Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-14277-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: **24.09.2021**

Date of issue: 01.04.2022

Holder of certificate:

Hohenstein Textile Testing Institute GmbH & Co. KG
Schloss Hohenstein, 74357 Bönnigheim

Tests in the fields:

Tests on fibers, yarns, fabrics, clothing and leather in the field of textile technology;
Chemical tests of textile products, textile accessories and leather;
Testing of products on harmful substances according to STANDARD 100, LEATHER STANDARD and ECO PASSPORT by OEKO-TEX®;
Selected chemical tests on water, wastewater and eluates;
Sample preparation and determination of lead in metal and non-metal products for children and adults, in colours and coloured surfaces according to the specifications of the United States Consumer Product Safety Commission, CPSC;
Burning behaviour of apparel textiles and children's sleeping bags according to the specifications of the United States Consumer Product Safety Commission, CPSC
Determination of organic compounds according to the specifications of the United States Consumer Product Safety Commission, CPSC
Chemical and physical tests on the safety of selected toys

The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories. Laboratories that conform to the requirements of this standard, operate generally in accordance with the principles of DIN EN ISO 9001.

The certificate together with the annex reflects the status as indicated by the date of issue.
The current status of any given scope of accreditation can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle GmbH at https://www.dakks.de/en/content/accredited-bodies-dakks.

Within the given testing field marked with [1), 2), 3)], the testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, the following:

1) **the free choice of standard or equivalent testing methods.**
2) **the modification, development and refinement of testing methods.**
3) **to use standards or equivalent testing methods listed here with different issue dates**

The listed testing methods are exemplary. The testing laboratory maintains a current list of all testing methods within the flexible scope of accreditation.

Content

#) This accreditation does replace neither the approval procedure nor the approval procedure of the proper authority according to the legal requirements.

1 Textile technology tests

1.1 Colour fastnesses [3)]

DIN 53160-1 2010-10	Determination of the colour fastness of articles for common use – Part 1: Test with artificial saliva
DIN 53160-2 2010-10	Determination of the colour fastness of articles in common use – Part 2: Test with artificial sweat
DIN 54034 2018-04	Testing of colour fastness of textiles – Determination of colour fastness of dyeings and prints to bleaching: Hypochlorite (mild)
DIN 54056 2017-11	Testing of colour fastness of textiles – Determination of colour fastness of dyeings and prints to sublimation in storage
DIN EN 20105-A02 1994-10	Textiles – Tests for colour fastness – Part A02: Grey scale for assessing change in colour
DIN EN 20105-N01 1995-03	Textiles – Tests for colour fastness – Part N01: Colour fastness to bleaching: Hypochlorite
DIN EN ISO 105-A01 2010-05	Textiles – Tests for colour fastness – Part A01: General principles of testing
DIN EN ISO 105-A03 2020-02	Textiles – Tests for colour fastness – Part A03: Grey scale for assessing staining
DIN EN ISO 105-A04 1999-10	Textiles – Tests for colour fastness – Part A04: Method for the instrumental assessment of the degree of staining of adjacent fabrics
DIN EN ISO 105-A05 1997-07	Textiles – Tests for colour fastness – Part A05: Instrumental assessment of change in colour for determination of grey scale rating
DIN EN ISO 105-B02 2014-11	Textiles – Tests for colour fastness – Part B02: Colour fastness to artificial light: Xenon arc fading lamp test
DIN EN ISO 105-B04 1997-05	Textiles – Tests for colour fastness – Part B04: Colour fastness to artificial weathering: Xenon arc fading lamp test
DIN EN ISO 105-B05 1995-12	Textiles – Tests for colour fastness – Part B05: Detection and assessment of photochromism

DIN EN ISO 105-B07 2009-10	Textiles – Tests for colour fastness – Part B07: Colour fastness to light of textiles wetted with artificial perspiration
DIN EN ISO 105-C06 2010-08	Textiles – Tests for colour fastness – Part C06: Colour fastness to domestic and commercial laundering
DIN EN ISO 105-C08 2010-08	Textiles – Tests for colour fastness – Part C08: Colour fastness to domestic and commercial laundering using a non-phosphate reference detergent incorporating a low-temperature bleach activator
DIN EN ISO 105-C10 2007-06	Textiles – Tests for colour fastness – Part C10: Colour fastness to washing with soap or soap and soda
DIN EN ISO 105-D01 2010-10	Textiles – Tests for colour fastness – Part D01: Colour fastness to dry cleaning using perchloroethylene solvent
DIN EN ISO 105-E01 2013-06	Textiles – Tests for colour fastness – Part E01: Colour fastness to water
DIN EN ISO 105-E02 2013-06	Textiles – Tests for colour fastness – Part E02: Colour fastness to sea water
DIN EN ISO 105-E03 2010-08	Textiles – Tests for colour fastness – Part E03: Colour fastness to chlorinated water (swimming-pool water)
DIN EN ISO 105-E04 2013-08	Textiles – Tests for colour fastness – Part E04: Colour fastness to perspiration
DIN EN ISO 105-E06 2006-10	Textiles – Tests for colour fastness – Part E06: Colour fastness to spotting: Alkali
DIN EN ISO 105-E07 2010-08	Textiles – Tests for colour fastness – Part E07: Colour fastness to spotting: Water
DIN EN ISO 105-N02 2018-12	Textiles – Tests for colour fastness – Part N02: Colour fastness to bleaching: Peroxide
DIN EN ISO 105-P01 1995-04	Textiles – Tests for colour fastness – Part P01: Colour fastness to dry heat (excluding pressing)
DIN EN ISO 105-X05 1997-05	Textiles – Tests for colour fastness – Part X05: Colour fastness to organic solvents
DIN EN ISO 105-X11 1996-10	Textiles – Tests for colour fastness – Part X11: Colour fastness to hot pressing

DIN EN ISO 105-X12 2016-11	Textiles – Tests for colour fastness – Part X12: Colour fastness to rubbing
DIN EN ISO 11640 2018-11	Leather – Tests for colour fastness – Colour fastness to cycles of to-and-fro rubbing
DIN EN ISO 11641 2013-02	Leather – Tests for colour fastness – Colour fastness to perspiration
DIN EN ISO 11642 2013-02	Leather – Tests for colour fastness – Colour fastness to water
DIN EN ISO 11643 2009-10	Leather – Tests for colour fastness – Colour fastness of small samples to solvents
DIN EN ISO 12947-4 2007-04	Textiles – Determination of abrasion resistance of fabrics by the Martindale method – Part 4: Assessment of appearance change
DIN EN ISO 15700 1999-10	Leather – Tests for colour fastness – Colour fastness to water spotting
ASU B 82.02-13 2011-12	Analysis of commodity goods – testing of colour fastness of commodity goods. Part 2: Testing of the sweat simulants (Assumption of the same name standard DIN 53160-2, edition October 2010)
ASU B 82.10-1 2011-12	Analysis of commodity goods; testing of coloured children's toys with respect to their resistance to saliva and perspiration (Assumption of the same name standard DIN 53160, edition June 1974)
ASU B 82.92-3 2011-12	Analysis of commodity goods – testing of colour fastness of commodity goods. Part 1: Testing of the sweat simulants (Assumption of the same name standard DIN 53160-1, edition October 2010)

1.2 Physical testing of textiles [2)]

The test range of the flexible accreditation is characterized by the measures listed in the table below.

