Laboratory	**Sleen Overseas T.& I.D., 295, Chelsar, Kuberpur, Agra, Uttar Pradesh**
Accreditation Standard	**ISO/IEC 17025: 2005**
Certificate Number	**TC-5579** **Page 1 of 24**
Validity	**24.10.2018 to 23.10.2020** **Last Amended on 06.05.2019**

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.	**TEXTILE (WOVEN & NON WOVEN)**			
1.	**Textile & Textile Products**	Colour Fastness to Washing	AATCC 61: 2013 ISO 105 C06: 2010	Qualitative (Grade: 1 to 5)
		Fiber Analysis	ISO 1833 (Part 1 to 5, 7 to 9, 11, 15, 16, 18 & 19): 2006 AATCC 20A: 2014 ISO 5088:1976 IS 667:1981	1 % to 100 %
		Fiber Analysis	AATCC 20: 2013	Qualitative
		Colour fastness to Saliva	DIN 53160-1: 2010	Qualitative (Grade: 1 to 5)
		Colour Fastness to Dry Cleaning	ISO 105 D01: 2010 AATCC 132: 2013	Qualitative (Grade: 1 to 5)
		Colour Fastness to Perspiration	ISO 105 E04: 2013 AATCC 15: 2013	Qualitative (Grade: 1 to 5)
		Colour Fastness to Organic Solvent	ISO 105 X05: 1994	Qualitative (Grade: 1 to 5)
		Colour Fastness to Water Spotting	AATCC 104: 2014 ISO 105 E07: 2010	Qualitative (Grade: 1 to 5)
		Colour Fastness to Water	ISO 105 E01: 2013 AATCC 107: 2013	Qualitative (Grade: 1 to 5)
		pH Value	ISO 3071: 2005 AATCC 81: 2016 SASO 2144: 2003	1 to 14
II.	**HAZARDOUS & RESTRICTED CHEMICALS**			
1.	**Textile and Textile Products**	Aromatic derived from AZO Colourants (Total 24 aryl amines as listed) O-Tiluidine(95-52-4) 2,3 Xylidine(95-68-1) O-Anisidine(90-04-0)	EN 14362 – 1: 2012 EN 14362 – 3: 2012	2 mg/kg to 300 mg/kg

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		P-Choroaniline(106-47-8) P -Kresidine (120-71-8) 2,4,5Trimethylaniline (137-17-7) 4 Chlor -O-Toluidine (95-69-2) 2,4 Tolyenediamine (95-80-7) 2,4 Diaminoanisole (615-05-4) 2 Naphthalamine (91 - 59 - 8) 2 Aminonitro-4 Toluene (99-55-8) 4 Aminobiphenyl (92-67-1) P-Aminoazobenzene (60-09–03) 4,4 Oxydianiline (101-80-4) Benzidine (92-87-5) 4,4 Diamino -diphenyl methane (101-77-9) O Amino azo toluene (97-56-3) 4,4 Diamino-3,3 Dimethyl diphenyl amine (838-88-0) 3,3 Dimethyl Benzidine (119-93-7) 4, 4 Thiodianiline (139-65-1) 3,3 Dichlorobenzidine (91- 94 -1)		
		Phthalates: 1 Di-isononyl phthalate (DINP);	BS EN 15777:2009	(50 to 10000) mg/kg

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		CAS No. 28553-12-0 Di-(2-ethylhexyl) phthalate (DEHP); CAS No. 117-81-7 Di-n-octyl phthalate (DNOP); CAS No. 117-84-0 Di-iso-decyl phthalate (DIDP); CAS No. 26761-40-0 Butyl benzyl phthalate (BBP); CAS No. 85-68-7 Di-butyl phthalate (DBP); CAS No. 84-72-2 Di-n-hexyl phthalates (DnHP); CAS No. 84-75-3 N-pentyl-isopenthyl phthalate (NPIPP); CAS No. 84777-06-0 Bis(2-methoxyethyl) phthalate (DMEP); CAS No. 117-82-8 Di-n-pentyl phthalate (DnPP); CAS No. 131-18-0 Di-isopentyl phthalate (DIPP); CAS No. 605-50-5 Di-iso Butyl phthalate (DIBP); CAS No. 84-69-5		
		Chlorinated Phenol: Pentachlorophenol (PCP); CAS no. 87-86-5, 2,3,4,5-Tetrachlorophenol (2,3,4,5-TeCP); CAS no. 4901-51-3	LMBG 82.02.8-2001	0.5 mg/kg to 100 mg/kg

