QA / 46 (Based on IS 11487:1985 (RA 2006) Dt. 05.05.2013)	68 % to 72 %
		Sodium chloride	IS 11487:1985 (RA 2006)	0.1 % to 1.5 %
		Sodium sulphate	IS 11487:1985 (RA 2006)	0.1 % to 6.0 %
		Non-detergent organic matter	IS 11487:1985 (RA 2006)	0.5 % to 2.5 %
		pH of 5% solution	IS 11487:1985 (RA 2006)	6.0 to 8.0
5.	Anionic Detergent	Active Detergent	IS 4956:2002 Annex C	5 % to 35 %
		Moisture	IS 4956:2002 Annex B	0.05 % to 5 %
		Bulk Density	IS 6100:1971	0.5 g/ml to 0.95 g/ml
		pH of 1% solution	IS 4956:2002 Annex F	6 to 9
II.	PAINTS AND SURFACE COATING			
1.	Inorganic Pigment - Ultramarine Blue of Different Grades, Ultramarine Violet, Bismuth Vanadate, Mixed Metal Oxides	Colour values	IS 33:1992	1 % to 100 %
		Particle size	ISO-13320-1	0.02 micron to 2000 micron
		Volatile matter	IS 33:1992	0.05 % to 6.0 %
		Sieve retention on 45 & 63 micron test sieve	IS 33:1992	0.05 % to 0.5 %
		Oil absorption	IS 33:1992	10 % to 60 %
		Free sulphur	IS 55:1970	100 mg/kg to 5000 mg/kg
		Matter soluble in water	IS 33:1992	0.2 % to 5.0 %
		Bulk Density	IS 33:1992	0.4 g/ml to 0.7 g/ml
		Alkalinity as sodium carbonate	IS 33:1992	0.05 % to 0.5 %