Unit	Measuring range
Pressure	50 to 2500 Pa
	2.5 kPa to 100 kPa
	10 kPa to 4000 kPa
Mass	0.001 mg to 1.0 g
	1.0 g to 2.0 g
	0.1 g to 100 g
	100 g to 300 g
	300 g to 6000 g
	1 kg to 50 kg
Force	0.04 N to 10 000 N
Length / Thickness	5 to 100 µm
	0.1 to 5 mm
	1 mm to 150 cm
	1 cm to 5 m
Temperature / Humidity	- 20°C to 110°C
	110°C to 800°C
	0 to 60°C
	5 to 95 % r.H.
Duration	from 5 s to 2 h

Characteristic test procedures:

DIN 53830-3 1981-05	Testing of textiles; determination of linear density of single and plied yarns; simple yarns and plied yarns, textured yarns, short length method
DIN 53859-5 1992-12	Testing of textiles; tear growth test on textile fabrics; trapezoid test
DIN 75200 1980-09	Determination of burning behaviour of interior materials in motor vehicles
DIN EN 1021-1 2014-10	Furniture – Assessment of the ignitability of upholstered furniture – Part 1: Ignition source smouldering cigarette
DIN EN 1021-2 2014-10	Furniture – Assessment of the ignitability of upholstered furniture – Part2: Ignition source match flame equivalent
DIN EN 1049-2 1994-02	Textiles; woven fabrics; construction; methods of analysis; part 2: determination of number of threads per unit length
DIN EN 1101 2005-09	Textiles and textile products – Burning behaviour – Curtains and drapes – Detailed procedure to determine the ignitability of vertically oriented specimens (small flame)
DIN EN 1102 2016-10	Textiles and textile products – Burning behaviour – Curtains and drapes – Detailed procedure to determine the flame spread of vertically oriented specimens
DIN EN 1103 2006-03	Textiles – Fabrics for apparel – Detailed procedure to determine the burning behaviour
DIN EN 12127 1997-12	Textiles – Fabrics – Determination of mass per unit area using small samples
DIN EN 14878 2007-08	Textiles – Burning behaviour of children's nightwear – Specification
DIN EN 14971 2006-04	Textiles – Knitted fabrics – Determination of number of stitches per unit length and unit area
DIN EN 1773 1997-03	Textiles – Fabrics – Determination of width and length
DIN EN ISO 811 2018-08	Determination of resistance of textile fabrics to water penetration; hydrostatic pressure test

DIN EN 22313 1992-08	Textiles; determination of the recovery form creasing of a horizontally folded specimen by measuring the angle of recovery
DIN EN 29073-1 1992-08	Textiles; test method for nonwovens; part 1: determination of mass per unit area
DIN EN 29073-3 1992-08	Textiles; test method for nonwovens; part 3: determination of tensile strength and elongation
DIN EN ISO 12945-1 2001-08	Textiles – Determination of fabric propensity to surface fuzzing and to pilling – Part 1: Pilling box method
DIN EN ISO 12945-2 2000-11	Textiles – Determination of fabric propensity to surface fuzzing and to pilling – Part 2: Modified Martindale method
DIN EN ISO 12947-2 2017-03	Textiles – Determination of the abrasion resistance of fabrics by the Martindale method – Part 2: Determination of specimen breakdown
DIN EN ISO 12947-3 2007-04	Textiles – Determination of abrasion resistance of fabrics by the Martindale method – Part 3: Determination of mass loss
DIN EN ISO 12947-4 2007-04	Textiles – Determination of abrasion resistance of fabrics by the Martindale method – Part 4: Assessment of appearance change
DIN EN ISO 137 2016-09	Wool – Determination of fibre diameter – Projection microscope method
DIN EN ISO 13934-1 2013-08	Textiles – Tensile properties of fabrics – Part 1: Determination of maximum force and elongation at maximum force using the strip method
DIN EN ISO 13934-2 2014-06	Textiles – Tensile properties of fabrics – Part 2: Determination of maximum force using the grab method
DIN EN ISO 13935-1 2014-07	Textiles – Seam tensile properties of fabrics and made-up textile articles – Part 1: Determination of maximum force to seam rupture using the strip method
DIN EN ISO 13935-2 2014-07	Textiles – Seam tensile properties of fabrics and made-up textile articles – Part 2: Determination of maximum force to seam rupture using the grab method
DIN EN ISO 13936-1 2004-07	Textiles – Determination of the slippage resistance of yarns at a seam in woven fabrics – Part 1: Fixed seam opening method

DIN EN ISO 13936-2 2004-07	Textiles – Determination of the slippage resistance of yarns at a seam in woven fabrics – Part 2: Fixed load method
DIN EN ISO 13937-1 2000-06	Textiles – Tear properties of fabrics – Part 1: Determination of tear force using ballistic pendulum method (Elmendorf)
DIN EN ISO 13937-2 2000-06	Textiles – Tear properties of fabrics – Part 2: Determination of tear force of trouser-shaped test specimens (single tear method)
DIN EN ISO 13937-3 2000-06	Textiles – Tear properties of fabrics – Part 3: Determination of tear force of wing-shaped test specimens (Single tear method)
DIN EN ISO 13937-4 2000-06	Textiles – Tear properties of fabrics – Part 4: Determination of tear force of tongue-shaped test specimens (Double tear test)
DIN EN ISO 13938-2 2020-03	Textiles – Bursting properties of fabrics – Part 2: Pneumatic method for determination of bursting strength and bursting distension
DIN EN ISO 1421 2017-03	Rubber- or plastics-coated fabrics – Determination of tensile strength and elongation at break
DIN EN ISO 14419 2010-08	Textiles – Oil repellency – Hydrocarbon resistance test
DIN EN ISO 15487 2018-12	Textiles – Method for assessing appearance of apparel and other textile end products after domestic washing and drying
DIN EN ISO 2060 1995-04	Textiles – Yarn from packages – Determination of linear density (mass per unit length) by the skein method
DIN EN ISO 2061 2015-12	Textiles – Determination of twist in yarns – Direct counting method
DIN EN ISO 2062 2010-04	Textiles – Yarns from packages – Determination of single-end breaking force and elongation at break using constant rate of extension (CRE) tester
DIN EN ISO 3759 2011-08	Textiles – Preparation, marking and measuring of fabric specimens and garments in tests for determination of dimensional change
DIN EN ISO 4674-1 2017-03	Rubber- or plastics-coated fabrics – Determination of tear resistance – Part 1: Constant rate of tear methods
DIN EN ISO 4674-2 1998-10	Rubber- or plastics-coated fabrics – Determination of tear resistance – Part 2: Ballistic pendulum method

DIN EN ISO 4920 2012-12	Textile fabrics – Determination of resistance to surface wetting (spray test)
DIN EN ISO 5077 2008-04	Textiles – Determination of dimensional change in washing and drying
DIN EN ISO 5084 1996-10	Textiles – Determination of thickness of textiles and textile products
DIN EN ISO 6330 2013-02	Textiles – Domestic washing and drying procedures for textile testing
DIN EN ISO 6940 2004-06	Textile fabrics – Burning behaviour – Determination of ease of ignition of vertically oriented specimens
DIN EN ISO 6941 2004-05	Textile fabrics – Burning behaviour – Measurement of flame spread properties of vertically oriented specimens
DIN EN ISO 9237 1995-12	Textile fabrics – Burning behaviour – Measurement of flame spread properties of vertically oriented specimens
AATCC Testmethode 193 2016	Aqueous Liquid Repellency: Water/Alcohol Solution Resistance Test
ASTM D 1230 - 2010 (Reapproved 2016)	Standard Test Method for Flammability of Apparel Textiles
16 CFR Part 1610 2008-10	Standard for the flammability of clothing textiles
16 CFR Part 1615 and 1616 2010-07	Standard for the flammability of children sleepwear, size 0 through 6+ Standard for the flammability of children sleepwear, size 7 through 14

2 Chemical tests on textile products and textile accessories

2.1 Sample preparation for physical-chemical tests

Test type	Matrix	Analyte/ testing parameter	Characteristic test procedures
Extraction for physical-chemical tests [1)]	Textile products, Textile accessories, Costumer goods	Metals	DIN EN 12472: 2020-11 Method for the simulation of accelerated wear and corrosion for the detection of nickel release from coated items DIN EN 13346: 2001-04 Characterization of sludges – Determination of trace elements and phosphorus – Aqua regia extraction methods (Here: textile products and textile accessories)

