

Laboratory **SGS India Private Limited, Testing Laboratory-Consumer and Retail,
No. 134, 2nd Floor, Sivashakthi Nagar, College Road, Tirupur, Tamil
Nadu**

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

Certificate Number **TC-6383**

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Validity **08.11.2017 to 07.11.2019**

Last Amended on 27.12.2018

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.	TEXTILE (WOVEN & NON WOVEN)			
1.	Fibre & filaments Yarns & chords Grey Fabrics Finished fabric Apparels/Garments Made-ups Carpet & rugs Terry Fabrics & its products Technical Textiles Geo Textiles	Qualitative and Quantitative analysis Fiber Content	AATCC 20:2013/20A:2014 ASTMD 276:2012/629:2015 BS 4407:1988, ISO 1833:2006 In Accordance with EU 1007/2011+EU No.286/2012 CAN/CGSB.4.2 No.14:2005 AS 2001.7:2005 (RA 2016) IS 3416:1988	0.1% to 100%
		Colour fastness to Laundering	AATCC-61:2013 BS EN ISO 105 C06:2010 ISO 105 C06:2010 DIN EN ISO 105 C06:2010 EN ISO 105 C06:2010 AS 2001.4.15:2006 (RA 2016) CAN/CGSB 4.2 No.19.2-2003 (RA 2010) GB/T:12490:2014	1 to 5 Grade
		Colour fastness to Washing	CAN/CGSB-4.2 No.19.1- 2004-(RA 2013) IS/ISO 105(Part C10):2006 ISO 105 C10:2006 BS EN ISO 105 C10:2007 DIN EN ISO 105 C10:2007 EN ISO 105 C10:2006 GB/T:3921:2008	1 to 5 Grade

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		Colour fastness to Crocking/Rubbing	AATCC-8:2016 ISO 105 X12:2016 BS EN ISO-105-X12:2016 DIN EN ISO-105-X12:2016 EN ISO-105-X12:2016 CAN/CGSB-4.2, No.22-2004 (RA 2013) AS 2001 4.3:1995 (RA 2016) IS 766:1988 AATCC 165:2013 GB/T:3920:2008	1 to 5 Grade
		Colour fastness to Water	AATCC-107:2013 CAN-CGSB 4.2 No/N20-M89(RA 2013) ISO 105 E01:2013 BS EN ISO 105 E01:2013 EN ISO 105 E01:2013 DINEN ISO 105 E01:2013 AS 2001.4 E01:2001 (RA 2016) IS 767:1988 GB/T 5713:2013	1 to 5 Grade
		Colour fastness to Perspiration	AATCC-15:2013 ISO 105 E04:2013 BS EN ISO-105 E04:2013 EN ISO-105 E04:2013 DINEN ISO 105 E04:2013 CAN/CGSB-4.2,No/N23-M90 (R 2013) AS 2001.4.E04:2005 (RA2016) IS 971:1983 (RA 2004) GB/T 3922:2013	1 to 5 Grade

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		Colour fastness to Dry Cleaning	AATCC-132:2013 ISO 105 D01:2010 EN ISO105 D01:2010 BS EN ISO105 D01:2010 DINEN ISO 105 D01:2010 CAN/CGSB-4.2No/N29.1-M89 (RA 1997) AS 2001.4.16:1981 (RA 2016) IS 4802:1988 GB/T5711-1997	1 to 5 Grade
		Colour fastness to Light (Xenon Arc)	AATCC 16.3:2014 ISO 105 B02:2014 BSEN ISO 105 B02:2014 EN ISO 105 B02:2014 DINEN ISO 105 B02:2014 CAN/CGSB-4.2, No.18.3-97 (RA 2010) ISO 105 B02:2014 (Modified) BSEN ISO 105 B02:2014 (Modified) EN ISO 105 B02:2014 (Modified) AS 2001.4.B02:2001 (RA 2016) GB/T 8427:2008	1 to 8 BWS Grey Scale grading 1 to 5 Grade

