

Deutsche Akkreditierungsstelle

Annex to the Accreditation Certificate D-PL-14563-01-00 according to DIN EN ISO/IEC 17025:2018

 Valid from:
 14.08.2023

 Date of issue:
 01.02.2024

Holder of accreditation certificate:

QIMA Testing (Germany) GmbH Schleidenstraße 1, 22083 Hamburg

The testing laboratory meets the requirements of DIN EN ISO/IEC 17025:2018 to carry out the conformity assessment activities listed in this annex. The testing laboratory meets additional legal and normative requirements, if applicable, including those in relevant sectoral schemes, provided that these are explicitly confirmed below.

The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories and confirm generally with the principles of DIN EN ISO 9001.

Testing in the areas:

physical, physical-chemical and chemical analysis of commodities / consumer goods; selected physical-chemical analysis of toys;

selected physical-chemical tests according to United States Consumer Product safety Improvement Act (CPSIA 2008);

migration studies and sensoric tests of commodities;

mechanical-technological analysis, functional- and usability tests as well as colour fastness tests of commodities / consumer goods;

tests for qualitative and quantitative fibre determination of textiles

This certificate annex is only valid together with the written accreditation certificate and 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.



Within the labelled test areas, the testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS,

- ¹⁾ the free selection of standardised or equivalent test methods.
- ²⁾ the modification as well as further and new development of test methods is permitted.

The test methods listed are examples.

The testing laboratory is authorised, without being required to inform and obtain prior approval from

DAkkS, the testing laboratory is permitted to use the standardised test methods listed here or equivalent test methods with different issue statuses.

The testing laboratory has an up-to-date list of all test methods within the flexible scope of accreditation.

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| | 3.3 | | ermination of organic pollutants (primary aromatic amines, solvents, wood preservatives) bys using gas chromatography with mass-selective detectors (MS detector) ¹⁾ |
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| | 3.5 | Dete | ermination of formaldehyde in toys using photometry (UV-VIS) |
| 4 | Pro | cedui | res of the Consumer Product Safety Improvement Act (CPSIA 2008) [#] |
| Ab | brevia | ations | s used: |



1 Physical analysis of commodities / consumer goods

1.1 Colour fastness tests

| ASU B 82.92-3 2011-12 | Determination of the colourfastness of articles for common use - Part 1: Test with artificial saliva (DIN 53160-1:2010-10) |
|-------------------------------|---|
| ASU B 82.02-13 2011-12 | Determination of the colourfastness of articles for common use - Part 2: Test with artificial sweat (DIN 53160-2:2010-10) |
| 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 (DIN 53160:1974-06) |
| DIN EN 20105-A02 1994-10 | Textiles - Tests for colour fastness - Part A02: Grey scale for assessing change in colour |
| 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-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 CO8: Colour fastness to domestic and commercial laundering using a non-phosphate reference detergent incorporating a low-temperature bleach activator |



| DIN EN ISO 105-C09 2007-10 | Textiles - Tests for colour fastness - Part C09: Colour fastness to domestic and commercial laundering - Oxidative bleach response 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-D02 2016-12 | Textiles - Tests for colour fastness - Part D02: Colour fastness to rubbing: Organic solvents |
| 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-E05 2010-12 | Textiles - Tests for colour fastness - Part E05: Colour fastness to spotting: Acid |
| 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 20105-N01 1995-03 | Textiles - Tests for colour fastness - Part N01: Colour fastness to bleaching: Hypochlorite |
| 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 105-X18 2007-12 | Textiles - Tests for colour fastness - Part X18: Assessment of the potential to phenolic yellowing of materials |
| DIN EN ISO 4892-2 2013-06 | Plastics - Methods of exposure to laboratory light sources - Part 2: Xenon-arc lamps |
| 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 15700 1999-10 | Leather - Tests for colour fastness - Colour fastness to water spotting |
| DIN EN ISO 15702 1999-10 | Leather - Tests for colour fastness - Colour fastness to machine washing |
| DIN EN ISO 15703 1999-10 | Leather - Tests for colour fastness - Colour fastness to mild washing |
| DIN EN 646 2019-02 | Paper and board intended to come into contact with foodstuffs - Determination of colour fastness of dyed paper and board |
| DIN 54056 2017-11 | Testing of colour fastness of textiles - Determination of colour fastness of dyeings and prints to sublimation in storage |
| SOP-TP-695 2017-05 | Color fastness tests for fastness to care products according to IKW recommendations |

