

BHEL, TIRUCHIRAPPALLI – TC ASH GREY UNIFORM – SHIRTING FABRIC – 2017
– for both Shirting and Chudidhar

Sl. No.	Parameter for Shirting Fabric	BHEL Requirement	Tolerance
01	Average Width of the Fabric	90 cms.	+/- 1 cm
02	Percentage of Composition		
	Polyester	67%	+/- 3%
	Cotton	33%	+/- 3%
03	Count of Yarn		
	Warp (2F)Ne	40s	+/- 5%
	Weft (2F) Ne	40s	+/- 5%
04	Average Threads per inch		
	Warp (Reed)	140	+ 5 % - 2.5 %
	Weft (Pick)	80	+ 5 % - 2.5 %
05	GSM (Weight per Sq. Mtr.)	140 g	Minimum
06	Average Water soluble matter (%)	1%	
07	pH Value of Aqueous Extract	6.0 to 8.0	
08	Shrinkage when heated%	Warpway 1%	Maximum
		Weftway 1%	Maximum
09	Relaxation shrinkage%	Warpway 1%	Maximum
		Weftway 1%	Maximum
10	Average Tensile strength on 5 x 20 cm strip	Warp: 440N	Minimum
		Weft : 350N	Minimum
11	Crease Recovery Angle	240 Degree.	Minimum
12	Colour Fastness to Washing @ 50 Degree C:		
	Change in colour	≥ 4	
	Staining on Cotton/Polyester	≥ 3	
13	Colour Fastness to Light		
	Change in colour (Blue Wool rating)	≥ 4	
14	Colour Fatness to Perspiration	Alkaline Medium	Acidic Medium
	Change in Colour	≥ 4	≥ 4
	Staining adjacent Cotton/Polyester	≥ 4	≥ 4
15	Colour fastness to rubbing		
	Dry	4 or better	
	Wet	4 or better	
16	Colour fastness to Hot Pressing	4 or better	
17	Pilling (after 1800 revolutions) Avg. Rating	4 or better	
18	Tear Strength	10 N	Minimum
NOTE: DYEING MUST BE DONE WITH VAT SHADES FOR COTTON AND DISPERSE FOR POLYESTER			

Samples of minimum one meter in ash grey colour to be submitted with the Company's name printed/written in black ink along with test report obtained from Govt./Govt. authorized lab on the above parameters.

Offer will be considered subject to the decision of the Uniform Standardization Committee, an Elected Body.

During final supply, Mill Name, Measurement of the Cloth and Blend are to be printed along with month & year of manufacture in each piece and to be packed in a single cover.

When Uniform is finally supplied, test report obtained from Govt./Govt. authorized lab should be accompanied with each batch and the sample material will be subjected to test in authorized lab and will be accepted only on conformation of the above parameters.

If the material supplied does not match our Technical Specification, the whole lot will be rejected and the transportation charges should be borne by the supplier.

BHEL, TIRUCHIRAPPALLI – TC ASH GREY UNIFORM – SUITING FABRIC - 2017

Sl. No.	Parameter for Suiting Fabric	BHEL Requirement	Tolerance
01	Average Width of the Fabric	150 cms.	+/- 1 cm
02	Percentage of Composition		
	Polyester	80%	+/- 3%
	Cotton	20%	+/- 3%
03	Count of Yarn		
	Warp (2F)Ne	20s	+/- 5%
	Weft (2F) Ne	20s	+/- 5%
04	Average Threads per inch		
	Warp (Reed)	125	+ 5 % - 2.5 %
	Weft (Pick)	65	+ 5 % - 2.5 %
05	GSM (Weight per Sq. Mtr.)	240 g	Minimum
06	Average Water soluble matter (%)	1%	
07	Ph Test (Hot Method)	6.0 to 8.0	
	pH Value of water used		
	pH Value of Aqueous Extract		
08	Shrinkage when heated%	Warpway 1%	Maximum
		Weftway 1%	Maximum
09	Relaxation shrinkage%	Warpway 1%	Maximum
		Weftway 1%	Maximum
10	Average Tensile strength (kg)	Warp: 600 N	Minimum
		Weft : 400 N	Minimum
11	Crease Recovery Angle	240 Degree	Minimum
12	Colour Fastness to Washing @ 50 Degree C:		
	Change in colour	≥ 4	
	Staining on Cotton/Polyester	≥ 3	
13	Colour Fastness to Light		
	Change in colour (Blue Wool rating)	≥ 4	
14	Colour Fatness to Perspiration	Alkaline Medium	Acidic Medium
	Change in Colour	≥ 4	≥ 4
	Staining adjacent Cotton/Polyester	≥ 4	≥ 4
15	Colour fastness to rubbing		
	Dry	4 or better	
	Wet	4 or better	
16	Colour fastness to Hot Pressing	4 or better	
17	Pilling (after 1800 revolutions) Avg. Rating	4 or better	
18	Tear Strength	25 N	Minimum
NOTE: DYEING MUST BE DONE WITH VAT SHADES FOR COTTON AND DISPERSE FOR POLYESTER			

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