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		Colour fastness to Sea water	ISO 105 E02:2013 AATCC 106:2013 BS EN ISO 105 E02:2013 EN ISO 105 E02:2013 DIN EN ISO 105 E02:2013 CAN/CGSB-4.2, No.21-M90 (2013) AS 2001 4.E02:2001 (RA 2016) GB/T 5714:1997	1 to 5 Grade
		Colour fastness to powdered Non chlorine bleach in Home Laundering	AATCC 172:2010	1 to 5 Grade
		Colour fastness to Chlorinated water	ISO 105 E03:2010 BS EN ISO 105 E03:2010 EN ISO 105 E03:2010 DIN EN ISO E03:2010 AS 2001.4.5:1998 GB/T 8433:2013	1 to 5 Grade
		Colour fastness to Chlorine bleach	ISO 105 N01:1993 AATCC 188:2010	1 to 5 Grade
		Colour fastness to domestic and commercial laundering using non-phosphate reference detergent Incorporating Low Temperature Bleach Activator	BS EN ISO 105 C08:2010 ISO 105 C08:2010 EN ISO 105 C08:2010 DIN EN ISO 105 C08:2010	1 to 5 Grade
		Colour fastness to domestic and commercial laundering-oxidative bleach response using	ISO 105 C09:2001 BS EN ISO 105 C09:2003 DIN ISO 105 C09:2007 EN ISO 105 C09:2003	1 to 5 Grade

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		non-phosphate reference detergent Incorporating Low Temperature Bleach Activator	Amd:1 2007	
		Soil Release:Oily Stain Release Method	AATCC 130:2015	1 to 5 grade
		Calculation of colour differences	AATCC 173:2015 ISO 105 J03:2009 EN ISO 105 J03:2009 BS EN ISO 105 J03:2009	0.1 to 20.0 ΔE cmc
		Instrumental Assessment of Relative whiteness	AATCC 110:2015 ISO 105 J02:1997/ Cor:1 1998 EN ISO 105 J02:1999 BS EN ISO 105 J02:2000 DIN EN ISO 105 J02::1999	1 to 200.0
		Colour Fastness to dye transfer in Storage	AATCC 163:2013	1 to 5 grade
		Assessment of the potential to phenolic yellowing	ISO 105 X18:2007 BS EN ISO 105 X18:2007 DIN EN ISO 105 X18:2007 EN ISO 105 X18:2007	1 to 5 grade
		Colour Fastness to Saliva Colour fastness to perspiration	LFGB (LMBG) BVL B 82.10.1:2011	Genuinely Resistant/not-resistant
		Colour fastness to Saliva & Sweat Colour fastness to Sweat	DIN 53160:Part 1:2010 DIN 53160 Part 2:2010 GB/T 18886:2002	1 to 5 grade
		Colour Fastness to Organic Solvent	ISO 105 X05:1994 BS EN ISO 105 X05:1997	1 to 5 grade

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		Colour fastness to Perspiration and Light	ISO 105 B07:2009 AATCC 125:2013 BS EN ISO 105 B07:2009 DIN EN ISO 105 B07:2009	1 to 5 grade
		Colour fastness to Water spotting	ISO 105 E07:2010 EN ISO 105 E07:2010 BS EN ISO 105 E07:2010 AATCC 104:2014	1 to 5 grade
		Metallic accessories- Corrosion resistance (Salt Water)	ISO 22775:2004-Method 2 BS EN ISO 22775:2004-Method 2	1 to 5 grade
		Mercerization in Cotton	AATCC 89:2012	100 to 200 Barium Activity Number
		Spirality after Washing/Laundrying	AATCC-179:2012 ISO 16322- Part 1,2&3:2005/Cor:2007 BS ISO 16322- Part 1,2&3:2005	up to 25%
		Dimensional Stability to Washing	AATCC 135:2015 AATCC 150:2012 CAN/CGSB 4.2 No.58:2004 ISO 3759:2011/ 5077:2007/6330:/ 2000/2012 BS EN ISO 3759:2011/ BS EN ISO 5077:2008 BS EN ISO 6330:2001/2012 DIN EN ISO 3759:2011/ DIN EN ISO 5077:2008 DIN EN ISO 6330:2000/2013 EN ISO 3759:2008/ EN ISO 5077:2011 EN ISO 6330:2000/2012	-25% to +25%