1.2

Tensile tests



DIN EN ISO 1421 Rubber- or plastics-coated fabrics - Determination of tensile strength 2017-03 and elongation at break DIN EN ISO 3376 Leather - Physical and mechanical tests - Determination of tensile 2020-08 strength and percentage elongation **DIN EN ISO 3377-1** Leather - Physical and mechanical tests - Determination of tear load -2012-03 Part 1: Single edge tear **DIN EN ISO 3377-2** Leather - Physical and mechanical tests - Determination of tear load -2016-07 Part 2: Double edge tear **DIN EN ISO 4674-1** Rubber- or plastics-coated fabrics - Determination of tear resistance -2017-03 Part 1: Constant rate of tear methods **DIN EN ISO 4674-2** Rubber or plastics-coated fabrics - Determination of tear resistance -1998-10 Part 2: Ballistic pendulum method **DIN EN ISO 9073-4** Nonwovens - Test methods - Part 4: Determination of tear resistance 2021-05 by the trapezoid procedure **DIN EN ISO 9073-18** Textiles - Test methods for nonwovens - Part 18: Determination of 2008-08 breaking strength and elongation of nonwoven materials using the grab tensile test **DIN EN ISO 13934-1** Textiles - Tensile properties of fabrics - Part 1: Determination of 2013-08 maximum force and elongation at maximum force using the strip method **DIN EN ISO 13934-2** Textiles - Tensile properties of fabrics - Part 2: Determination of 2014-06 maximum force using the grab method **DIN EN ISO 13935-1** Textiles - Seam tensile properties of fabrics and made-up textile 2014-07 articles - Part 1: Determination of maximum force to seam rupture using the strip method **DIN EN ISO 13935-2** Textiles - Seam tensile properties of fabrics and made-up textile 2014-07 articles - Part 2: Determination of maximum force to seam rupture using the grab method

DIN EN ISO 13936-1Textiles - Determination of the slippage resistance of yarns at a seam2004-07in 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 20932-1 2020-05 | Textiles - Determination of the elasticity of fabrics - Part 1: Strip tests |
| DIN EN 1875-3 1998-02 | Rubber- or plastics-coated fabrics - Determination of tear strength - Part 3: Trapezoidal method (EN 1875-3:1997) |
| DIN EN 16732 2016-05 | Slide fasteners (zips) - Specification (EN 16732:2015) (Restriction: without paragraph 5.7 and appendix F) |
| DIN EN 29073-3 1992-08 | Textiles; test method for nonwovens; part 3: determination of tensile strength and elongation |
| DIN 53835-13 1983-11 | Testing of textiles; determination of the elastic behaviour of textile fabrics by a single application of tensile load between constant extension limits |



