

	<b>ACCREDITATION DOCUMENT</b>	<b>F-06/02 Issue Date: 18/08/2020 Rev. No: 09 LAB 022</b>
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**Accreditation No: LAB 022**

**Awarded to**

**Tti Testing Laboratories (Textile Testing International)  
Lahore, Pakistan.**

The scope of accreditation is in accordance with the standard specifications outlined in the following page(s) of this document. The accredited scope shall be visible and legible in areas such as customer service, sample-receiving section etc and shall not mislead its users.

The accreditation was first time granted on **13-05-2006** by Pakistan National Accreditation Council.

The laboratory complies with the requirements of **ISO/IEC 17025:2017**.

The accreditation requires regular surveillance, and is valid until **08-08-2027**.

The decision of accreditation made by Pakistan National Accreditation Council implies that the organization has been found to fulfill the requirements for accreditation within the scope.

The organization however, itself is responsible for the results of performed measurements/tests.

**PAKISTAN NATIONAL ACCREDITATION COUNCIL**

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### Testing Laboratory.

Accreditation Scope of **Tti Testing Laboratories** (Textile Testing International), 347-S, Quaid-e-Azam Industrial Estate, Kot Lakhpat, 54770, Lahore.

Permanent laboratory premises

Materials/ Products tested	Testing field (e.g. environmental testing or mechanical testing)	Types of test/ Properties measured	Reference to standardized method (e.g. ISO 14577-1:2003)/ Internal method reference
<b>Textiles</b>	Physical Testing	Yarn number by skein method (Yarn count)	ASTM D1907/ D1907M-12 (2018)
	Physical Testing	Twist in yarn (TPI)	ASTM D1422/ D1422M-13 (2020)
	Physical Testing	Yarn strength	ASTM D2256/ D2256M-21 ISO 2062:2009
	Physical Testing	Warp & weft count (Ends /picks)	ASTM D3775-17 BS EN 1049-2 :1994 ISO 7211-2 : 2024
	Physical Testing	Yarn number - short length specimen	ASTM D1059-17
	Physical Testing	Abrasion Resistance - Martindale a) Specimen break down b) Mass loss c) Appearance change	ASTM D4966-22 BS EN ISO 12947-1:1998 BS EN ISO 12947-2:2016 BS EN ISO 12947-3:1998 BS EN ISO 12947-4:1998
	Physical Testing	Pilling resistance (Martindale)	ASTM D4970/D4970M- 22 BS EN ISO 12945-2: 2020
	Physical Testing	Pilling resistance (Random tumble)	ASTM D3512/D3512M- 22
	Physical Testing	Pilling resistance (ICI pilling)	BS EN ISO 12945-1:2020 EN ISO 12945-1: 2020 ISO 12945-1: 2020
	Physical Testing	Bursting strength	ASTM D3786/D3786M-(R2023) BS EN ISO 13938-1:2019
	Physical Testing	Tear strength (Elmendorf)	ASTM D1424:21 BS EN ISO 13937-1:2000
	Physical Testing	Tear strength (Tongue-single rip)	ASTM D2261-13: 2024 ISO 13937-2:2000
	Physical Testing	Tear strength (Wing shaped)	BS EN ISO 13937-3:2000

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<b>Textiles</b>	Physical Testing	Tensile strength	ASTM D5034-21 ASTM D5035-11 (2019) BS EN ISO 13934-1:2013 BS EN ISO 13934-2:2014
	Physical Testing	Seam slippage	ISO 13936-1:2004 ISO 13936-2:2004
	Physical Testing	Failure in sewn seams	ASTM D1683/ D1683M-22
	Physical Testing	Stretch properties of fabrics woven from stretch yarns	ASTM D3107-07 (2019)
	Physical Testing	Stiffness of fabrics by the circular bend procedure	ASTM D4032-08 (2016)
	Physical Testing	Flammability of apparel & clothing textiles	ASTM D1230-22 16 CFR 1610 (2008)
	Physical Testing	Mass per unit area	ASTM D3776 / D3776M-20 ISO 3801:1977 BS EN 12127:1998
	Physical Testing	Water repellency: spray test	AATCC 22 :2017 BS EN ISO 4920 :2012
	Physical Testing	Absorbency of textiles	AATCC 79-2018
	Physical Testing	Oil repellency: Hydrocarbon resistance Test	AATCC 118 :2020
	Physical Testing	Soil release: Oily stain release method	AATCC 130:2018
	Physical Testing	Vertical Wicking	AATCC 197:2022
	Physical Testing	Colorfastness to crocking / rubbing	AATCC 8:2022 ISO 105-X12:2016
	Physical Testing	Color fastness to perspiration	AATCC 15:2021 ISO 105-E04:2013
	Physical Testing	Color fastness to light (Xenon arc)	AATCC 16.3:2020 ISO 105-B02:2014
Physical Testing	Color fastness to laundering: accelerated	AATCC 61:2020 ISO 105-C10:2006 ISO 105-C06:2010	

