

Test	Method/Standard	Result	
Tensile Strength	ISO: 13934 - 1 - 2013	Strength	
		Direction 1	301 N
		Direction 2	223 N
		Elongation %	
		Direction 1	55.4%
		Direction 2	102.8%
Tear Strength	ISO: 13938 Part 1 - 2000	Direction 1	42.2
		Direction 2	17.0
Seam Breaking Strength	ISO 13935-2:2014	Warp	140.4 N
		Weft	120.9 N
Abrasion Resistance Martindale	ISO 12947-4: 1998	Abrasion Resistance Load	12 kPa
		Weight Loss %	32.14
		No Two Thread Break Observed at Cycles	50000
Dematia Method Flexing Test	IS: 7016 Part IV - 2003	Warp	No Cracking and No flaking observed upto 100000 cycles
		Weft	No Cracking and No flaking observed upto 100000 cycles
Color Fastness			
<i>Crocking</i>	IS/ISO 105 X12:2016 (Grey Scale Rating 1-5 - (Water Spotting) 1 - Very Poor, 2 - Poor, 3 - Fair, 4 - Good, 5 - Excellent)	Staining on Un-dyed cotton Fabric	
		Dry	4-5
		Wet	3-4



Exposure to Light	IS/ISO 105 B02:2014 (Blue Wool Rating: 1-8 (For Light): 1 - Very Poor, 2 - Poor, 3 - Fair, 4 - Fairly Good, 5 - Good, 6 - Very Good, 7 - Excellent, 8 - Outstanding)	Blue Wool Rating	Above 5
Water Spotting	ISO 15700:1998 (Blue Wool Rating: 1-8 (For Water Spotting): 1 - Very Poor, 2 - Poor, 3 - Fair, 4 - Fairly Good, 5 - Good, 6 - Very Good, 7 - Excellent, 8 - Outstanding)	Physical effects of water on Leather sample	No change in Physical appearance
		Grey Scale rating for change in colour	4-5
pH	IS/ISO 3071:2020	pH Value of Aqueous Extract at 25 C	6.9
Flammability	16 CFR 1610-45 Degree (Inclined Flame Test)	Does not Ignite (Class-I)	
Banned amines (Released from Azodyes) (mg/kg)	DIN EN ISO 14362 Part -1 & 3	Detection Method Limit 10.0mg/kg	
	4 4-Methylene-bis-(2-chloroaniline)[101-14-4]	Not Detected	
	4 4-Oxydianiline[101-80-4]	Not Detected	
	4 4-Thiodianiline[139-65-1]	Not Detected	
	0-Toluidine[95-53-4]	Not Detected	
	2 4-Toluenediamine[95-80-7]	Not Detected	
	2 4 5-Trimethylaniline[137-17-7]	Not Detected	
	0-Anisidine[90-04-0]	Not Detected	
	4-Aminoazobenzene[60-09-3]	Not Detected	
	2 4-Xylidine[95-68-1]	Not Detected	
	2 6-Xylidine[87-62-7]	Not Detected	
	4-Aminobiphenyl [92-67-1]	Not Detected	
	Benzidine [92-87-5]	Not Detected	



	4-Chloro-o-toluidine [95-69-2]	<i>Not Detected</i>
	2-Napthylamine [91-59-8]	<i>Not Detected</i>
	o-Aminoazotoluene [97-56-3]	<i>Not Detected</i>
	5-Nitro-o-toluidine [99-55-8]	<i>Not Detected</i>
	4-Chloroaniline [106-47-8]	<i>Not Detected</i>
	2,4-Diaminoanisole [615-05-4]	<i>Not Detected</i>
	4,4-Diaminodiphenylmethane [101-77-9]	<i>Not Detected</i>
	3,3-Dichlorobenzidine [91-94-1]	<i>Not Detected</i>
	3,3-Dimethoxybenzidine [119-90-4]	<i>Not Detected</i>
	3,3-Dimethylbenzidine [119-93-7]	<i>Not Detected</i>
	3,3-Dimethyl-4,4-Diaminodiphenylmethane [838-88-0]	<i>Not Detected</i>
	p-Cresidine [120-71-8]	<i>Not Detected</i>
Organotin compounds	DIN ISO 17353/ISO 16179 analysis by GCMS	<i>Detection Limit 0.05mg/kg</i>
	DBT (Dibutyl tin)	<i>Not Detected</i>
	TBT (Tributyl tin)	<i>Not Detected</i>
	DOT (Diocetyl tin)	<i>Not Detected</i>
	TPHT (Triphenyl tin)	<i>Not Detected</i>
APEO /NPEO	DIN EN ISO 18254-1 & DIN EN ISO 18218-1 [analysis by GCMS and LCMS]	<i>Detection Limit 1mg/kg</i>
	Octylphenol [OPs]	<i>Not Detected</i>
	Nonylphenol [NPs]	<i>Not Detected</i>
	Nonyl Phenol Ethoxylate [NPEOs]	<i>Not Detected</i>



