

Laboratory **QC Laboratory-Jay Chemical Industries Limited, Unit-1, Plot No. 44, GIDC Industrial Estate, Odhav, Ahmedabad, Gujarat**

Accreditation Standard **ISO/IEC 17025: 2017**

Certificate Number **TC-5200**

Page 1 of 3

Validity **08.02.2019 to 07.02.2021**

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
-----	----------------------------	-------------------------	---	--

### CHEMICAL TESTING

I.	<b>INKS, DYES AND PIGMENTS</b>			
1.	<b>Reactive Dyes</b>	Strength of Reactive Dyes in Solution	IS 14444:1997 (RA 2002)	0.1 to 1.5 (Absorbance)  95% to 105% (Relative color strength)
		Strength of Reactive Dyes by Dyeing Test, (Strength of Dyed Piece)	SOP-QC-108, Rev:00, dated 01.01.2017	1 % to 300 %
		Color difference of reactive dyes by dyeing test $\Delta E$ , $\Delta a$ , $\Delta b$ , $\Delta c$ , $\Delta L$ , $\Delta H$ (CIE and CMC 2:1) of Dyed Piece	IS 15098:2002 (RA 2010)	$\Delta E=0.01$ to 25 $\Delta a= \pm 0.01$ to 25 $\Delta b= \pm 0.01$ to 25 $\Delta c= \pm 0.01$ to 25 $\Delta L= \pm 0.01$ to 25 $\Delta H=\pm 0.01$ to 25
		pH of dye Solution	SOP-QC-110, Rev:00, dated 01.01.2017	1 to 14
		Dusting Behavior of Dye Powder-Visual	AATCC 184-2014	Grade 1 to 5 $\pm 0.5$
		Solubility of water soluble Dyes at dissolving temp. of 20°C to 80°C	IS 13627: 1993 (RA 2000)	1 gpl to 250 gpl
		Moisture Content in dye powder	SOP-QC-109, Rev:00, dated 01.01.2017	0.2 % to 15 %
II.	<b>HAZARDOUS AND RESTRICTED CHEMICALS</b>			
1.	<b>Reactive Dyes</b>	Para chloro aniline (PCA) in Reactive Dyes	EN 14362 (Part 1): 2017 (Annexure F)	10 mg/kg to 1000 mg/kg
		Beta Naphthylamine (BNA)	EN 14362 (Part 1): 2017	10 mg/kg to 1000 mg/kg

**Ajay Sharma**  
Convenor

**Venugopal C**  
Program Manager

Laboratory

QC Laboratory-Jay Chemical Industries Limited, Unit-1, Plot No. 44,  
GIDC Industrial Estate, Odhav, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2017

Certificate Number TC-5200

Page 2 of 3

Validity 08.02.2019 to 07.02.2021

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
		in Reactive Dyes	(Annexure F)	
III.	<b>TEXTILE (WOVEN AND NON WOVEN)</b>			
1.	<b>Dyed Textile</b>	Colorfastness to perspiration	AATCC 15:2013	Grade 1 to 5 ± 0.5
		Colorfastness to perspiration : Alkaline and Acidic	ISO 105 E04:2013	Grade 1 to 5 ± 0.5
		Colorfastness to Bleaching :Hypo chlorite	ISO 105 N01:1993	Grade 1 to 5 ± 0.5
		Colorfastness to Bleaching : Hydrogen Peroxide	ISO 105 N02:1993	Grade 1 to 5 ± 0.5
		Colorfastness to Perspiration and Light	ISO 105 B07:2009 AATCC 125:2013	BWS Rating 1 to 6 ± 0.5 Grade 1 to 5 ± 0.5
		Colorfastness to Chlorinated water (swimming pool water)	ISO 105 E03:2010	Grade 1 to 5 ± 0.5
		Colorfastness to Light: Xenon–Arc	AATCC 16.3:2014	Grade 1 to 5 ± 0.5
		Colorfastness to Light: Xenon–Arc	ISO 105 B02:2014	BWS Rating 1 to 6 ± 0.5
		Colorfastness to Domestic and Commercial Laundering	ISO 105 C10:2006 ISO 105 C06:2010 except D3S and D3M	Grade 1 to 5 ± 0.5
		Colorfastness to Crocking	AATCC 8 : 2013 ISO 105 X12 : 2016	Grade 1 to 5 ± 0.5
		Colorfastness to water	AATCC 107:2013 ISO 105 E01:2013	Grade 1 to 5 ± 0.5
		Colorfastness to Mercerizing	ISO 105 X04:1994	Grade 1 to 5 ± 0.5
		Colorfastness to Spotting : Acid	ISO 105 E05:2010	Grade 1 to 5 ± 0.5
		Colorfastness to Spotting : Alkali	ISO 105 E06:2006	Grade 1 to 5 ± 0.5

Ajay Sharma  
Convenor

Venugopal C  
Program Manager

**Laboratory**                      **QC Laboratory-Jay Chemical Industries Limited, Unit-1, Plot No. 44,  
GIDC Industrial Estate, Odhav, Ahmedabad, Gujarat**

**Accreditation Standard**    **ISO/IEC 17025: 2017**

**Certificate Number**        **TC-5200**

**Page 3 of 3**

**Validity**                        **08.02.2019 to 07.02.2021**

**Last Amended on --**

<b>Sl.</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>
		Colorfastness to Hot Pressing	ISO 105 X11:1994	Grade 1 to 5 ± 0.5
		Shade Matching Exhaust Dyeing : Visual Assessment	SOP-QC-111, Rev:00, dated 01.01.2017	Qualitative

---

**Ajay Sharma**  
Convenor

---

**Venugopal C**  
Program Manager