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		2,3,4,6-Tetrachlorophenol (2,3,4,6-TeCP); CAS no. 58-90-2 2,3,5,6-Tetrachlorophenol (2,3,5,6-TeCP); CAS no. 935-95-5 2,3,6-Trichlorophenol (2,3,6-TCP); CAS no. 933-75-5 2,4,6-Trichlorophenol (2,4,6-TCP); CAS no. 88-06-2		
		Formaldehyde	AATCC 112: 2014 BS EN ISO 14184-I: 2011 SASO 2143: 2003	10 mg/kg to 1000 mg/kg
2.	**Polymeric Accessories in Textiles/**	PAHs in Plastic Naphthalene Acenaphtylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)Anthracene Chrysene Indeno(1,2,3-cd)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenzo(a,h)Anthracene Benzo(ghi)perylene Benzo(j) fluoranthene Benzo(e)pyrene	ISO/TS 16190: 2013	0.5 mg/kg to 200 mg/kg

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
3.	**Leather Products**	Aromatic derived from AZO Colourants (Total 24 aryl amines as listed) O-Tiluidine(95-52-4) 2,3 Xylidine(95-68-1) O-Anisidine(90-04-0) P-Choroaniline(106-47-8) P -Kresidine (120-71-8) 2,4,5Trimethylaniline (137-17-7) 4 Chlor -O-Toluidine (95-69-2) 2,4 Tolyenediamine (95-80-7) 2,4 Diaminoanisole (615-05-4) 2 Naphthalamine (91 - 59 - 8) 2 Aminonitro-4 Toluene (99-55-8) 4 Aminobiphenyl (92-67-1) P-Aminoazobenzene (60-09–03) 4,4 Oxydianiline (101-80-4) Benzidine (92-87-5) 4,4 Diamino -diphenyl methane (101-77-9) O Amino azo toluene (97-56-3) 4,4 Diamino-3,3 Dimethyl diphenyl amine (838-88-0) 3,3 Dimethyl Benzidine (119-93-7) 4, 4 Thiodianiline	ISO 17234- 1: 2012 ISO 17234- 2: 2011	2 mg/kg to 300 mg/kg

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		(139-65-1) 3,3 Dichlorobenzidine (91- 94 -1)		
		Phthalates: 1 Di-isononyl phthalate (DINP); CAS No. 28553-12-0 Di-(2-ethylhexyl) phthalate (DEHP); CAS No. 117-81-7 Di-n-octyl phthalate (DNOP); CAS No. 117-84-0 Di-iso-decyl phthalate (DIDP); CAS No. 26761-40-0 Butyl benzyl phthalate (BBP); CAS No. 85-68-7 Di-butyl phthalate (DBP); CAS No. 84-72-2 Di-n-hexyl phthalates (DnHP); CAS No. 84-75-3 N-pentyl-isopenthyl phthalate (NPIPP); CAS No. 84777-06-0 Bis(2-methoxyethyl) phthalate (DMEP); CAS No. 117-82-8 Di-n-pentyl phthalate (DnPP); CAS No. 131-18-0 Di-isopentyl phthalate (DIPP); CAS No. 605-50-5 Di-iso Butyl phthalate (DIBP); CAS No. 84-69-5	ISO//TS 16181: 2011	50 mg/kg to 10000 mg/kg

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		DMFU content	ISO/ TS 16186:2012	0.1 mg/kg to 10 mg/kg
		Chlorinated Phenol: Pentachlorophenol (PCP); CAS no. 87-86-5, 2,3,4,5-Tetrachlorophenol (2,3,4,5-TeCP); CAS no. 4901-51-3 2,3,4,6-Tetrachlorophenol (2,3,4,6-TeCP); CAS no. 58-90-2 2,3,5,6-Tetrachlorophenol (2,3,5,6-TeCP); CAS no. 935-95-5 2,3,6-Trichlorophenol (2,3,6-TCP); CAS no. 933-75-5 2,4,6-Trichlorophenol (2,4,6-TCP); CAS no. 88-06-2	DIN 53313: 1996 BSEN ISO 17070: 2006	0.5 mg/kg to 100 mg/kg
		Free Formaldehyde in Leather	ISO:17226-2:2008	1 mg/kg to 2000 mg/kg
		Leather Chromium VI	ISO:17075-2:2017	0.1 mg/kg to 500 mg/kg
4.	**Plastics and Other Polymeric Products**	Total Cadmium Content in plastic	EN 1122: 2001	10 mg/kg to 300000 mg/kg
5.	**Polymeric Accessories in Leather**	PAHs in Plastic Naphthalene Acenaphtylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)Anthracene Chrysene	ISO/TS 16190: 2013	0.5 mg/kg to 200 mg/kg