Digestion [1)]	Textile products, Textile accessories	Metals	DIN EN 13657: 2003-01 Characterization of waste – Digestion for subsequent determination of aqua regia soluble portion of elements in waste CPSC-CH-E1001-08.3: 2012-11 Standard Operating Procedure for Determining Lead (Pb) in Children's Metal Products (Including Children's Metal Jewelery) (Here: Sample preparation only) CPSC-CH-E1002-08.3: 2012-11 Standard Operating Procedure for Determining Lead (Pb) in Non-Metal Children's Products, (Here: Sample preparation only) CPSC-CH-E1003-09.1: 2011-02 Standard Operating Procedure for Determining Lead (Pb) in Paint and other Similar Surface Coatings (Here: Sample preparation only CPSC-CH-E1004-11: 2011-03 Standard Operation Procedure for Determining Cadmium (Cd) Extractability from Children's Metal Jewelry HC Part B: Method C-02.2: 2016-10 Determination of Total Lead in Surface Coating Materials by Closed Vessel Microwave Digestion (Here: Sample preparation only) HC Part B: Method C-02.3: 2013-06 Determination of Total Lead in Polyvinyl Chloride Products by Closed Vessel Microwave Digestion (Here: Sample preparation only) HC Part B: Method C-02.4: 2013-05 Determination of Total Lead in Metallic Consumer Products (Here: Sample preparation only)

Cleanup [3)]	Leather	Dry matter	DIN EN ISO 4684: 2006-02 Leather – Chemical tests – Determination of volatile matter

2.2 Physical-chemical tests [3)]

DIN EN ISO 3071 2020-05	Textiles – Determination of pH of aqueous extract
DIN EN ISO 4045 2018-09	Leather – Chemical tests – Determination of pH

2.3 Quantitative determination or shares of textile mixtures by gravimetry [3)]

DIN 54204 1975-08	Testing of textiles; quantitative analysis of binary mixtures, wool with other fibres, potassium hydroxide solution method
DIN 54209 1975-08	Testing of textiles; quantitative analysis of binary mixtures, degummed mulberry silk with wool, formic acid/zinc chloride method
DIN 54221 1975-08	Testing of textiles; quantitative analysis of binary mixtures, polyamide 6 6 or polyamide 6 fibres with other fibres, hydrochloric acid method
DIN EN ISO 1833-1 2011-01	Textiles – Quantitative chemical analysis – Part 1: General principles of testing
DIN EN ISO 1833-2 2011-01	Textiles – Quantitative chemical analysis – Part 2: Ternary fibre mixtures
DIN EN ISO 1833-3 2019-10	Textiles – Quantitative chemical analysis – Part 3: Mixtures of acetate and certain other fibres (method using acetone)
DIN EN ISO 1833-4 2017-12	Textiles – Quantitative chemical analysis – Part 4: Mixtures of certain protein fibres with certain other fibres (method using hypochlorite)
DIN EN ISO 1833-6 2019-07	Textiles – Quantitative chemical analysis – Part 6: Mixtures of viscose or certain types of cupro or modal or lyocell and cotton fibres (method using formic acid and zinc chloride)
DIN EN ISO 1833-7 2017-12	Textiles – Quantitative chemical analysis – Part 7: Mixtures of polyamide with certain other fibres (method using formic acid)
DIN EN ISO 1833-11 2017-12	Textiles – Quantitative chemical analysis – Part 11: Mixtures of certain cellulose fibres with certain other fibres (method using sulfuric acid)
DIN EN ISO 1833-12 2019-10	Textiles – Quantitative chemical analysis – Part 12: Mixtures of acrylic, certain modacrylics, certain chlorofibres, certain elastane fibres with certain other fibres (method using dimethylformamide)
DIN EN ISO 1833-16 2011-01	Textiles – Quantitative chemical analysis – Part 16: Mixtures of polypropylene fibres and certain other fibres (method using xylene)
DIN EN ISO 1833-18 2011-01	Textiles – Quantitative chemical analysis – Part 18: Mixtures of silk and wool or hair (method using sulfuric acid)

DIN EN ISO 1833-22 2013-07	Textiles – Quantitative chemical analysis – Part 22: Mixtures of viscose or certain types of cupro or modal or lyocell and flax fibres (method using formic acid and zinc chloride)

2.4 Sample preparation for the element determination with AAS and ICP/MS in eluates and extracts

Test type	Matrix	Analyte/ testing parameter	Characteristic test procedures
Extraction for physical-chemical tests [1)]	Textile products, Textile accessories, Costumer goods	Metals	DIN EN 12472: 2020-11 Method for the simulation of accelerated wear and corrosion for the detection of nickel release from coated items; German version DIN EN 13346: 2001-04 Characterization of sludges – Determination of trace elements and phosphorus – Aqua regia extraction methods (Here: Textile products and textile accessories)
Digestion [1)]	Textile products, Textile accessories	Metals	DIN EN 13657: 2003-01 Characterization of waste – Digestion for subsequent determination of aqua regia soluble portion of elements in waste CPSC-CH-E1001-08.3: 2012-11 Standard Operating Procedure for Determining Lead (Pb) in Children's Metal Products (Including Children's Metal Jewelry) (Here: Sample preparation only) CPSC-CH-E1002-08.3: 2012-11 Standard Operating Procedure for Determining Lead (Pb) in Non-Metal Children's Products, (Here: Sample preparation only) CPSC-CH-E1003-09.1: 2011-02

Test type	Matrix	Analyte/ testing parameter	Characteristic test procedures
Digestion [1)]	Textile products, Textile accessories	Metals	Standard Operating Procedure for Determining Lead (Pb) in Paint and other Similar Surface Coatings (Here: Sample preparation only) CPSC-CH-E1004-11: 2011-03 Standard Operation Procedure for Determining Cadmium (Cd) Extractability from Children's Metal Jewelry HC Part B: Method C-02.2: 2016-10 Determination of Total Lead in Surface Coating Materials by Closed Vessel Microwave Digestion (Here: Sample preparation only) HC Part B: Method C-02.3: 2013-06 Determination of Total Lead in Polyvinyl Chloride Products by Closed Vessel Microwave Digestion (Here: Sample preparation only) HC Part B: Method C-02.4: 2013-05 Determination of Total Lead in Metallic Consumer Products (Here: Sample preparation only)
Cleanup [3)]	Leather	Dry matter	DIN EN ISO 4684: 2006-02 Leather – Chemical tests – Determination of volatile matter

2.5 Element determination in eluates and extracts

2.5.1 by means of AAS [1)]

Test type	Matrix	Analyte/ testing parameter	Characteristic test procedures
Atomic absorption spectrometry	Textile products, Textile accessories, Costumer goods	Metals	DIN 38405-D35: 2004-09 Determination of arsenic – Method by graphite furnace atomic absorption spectrometry (GF-AAS) (Here: Determination in eluate and extracts according paragraph 2.1) DIN EN ISO 12846: 2012-08 Water quality – Determination of mercury – Method using atomic absorption spectrometry (AAS) with and without enrichment

2.5.2 by means of ICP/MS [2)]

Test type	Matrix	Analyte/ testing parameter	Characteristic test procedures
Inductively coupled plasma mass spectrometry (ICP-MS)	Textile products, Textile accessories, Costumer goods	Metals	DIN EN 16711-1: 2016-02 Textiles – Determination of metal content – Part 1: Determination of metals using microwave digestion (Modification: 7 additional analytes (Se, Mn, Zn, Sn, Ba, Ag, Fe)) DIN EN 16711-2: 2016-02 Textiles – Determination of metal content – Part 2: Determination of metals extracted by acidic artificial perspiration solution (Modification: 4 additional analytes (Ag, Sn, Zn, Mn))

DIN EN 1811 2015-10	Reference test method for release of nickel from all post assemblies which are inserted into pierced parts of the human body and articles intended to come into direct and prolonged contact with the skin

DIN EN ISO 17072-1 2019-07	Leather – Chemical determination of metal content – Part 1: Extractable metals
DIN EN ISO 17072-2 2019-07	Leather – Chemical determination of metal content – Part 2: Total metal content
DIN EN ISO 17294-2 (E29) 2017-01	Water quality – Application of inductively coupled plasma mass spectrometry (ICP-MS) – Part 2: Determination of selected elements including uranium isotopes (Here: Determination in eluate and extracts according paragraph 2.1)
ASTM F 963 2017	4.3.5.1 Paint and similar surface – Coating Materials 4.3.5.2 Toys Substrate Materials