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<b>Textiles</b>	Physical Testing	Color fastness to water spotting	AATCC 104:2014 ISO 105-E07:2010
	Physical Testing	Color fastness to sea water	AATCC 106:2013 ISO 105-E02:2013
	Physical Testing	Color fastness to water	AATCC 107:2022 ISO 105-E01:2013
	Physical Testing	Color fastness to dry cleaning	AATCC 132:2013 ISO 105-D01:2010
	Physical Testing	Color fastness to non-chlorine bleach in home laundering	AATCC 172:2016
	Physical Testing	Color fastness to sodium hypochlorite bleach in home laundering	AATCC 188:2017
	Physical Testing	Color fastness to chlorine bleach (Spot test)	AATCC TS-001
	Physical Testing	Color fastness to non-chlorine bleach (Spot & Soaking)	AATCC TS-001
	Physical Testing	Color fastness to phenolic yellowing	ISO 105X-18:2007
	Physical Testing	Dimensional changes after home laundering	AATCC 135:2018 AATCC 150:2018 BS EN ISO 3759:2011 BS EN ISO 5077:2008 BS EN ISO 6330:2021
	Physical Testing	Appearance after home laundering	AATCC 143:2018 ISO 15487:2018
	Physical Testing	Skewness changes/garment twisting	AATCC 179-2023
	Physical Testing	Bow and skew in woven and knitted fabrics	ASTM D 3882-08 (2020)
	Physical Testing	Industrial washing of work wear	ISO 15797:2017
	Physical Testing	Spirality after laundering	ISO 16322-1:2005 ISO 16322-2:2021 ISO 16322-3:2021
	Chemical Testing	Fiber analysis: Qualitative	AATCC 20-2021

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<b>Textiles</b>	Chemical Testing	Fiber analysis: Quantitative	AATCC 20A- 2021e ISO 1833-1:2020 ISO 1833-2:2020 ISO 1833-3:2020 ISO 1833-4: 2023 ISO 1833-6:2018 ISO 1833-7:2017 ISO 1833-8:2006 ISO 1833-10:2019 ISO 1833-11:2017 ISO 1833-12:2020 ISO 1833-16:2019
	Chemical Testing	pH value	AATCC 81-2022 ISO 3071:2020
	Chemical Testing	Formaldehyde	AATCC 112-2020 ISO 14184-1:2011 ISO 14184-2:2011
	Chemical Testing	Aromatic amines from azo colorants	BS EN ISO 14362-1:2017 BS EN ISO 14362-3:2017
	Chemical Testing	Phthalate content- Tetrahydrofuran method	ISO 14389:2022 CPSC-CH-C1001-09.4
	Chemical Testing	Formaldehyde (Spot test)	Lab Developed Method, AATCC 94:2020
	Chemical Testing	Chlorinated Phenols	LFGB B 82.02-8
	Chemical Testing	Total Heavy Metals	DIN EN 16711-1:2016
	Chemical Testing	Extractable heavy metals from fabrics	DIN EN 16711-2:2016
<b>PPE Products, Woven / Non-Woven Textile Materials &amp; Medical Products</b>	Physical Testing	Hydrostatic Head Pressure	AATCC 127-2017(2018) e ISO 811:2018 EN 20811:1992
	Physical Testing	Air Permeability	ASTM D737-18 (2023) ISO 9237:1995
	Physical Testing	Seam Strength	ASTM D751-19 EN 14325:2018
	Physical Testing	Tear Strength	ASTM D 5733-99 ASTM D 5587-15 (2024)
	Physical Testing	Water Resistance Impact Penetration	AATCC 42-2017e