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			1.1.1.1 AS 2001 5.4:2005 (RA2016) GB/T 8628 2001 GB/T 8629 2001 GB/T 8630 2002	
		Smoothness appearance after laundering	AATCC-124:2014 CAN/CGSB 4.2, No/N59.1-M88 ISO-7768:2009 BS EN ISO-7768:2009 BS EB ISO 15487:2010	1 to 5 Grade
		Smoothness of seams after laundering	AATCC 88B:2014 ISO-7769:2009 BS EN ISO-7769:2009 CAN/CGSB 4.2, No/N59.2-M88	1 to 5 Grade
		Retention of creases in fabric after laundering	AATCC 88C:2014 ISO-7770:2009 CAN/CGSB 4.2, No/N59.3-M88	1 to 5 Grade
		Flammability of Apparel Textiles	ASTMD 1230:2010 (RA 2016) 16 CFR 1610 CAN/CGSB-4.2 No. 27.5-2008 GB/T 14644::2014	1 to 20 seconds
		Surface water absorbency of terry fabrics	ASTM D 4772:2014	1ml to 50ml
		Water Absorbency/Wet ability of Textiles	AATCC 79:2014 BS 4554:1970 NF EN 14697:2005 (AnnexB)	Up to 100 sec

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		Vertical Wicking	AATCC 197:2013	1mm to 150mm 10s to 30 min
		Determination of pH of aqueous extract	AATCC-81:2012 ISO 3071:2005 BS EN ISO 3071:2006 DIN EN ISO 3071:2006 NF EN ISO 3071:2006 EN ISO 3071:2006 CAN/CGSB 4.2 No. 74-2011/ISO 3071:2005 IS 1390:1983 GB/T 7573:2009	2 to 12
II.	HAZARDOUS & RESTRICTED CHEMICALS			
1.	Textile & Textile products Plastics & other polymeric products Leather products Prints Zippers Paints Others	Estimation of Formaldehyde Content (Free and Hydrolysed) Estimation of Release Formaldehyde content	JIS L-1041:2011 JAP LAW 112 ISO 14184-1:2011 EN ISO 14184-1:2011 BS EN ISO 14184-1:2011 DIN EN ISO 14184-1:2011-12 § 64 LFGB, BVL B 82.02-1:1985 CAN/CGSB 4.2 No.63.4-2007/ISO 14184-1:1998 GB/T 2912.1:2009 ISO 14184-2:2011 EN ISO 14184- 2:2011 BS EN ISO 14184-2:2011 AATCC 112:2014 CAN/CGSB 4.2 No.63.5-2007/ISO 14184-2:1998	10 to 3500mg/Kg

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			DIN EN ISO 14184-2:2011-12 GB/T 2912.2:2009	
		Screening tests for Nickel Spot Test	CR 12471:2002 EN 12471:2002 FD CR 12471:2002	Qualitative (Present/Absent)
		Qualitative detection of Formaldehyde by spot test	AATCC-94:2012	Qualitative (Present/Absent)
		Estimation of Pentachlorophenol (PCP) 2,3,4,6- Tetrachlorophenol 2,3,4,5- Tetrachlorophenol 2,3,5,6- Tetrachlorophenol 2,4,6- Trichlorophenol 2,3,4- Trichlorophenol 2,3,5- Trichlorophenol 2,3,6- Trichlorophenol 2,4,5- Trichlorophenol 3,4,5- Trichlorophenol	<u>SO-IN-CRS-TE-006-1</u> Issue No.01, Dated Jan,2017 [SOP based on § 64 LFGB, BVL B 82.02.8:2001] <u>SO-IN-CRS-TE-006-2</u> Issue No.01, Dated Jan,2017 [SOP based on § 64 LFGB, BVL B 82.02.8:2001(KOH EXTN.)]	0.05 mg/kg to 200 mg/kg
		Estimation of Orthophenyl Phenol	<u>SO-IN-CRS-TE-006-4</u> Issue No.01, Dated Jan,2017 [SOP based on § 64 LFGB, BVL B 82.02.8:2001(KOH EXTN.)]	0.5 mg/kg to 200 mg/kg