2.6 Sample preparation for the determination of organic compounds

Test type	Matrix	Analyte/ testing parameter	Characteristic test procedures
Extraction for physical-chemical tests[2)]	Textile products, Textile accessories, Leather, Plant materials	Organic compounds	DIN 38407-37: 2013-11 German standard methods for the examination of water, waste water and sludge – Jointly determinable substances (group F) – Part 37: Determination of organochlorine pesticides, polychlorinated biphenyls and chlorobenzene in water – Method using gas chromatography and mass spectrometric detection (GC-MS) after liquid-liquid extraction (F 37) (Here: Extraction process only; Modification: Extraction process) DIN EN 17132: 2019-09 Textiles and textile products – Determination of Polycyclic Aromatic Hydrocarbons (PAH), method using gas chromatography DIN 38414-14: 2011-08 Determination of selected polyfluorinated compounds (PFC) in sludge, compost and soil – Method using high performance liquid chromatography and mass spectrometric detection (HPLC-MS/MS) (Here: Extraction process only; Modification: Extraction process, solvent volume, extraction temperature, sample quantities, sample preparation) DIN 50009: 2021-01 Textiles – Determination of tetrachlorophenol-, trichlorophenol-, dichlorophenol-, monochlorophenol-isomers and pentachlorophenol content Modification: Microwave extraction)

Test type	Matrix	Analyte/ testing parameter	Characteristic test procedures
Extraction for physical-chemical tests[2)]	Textile products, Textile accessories, Leather, Plant materials	Organic compounds	DIN EN 14362-1: 2017-05 Textiles – Methods for determination of certain aromatic amines derived from azo colorants – Part 1: Detection of the use of certain azo colorants accessible with and without extracting the fibres (Here: Extraction process only; Modification: Extraction process and extraction solution) DIN EN 14362-3: 2017-05 Textiles – Methods for the determination of certain aromatic amines derived from azo colorants – Part 3: Detection of the use of certain azo colorants, which may release 4-aminoazobenzene (Here: Extraction process only; Modification: Extraction process and extraction solution) DIN EN ISO 14389: 2014-10 Textiles – Determination of the phthalate content – Tetrahydrofuran method (Here: Extraction process only; Modification: Sample quantities, extraction process) DIN EN ISO 17234-1: 2020-12 Leather – Chemical tests for the determination of certain azo colorants in dyed leathers – Part 1: Determination of certain aromatic amines derived from azo colorants (Here: Extraction process only; Modification: Extraction process and extraction solution) DIN EN ISO 17234-2:2011-06 Leather – Chemical tests for the determination of certain azo colorants in

Test type	Matrix	Analyte/ testing parameter	Characteristic test procedures
			dyed leathers – Part 2: Determination of 4-aminoazobenzene (Here: Extraction process only; Modification: Extraction process and extraction solution) DIN EN ISO 22744-1: 2020-09 Textiles and textile products – Determination of organotin compounds – Part 1: Derivatisation method using gas chromatography (ISO 22744-1:2020) DIN EN 17137: 2019-02 Textiles – Determination of the content of compounds based on chlorobenzenes and chlorotoluenes (Here: Extraction process only; Modification: Extraction process, extraction solution) DIN 54603: 2008-08 Testing of paper, paperboard and board – Determination of glyoxal content (Modification: Extraction of textile products, textile accessories, leather, plant materials) DIN ISO 16308: 2017-09 Water quality – Determination of glyphosate and AMPA – Method using high performance liquid chromatography (HPLC) with tandem mass spectrometric detection (Here: Extraction process only; Modification: Extraction process, extraction solution)) SOP-QM-11 0 02 A3 028: 2020-03 Determination of Azodicarbonamide in textiles, leather and accessories according to STANDARD 201 by OEKO-TEX®

Test type	Matrix	Analyte/ testing parameter	Characteristic test procedures
			(Here: Extraction process only)
Elution [3)]	Textilies Leather		DIN EN ISO 17881-2: 2016-09 Textiles – Determination of certain flame retardants – Part 2: Phosphorus flame retardants (Here: Elution; Modification: Eluent)

2.7 Determination of organic compounds by means of gas chromatography with mass selective detectors (GC/MS) [2)]

Test type	Matrix	Analyte/ testing parameter	Characteristic test procedures
Gas chromatography with mass selective detectors (GC-MS)	Textile products, Textile accessories, Leather, Plant materials	Organic compounds	DIN 38407-37: 2013-11 German standard methods for the examination of water, waste water and sludge – Jointly determinable substances (group F) – Part 37: Determination of organochlorine pesticides, polychlorinated biphenyls and chlorobenzene in water – Method using gas chromatography and mass spectrometric detection (GC-MS) after liquid-liquid extraction (F 37) (Here: Determination in extracts of fibre, textile and leather; Modification: Analyte quantities (59)) DIN EN 17132: 2019-09 Textiles and textile products – Determination of Polycyclic Aromatic Hydrocarbons (PAH), method using gas chromatography DIN 50009: 2021-01 Textiles – Determination of tetrachlorophenol-, trichlorophenol-, dichlorophenol-, monochlorophenol-isomers and pentachlorophenol content DIN EN 14362-1: 2017-05 Textiles – Methods for determination of certain aromatic amines derived from azo colorants – Part 1: Detection of the use of certain azo colorants accessible with and without extracting the fibres (Modification: Additional determination of carcinogenic arylamines)

Test type	Matrix	Analyte/ testing parameter	Characteristic test procedures
			DIN EN ISO 11890-2: 2020-12 Paints and varnishes – Determination of volatile organic compounds (VOC) and/or semi volatile organic compounds (SVOC) content – Part 2: Gas-chromatographic method (Here: Determination in fibre, textile and leather samples; Modification: Determination of VOC, chlorinated solvents und glycols) DIN EN ISO 14389: 2014-10 Textiles – Determination of the phthalate content – Tetrahydrofuran method (Modification: Analyte quantities e.g. Tris (2-chlorethyl) phosphate) DIN EN ISO 17234-1: 2020-12 Leather – Chemical tests for the determination of certain azo colorants in dyed leather – Part 1: Determination of certain aromatic amines derived from azo colorants (Modification: Additional determination of carcinogenic arylamines) DIN EN ISO 17881-1: 2016-09 Textiles – Determination of certain flame retardants – Part 1: Brominated flame retardants (Here: Determination in fibre, textile and leather samples; Modification: Analyte quantities) DIN EN ISO 22744-1: 2020-09 Textiles and textile products – Determination of organotin compounds – Part 1: Derivatisation method using gas chromatography

Test type	Matrix	Analyte/ testing parameter	Characteristic test procedures
			(ISO 22744-1:2020) DIN EN 17137: 2019-02 Textiles – Determination of the content of compounds based on chlorobenzenes and chlorotoluenes (Here: Determination in extracts of fibre, textile and leather; Modification: Determination of mono- and dichlorbenzene) SOP-QM-11 0 02 A3 017: 2021-01 Determination of short chain chlorinated paraffins (SCCP) according to DIN EN ISO 18219 Modification: Determination in fibres, textiles and leather extracts by EI GC-MS/MS or CI GC-MS/S after extraction with a mixture of Dichloromethane and n-hexane according to STANDARD 201 by OEKO-TEX® M-24 + ML-24 and additional testing of medium chain chlorinated paraffins (MCCP) SOP-QM 11 0 02 A3 002: 2020-02 Determination of phthalate content in textiles (Tetrahydrofuran method) according to DIN EN ISO 14389 Modification: Sample preparation according to STANDARD 201 by OEKO-TEX® M-18 and ML-18 and determination of tris(2-chlorethyl)phosphate, bisphenol, UV-Stabilizer A and selected Siloxanes (here: Determination of bisphenol A, UV stabilizers and selected siloxanes) SOP-QM 11 0 02 A3 007: 2019-02 Determination of poly- and perfluorinated compounds in textiles and leather by HPLC-MS und PCI-GC-MS