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Indeno(1,2,3-cd)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenzo(a,h)Anthracene Benzo(ghi)perylene Benzo(j) fluoranthene Benzo(e)pyrene		
6.	**Toys and sports Equipment**	Migration of Heavy Element Content: Lead Cadmium Chromium Mercury Arsenic	BS EN 71-3:2013 + A1:2014 BS 5665-3:1995	0.5 mg/kg to 10000 mg/kg
III.	**LEATHER**			
1.	**Leather, Products & Synthetic Leather**	Volatile Matter	IS 582:LC:1:1970 (RA-2003)	0.5% to 80 %
		Moisture	IS 582:LC:2:1970 (RA-2003)	0.5% to 80 %
		Total Ash	IS 582:LC:3:1970 (RA-2003)	0.5% to 20 %
		Solvent Extract actable Substance	IS 582:LC:4:1970 (RA-2003)	0.5% to 15 %
		Water Soluble Matter	IS 582:LC:6:1970 (RA-2003)	0.2% to 25 %
		water Insoluble Ash	IS 582:LC:8:1970 (RA-2003)	0.2% to 20 %
		Water Soluble Organic	IS 582:LC:9:1970 (RA-2003)	0.2% to 25 %
		Chromic Oxide Content	IS 582:LC:10:1970 (RA-2003)	0.5 %to 10 %
		pH and Difference figure of Water Soluble Matter	IS 582:LC:18:1970 (RA-2003)	1 to 14

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Bound Organic Substance And	IS 582:LC:21:1970 (RA-2003)	10% to 75 %
		pH of Leather	ISO:4045:2018 SASO ISO 4045:2007	1 to 14
IV.	**RUBBER & RUBBER PRODUCTS**			
1.	**Rubber & Rubber Products**	Determination of Rubber hydrocarbon	IS 3660:P-6:1988 (RA-2003)	15 %to 80 %
		Rubber Polymer Content	IS 3400:P:22:1984 (RA-2003)	15% to 80 %
		Carbon Black	IS 3400:P22:1984 (RA-2003)	2% to 40 %

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		MECHANICAL TESTING		
I.	**TEXTILE MATERIALS**			
1.	**Textile Materials**	Rugs and Carpet Flammability	16 CFR 1630/1631:2012	(1 cm to 20.32 cm) Upto 8 inch
		Mass per Unit Area	ISO 3801:1977 (RA-2011)	10 g/m^2 to 1000 g/m^2
		Dimensions: Carpet	ISO 3018-1974 (RA-2009)	0.1 cm to 5 m 0.1 cm to 5m
		Wet ability	AATCC 79:2010 BS 4554:1970	0.5 Sec. to 60 Sec. 0.5 Sec. to 300 Sec
		Tensile Properties & Elongation	BS EN ISO 13934-1: 2013 BS EN ISO 13934-2: 2014 ASTM D 5034: 2009 (2013) ASTM D 5035: 2011	10 N to 4000 N 5 % to 80 %
		Tear Strength	ASTM D 2261: 2013 BS EN ISO 13937-2: 2000 BS EN ISO 13937-3: 2000 BS EN ISO 13937-4: 2000	10 N to 4000 N
		Seam Slippage	BS 3320: 1988 ASTM D 434: 1995 ASTM D 1683/D 1683M: 11a EN ISO 13936-1: 2004 EN ISO 13936-2: 2004	10 N to 1000 N
		Seam Strength	ISO 13935-2: 2014 ASTM D 1683/D 1683M:11a	10 N to 1000 N
		Colour Fastness to Water Spotting of Textiles and Coated Fabrics	SATRA TM 185:1995	Qualitative (Grade 1 to 5)
		Fabric Width	ISO 3932: 1976 ASTM D 3774: 1996 (2012)	1 cm to 500 cm
		Pilling Resistance	ASTM D 4970/ D 4970M-16 BS EN ISO 12945-2: 2000	Qualitative (Grade: 1 to 5)