1.3 Functional tests

| DIN EN ISO 4920 2012-12 | Textile fabrics - Determination of resistance to surface wetting (spray test) |
|-------------------------------|--|
| DIN EN ISO 9073-15 2008-08 | Textiles - Test methods for nonwovens - Part 15: Determination of air permeability |
| DIN EN ISO 9073-16 2009-01 | Textiles - Test methods for nonwovens - Part 16: Determination of resistance to penetration by water (hydrostatic pressure) |
| DIN EN ISO 9073-17 2008-09 | Textiles - Test methods for nonwovens - Part 17: Determination of water penetration (spray impact) |
| DIN EN ISO 9237 1995-12 | Textiles - Determination of permeability of fabrics to air |
| DIN EN ISO 11092 2014-12 | Textiles - Physiological effects - Measurement of thermal and water- vapour resistance under steady-state conditions (sweating guarded- hotplate test) |
| DIN EN ISO 14268 2013-03 | Leather - Physical and mechanical tests - Determination of water vapour permeability |
| DIN EN 811 2018-08 | Textiles - Determination of resistance to water penetration - Hydrostatic pressure test |
| DIN 53923 1978-01 | Testing of textiles; determination of water absorption of textile fabrics |
| ASTM E96 / E96M 2016 | Standard Test Methods for Water Vapor Transmission of Materials |
| JIS L 1099 2012-03 | Testing methods for water vapour permeability of textiles |



1.4 Abrasion and pilling tests

| DIN EN ISO 5470-2 2003-10 | Rubber- or plastics-coated fabrics - Determination of abrasion resistance - Part 2: Martindale abrader |
|-------------------------------|---|
| DIN EN ISO 12945-1 2021-04 | Textiles - Determination of fabric propensity to surface pilling, fuzzing or matting - Part 1: Pilling box method |
| DIN EN ISO 12945-2 2021-04 | Textiles - Determination of fabric propensity to surface pilling, fuzzing or matting - 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 |
| ASTM D3512 / D3512M 2016 | Standard Test Method for Pilling Resistance and Other Related Surface Changes of Textile Fabrics: Random Tumble Pilling Tester |

1.5 Fibre identification

| DIN EN ISO 1833-1 2020-09 | Textiles - Quantitative chemical analysis - Part 1: General principles of testing |
|------------------------------|--|
| DIN EN ISO 1833-2 2020-09 | Textiles - Quantitative chemical analysis - Part 2: Ternary fibre mixtures |
| DIN EN ISO 1833-3 2021-03 | Textiles - Quantitative chemical analysis - Part 3: Mixtures of acetate with 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 1833-5 2011-01 | Textiles - Quantitative chemical analysis - Part 5: Mixtures of viscose, cupro or modal and cotton fibres (method using sodium zincate) |
|-------------------------------|---|
| DIN EN ISO 1833-6 2019-07 | Textiles - Quantitative chemical analysis - Part 6: Mixtures of viscose, certain types of cupro, modal or lyocell with certain other 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 1833-8 2011-01 | Textiles - Quantitative chemical analysis - Part 8: Mixtures of acetate and triacetate fibres (method using acetone) |
| DIN EN ISO 1833-9 2020-02 | Textiles - Quantitative chemical analysis - Part 9: Mixtures of acetate with certain other fibres (method using benzyl alcohol) |
| DIN EN ISO 1833-10 2019-10 | Textiles - Quantitative chemical analysis - Part 10: Mixtures of triacetate or polylactide with certain other fibres (method using dichloromethane) |
| 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 2021-03 | 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 1833-14 2020-03 | Textiles - Quantitative chemical analysis - Part 14: Mixtures of acetate with certain other fibres (method using glacial acetic acid) |
| DIN EN ISO 1833-16 2019-10 | Textiles - Quantitative chemical analysis - Part 16: Mixtures of polypropylene fibres with certain other fibres (method using xylene) |
| DIN EN ISO 1833-18 2021-03 | Textiles - Quantitative chemical analysis - Part 18: Mixtures of silk with wool or other animal hair (method using sulfuric acid) |