Test type	Matrix	Analyte/ testing parameter	Characteristic test procedures
			(here: determination of polyfluorinated compounds by PCI-GC-MS)

DIN EN 14362-3 2017-05	Textiles – Methods for determination of certain aromatic amines derived from azo colorants – Part 3: Detection of the use of certain azo colorants, which may release 4-aminoazobenzene
DIN EN 16778 2016-10	Protective gloves – The determination of Dimethylformamide in gloves
DIN EN 17130 2019-09	Textiles and textile products – Determination of dimethylfumarate (DMFu), method using gas chromatography
DIN EN ISO 16000-9 2008-04	Indoor air – Part 9: Determination of the emission of volatile organic compounds from building products and furnishing – Emission test chamber method (Here: Determination in fibre, textile and leather samples)
DIN EN ISO 17070 2015-05	Leather – Chemical tests – Determination of tetrachlorophenol-, trichlorophenol-, dichlorophenol-, monochlorophenol-isomers and pentachlorophenol content (Here: Determination in fibre, textile and leather samples)
DIN EN ISO 17234-2 2011-06	Leather – Chemical tests for the determination of certain azo colorants in dyed leathers – Part 2: Determination of 4-aminoazobenzene
DIN CEN ISO/TS 16186 2012-12	Footwear – Critical substances potentially present in footwear and footwear components – Test method to quantitatively determine dimethylfumarate (DMFU) in footwear materials (Here: Determination in fibre, textile and leather samples)
DIN CEN ISO/TS 16189 2013-12	Footwear – Critical substances potentially present in footwear and footwear components – Test method to quantitatively determine dimethylformamide in footwear materials (Here: Determination in fibre, textile and leather samples)
DIN CEN ISO/TS 16190 2013-12	Footwear – Critical substances potentially present in footwear and footwear components – Test method for quantitatively determine polycyclic aromatic hydrocarbons (PAH) in footwear materials

DIN ISO 16000-6 2012-11	Indoor air – Part 6: Determination of volatile organic compounds in indoor and test chamber air by active sampling on Tenax TA® sorbent, thermal desorption and gas chromatography using MS or MS-FID
ASU B 82.02-2 2017-12	Analysis of commodity goods – Methods for determination of certain aromatic amines in textiles derived from azo colourants – Part 1: Detection of the use of certain azo colourants accessible with and without extracting the fibres (Assumption of the same name standard DIN EN 14362 part 1, edition May 2017)
ASU B 82.02-3 2016-07	Analysis of commodity goods – Method for the determination of certain azo colourants in dyed leather – Part 1: Determination of certain aromatic amines from azo dyes (Assumption of the same name standard DIN EN ISO 17234-1, edition July 2015)
ASU B 82.02-9 2014-02	Analysis of commodity goods – Method for the determination of certain azo colourants in dyed leather – Part 2: Determination of 4-amino azobenzene (Assumption of the same name standard DIN EN ISO 17234-2, edition June 2011)
ASU B 82.02-15 2017-12	Analysis of commodity goods – Method for the determination of certain aromatic amines in textiles derived from azo colourants – Part 3: Proof of the use of azo colourants that may release 4-aminoazobenzole (Assumption of the same name standard DIN EN 14362 Part 3, edition May 2017)
AFPS GS 2019:01 PAK	Evaluation and assessment of polycyclic aromatic hydrocarbons (PAK) at awarding of the GS mark

2.8 Determination of organic compounds by means of liquid chromatography

2.8.1 by means of HPLC-DAD [2)]

Test type	Matrix	Analyte/ testing parameter	Characteristic test procedures
Liquid chromatography with conventional detectors (HPLC-DAD)	Textile products, Textile accessories, Leather, Plant materials	Organic compounds	DIN EN ISO 13365-1: 2020-12 Leather – Chemical determination of the preservative (TCMTB, PCMC, OPP, OIT) content in leather by liquid chromatography – Part 1: Acetonitrile extraction method (Here: Determination in extracts of fibre, textile and leather; Modification: Additional determination of Triclosan and 2-MBT) DIN 54231: 2005-11 Textiles – Detection of disperse dyestuffs (Here: Determination in extracts of fibre, textile and leather; Modification: Analyte quantities) DIN 54603: 2008-08 Testing of paper, paperboard and board – Determination of glyoxal content (Here: Determination in textile, leather and accessories; Detection by means of HPLC-DAD)

DIN EN ISO 17226-1 2019-04	Leather – Chemical determination of formaldehyde content – Part 1: Method using high performance liquid chromatography

ASU B 82.02-2 2017-12	Analysis of commodity goods – Methods for determination of certain aromatic amines in textiles derived from azo colourants – Part 1: Detection of the use of certain azo colourants accessible without extracting the fibres (Assumption of the same name standard DIN EN 14362 part 1, edition May 2017)
ASU B 82.02-3 2016-07	Analysis of commodity goods – Method for the determination of certain azo colourants in dyed leather – Part 1: Determination of certain aromatic amines from azo dyes (Assumption of the same name standard DIN EN ISO 17234-1, edition July 2015)
ASU B 82.02-9 2014-02	Analysis of commodity goods – Method for the determination of certain azo colourants in dyed leather – Part 2: Determination of 4-amino azobenzene (Assumption of the same name standard DIN EN ISO 17234-2, edition June 2011)
ASU B 82.02-15 2017-12	Analysis of commodity goods; Method for the determination of certain aromatic amines in textiles derived from azo colourants – Part 3: proof of the use of azo colourants that may release 4- aminoazobenzole (Assumption of the same name standard DIN EN 14362 Part 3, edition May 2017)
SOP-QM-11 0 02 A3 028 2020-03	Determination of Azodicarbonamide in textiles, leather and accessories according to STANDARD 201 by OEKO-TEX®

2.8.2 by means of HPLC/MS [2)]

Test type	Matrix	Analyte/ testing parameter	Characteristic test procedures
Liquid chromatography with mass-selective detectors (HPLC-MS)	Textile products, Textile accessories, Leather Plant materials	Organic compounds	DIN 38414-14: 2011-08 Determination of selected polyfluorinated compounds (PFC) in sludge, compost and soil – Method using high performance liquid chromatography and mass spectrometric detection(HPLC/MS-MS) (Here: Determination in textile and leather; Modification: Analyte quantities, e.g. PFXS) DIN EN ISO 17881-2: 2016-09 Textiles – Determination of certain flame retardants – Part 2: Phosphorus flame retardants (Here:

Test type	Matrix	Analyte/ testing parameter	Characteristic test procedures
			Determination in textile and leather; Modification: Analyte quantities, e.g. BBMP, V6)) DIN 54231: 2005-11 Textiles – Detection of disperse dyestuffs (Here: Determination in extracts of fibre, textile and leather; Modification: Analyte quantities) DIN EN ISO 18254-1:2016-09 Textiles – Method for the detection and determination of alkylphenol ethoxylates (APEO) – Part 1: Method using HPLC-MS (Modification: Additional determination of alkylphenols, e.g. NP, OP; Use of alternative standards; calculation) DIN ISO 16308: 2017-09 Water quality – Determination of glyphosate and AMPA – Method using high performance liquid chromatography (HPLC) with tandem mass spectrometric detection (Here: Determination in extracts of fibre, textile and leather) SOP-QM 11 0 02 A3 004: 2021-01 Determination of polar pesticides (herbicides, neonicotinoids and aldicarb) in textiles, accessories and leather according to STANDARD 201 by OEKO-TEX® M-6 A & ML-6-A

Test type	Matrix	Analyte/ testing parameter	Characteristic test procedures
			SOP-QM 11 0 02 A2 003: 2021-01 Determination of Disperse dyestuffs and other dyes according to DIN 54231 Modification: Determination of prohibited disperse dyestuffs, other dyes and Quinoline according to STANDARD 201 by OEKO-TEX® M-4-A & ML-4-A as M-4-B & ML-4-B (here: Determimation of Quinolin)