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Abrasion Resistance	ASTM D 4966: 2016 BS EN ISO 12947-2:2016 ASTM D 3885-07a (2015) BS EN ISO 12947-3: 1999 BS EN ISO 12947-4: 1999 Cor 1: 2002	(1000 to 99999) cycles
		Tuft Withdrawal Strength	ISO 4919: 2012	2 N to 200 N
		Vertical Wicking Test	AATCC 197:2011 SATRA TM 305:1998	1 mm to 150 mm
		Zipper Strength:- i) Top stop strength ii) Slider pull of strength iii) Bottom stop holding stringer separation strength iv) Chain crosswise strength v) Puller strength vi)Top stop strength vii) Bottom stop holding strength viii) Closed end strength ix) Lateral strength Slider locking strength	ASTM D 2061:2013 BS 3084:2006	1N to 1000 N
II.	**LEATHER & LEATHER PRODUCTS**			
1.	**Leather & Leather Products**	Tensile Strength	BS 3144 (Part 5): 1968 SATRA TM 43: 2000 ISO 3376: 2011, SASO ISO 17706:2007 ISO 20344 / 20345: 2011 ISO 20346: 2014, ISO 20347 : 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	1 N/mm² to 200 N/mm²

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Tear Strength	BS 3144 (Part 6): 1981 SATRA TM 162: 2017 SATRA TM 179: 1996 SATRA TM 30: 2017 ISO 3377 (Part 1): 2011 ISO 3377 (Part 2): 2002, SASO ISO 17696:2007,ISO 20344/ 20345: 2011 ISO 20346: 2014, ISO 20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	1 N to 2 kN
		Water Vapour Permeability	BS 3144 (Part 24): 1981 SATRA TM 172: 1993 ISO 14268: 2012 ISO 20344 / 20345: 2011 ISO 20346: 2014 ISO 20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	0.001 mg/cm²h to 200 mg/cm²h
		Water Vapour Coefficient	ISO 20344/ 20345: 2011 ISO 20346: 2014, ISO 20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	1 mg/cm^2 to 500 mg/cm^2
		Water Penetration & Water Absorption	ISO 20344/ 20345: 2011, ISO 5403:2011, IS 15298-1:2015, IS 15298-2:2016,	0.001 g to 200 g

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			IS 15298-3:2011, IS 15298-4:2017	
		Water Vapour Absorption	SATRA TM 178: 2001 ISO 20344 / 20345: 2011 ISO 20346: 2014, ISO 20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	1 mg/cm^2 to 500 mg/cm^2
		Martindale Abrasion	ISO 20344/ 20345: 2011 ISO 20346: 2014, ISO 20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017 SATRA TM 31: 2014	Qualitative
		Whole Shoe Flexing	SATRA TM 92: 2016, ISO 19955:2000	Qualitative
		Rapid Sole Bond Strength	BS 5131: 5.1: 1990 SATRA TM 404: 1992	10 N to 980 N
		Sole Bond Peel Strength	BS 5131: 5.4: 1978 SATRA TM 411: 1992 ISO 17708: 2003 ISO 20344 / 20345: 2011 ISO 20346: 2014, ISO 20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	1 N/mm to 100 N/mm
		Slip Resistance (Coefficient of Friction)	SATRA TM 144: 2011 ISO 13287: 2012 SASO ISO 13287: 2007 ISO 20344: 2011, ISO	0.01 cof to 2.0 cof

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			20345: 2011,ISO 20346: 2014, ISO 20347: 2012 IS 15298-1:2015, IS 15298-2: 2016, IS 15298-3:2011, IS 15298-4:2017	
		Strap to Sole Attachment	SATRA TM 120: 2001	1 N to 2 kN
		Strap / Buckle & Related Attachment Strength	BS 5131: 5.11: 1981 SATRA TM 181: 2017	1 N to 2 kN
		Toe-post Attachment	SATRA TM 118: 1992	1 N to 2 kN
		Leak Proofness test	ISO 20344 ISO 20345: 2011,ISO 20346: 2014 ISO 20347: 2012, IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	Qualitative
		Decorative Trim Attachment	SATRA TM 117: 1992	1 N to 2 kN
		Heel Attachment	SATRA TM 113 : 1996 BS EN 12785: 2000 BS 5131:5.10: 1990	1 N to 2 kN
		Height of Upper	ISO 20344 / 20345: 2011 ISO 20346: 2014, ISO 20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	0.01 mm to 800 mm
		Seat Region	ISO 20344/ 20345: 2011 ISO 20346: 2014, ISO 20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	Qualitative