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		Estimation of Forbidden Amines Benzidine 3,3'- Dimethoxybenzidine 3,3'- Dimethylbenzidine P- Chloraniline O-Toluidine Toluylene 2,4 Diamine 4- Aminobiphenyl 4-Chlor- O-Toluidine 5 Methyl O Anisidine 4,4' Methylenedianiline O- Anisidine 2,4-Dimethyl Aniline 4methoxymphenylenedia mine 4,4methylen- Bis(2chloraniline) 4,4'- Oxydianiline 2,4,5- Trimethylaniline O- Aminoazotoluene 4- Amino Azo Benzene 2,6- Dimethyl Aniline 3,3'- Dichlorobenzidine 2- Naphthylamine 4,4' Methylene Di O Toluidine 4,4'-Thiodianiline 5-Nitro- O-Toluidine Aniline p- Phenylenediamine	BS EN 14362-1:2012 BS EN 14362-3:2012 ISO 24362-1:2014 ISO 24362-3:2014 GB/T 17592:2011 GB/T 23344:2009 § 64 LFGB, BVL B 82.02.2:2013 § 64 LFGB, BVL B 82.02.15:2013 JIS L 1940-1:2014 JIS L 1940-3:2014 ISO 14362-1:2017 ISO 14362-3:2017	5 mg/kg to 2000 mg/kg
		Estimation of Phthalates Dibutyl phthalate Benzyl Butyl phthalate Bis 2 ethyl hexyl phthalate Di octyl phthalate Diiso nonyl	SO-IN-CRS-TE-009-1 Issue No.01, Dated Jan,2017 [SOP based on	30 to 500000 mg/kg (0.003 to 50%)

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		phthalate Diiso decyl phthalate Bis (2- methoxyethyl) Phthalate Di cyclohexyl phthalate Di Hexyl phthalate Di n pentyl phthalate Di iso pentyl phthalate Di n pentyl isopentyl phthalate 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear(DPP) Diisobutyl phthalate Di-n-Hexyl phthalate Di Isoheptyl Phthalate Di Undecyl Phthalate Di-C7-C11- (lineary and branched)- alkyl Phthalate(DHNUP) Diethyl Phthalate Dimethyl phthalate Di-(2- propylheptyl) Phthalate Dipropyl Phthalate Diphenyl Phthalate Diheptyl Phthalate Diisooctyl Phthalate Dibenzyl phthalate Dinonyl Phthalate Didecyl Phthalate Diisohexyl Phthalate	ASTM D 3421-75] SO-IN-CRS-TE-009-2 Issue No.01, Dated Jan,2017 [SOP based on EN 14372:2004 BS EN 14372:2004] SO-IN-CRS-TE-009-3 Issue No.01, Dated Jan,2017 [SOP based on ISO 14389:2014; EN ISO 14389:2014; BS EN ISO 14389:2014] SO-IN-CRS-TE-009-5 Issue No.01, Dated Jan,2017 [SOP based on CPSC-CH-C1001- 09.4:2018] SO-IN-CRS-TE-009-6 Issue No.01, Dated Jan,2017 [In house Method/Analysis by GCMS]	

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		Estimation of Forbidden Amines Benzidine 3,3'- Dimethoxybenzidine 3,3'- Dimethylbenzidine P- Chloraniline O-Toluidine Toluylene 2,4 Diamine 4- Aminobiphenyl 4-Chlor- O-Toluidine 5 Methyl O Anisidine 4,4' Methylenedianiline O- Anisidine 2,4-Dimethyl Aniline 4methoxymphenylenedia mine 4,4methylen- Bis(2chloraniline) 4,4'- Oxydianiline 2,4,5- Trimethylaniline O- Aminoazotoluene 4- Amino Azo Benzene 2,6- Dimethyl Aniline 3,3'- Dichlorobenzidine 2- Naphthylamine 4,4' Methylene Di O Toluidine 4,4'-Thiodianiline 5-Nitro- O-Toluidine Aniline p- Phenylenediamine	§ 64 LFGB, BVL B 82.02.2:2013 EN 14362-1:2012 ISO 24362-1:2014 ISO 14362-1:2017 § 64 LFGB, BVL B 82.02.15:2013 EN 14362-3:2012 ISO 14362-3:2017 ISO 24362-3:2014	5 mg/kg to 2000 mg/kg