ASU B 82.02-10 2007-03	Analyses of commodity goods – Detection of disperse dyestuffs in textiles (Assumption of the same name standard DIN 54231, edition November 2005)

2.8.3 by means of HPLC/FLD [3)]

DIN EN ISO 14184-1 2011-12	Textiles – Determination of formaldehyde – Part 1: Free and hydrolysed formaldehyde (water extraction method) (Modification: Determination by HPLC-FLD)

2.9 Determination of formaldehyde and chrome (VI) by means of photometry [3)]

DIN EN ISO 14184-1 2011-12	Textiles – Determination of formaldehyde – Part 1: Free and hydrolysed formaldehyde (water extraction method)
DIN EN ISO 17075-1 2017-05	Leather – Chemical determination of chromium(VI) content in leather – Part 1: Colorimetric method (Here: Determination in perspiration eluates of textiles
ISO 10195 2018-05	Leather – Chemical determination of chromium(VI) content in leather – Thermal pre-ageing of leather and determination of hexavalent chromium
JIS L 1041 2011 Harmful Substance-Containing Household Products Control Law Nr. 112	Quantitative determination of free and partly cleavable formaldehyde on finished textiles (acetylacetone method)

2.10 Qualitative and sensorial tests

PW-QM 11.0.02.009 2008-01	Qualitative testing on textiles finished with high-grade finishing based on formaldehyde and glyoxal resin, color reaction
SOP-QM 11.0.02.A5.002 2019-01	Qualitative detection of fluorocarbon resins on finished textiles, sodium nitrate digestion
AW-QM-11.0.03.082 2020-06	Beilstein test: testing of halogen containing compounds
SNV 195 651 2015-09	Textiles: Determination of the development of smells of finishings (sensory test)

3 Physical-chemical and chemical tests of products according to STANDARD 100, LEATHER STANDARD and ECO PASSPORT by OEKO-TEX® [3)]

3.1 Determination of the pH value

DIN EN ISO 3071 2020-05	Textiles – Determination of pH of aqueous extract

3.2 Determination of formaldehyde

3.2.1 Qualitative testing for the presence of formaldehyde

PW-QM 11 0 02 A5 010 2013-04	Qualitative testing of the presence of formaldehyde

3.2.2 Quantitative determination of the content of free and partially releasable formaldehyde

JIS L 1041; Harmful Substances-containing Houshold Products Control Law Nr. 112 2011-07	Quantitative determination of free and partly cleavable formaldehyde on finished textiles (acetylacetone method)

3.3 Determination of heavy metals

DIN EN ISO 17294-2 2017-01	Water quality – Application of inductively coupled plasma mass spectrometry (ICP-MS) – Part 2: Determination of selected elements including uranium isotopes

3.3.1 Extraction with artificial acid sweat solution

DIN EN 1811 2015-10	Reference test method for release of nickel from all post assemblies which are inserted into pierced parts of the human body and articles intended to come into direct and prolonged contact with the skin
DIN EN 12472 2020-11	Method for the simulation of accelerated wear and corrosion for the detection of nickel release from coated items
DIN EN 16711-2 2016-02	Textiles – Determination of metal content – Part 2: Determination of metals extracted by acidic artificial perspiration solution

3.3.2 Digestion of the samples

CPSC-CH-E1001-08.3 2012-11	Standard operation procedure of determination of total lead (Pb) in children´s metal products (Here: Pulping only)
HC Part B: Method C-02.3 2013-06	Determination of Total Lead in Surface Coating Materials by Closed Vessel Microwave Digestion (Here: Pulping only)
DIN EN 16711-1 2016-02	Textiles – Determination of metal content – Part 1: Determination of metals using microwave digestion

3.3.3 Test for chromium (VI)

DIN EN ISO 17075-1 2017-05	Leather – Chemical determination of chromium(VI) content in leather – Part 1: Colorimetric method (Here: Determination in perspiration eluates)
ISO 11083 1994-08	Water quality – Determination of chromium(VI) – Spectrometric method using 1,5-diphenylcarbazide (Here: Determination in perspiration eluates)

3.4 Determination of the content of pesticides

DIN 38407-37 2013-11	German standard methods for the examination of water, waste water and sludge – Jointly determinable substances (group F) – Part 37: Determination of organochlorine pesticides, polychlorinated biphenyls and chlorobenzene in water – Method using gas chromatography and mass spectrometric detection (GC-MS) after liquid-liquid extraction (F 37) (Here: Determination in extracts of fibre, textile and leather)
SOP-QM 11 0 02 A3 004 2021-01	Determination of polar pesticides (herbicides, neonicotinoids and aldicarb) in textiles, accessories and leather according to STANDARD 201 by OEKO-TEX® M-6 A & ML-6-A
DIN ISO 16308 2017-09	Water quality – Determination of glyphosate and AMPA – Method using high performance liquid chromatography (HPLC) with tandem mass spectrometric detection (Here: Determination in extracts of fibre, textile and leather)

3.5 Determination of the content of phenols

DIN 50009 2021-01	Textiles – Determination of tetrachlorophenol-, trichlorophenol-, dichlorophenol-, monochlorophenol-isomers and pentachlorophenol content

3.6 Determination of the content of softeners

DIN EN ISO 14389 2014-10	Textiles – Determination of the phthalate content – Tetrahydrofuran method

3.7 Determination of the content of bisphenol A

SOP-QM 11 0 02 A3 002 2020-02	Determination of phthalate content in textiles (Tetrahydrofuran method) according to DIN EN ISO 14389 Modification: Sample preparation according to STANDARD 201 by OEKO-TEX® M-18 and ML-18 and determination of tris(2-chlorethyl)phosphate, bisphenol, UV-Stabilizer A and selected Siloxanes (here: Determination of Bisphenol A)

3.8 Determination of the content of organic tin compounds

DIN EN ISO 22744-1 2020-09	Textiles and textile products – Determination of organotin compounds – Part 1: Derivatisation method using gas chromatography (ISO 22744-1:2020)

3.9 Determination of the content of DMFu

DIN CEN ISO/TS 16186 2012-12	Footwear – Critical substances potentially present in footwear and footwear components – Test method to quantitatively determine dimethylfumarate (DMFU) in footwear materials (Here: Determination in extracts of fibre, textile and leather)
DIN EN 17130 2019-09	Textiles and textile products – Determination of dimethylfumarate (DMFu), method using gas chromatography

3.10 Determination of the content of quinoline

SOP-QM 11 0 02 A2 003 2020-06	Determination of Disperse dyestuffs and other dyes according to DIN 54231 Modification: Determination of prohibited disperse dyestuffs, other dyes and Quinoline according to STANDARD 201 by OEKO-TEX® M-4-A & ML-4-A as M-4-B & ML-4-B (here: Determination of Quinolin)

3.11 Determination of azodicarbonamide

SOP-QM-11 0 02 A3 028 2020-03	Determination of Azodicarbonamide in textiles, leather and accessories according to STANDARD 201 by OEKO-TEX®

3.12 Determination of phenol

DIN EN ISO 13365-1 2020-12	Leather – Chemical determination of the preservative (TCMTB, PCMC, OPP, OIT) content in leather by liquid chromatography – Part 1: Acetonitrile extraction method (Here: Determination in extracts of fibre, textile and leather; Determination of Phenol)

3.13 Test for human ecologically critical colorants

3.13.1 Test for Azo-colorants, which may be cleaved into arylamines of MAK-group III, categories 1 and 2 under reductive conditions

DIN EN ISO 14362-1 2017-05	Textiles – Methods for determination of certain aromatic amines derived from azo colorants – Part 1: Detection of the use of certain azo colorants accessible with and without extracting the fibres
DIN EN ISO 14362-3 2017-05	Textiles – Methods for determination of certain aromatic amines derived from azo colorants – Part 3: Detection of the use of certain azo colorants, which may release 4-aminoazobenzene
DIN EN ISO 17234-1 2020-12	Leather – Chemical tests for the determination of certain azo colorants in dyed leathers – Part 1: Determination of certain aromatic amines derived from azo colorants
DIN EN ISO 17234-2 2011-06	Leather – Chemical tests for the determination of certain azo colorants in dyed leathers – Part 2: Determination of 4-aminoazobenzene