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Construction	ISO 20344 / 20345: 2011 ISO 20346: 2014, ISO 20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	Qualitative
		Toe-Protection (General Clause)	ISO 20344 / 20345: 2011 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	Qualitative
		Internal Length of Toe-Cap	ISO 20344 / 20345: 2011 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	0.01 mm to 90 mm
		Impact Resistance	ISO 20344 / 20345: 2011 IS 15298-1:2015, IS 15298-1:2016, IS 15298-3:2011, IS 15298-4:2017	0.01 mm to 25 mm
		Compression Resistance	ISO 20344 / 20345: 2011 IS 15298-1:2015, IS 15298-1:2016, IS 15298-3:2011, IS 15298-4:2017	0.01 mm to 25 mm
		Behavior of Toe-Cap	ISO 20344 / 20345: 2011, SASO EN ISO 22775:2007(Method-2), IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017 2011	Qualitative
		Specific ergonomic features	ISO 20344 / 20345: 2011 ISO 20346: 2014, ISO	Qualitative

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	
		Adhesion of Finish	ISO 11644: 2009, SATRA TM 410:1995	1 N/mm to 100 N/mm
		Penetration Resistance of Inserts	ISO 20344 / 20345: 2011 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	1 N to 2kN
		Heat Insulation of Sole Complex	ISO 20344 / 20345: 2011 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	1°C to 30°C
		Top-Piece Attachment	SATRA TM 108: 1992 BS 5131: 5.9: 1979	1 N to 2 kN
		Cold Insulation of Sole Complex	ISO 20344 / 20345: 2011 ISO 20346: 2014, ISO 20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	(to)0.20°C to 20 °C
		Electrical Properties (Conductive Footwear, Antistatic Footwear)	ISO 20344 / 20345: 2011 ISO 20346: 2014, ISO 20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	1 KΩ to 1000 MΩ
		Electrical Insulation (Insulating Footwear)	ISO 20344 / 20345: 2011 IS 15298-1:2015, IS 15298-2:2016,	Qualitative

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			IS 15298-3:2011, IS 15298-4:2017	
		Thickness of Insole	ISO 20344 / 20345: 2011 ISO 20346: 2014, ISO 20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	1 mm to 15 mm
		Construction of Insole	ISO 20344 / 20345: 2011 ISO 20346: 2014, ISO 20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	Qualitative
		Dimension Test	ISO 20344 / 20345: 2011 ISO 20346: 2014, ISO 20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	1 to 25 mm
		Water Absorption & Desorption of Insole / Insock	ISO 20344 / 20345: 2011 ISO 20346: 2014 ISO 20347: 2012 IS 15298 (Part 1,2,3&4): 2011	0.0010 g to 200 g
		Flexing Endurance (Bally)	BS 3144 (Part 13): 1981 SATRA TM 55: 1999 ISO 5402-1:2017	Qualitative
		Energy Absorption of Seat Region	ISO 20344 ISO 20345: 2011 ISO 20346: 2014 ISO 20347: 2012 IS 15298-1:2015, IS 15298-	1 J to 2 kJ

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			2:2016, IS 15298-3:2011, IS 15298-4:2017	
		Abrasion resistances of Insole / Insock	ISO 20344 / 20345: 2011 ISO 20346: 2014 ISO 20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	Qualitative
		Abrasion Resistance Of Insole	ISO 20344 / 20345: 2011 ISO 20346: 2014 ISO 20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	Qualitative
		Water Resistance	ISO 20344: 2011 Clause No. 5.15.1 SASO EN ISO 5405:2007 ISO 20345: 2011 ISO 20346: 2014 ISO 20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	Qualitative
		Requirements for Toe Caps Finishing	BS EN 12568: 2010 Clause No. 4.2.1	Qualitative
		Internal Length	Clause No. 4.2.2.1 & 5.2.1	10 mm to 90 mm
		Width of Flange	Clause No. 4.2.2.2	1 mm to 15 mm
		Impact Resistance	Clause No. 4.2.3 & 5.2.2	1 mm to 30 mm
		Compression Resistance	Clause No. 4.2.4 & 5.2.3	1 mm to 30 mm
		Corrosion Resistance	Clause No. 4.3 & 5.3	Qualitative
		Impact Resistance after five environmental treatments	Clause No. 4.4 & 5.4	1 mm to 30 mm