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<b>Textile Materials / PPE and Medical Devices</b> (Coveralls, Masks, Gowns, Drapes etc)	Physical Testing	Pneumatic Bursting	ISO 13938-2:2019
	Physical Testing	Particle Filtration Efficiency (PFE)	ASTM F2299 / F2299M – 03 (2017)
	Physical Testing	Differential Pressure (Breathability)	EN 14683:2019+AC:2019
	Physical Testing	Synthetic Blood Penetration	ASTM F1862 / F1862M - 17 ISO 22609:2004 ASTM F1670 / F1670M - 17a ISO 16603:2004
	Microbial Testing	Antibacterial finish	AATCC 100-2019 AATCC 147-2011(2016) e ASTM E2149 - 20
	Microbial Testing	Bacterial Filtration Efficiency (BFE)	ASTM F2101-19 EN 14683:2019+AC:2019
	Microbial Testing	Bio burden	ISO 11737-1:2018/Amd 1:2021 EN 14683:2019+AC:2019
	Microbial Testing	Dry Microbial Penetration Wet Bacterial Penetration	ISO 22612:2005 ISO 22610:2018
<b>Textile, Leather &amp; Chemical</b>	Chemical Testing	Disperse Dyes	DIN 54231:2022-09
	Chemical Testing	AP & APEOs	BS EN ISO 18254-1:2016, BS EN ISO 18218-1: 2023, BS EN ISO 21084:2019
	Chemical Testing	Volatile Organic Compounds (VOCs)	USEPA 5021A, Tti/ORG/SOP-009
	Chemical Testing	Poly Aromatic Hydrocarbons (PAH)	ISO 16190, AfPS GS 2019-01
	Chemical Testing	Chlorinated Organic Compounds (COC)	EN 17137:2018
	Chemical Testing	Determination of Per and Poly Fluoroalkyl Substances (PFOA, PFOS)	ISO 23702:2023, CEN/TS 15968:2010
	Chemical Testing	Determination of Bisphenols	ISO 11936:2023 LC MS/MS
	Chemical Testing	Estimation of Flame Retardants	EN ISO 17881-1:2016, EN ISO 17881-2:2016
	Chemical Testing	Determination of Preservatives (OPP, OIT, PCMC, TCMTB)	ISO 13365-1:2020 LC-MS

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	Chemical Testing	Total Aniline estimation	ISO 14362-1, GC MS
	Chemical Testing	Determination of Dimethyl Fumarate	ISO 16186:2021 GC MS
	Chemical Testing	Chlorinated Paraffins (SCCP & M CCP)	ISO18219-2:2021, ISO18219-1:2021, ISO 22818-2021
<b>Metals</b>	Chemical Testing	Nickel Release	BS EN 1811:2023
<b>Metal Products</b>	Chemical Testing	Total lead in children's metal products (including jewelry)	CPSC-CH-E1001-08.3 Acid digestion method (ICP-OES / AAS)
<b>Non-Metal Products</b>	Chemical Testing	Total lead in children's non-metal products	CPSC-CH-E1002-08.3 Acid digestion method (ICP-OES / AAS)
<b>Paint / Surface Coating</b>	Chemical Testing	Lead in paint & surface coatings	CPSC-CH-E1003-09.1 16 CFR 1303 Acid digestion method (ICP-OES / AAS)
<b>Plastics</b>	Chemical Testing	Cadmium content	BS EN 1122:2001
<b>Toys</b>	Chemical Testing	Migration of certain elements	EN 71-3:2019 + A1 2021
<b>Toys</b>	Physical Testing	Torque test, Tension test, Sharp Point, Sharp edge, Small parts	ASTM F 963- 2023 16 CFR 1500.50, 51, 53 16 CFR 1500.48, 16 CFR 1500.49 16 CFR 1501
<b>Protective Gloves and Clothing</b>	Physical Testing	Limited flame spread / Burning behavior	EN 407:2020 EN 12477:2002+A1:2005 ISO 11611: 2024 ISO 11612:2015 ISO 14116:2015 ISO 15025:2016 (TM)
	Physical Testing	Contact heat	EN 407:2020 EN 12477:2002+A1:2005 ISO 11612:2015 ISO 12127-1:2015 (TM)
	Physical Testing	Convective Heat	EN 407:2020 EN 12477:2002+A1:2005 ISO 11612:2015 ISO 9151:2016 (TM)