3.13.2 Test for dyestuffs and pigments, classified as carcinogenic

DIN 54231 2005-11	Textiles – Detection of disperse dyestuffs

3.13.3 Test for dyestuff, classified as allergenic

DIN 54231 2005-11	Textiles – Detection of disperse dyestuffs

3.14 Determination of the content of chlorinated benzenes and toluenes

DIN EN 17137 2019-02	Textiles – Determination of the content of compounds based on chlorobenzenes and chlorotoluenes (Here: Determination in extracts of fibre, textile and leather)

3.15 Determination of the content of PAH

DIN EN 17132 2019-09	Textiles and textile products – Determination of Polycyclic Aromatic Hydrocarbons (PAH), method using gas chromatography

3.16 Determination of flame retardants

DIN EN ISO 17881-1 2016-09	Textiles – Determination of certain flame retardants – Part 1: Brominated flame retardants (Here: Determination in fibre, textile and leather samples; Modification: Analyte quantities)
DIN EN ISO 17881-2 2016-09	Textiles – Determination of certain flame retardants – Part 2: Phosphorus flame retardants (Here: Determination in textile and leather; Modification: Analyte quantities, e.g. BBMP, V6))

3.17 Determination of the content of solvent residues

DIN CEN ISO/TS 16189 2013-12	Footwear – Critical substances potentially present in footwear and footwear components – Test method to quantitatively determine dimethylformamide in footwear materials (Here: Determination in extracts of fibre, textile and leather)
DIN EN ISO 11890-2 2020-12	Paints and varnishes – Determination of volatile organic compounds (VOC) and/or semi volatile organic compounds (SVOC) content – Part 2: Gas-chromatographic method

3.18 Determination of the content of surfactant and wetting agent residues

DIN EN ISO 18254-1 2016-09	Textiles – Method for the detection and determination of alkylphenol ethoxylates (APEO) – Part 1: Method using HPLC-MS (Here: Additional determination of alkylphenols; Use of alternative standards; calculation)

3.19 Determination of the content of poly- and perfluorinated compounds

DIN 38414-14 2011-08	German standard methods for the examination of water, waste water and sludge – Sludge and sediments (group S) – Part 14: Determination of selected polyfluorinated compounds (PFC) in sludge, compost and soil – Method using high performance liquid chromatography and mass spectrometric detection (HPLC-MS/MS) (Here: Determination in perspiration eluates)
SOP-QM 11 0 02 A3 007 2020-07	Determination of poly- and perfluorinated compounds in textiles and leather by HPLC-MS and PCI-GC-MS (here: Determination of polyfluorinated compounds by PCI-GC-MS)

3.20 Determination of the content of UV-stabilizer

SOP-QM 11 0 02 A3 002 2020-02	Determination of phthalate content in textiles (Tetrahydrofuran method) according to DIN EN ISO 14389 Modification: Sample preparation according to STANDARD 201 by OEKO-TEX® M-18 and ML-18 and determination of tris(2-chlorethyl)phosphate, bisphenol, UV-Stabilizer A and selected Siloxanes (here: Determination of UV-Stabalizer)

3.21 Determination of chlorinated paraffins

SOP-QM-11 0 02 A3 017 2021-01	Determination of short chain chlorinated paraffins (SCCP) according to DIN EN ISO 18219 Modification: Determination in fibres, textiles and leather extracts by EI GC-MS/MS or CI GC-MS/S after extraction with a mixture of Dichloromethane and n-hexane according to STANDARD 201 by OEKO-TEX® M-24 + ML-24 and additional testing of medium chain chlorinated paraffins (MCCP)

3.22 Determination of the content of siloxane

SOP-QM 11 0 02 A3 002 2020-02	Determination of phthalate content in textiles (Tetrahydrofuran method) according to DIN EN ISO 14389 Modification: Sample preparation according to STANDARD 201 by OEKO-TEX® M-18 and ML-18 and determination of tris(2-chlorethyl)phosphate, bisphenol, UV-Stabilizer A and selected Siloxanes (here: Determination of Siloxane)

3.23 Determination of nitrosamines

DIN EN 71-12 2017-03	Safety of toys – Part 12: N-Nitrosamines and N-nitrosatable substances **(Modification: Determination in textiles, leather and accessories)**

3.24 Determination of colour fastnesses

DIN EN ISO 105-E01 2013-06	Textiles – Tests for colour fastness – Part E01: Colour fastness to water
DIN EN ISO 105-E04 2013-08	Textiles – Tests for colour fastness – Part E04: Colour fastness to perspiration
DIN EN ISO 105-X12 2016-11	Textiles – Tests for colour fastness – Part X12: Colour fastness to rubbing
DIN 53160-1 2010-10	Determination of the colourfastness of articles for common use – Part 1: Test with artificial saliva
DIN 53160-2 2010-10	Determination of the colourfastness of articles for common use – Part 2: Test with artificial sweat

3.25 Determination of the emission of volatile and odorous compounds by gas chromatography

DIN EN ISO 16000-9 2008-04	Indoor air – Part 9: Determination of the emission of volatile organic compounds from building products and furnishing – Emission test chamber method
DIN ISO 16000-6 2012-11	Indoor air – Part 6: Determination of volatile organic compounds in indoor and test chamber air by active sampling on Tenax TA® sorbent, thermal desorption and gas chromatography using MS or MS-FID

3.26 Sensorial odour test

SOP-QM 11 0 02 A5 008 2021-03	SNV 195 651: 2015-09: Textiles: Determination of odour evolution of equipment (sensory examination) (Modification: Determination of odour according to OEKO- TEX® Standard 201 M-16)

4 Determination of water and waste water [3)]

4.1 Sample preparation

DIN 38404-4 1976-12	Determination of Temperature (C4)
DIN 38406-3 2002-03	Determination of calcium and magnesium, complexometric method (E 3)
DIN EN ISO 10523 2012-04	Water quality – Determination of pH
DIN EN ISO 12010 2019-09	Water quality – Determination of short-chain polychlorinated alkanes (SCCP) in water – Method using gas chromatography-mass spectrometry (GC-MS) and negative-ion chemical ionization (NCI) (Here: Extraction process only; Modification: Extraction process, extraction solution)
DIN EN ISO 15587-1 2002-07	Water quality – Digestion for the determination of selected elements in water – Part 1: Aqua regia digestion
DIN EN ISO 15587-2 2002-07	Water quality – Digestion for the determination of selected elements in water – Part 2: Nitric acid digestion

4.2 Element determination by means of ICP/MS and AAS

DIN EN ISO 17294-2 (E29) 2017-01	Water quality – Application of inductively coupled plasma mass spectrometry (ICP-MS) – Part 2: Determination of selected elements including uranium isotopes

4.3 Determination of organic compounds by means of GC

DIN EN 12673 1999-05	Water quality – Gas chromatographic determination of some selected chlorophenols in water
DIN EN 16694 2015-12	Water quality – Determination of selected polybrominated diphenly ether (PBDE) in whole water samples – Method using solid phase extraction (SPE) with SPE-disks combined with gas chromatography-mass spectrometry (GC-MS)
DIN EN ISO 12010 2019-09	Water quality – Determination of short-chain polychlorinated alkanes (SCCP) in water – Method using gas chromatography-mass spectrometry (GC-MS) and negative-ion chemical ionization (NCI) (Modification: Analyte quantities, evaluation and calculation)
DIN EN ISO 17353 2005-11	Water quality – Determination of selected organotin compounds – Gas chromatographic method
DIN EN ISO 18856 2005-11	Water quality – Determination of selected phthalates using gas chromatography/mass spectrometry
ISO 20595 2018-01	Water quality – Determination of selected highly volatile organic compounds in water – Method using gas chromatography and mass spectrometry by static headspace technique (HS-GC-MS)
SOP-QM-11 0 02 A8 002 2019-11	Determination of chlorobenzenes, chlorotoluolenes, phthalates, flame retardants (GC), PAH and FTOH in wastewater after liquid-liquid extraction; Detection by GC-MS/MS
SOP-QM-11 0 02 A8 018 2020-06	Determination of polar VOC compounds and Glycols after solid-phase extraction by GC-MS