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
2.	**Leather & Leather Products (Foot Wears)**	Strength of Buckle Attachment	SATRA TM 151:1999	1N to 4000 N
		Shoe Lace Strength	SATRA TM 94:1993	1N to 4000 N
		Stitch Tear Strength	SATRA TM 5:2000	1N to 4000 N
		Thickness of Leather & Insole Material	SATRA TM 1:2013	1mm to 25 mm
		Color fastness to Rubbing (Circular Motion)	SATRA TM 8:2004 ISO 17700:2004 (Method - B)	Qualitative (Grade: 1 to 5)
		Color fastness to Rubbing (To & Fro Motion)	SATRA TM 173:2017 ISO 17700:2004 (Method - A) ISO 11640:2012	Qualitative (Grade: 1 to 5)
		Color fastness to Crocking	SATRA TM 167:2017 ISO 105 X12:2016	Qualitative (Grade: 1 to 5)
		Thickness of non Leather Flexing Shoe Material	SATRA TM 27:2004	1 mm to 25 mm
		Breaking Strength & Elongation at break	SATRA TM 29:2017	1 N to 4000 N
		Split Tear Strength	SATRA TM 65:2015	1 N to 4000 N
		Strength of Eyelet Facing & other laced fastening	SATRA TM 149:1998	1 N to 4000 N
		Attachments Strength of Eyelets	SATRA TM 150:1999	1 N to 4000 N
		Abrasion Resistance of Leather	SATRA TM 193:2014	1 mm/kRev to 100 mm/kRev
		Attachment Strength of Shoe Lace tag	SATRA TM 175:1995	1 N to 4000 N
		Knot Slippage Test	SATRA TM 195:2004	1 N to 2000 N
		Surface peel strength of Insole material	SATRA TM 101:1993	1 N/mm to 200 N/mm
		Peel Strength of Bottom Construction in complete footwear	SATRA TM 281:2002	1 N/mm to 200 N/mm

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Hydrolysis test of PU based sheet material	SATRA TM 328:1992	Qualitative
		Hydrolysis test of PU sole & PU coated Leather	SATRA TM 344:1995	Qualitative
		Seam Strength of Leather	SATRA TM 180:2010	1 N/mm to 100 N/mm
		Requirements for Penetration Resistance inserts	BS EN 12568: 2010	Qualitative
		Nail Penetration Resistance	Clause No. 6.2.1 & 7.2.1	Qualitative
		Corrosion Resistance	Clause No. 6.3.2 & 7.3.2	Qualitative
		Nail Penetration Resistance after five environmental treatment	Clause No. 6.4 & 7.4	Qualitative
		General	EN 420: 2003+A1 :2009	Qualitative
		Comfort & Efficiency	EN 420: 2003+A1 :2009	Qualitative
		Dexterity	EN 420: 2003+A1 :2009	Qualitative
		Water Vapor Transmission Absorption	EN 420: 2003+A1 :2009	0.001 g to 200 g
		Resistance of Glove material to Water Penetration	EN 420: 2003+A1 :2009	(1 to 200) minute
III.	**RUBBER AND RUBBER PRODUCTS**			
1.	**Rubber Sole & Rubber Sheet Products**	Abrasion Resistance	EN 388: 2016	Qualitative
		Tear Resistance	EN 388: 2016	1 N to 500 N
		Puncture Resistance	EN 388: 2016	1 N to 2 kN
		Blade Cut Resistance	EN 388: 2016	0.5 Index to 20 Index
		Compression Set Test	BS ISO 815-I:1991	1% to 50%
		Hardness(IRHD)	BS ISO 48:1994 (Method N) SATRA TM 206:1999	10 IRHD to 90 IRHD