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		Estimation of Phthalates Dibutyl phthalate Benzyl Butyl phthalate Bis 2 ethyl hexyl phthalate Di octyl phthalate Diiso nonyl phthalate Diiso decyl phthalate Bis (2-methoxyethyl) Phthalate Di cyclohexyl phthalate Di Hexyl phthalate Di n pentyl phthalate Di iso pentyl phthalate Di n pentyl isopentyl phthalate 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear(DPP) Diisobutyl phthalate Di-n-Hexyl phthalate Di Isoheptyl Phthalate Di Undecyl Phthalate Di-C7-C11- (lineary and branched)-alkyl Phthalate(DHNUP) Diethyl Phthalate Dimethyl phthalate Di-(2-propylheptyl) Phthalate Dipropyl Phthalate	SO-IN-CRS-TE-009-1 Issue No.01, Dated Jan,2017 [SOP based on ASTM D 3421-75] SO-IN-CRS-TE-009-2 Issue No.01, Dated Jan,2017 [SOP based on EN 14372:2004 BS EN 14372:2004] SO-IN-CRS-TE-009-3 Issue No.01, Dated Jan,2017 [SOP based on ISO 14389:2014; EN ISO 14389:2014; BS EN ISO 14389:2014] SO-IN-CRS-TE-009-5 Issue No.01, Dated Jan,2017 [SOP based on CPSC-CH-C1001- 09.4:2018] SO-IN-CRS-TE-009-6 Issue No.01, Dated	30 to 500000 mg/kg (0.003 to 50%)

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		Diphenyl Phthalate Diheptyl Phthalate Diisooctyl Phthalate Dibenzyl phthalate Dinonyl Phthalate Didecyl Phthalate Diisohexyl Phthalate	Jan,2017 [In house Method/Analysis by GCMS]	

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MECHANICAL TESTING

I.	TEXTILE MATERIALS			
1.	Garments and Apparel, Yarns	Linear Density	SO-IN-CTS-C02-QU-001 (Version 3.2) ASTM D1907/D1907 M-12 ISO 2060:1994 BS EN ISO 2060:1995 DIN EN ISO 2060:1995	5 tex to 590 tex (1s to 120s Ne)
		Twist in yarn	ISO 17202:2002 ASTM D 1422/D1422:2013 ISO 2061:2015 BS EN ISO 2061:2015 DIN EN ISO 2061:2015 EN ISO 2061:2015 ASTMD1423:/D 1423 M:2016 BS ISO 17202:2002	2 to 30 twist/cm (2 to 80 Twist/inch)
		Breaking strength of Yarn in Skein Form	ISO 6939:1988 ASTM D1578:93(RA 2016)	50 Nto 2000 N (10 lbf to 500 lbf)
		Fabric Count (Woven)	ASTM D3775:2012 BSEN 1049-2:1994 EN 1049-2:1993 DIN EN 1049-2:1994 ISO 7211-2 (Method:A) 1984	10 to 250 Threads/cm (25 to 600 Threads/inch)
		Fabric Count (Knits)	ASTMD-3887:96 (RA 2008) CAN/CGSB 4.2, No.7 M88 BS 5441:1988 BS EN 14971:2006 DIN EN 14971:2006 EN 14971:2006	3 to 30 wales & Course/cm (7 to 80 wales & Course/inch)

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		Fabric Weight per unit area	SO-IN-CTS-C02-QU-002 (Version 3.1) ISO 3801(Method 5):1977 EN:12127:1997 DINEN:12127:1997 BS EN 12127:1998 CAN/CGSB-4.2 No.5.1M90 (RA 2013) AS 2001.2.13;(RA 2016) ASTM D 3776/D3776M-09a (Option-C)(RA 2013)	20 g/m ² to 550 g/m ²
		Bursting Strength Ball bursting	CAN/CGSB 4.2 No.11.2 M89 (RA 2013) AS 2001.2.19:1988 (RA 2016) JIS L1096:(RA 2015) ASTM D6797:2015	50 N to 1000 N
		Diaphragm Tester (Pneumatic machine)	ISO 13938-2:1999 BS EN ISO-13938-2:1999 DIN EN ISO-13938-2:1999 EN ISO-13938-2:1999 ASTMD-3786/D 3786M:2013	50 kPa to 900 kPa (7 psi to 130psi)
		Hydraulic Machine	ASTMD-3786/D 3786M:2013 CAN/CGSB 4.2 No.11.1 M-94(RA 2013) BS EN ISO-13938-1:1999 DIN EN SIO-13938-1:1999 EN ISO-13938-1:1999 ISO 13938-1:1999 AS 2001 2.4:RA2016	65 kPa to 950 kPa (10 psi to 140psi)