	Octyl Phenol Ethoxylate [OPEOs]	<i>Not Detected</i>
Allergenic disperse dyes	DIN 54231 Analysed by HPLC	<i>Method Detection Limit: 20mg/kg</i>
	Disperse Blue 1	<i>Not Detected</i>
	Disperse Blue 3	<i>Not Detected</i>
	Disperse Blue 35	<i>Not Detected</i>
	Disperse Blue 106	<i>Not Detected</i>
	Disperse Blue 124	<i>Not Detected</i>
	Disperse Orange 1	<i>Not Detected</i>
	Disperse Orange 3	<i>Not Detected</i>
	Disperse Orange 37	<i>Not Detected</i>
	Disperse Red 1	<i>Not Detected</i>
	Disperse Yellow 3	<i>Not Detected</i>
	Disperse Yellow 9	<i>Not Detected</i>
Poly cyclic aromatic compounds (PAH)	BS EN 17132 : 2019	<i>Method Detection Limit: 0.5mg/kg</i>
	Naphthalene	<i>Not Detected</i>
	Acenaphthylene	<i>Not Detected</i>
	Acenaphthene	<i>Not Detected</i>
	Fluorene	<i>Not Detected</i>
	Phenanthrene	<i>Not Detected</i>
	Anthracene	<i>Not Detected</i>
	Fluoranthene	<i>Not Detected</i>
	Pyrene	<i>Not Detected</i>
	Benzo(a)Anthracene	<i>Not Detected</i>



	Chrysene	<i>Not Detected</i>
	Benzo(b)Fluoranthene	<i>Not Detected</i>
	Benzo(k)Fluoranthene	<i>Not Detected</i>
	Benzo(a)Pyrene	<i>Not Detected</i>
	Benzo(g,h,i)Perylene	<i>Not Detected</i>
	Indenol(1,2,3-cd)Pyrene	<i>Not Detected</i>
	Di-Benzo(a,h)Anthracene	<i>Not Detected</i>
	Benzo(j)Fluoranthene	<i>Not Detected</i>
	Benzo(e)Pyrene	<i>Not Detected</i>
Chlorophenol (PCP+TECP+TCP)	ISO 17070 /IS15651 Analysis by GC ECD	
	PCP [Pentachlorophenol]	<i>Not Detected (Detection Limit: 0.05 mg/kg)</i>
	2,3,5,6-TeCP	<i>Not Detected (Detection Limit: 0.05 mg/kg)</i>
	2,3,4,6-TeCP	<i>Not Detected (Detection Limit: 0.05 mg/kg)</i>
	2,3,4,5-TeCP	<i>Not Detected (Detection Limit: 0.05 mg/kg)</i>
	2,4,6-Trichlorophenol	<i>Not Detected (Detection Limit: 0.2 mg/kg)</i>
	2,3,5-Trichlorophenol	<i>Not Detected (Detection Limit: 0.2 mg/kg)</i>
	2,4,5-Trichlorophenol	<i>Not Detected (Detection Limit: 0.2 mg/kg)</i>
	2,3,6-Trichlorophenol	<i>Not Detected (Detection Limit: 0.2 mg/kg)</i>
	3,4,5-Trichlorophenol	<i>Not Detected (Detection Limit: 0.2 mg/kg)</i>
	2,3,4-Trichlorophenol	<i>Not Detected (Detection Limit:</i>



		0.2 mg/kg)
Phthalates content	CPSC-CH-C-1001-09/ ISO-14389 analysis by GCMS	<i>Detection Limit: 20mg/kg *Qualitatively</i>
	Dibutyl Phthalate (DBP)	<i>Not Detected</i>
	Benzyl Butyl Phthalate (BBP)	<i>Not Detected</i>
	Di[2-Ethyl Hexyl Phthalate] (DEHP)	<i>Not Detected</i>
	Di-N-Octyl Phthalate (DNOP)	<i>Not Detected</i>
	Di-iso-Nonyl Phthalate (DINP)	<i>Not Detected*</i>
	Di-iso-Decyl Phthalate (DIDP)	<i>Not Detected*</i>
	Di-iso-butyl Phthalate (DIBP)	<i>Not Detected</i>
	Di-(2-methoxyethyl) Phthalate (DMEP)	<i>Not Detected</i>
	Di-n-hexyl Phthalate	<i>Not Detected</i>
	Di-iso-heptyl Phthalate	<i>Not Detected*</i>
	Di cyclohexyl Phthalate (DCHP)	<i>Not Detected</i>
	Di Ethyl Phthalate (DEP)	<i>Not Detected</i>

Tests conducted by "The Bombay Textile Research Association (BTRA), Approved Body of the Ministry of Textiles, Govt. Of India".

Tests conducted in 2024 and 2025