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Tensile Stress-Strain Properties (before ageing)	ISO – 37:2005	1 to 200 N/mm
		Tensile Stress-Strain Properties (after ageing)	ISO – 37:2005	1 to 200 N/mm
		Tensile Stress-Strain Properties (after immersion)	ISO – 37:2005	1 to 200 N/mm
		Tension Test	BS ISO 2285:2001	1% to 200%
		Sole Flexing (Bennewart)	BS EN 12769: 1997 SATRA TM 161: 2004 ISO 17707: 2005, SASO EN ISO 17707: 2007 ISO 20344/ 20345: 2011 ISO 20346: 2014, ISO 20347: 2012 DIN 53543: 1979 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	0.5 mm to 25 mm
		Thickness of non cleated outsole	ISO 20344 / 20345: 2011 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	0.01 mm to 90 mm
		Ross Flexing Resistance ISO 20345: 2011/ IS 15298 (Part 2,3&4): 2011	ISO 20344 / 20345: 2011 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017, SATRA TM 60: 1992	0.1 mm to 25 mm
2.	**Rubber & Rubber Products**	Hardness (Shore A & D)	BS 903:A26:N: 1995 SATRA TM 205: 2017 ISO 48: 2010	10 Shore A to 100 Shore A 10 Shore D to 100 Shore D
		Abrasion Resistance	BS 903:A9: 1988	10 mm to 1000 mm

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		(Drum)	SATRA TM 174: 2016 ISO 4649: 2010, SASO ISO 20871:2007 ISO 20344 / 20345: 2011 ISO 20346: 2014, ISO 20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017 DIN 53516: 1987, SATRA TM 193:2014	
		Cleated Area/Height (Design)	ISO 20344 / 20345: 2011 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	0.01 mm to 300 mm
		Thickness of cleated outsole (Design)	ISO 20344 / 20345: 2011 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	0.01 mm to 80 mm
		Resistance to Hot Contact	ISO 20344 / 20345: 2011 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	Qualitative
		Flexing Endurance (Vamp)	BS EN ISO 7854: 1997, ISO 5402-2:2015 SATRA TM 25: 2016	Qualitative
		Hydrolysis	ISO 20344 / 20345: 2011 ISO 20346: 2014, SATRA TM 344:1995 ISO 20347: 2012, IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	Qualitative

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Resistance to Fuel Oil	ISO 20344 / 20345: 2011 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	1% to 15%
		Visual Examination	BS 1970:2012(4.1)	Qualitative
		Thickness	BS 1970:2012(4.2) Annex-A	1 mm to 5 mm
		Capacity	BS 1970:2012(4.2) Annex-B	1 ml to 2500 ml
		Filling Characteristics	BS 1970:2012(4.3)	Qualitative
		Visual Leakage	BS 1970:2012(5.1) Test 1 and Test 2	Qualitative
		Closure Dimension	BS 1970:2012(5.1) Annex-C.5 Test 3	Qualitative
		Separation of Screwed Closures	BS 1970:2012(5.2) Annexure-D	Qualitative
		Loss of washer Thickness	BS 1970:2012(5.1) Annex-C.4 Test 3	0 to 5.0 mm
		Compression Set Test	BS 1970:2012(5.3) BS ISO 815-I:1991	Qualitative
		Hardness	BS 1970:2012(5.3) BS ISO 48:1994 (Method N)	10 IRHD to 90 IRHD
		Leak-proof ness	BS 1970:2012(6.1)	Qualitative
		Strength of Bonded Seam	BS 1970:2012(6.2)	1 N to 1000 N
		Pressure Test	BS 1970:2012(6.3)	Qualitative
		Tensile Stress-Strain Properties (before ageing)	BS 1970:2012(6.4) ISO 37:2005	1 N/mm to 100 N/mm
		Tensile Stress-Strain Properties (after ageing)	BS 1970:2012(6.4) ISO 37:2005	1 N/mm to 100 N/mm
		Tensile Stress-Strain Properties (after immersion)	BS 1970:2012(6.4) ISO 37:2005	1 N/mm to 100 N/mm

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Tension Test	BS 1970:2012(6.5) BS ISO 2285:2001	1 % to 500 %
		Tear Strength (Crescent Tear)	BS 1970:2012(6.6) ISO 34-I:2010	1 N to 200 N
		Resistance to damage by flexing	ISO 7854:1997, ISO 132:2017, BS 3424-9:1996, ASTM D813:2014, ASTM D430:2018	Qualitative
		Shock absorption capacity of ankle protection materials incorporated into the upper	ISO 20344 / 20345: 2011 ISO 20346: 2014, ISO 20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	1 kN to 100 kN
		Resistance of upper to cutting	ISO 20344 / 20345: 2011 ISO 20346: 2014, ISO 20347: 2012 IS 15298-1:2015, IS 15298-2:2016, IS 15298-3:2011, IS 15298-4:2017	1.2 index level to 20.0 index level