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		Pilling Resistance & other surface changes ICI Pill Box method	ISO 12945-1:2000 BS EN ISO-12945-1:2001 DIN EN ISO-12945-1:2001 EN ISO-12945-1:2001 CAN/CGSB 4.2 No.51.1 95	1 to 5 Grade
		Modified Martindale method	ISO 12945-2:2000 BS EN ISO 12945-2:2000 DIN EN ISO 12945-2:2000 EN ISO 12945-2:2000 ASTMD-4970/D 4970 M:2016	
		RTP tester method	ASTMD-3512/D 3512 M-10 RA:2016 CAN/CGSB 4.2 No.51.2 M87	
		Abrasion Resistance of fabrics-Martindale Method	ISO 12947-2:2016 BS EN ISO-12947-2:2016 DIN EN ISO-12947-2:2016 EN ISO-12947-2:2016	5 rubs to 100000 rubs
			ISO 12947-3:1998 cor 1:2002 BS EN ISO 12947-3:1999 cor 1:2008 DIN EN ISO 12947-3:2007 EN ISO 12947-3:1998 cor 1 2006 ISO 12947-4:1998 cor 1:2002 BS EN ISO 12947-4:1998 cor 1:2008	1 mg to 20 mg
				1 to 5 grade

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			DIN EN ISO 12947-4:2007 EN ISO 12947-4:1998: cor 1:2006 ASTMD 4966:2012 (RA2016) AS 2001.2.25 part 2,3,4:2006 (RA 2016)	
		Tearing Strength Elmendorf	ISO 13937-1:2000 Cor:2004 BSEN ISO 13937- 1:2000:Cor:2006 DIN EN ISO 13937- 1:2000:Cor:2006 EN ISO 13937- 1:2000:Cor:2006 ASTM D 1424:2009 (RA 2013) AS 2001.2.8:2001 (RA 2016) CAN/CGSB 4.2 No. 12.3:2005(RA 2013)	2 N to 55 N
		Tear strength using CRE machine	ISO 13937-2:2000 ISO 13937-3:2000 BSEN ISO 13937-2:2000 BSEN ISO 13937-3:2000 DIN EN ISO 13937-2:2000 DIN EN ISO 13937-3:2000 EN ISO 13937-2:2000 EN ISO 13937-3:2000 ASTM D 2261:2013 ASTM D 5587:2015	5 N to 500 N

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		Breaking Strength Grab Method	ASTMD-5034:2009 (RA 2013) ISO 13934-2:2014 BS EN ISO 13934-2:2014 DIN EN SIO 13934-2:2014 EN ISO 13934-2:2014 CAN/CGSB 4.2 No. 9.2 M90 AS 2001.2.3.2-2001 (RA 2016)	20 N to 3000 N
		Strip method	AS 2001.2.3.1:2001 (RA 2016) ASTMD-5035:(RA 2015) ISO 13934-1:2013 CAN/CGSB 4.2 No. 9.1 M90 (R 2013) BS EN ISO 13934-1:2013 DIN EN ISO 13934-1:1999 EN ISO 13934-1:2013	
		Seam Slippage Fixed Seam Opening	ISO 13936-1:2004 BS EN ISO 13936-1:2004 DIN EN ISO 13936-1:2004 EN ISO 13936-1:2004 AS 2001.2.22-2006 ASTMD 1683/D 1683:M2016 CAN CGSB-4.2No.32.1-98	5 N to 500 N And 1 mm to 20 mm
		Fixed load	ISO 13936-2:2004 BS EN ISO 13936-2:2004 DIN EN ISO 13936-2:2004 EN ISO 13936-2:2004	