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<b>Protective Gloves and Clothing</b>	Physical Testing	Radiant Heat / Heat transfer	EN 407:2020 ISO 11612:2015 ISO 11611:2024 ISO 6942:2022 (TM)
	Physical Testing	Small splashes of molten metal	EN 407:2020 EN 12477:2002+A1:2005 EN 348:1992 (TM) ISO 11611:2024 ISO 9150:1988 (TM)
	Physical Testing	Large quantity of molten metal	EN 407:2020 ISO 11612:2015 ISO 9185:2007 (TM)
	Physical Testing	Heat shrinkage/ Resistance	ISO 11612:2015 ISO 17493:2016 (TM)
	Physical Testing	Seam strength	ISO 11612:2015 ISO 11611: (2024) ISO 13935-2:2014 (TM)
	Physical Testing	Tear Strength	EN 407:2020
	Physical Testing	Impact abrasion (Darmstadt & Cambridge) Restraint resistance	EN 13594:2015 (TM) EN 17092-1,2,3,4,5,6 EN 13594:2015 EN 17092
	Physical Testing	Impact Protection (Knuckle Impact Test)	EN 13594:2015 EN 1621-1,2,3 EN 17092-2,3,4 EN 388 ANSI 138
<b>Leather / Footwear / Gloves</b>	Physical Testing	Abrasion resistance	EN 388:2016+A1:2018 (6.1)
	Physical Testing	Blade cut resistance	EN 388:2016+A1:2018 (6.2) ISO 13997:2023 ASTM F2992-15
	Physical Testing	Tear resistance	EN 388:2016+A1:2018 (6.3)
	Physical Testing	Puncture resistance	EN 388:2016+A1:2018 (6.4)
	Physical Testing	Anti-static properties	ISO 20344:2021/Amd 1:2024

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<b>Leather / Footwear / Gloves</b>	Physical Testing	Toe impact test	EN ISO 20344:2021
	Physical Testing	Glove sizing, Dexterity/ Protective gloves-general requirements and test methods	BS EN ISO 21420:2020+A1:2024
	Physical Testing	Thickness	ISO 2589:2016 (IULTCS/IUP 4), SLP 4
	Physical Testing	Tensile strength & percentage extension	ISO 3376:2020 (IULTCS/IUP 6), SLP 6
	Physical Testing	Tear load (Single edge tear)	ISO 3377-1:2011 (IULTCS/IUP 40-1), SLP 40
	Physical Testing	Tear load (Double edge tear)	ISO 3377-2:2016 (IULTCS /IUP 8), SLP 7
	Physical Testing	Distension and strength of surface (Ball burst method)	ISO 3379: 2024 (IULTCS/IUP 9)
	Physical Testing	Abrasion resistance using a rotating cylindrical drum device	ISO 4649: 2024
	Physical Testing	Water resistance of flexible leather	ISO 5403-1:2011 (IULTCS/IUP 10-1)
	Physical Testing	Flex resistance - Flexometer method	ISO 5402-1:2022 (IULTCS/IUP 20) SATRA TM 55
	Physical Testing	Flex resistance - Vamp flex method	ISO 5402-2:2015 SATRA TM 25
	Physical Testing	Water vapor absorption	ISO 20344:2021 EN ISO 21420:2020
	Physical Testing	Water vapor permeability	ISO 14268:2023 (IULTCS/IUP 15) ISO 20344:2021 EN ISO 21420:2020
	Physical Testing	Softness	ISO 17235:2015 (IULTCS/IUP 36)
	Physical Testing	Abrasion resistance	ISO 17704:2004 ISO 20344:2021
	Physical Testing	Out Sole Flex resistance	ISO 17707:2005 ISO 20344:2021
	Physical Testing	Resistance of footwear to flexing	SATRA TM 92
	Physical Testing	Rapid Sole adhesion test	BS 5131:1990 SATRA 404