| DIN EN ISO 1833-21 2019-10 | Textiles - Quantitative chemical analysis - Part 21: Mixtures of chlorofibres, certain modacrylics, certain elastanes, acetates, triacetates and certain other fibres (method using cyclohexanone) | |
|-------------------------------|--|--|
| 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) | |
| 1.6 Construction and fibre | determinations | |
| ISO 16322-2 2021-04 | Textiles - Determination of spirality after laundering - Part 2: Woven and knitted fabrics | |
| ISO 16322-3 2021-04 | Textiles - Determination of spirality after laundering - Part 3: Woven and knitted garments | |
| DIN EN ISO 2286-1 2017-01 | Rubber- or plastics-coated fabrics - Determination of roll characteristics - Part 1: Methods for determination of length, width and net mass | |
| DIN EN ISO 2286-2 2017-01 | Rubber- or plastics-coated fabrics - Determination of roll characteristics - Part 2: Methods for determination of total mass per unit area, mass per unit area of coating and mass per unit area of substrate | |
| DIN EN ISO 2286-3 2017-01 | Rubber- or plastics-coated fabrics - Determination of roll characteristics - Part 3: Method for determination of thickness | |
| 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 1773 1997-03 | Textiles - Fabrics - Determination of width and length | |
| DIN EN 12127 1997-12 | Textiles - Fabrics - Determination of mass per unit area using small samples | |
| DIN EN 14971 2006-04 | Textiles - Knitted fabrics - Determination of number of stitches per unit length and unit area | |
| DIN EN 29073-1 1992-08 | Textiles; test method for nonwovens; part 1: determination of mass per unit area | |



| DIN 53808-1 2003-01 | | Testing of textiles - Determination of length of fibres by measuring of individual fibres |
|-------------------------------|--------------------------|--|
| 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 |
| SOP-TP-698 2020-04 | | Differentiation of ring-spun yarns and open-end yarns based on yarn structures and their properties |
| 1.7 Visual asse | ssment | |
| ISO 7768 2009-05 | | Textiles - Test method for assessing the smoothness appearance of fabrics after cleansing |
| ISO 7770 2009-05 | | Textiles - Test method for assessing the smoothness appearance of seams in fabrics after cleansing |
| 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 5077 2008-04 | | Textiles - Determination of dimensional change in washing and drying |
| DIN EN ISO 6330 2013-02 | | Textiles - Domestic washing and drying procedures for textile testing |
| DIN EN 22313 1992-08 | | Textiles; determination of the recovery form creasing of a horizontally folded specimen by measuring the angle of recovery |
| DIN 53856 2001-02 | | Testing of textiles - Determination of the mass portion of warp and weft |
| DIN 53890 1972-01 | | Testing of Textiles; Determination of the Crease Recovery Angle of Area-measured Textiles; Method Using an Air-dry Specimen with Horizontal Fold and Erected Free Limb |
| DIN 53897 1993-11 | | Testing of textiles; determination of dimensional change of knitted fabrics by domestic washing with drum-type drying |
| SOP-TP-700 2016-05 | | Determining the individual filament or filament fineness (microscopically) |
| SOP-TP-709 2021-05 | | Visual determination of optical brighteners in textiles |
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| 1.8 Shoe tests | |
|------------------------------|---|
| ISO 4643 1992-02 | Moulded plastics footwear; lined or unlined poly(vinyl chloride) boots for general industrial use; specification (<i>Appendix B and C only</i>) |
| ISO 20871 2018-03 | Footwear - Test methods for outsoles - Abrasion resistance |
| DIN ISO 4649 2014-03 | Rubber, vulcanized or thermoplastic - Determination of abrasion resistance using a rotating cylindrical drum device |
| DIN EN ISO 5402-1 2017-05 | Leather - Determination of flex resistance - Part 1: Flexometer method |
| DIN EN ISO 5402-2 2015-02 | Leather - Determination of flex resistance - Part 2: Vamp flex method |
| DIN EN ISO 10768 2010-12 | Footwear - Test method for the determination of the resistance of elastic materials for footwear to repeated extension - Fatigue resistance |
| DIN EN ISO 17694 2016-10 | Footwear - Test methods for uppers and lining - Flex resistance |
| DIN EN ISO 17707 2005-10 | Footwear - Test methods for outsoles - Flex resistance |
| DIN EN ISO 17708 2018-10 | Footwear - Test methods for whole shoe - Upper sole adhesion |
| DIN EN ISO 19953 2004-10 | Footwear - Test methods for heels - Resistance to lateral impact |
| DIN EN ISO 22776 2005-03 | Footwear - Test methods for accessories: Touch and close fasteners - Shear strength before and after repeated closing |
| DIN EN ISO 22777 2005-03 | Footwear - Test methods for accessories: Touch and close fasteners - Peel strength before and after repeated closing |
| DIN EN ISO 32100 2019-02 | Rubber- or plastics-coated fabrics - Physical and mechanical tests - Determination of flex resistance by the flexometer method |