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		Seam Strength	ASTMD 1683/D 1683:M2016 ISO 13935-1:2014 (Strip) ISO 13935-2:2014 (grab) BS EN ISO 13935-1:2014(Strip) BS EN ISO 13935-2:2014(grab) DIN EN ISO 13935-1:2014(Strip) DIN EN ISO 13935-2:2014(grab) EN ISO 13935-1:2014 (strip) EN ISO 13935-2:2014(grab) CAN/CGSB-4.2No.32.2-M89 AS 2001.2.20-2004 (RA 2014)	5 N to 500 N
		Elastic Properties	ASTM D2594:2004 (RA 2016) ASTM D3107:2007 (RA 2015) ASTM D4964:96 (RA 2016) ASTM D5278/D 5278M-09 (RA 2013) DIN 53835 part 13:1983 ASTM D6614:2007 (RA 2015) BS EN 14704-1:2005 EN 14704-1:2005 DIN EN 14704-1:2005	Stretch 1% to300% Recovery & Unrecovered Elongation Up to 100%

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Convenor

N. Venkateswaran
Program Manager

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			NF EN 14704-1:2005 EN 14704-3:2006 BS EN 14704-3:2006 DIN EN 14704-3:2006 NF EN 14704-3:2007	
		Bow & Skew of Fabrics	ASTM D3882:08(RA 2016) BS 2819:1990	0.1% to 30%
		Fabric Width	ASTM D3774:96 (RA 2016) AS 2001.2.12-1987 (RA 2016) JIS L 1096:2010(RA 2015) ISO 22198:2006	2 cm to 200 cm
		Thickness	ISO 5084:1996 BSEN ISO 5084:1997	0.5 mm to 6.5 mm
2	Garments and Apparel Textile Accessories	Zipper Strength 1.Strength of Puller Attachment 2.Strength of Closed End 3.Strength of Top Stop 4.Strength of open-end slide fastener box 5.Lateral strength of slide fastener 6.Lateral strength of open-end attachment 7.Strength of slider locking device 8.Open-end slide fastener single stringer slider retention 9.Torque strength	BS 3084:2006 ASTM D 2061:2007 (RA 2013) AS 2332:2003 BS EN 16732:2015	10 N to 1000 N
		Holding Strength of Prong-Ring Attached Snap Fasteners	ASTM D7142:05 (RA 2016)	20 N to 500 N

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		Resistance to Unsnapping of Snap Fasteners	ASTM D4846:96(RA 2016)	5 N to 80 N (0.5 kgf to 8 kgf)
		Snapping pressure of Snap Fasteners	AATCC TS013	0.1 Kgf to 25 Kgf
		Small Parts	16 CFR 1501 BS EN 71-1:2011 + A3 2014 (Clause 8.2) EN 71-1:2014(Clause 8.2) NF EN 71-1:2014 (Clause 8.2) ASTM F963-2016 (Clause4.6) PD CEN/TR 16792:2014	Qualitative
		Strength of Attached Components (Tension Test)	EN 71-1:2014(Clause 8.4) BS EN 71-1:2011+ A3 2014 (Clause 8.4) NF EN 71-1:2014 (Clause 8.4) 16 CFR 1500.51 Section (f) 16 CFR 1500.52 Section (f) 16 CFR 1500.53 Section (f) ASTM F963-2016 (Clause 8.9) BS 7907:2007 PD/CEN/TR:16792:2014	5 N to 500 N
		(Torque Test)	BS EN 71-1:2011+ A3 2014 (Clause 8.3) EN 71-1:2014 (Clause 8.3) NF EN 71-1:2014 (Clause 8.3) 16 CFR 1500.51 Section (e)	0 cN-m to 90 cN-m

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			16 CFR 1500.52 Section (e) 16 CFR 1500.53 Section (e) ASTM F963-2016 (Clause 8.8)	
		Determination of Sharp Point	16 CFR 1500.48 EN 71 Part 1:2014, Clause 8.12 BS EN 71 Part 1:2014, clause 8.12 DIN EN 71 Part 1:2014, clause 8.12 NF EN 71 Part 1:2014, clause 8.12 ASTM F963, Clause 4.9:2016	Qualitative
		Determination of Sharp Edge	16 CFR 1500.49 EN 71 Part 1:2014, Clause 8.11 BS EN 71 Part 1:2014, clause 8.11 DIN EN 71 Part 1:2014, clause 8.11 NF EN 71 Part 1:2014, clause 8.11 ASTM F963, Clause 4.7:2016	Qualitative