4.4 Determination of organic compounds by means of HPLC

DIN 38407-42 2011-03	German standard methods for the examination of water, waste water and sludge – Jointly determinable substances (group F) – Part 42: Determination of selected polyfluorinated compounds (PFC) in water – Method using high performance liquid chromatography and mass spectrometric detection (HPLC/MS-MS) after solid-liquid extraction (F 42)
DIN 38414-14 2011-08	German standard methods for the examination of water, waste water and sludge – Sludge and sediments (group S) – Part 14: Determination of selected polyfluorinated compounds (PFC) in sludge, compost and soil – Method using high performance liquid chromatography and mass spectrometric detection (HPLC-MS/MS) (S 14) (Here: Determination in waste water)
DIN EN ISO 14362-1 2017-05	Textiles – Methods for determination of certain aromatic amines derived from azo colorants – Part 1: Detection of the use of certain azo colorants accessible with and without extracting the fibres
DIN EN ISO 14362-3 2017-05	Textiles – Methods for determination of certain aromatic amines derived from azo colorants – Part 3: Detection of the use of certain azo colorants, which may release 4-aminoazobenzene
PW-QM-11 0 02 A8 007 2019-05	Direct determination of APEO, perfluorinated compounds (PFC), Flame retardants (LC), Disperse, allergenic and carcinogenic dyes in water by HPLC-MS/MS

4.5 Rapid tests with ready-to-use reagents

LCK 555 (Hach Lange) BSB_5 cuvette test 4 -1650 mg/l BSB5 1998-04	Photometric determination of biological oxygen demand
LCK 386 (Hach Lange) TOC cuvette test 30 – 300 mg/l TOC 2005-08	Photometric determination of total organic carbon
LCK 390 (Hach Lange) AOX cuvette test 0.05 – 3 mg/l AOX 1997-06	Photometric determination of adsorbable organic bounded halogens

LCK 1014 (Hach Lange) CSB cuvette test 100 – 2000 mg/l CSB 2019-10	Photometric determination of chemical oxygen demand
LCK314 (Hach Lange) CSB cuvette test 15 – 150 mg/l CSB 2019-10	Photometric determination of chemical oxygen demand
LCK 138 (Hach Lange) Total Nitrogen cuvette test 1 – 16 mg/l Nitrogen (total) 2017-06	Photometric determination of nitrogen (total)
LCK 653 (Hach Lange) Sulphide cuvette test 0.1 – 2 mg/l Sulphide 2019-10	Photometric determination of sulphide content
LCK 654 (Hach Lange) Sulphite cuvette test 0.1 – 5 mg/l Sulphite 2019-10	Photometric determination of sulphite content
LCK 315 (Hach Lange) Cyanide cuvette test 0.01 – 0.06 mg/l Cyanide 2020-01	Photometric determination of cyanide content
LCK 303 (Hach Lange) Ammonium cuvette test 2.5 – 60 mg/l Ammonium 2019-10	Photometric determination of ammonium content
LCK 304 (Hach Lange) Ammonium cuvette test 0.015 mg/l – 2.0 mg/l Ammonium 2019-10	Photometric determination of ammonium content

4.6 Determination of suspended solids by means of filtration

ISO 11923 1997-02	Water quality – Determination of suspended solids by filtration through glass-fibre filters

5 Tests according to the specifications of the United States Consumer Product Safety Commission[#)]

5.1 Sample preparation and determination of lead in metal and non-metal products for children and adults, in colours and coloured surfaces according to the specifications of the United States Consumer Product Safety Commission, CPSC[#)]

CPSC-CH-E1001-08.3 2012-11	Standard Operating Procedure for Determining Lead (Pb) in Children's Metal Products (Including Children's Metal Jewelry) (Modification: Determination according to DIN EN ISO 17294-2)
CPSC-CH-E1002-08.3 2012-11	Standard Operating Procedure for Determining Lead (Pb) in Non-Metal Children's Products (Modification: Determination according to DIN EN ISO 17294-2)
CPSC-CH-E1003-09.1 2011-02	Standard Operating Procedure for Determining Lead (Pb) in Paint and other Similar Surface Coatings (Modification: Determination according to DIN EN ISO 17294-2)
CPSC-CH-E1004-11 2011-02	Standard Operation Procedure for Determining Cadmium (Cd) Extractability from Children's Metal Jewelry
HC Part B: Method C-02.2 2016-10	Determination of Total Lead in Surface Coating Materials by Closed Vessel Microwave Digestion (additional: Determination according to DIN EN ISO 17294-2)
HC Part B: Method C-02.3 2013-06	Determination of Total Lead in Polyvinyl Chloride Products by Closed Vessel Microwave Digestion (additional: Determination according to DIN EN ISO 17294-2)
HC Part B: Method C-02.4 2013-05	Determination of Total Lead in Metallic Consumer Products (additional: Determination according to DIN EN ISO 17294-2)

5.2 Burning behaviour of apparel textiles and children's sleeping bags according to the specifications of the United States Consumer Product Saftey Commission, CPSC#)

16 CFR Part 1610 2008-10	Standard for the flammability of clothing textiles
16 CFR Part 1615 and 1616 2010-07	Standard for the flammability of children's sleepwear

5.3 Determination of organic compounds according to the specifications of the United States Consumer Product Safety Commission, CPSC#)

CPSC-CH-C1001-09.4 2018-01	Standard Operation Procedure for Determination of Phthalates

#) This accreditation does replace neither the approval procedure nor the approval procedure of the proper authority according to the legal requirements.

6 Tests on toys 3)

DIN EN 1541 2001-07	Paper and board intended to come into contact with foodstuffs – Determination of formaldehyde in an aqueous extract
DIN EN 645 1994-01	Paper and board intended to come into contact with foodstuffs; preparation of a cold water extract
DIN EN 71-2 2014-07	Safety of toys – Part 2: Flammability
DIN EN 71-3 2019-08	Safety of toys – Part 3: Migration of certain elements
DIN EN 71-9 2007-09	Safety of toys – Part 9: Organic chemical compounds – Requirements
DIN EN 71-10 2006-03	Safety of toys – Part 10: Organic chemical compounds – Sample preparation and extraction
DIN EN 71-11 2006-01	Safety of toys – Part 11: Organic chemical compounds – Methods of analysis

DIN EN 71-12 2017-03	Safety of toys – Part 12: N-Nitrosamines and N-nitrosatable substances
DIN EN ISO 787-9 2019-06	General methods of test for pigments and extenders – Part 9: Determination of pH value of an aqueous suspension **(ISO 787-9:2019)**

Abbreviations used:

AATCC	American Association of Textile Chemists and Colorists
AfPS	Product Safety Commission [Aufgaben des Ausschusses für Produktsicherheit]
ASTM	ASTM International, formerly known as the American Society for Testing and Materials
ASU	Official collection of test methods according to § 64 food, feeding stuff and commodity goods, law code available as technical rule BVL at the Beuth Verlag (www.beuth.de)
AW-QM...	Working instruction of Hohenstein Textile Testing Institute GmbH & Co. KG
CFR	Code of Federal Regulations (USA)
CPSC	Consumer Product Saftey Commission (USA)
HC	Health Canada – Product Safety Laboratory Book 5 – Laboratory Policies and Procedures
JIS	Japan Industrial Standard
OEKO-TEX®	Confidence in Textiles/Leather (www.oeko-tex.com)
PW-QM...	Testing instruction of Hohenstein Textile Testing Institute GmbH & Co. KG
PW/SOP-QM….	Testing instruction / Standard Operation Procedure of Hohenstein Textile Testing Institute GmbH & Co. KG
SOP-QM….	Standard Operating Procedure of Hohenstein Textile Testing Institute GmbH & Co. KG