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<b>Leather / Footwear / Gloves</b>	Physical Testing	Color fastness to light	ISO 105 B02:2014 SATRA TM 160
	Physical Testing	Color fastness to cycles of to-and-fro rubbing	ISO 11640:2018 (IULTCS/IUF 450) SATRA TM 167
	Physical Testing	Color fastness to perspiration	ISO 11641:2012 (IULTCS/IUF 426)
	Physical Testing	Color fastness to water	ISO 11642:2012 (IULTCS/IUF 421)
	Physical Testing	Color fastness of small samples to solvents	ISO 11643:2009 (IULTCS/IUF 434) SLF 434
	Physical Testing	Color fastness to water spotting	ISO 15700:1998 (IULTCS/IUF 420)
	Physical Testing	Color fastness to migration into polymeric material	ISO 15701:2022 IUF 442
	Physical Testing	Color fastness to machine washing	ISO 15702:1998 (IULTCS/IUF 435)
	Physical Testing	Color fastness to mild washing	ISO 15703:1998 (IULTCS/IUF 423)
	Physical Testing	Color fastness to crocking	ISO 20433:2012 (IULTCS/IUF 452) SLF 452
	Physical Testing	Color fastness to Water or perspiration	SATRA TM 335
	Physical Testing	Seam Strength	EN 13594:2015 6.7 and Annex B, EN 17092-1:2020
	Physical Testing	ANSI Classification (Blade cut, Needle puncture & Abrasion)	ANSI/ISEA 105-2016 5.1 ASTM F2992 / F2992M – 2023 ASTM F 2878: 21 ASTM D3389: 21 ASTM D3884 - 22
	Physical Testing	Tear Resistance	ISO 4674-1:2016, BS EN 17092-1:2020
	Chemical Testing	pH	EN ISO 4045:2018 (IULTCS/IUC 11), SLC 13, ISO 20344:2021 EN ISO 21420:2020
Chemical Testing	Chromic oxide content	ISO 5398-3:2018 (IULTCS/IUC 8-3)	
Chemical Testing	Organotin	ISO/TS 16179:2012	

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<b>Leather / Footwear / Gloves</b>	Chemical Testing	Dimethyl fumarate (DMFu)	ISO/TS 16186:2021
	Chemical Testing	Dimethyl formamide (DMFa)	ISO/TS 16189:2021 EN ISO 21420:2020
	Chemical Testing	Chlorinated phenols	ISO 17070:2015 (IULTCS/IUC 25)
	Chemical Testing	Extractable metals	ISO 17072-1:2019 (IULTCS/IUC27-1)
	Chemical Testing	Total metal contents	ISO 17072-2:2022 (IULTCS/IUC 27-2)
	Chemical Testing	Chromium (VI) content	ISO 17075-1 :2017, ISO 10195-2018 (IULTCS/IUC 18-1), SLC 22, ISO 20344:2021 EN ISO 21420:2020
	Chemical Testing	Formaldehyde content (HPLC method)	ISO 17226-1:2021 (IULTCS/IUC 19-1)
	Chemical Testing	Formaldehyde content (colorimetric method)	ISO 17226-2:2018 (IULTCS/IUC 19-2), SLC 23
	Chemical Testing	Aromatic amines from azo colorants	ISO 17234-1:2020 (IULTCS/IUC 20-1) ISO 17234-2:2011 (IULTCS/IUC 20-2) EN ISO 21420:2020
<b>Petroleum Products</b>	Physical Testing	Flash & Fire Points by Cleveland Open Cup Tester	ASTM D 92-24
	Physical Testing	Flash Point by Pensky-Martens Closed Cup Tester	ASTM D 93-20
	Physical Testing	Kinematic viscosity	ASTM D 445- 24
	Chemical Testing	Acid number	ASTM D 974-22
	Chemical Testing	Base number	ASTM D 2896-21
	Chemical Testing	Aromatic Amines from Azo Colorants	ISO 14362 Modified
	Chemical Testing	Phthalate content	ISO 18856 USEPA 8270 E
	Chemical Testing	AP/APEO	ISO 18254-1 Modified

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<b>Water / Waste Water &amp; Sludge</b>	Chemical Testing	Poly Aromatic Hydrocarbons PAH	EPA 8270 D, E (Tti/Org/SOP-27)
	Chemical Testing	Chlorinated Organic Compounds (COC)	US EPA 8270 D, E (Tti/Org/SOP-26)
	Chemical Testing	Organotin Compounds	ISO 17353 (Tti/Org/SOP-28)
	Chemical Testing	Chlorinated Phenols	EPA 8270 E (Tti/Org/SOP-29)
	Chemical Testing	pH value	APHA 4500 H <sup>+</sup> B
	Chemical Testing	Conductivity	APHA 2510 B
	Chemical Testing	Hardness	APHA 2340 C
	Chemical Testing	Alkalinity	APHA 2320 B
	Chemical Testing	Chloride	APHA 4500 Cl <sup>-</sup> B
	Chemical Testing	Heavy Metals (Pb, Ba, Cd, Co, Hg, As, Sb, Sn, Fe, Ni, Cu, Cr, Mn, Se, Ag, Zn)	APHA 3030, 3111, 3120, EPA 6010C (ICP-OES, AAS)
	Chemical Testing	Minerals (Na, K, Ca, Mg)	APHA 3030, 3111, 3120, EPA 6010C (ICP-OES, AAS)
	Chemical Testing	Oil & Grease	APHA 5520 B
	Chemical Testing	Chemical Oxygen Demand (COD)	APHA 5220 B & D
	Chemical Testing	Dissolved Solid, Total (TDS)	APHA 2540C
	Chemical Testing	Suspended Solids, Total (TSS)	APHA 2540D
	Chemical Testing	Sulphates	APHA 4500 SO <sub>4</sub> E
	Chemical Testing	Nitrates	APHA 4500-NO <sub>3</sub> <sup>-</sup> B
	Chemical Testing	Fluoride	APHA 4500F D
	Chemical Testing	Nitrite	APHA 4500 B
	Chemical Testing	Sulfides	APHA 4500 D
Chemical Testing	Sulfites	APHA 4500 C	

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<b>Water / Waste Water &amp; Sludge</b>	Chemical Testing	Biological Oxygen Demand (BOD)	APHA 5210 B
	Chemical Testing	Cyanide	APHA 4500E
	Chemical Testing	Total Chlorine	APHA 4500 G
	Chemical Testing	Phenol	APHA 5530C
	Chemical Testing	Dissolved Oxygen	APHA 4500 O' G (DO Meter)
	Chemical Testing	Temperature	APHA 2550 B
	Chemical Testing	Color	ISO 7887B
	Chemical Testing	Persistent Foam	Physical
	Chemical Testing	Total Nitrogen	USEPA 351.2
	Chemical Testing	Ammonia as Ammoniacal Nitrogen	USEPA 350.1
	Chemical Testing	Determination of Per and Poly Fluoroalkyl Substances (PFOA, PFOS)	DIN 38407-42, BS EN 12673 GC-MS / LC-MS/MS
	Chemical Testing	Determination of Bisphenols	ISO 11936:2023 LC MS/MS
	Chemical Testing	Estimation of Flame Retardants	ISO 22032:2006 GC-MS / LC/MS
	Chemical Testing	Determination of Preservatives (OPP, OIT, PCMC, TCMTB)	ISO 13365-1:2020 LC-MS
	Chemical Testing	Total Aniline	ISO 14362-1, GC MS
	Chemical Testing	Determination of Dimethyl Fumarate (DMFa)	EPA 8270 E, GCMS
<b>Waste Water &amp; Chemical</b>	Chemical Testing	Disperse Dyes	DIN 54231:2022-09 Liquid Extraction, LC-MS
	Chemical Testing	Chlorinated Paraffins (SCCP & MCCP)	ISO 22818:2021 ISO 18219-1,2
	Chemical Testing	Volatile Organic Compounds (VOC)	USEPA 8260D / EPA 8270 GC-MS
	Chemical Testing	Anti-Microbials and Biocides	ISO 16186:2021 & ISO 13365-1
	Chemical Testing	Glycols / Glycol Ethers	USEPA 8270E Liquid extraction, LC-MS & GC-MS

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<b>Waste Water &amp; Chemical</b>	Chemical Testing	Halogenated Solvents	USEPA 8260D GC-MS
	Chemical Testing	2- (2-Aminoethylamino) ethanol (AEEA)	Tti/ORG/SOP-46, Liquid extraction, LC-MS/MS
	Chemical Testing	Diazene-1,2-dicarboxa mide [C, C`-azodi (formamide)] (ADCA)	Tti/ORG/SOP-46 Liquid extraction, GC-MS / LC- MS/MS
	Chemical Testing	Thiourea	Liquid extraction, LC-MS/MS
	Chemical Testing	UV Absorbers	USEPA 8270 ISO 22032, USEPA 8321B, GC-MS
	Chemical Testing	Siloxane	TEGEWA method, Solvent Extraction, GC-MS
	Chemical Testing	Organic Solvents (DMAC, DMFa, NEP, NMP)	ISO/TS 16189, USEPA 5021A GC-MS
<b>Food &amp; Feed samples</b>	Chemical Testing	Pesticides Residues Analysis (Carbendazim, Tebuconazole, Triazophos, Choloropyriphos, Acetamyprid, Amidacloprid, Tricyclazole, Pendimethiline, Metolachlor, Profenophos, Difenoconazole)	Tti/SOP/FTL-01 based on EN 15662: 2018
	Chemical Testing	Aflatoxin (B1, B2, G1)	Tti/SOP/FTL-02 AOAC 990.34 & ISO 16050
	Chemical Testing	Heavy Metals (Pb, Cd, As, Hg, Fe, Cu, Cr, Mn, Zn, Co)	AOAC 999.10, 975.03, 985.01, 984.27
<b>Food, Water &amp; other relevant matrix</b>	Microbial Testing	Total Coliform	APHA 9221B, EN ISO 9308-1, BAM Ch 4
	Microbial Testing	Faecal Coliform	APHA 9221E
	Microbial Testing	E. coli	BAM Ch 4, EN ISO 9308-1
	Microbial Testing	Total Plate Count / Aerobic Colony Count	MFHPB-18, APHA-9215B

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<b>Food, Water &amp; other relevant matrix</b>	Microbial Testing	Detection of Salmonella spp.	BAM Ch 5, ISO 6579
	Microbial Testing	Enumeration of Staph aureus	ISO 6888-1, MFHPB-21
	Microbial Testing	Enumeration of Yeast & molds	MFHPB-22, BAM Ch 18, ISO 21527
	Microbial Testing	Detection of Listeria monocytogenes	BAM Ch 10, ISO 11290
	Microbial Testing	Enumeration of Bacillus Cereus	BAM Ch 14, ISO 7932:2020
	Microbial Testing	Detection of Campylobacter	ISO 10272-1/BAM Ch. 07
<b>Pharma &amp; Cosmeceutical Products</b>	Microbial Testing	Detection of E. coli	ISO 21150:2015 Amndt 1 :2022 USP 62
	Microbial Testing	Detection of Staph aureus	ISO 22718:2015 Amndt 1 :2022 USP 62
	Microbial Testing	Detection of Pseudomonas aeruginosa	ISO 22717: 2015/ Amndt1 :2022 USP 62
	Microbial Testing	Detection of Candida Albicans	ISO 18416:2015/ Amndt 1 :2022 USP 62
	Microbial Testing	Total aerobic microbial count	ISO 21149:2015 / Ama 1 :2022 USP 61
	Chemical Testing	Nitrosamines (NDMA, NDEA)	FY18-176-DPA-S, FY20-058-DPA-S
	Chemical Testing	Diethylene glycol (DEG) and Mono Ethylene Glycol (MEG) in Propylene glycol, Glycerin & Sorbitol	USP-NF (Glycerin, Sorbitol, Propylene glycol Monographs)

04-12-2024  
Date

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Sd  
Director