| DIN EN 12770 2000-03 | Footwear - Test methods for outsoles - Abrasion resistance |
|---------------------------|--|
| DIN EN 13780 2003-05 | Touch and close fasteners - Determination of longitudinal shear strength |
| DIN SPEC 53264 2017-02 | Footwear - Test methods - Determination of waterpassage |
| SOP-TP-682 2020-04 | Shoe size and inside shoe width measurement |

1.9 AATCC-Test methods

| AATCC Test Method 22 2017 | Water Repellency: Spray Test |
|-------------------------------|--|
| AATCC Test Method 79 2018 | Absorbency of Textiles |
| AATCC Test Method 88B 2018 | Smoothness of Seams in Fabrics after Repeated Home Laundering |
| AATCC Test Method 118 2020 | Oil Repellency: Hydrocarbon Resistance Test |
| 1.10 Other tests | |
| DIN EN ISO 9073-6 2003-05 | Textiles - Test methods for nonwovens - Part 6: Absorption |
| DIN EN ISO 9073-8 1998-10 | Textiles - Test methods for non-wovens - Part 8: Determination of liquid strike-through time (simulated urine) |
| DIN EN ISO 9073-11 2005-03 | Textiles - Test methods for nonwovens - Part 11: Run-off |
| DIN EN ISO 14419 2010-08 | Textiles - Oil repellency - Hydrocarbon resistance test |
| DIN EN 12280-1 1998-01 | Rubber- or plastic-coated fabrics - Accelerated ageing tests - Part 1: Heat ageing |



| DIN EN 14465 2006-09 | Textiles - Upholstery fabrics - Specification and methods of test |
|-------------------------|---|
| BS 4162 1983-03 | Methods of test for buttons |
| BS 7907 2007-12 | Code of practice for the design and manufacture of children's clothing to promote mechanical safety Annex B: Method for determination of removal force of attached components Annex C: Method for determination of the security of attachment of non-grippable attached components |
| SOP-TP-616 2021-04 | Determination of the moisture content of textiles under laboratory conditions (damp goods) |
| SOP-TP-708 2014-06 | Determination of piece weight |
| SOP-TP-755 2015-10 | Determination of corrosion resistance - hydrolytic aging (steam test) |

2 Analyses of/on commodities / consumer goods

2.1 Sample preparation

2.1.1 Sample preparation using extraction ¹⁾

| EPA 3540C Revision 3 1996-12 | Soxhlet extraction (Matrix: <i>Extract from commodities</i>) |
|------------------------------------|--|
| EPA 3541 Revision 0 1994-09 | Automated soxhlet extraction (Matrix: <i>Extract from commodities</i>) |
| EPA 3545A Revision 1 2007-02 | Pressurized fluid extraction (PFE) (Matrix: <i>Extract from commodities</i>) |
| DIN EN 16711-2 2016-02 | Textiles - Determination of metal content - Part 2: Determination of metals extracted by acidic artificial perspiration solution (EN 16711-2:2015) (Restriction: <i>no determination of metals</i>) |



2.1.2 Sample preparation using acid digestion ¹⁾

| EPA 3015A Revision 1 2007-02 | Microwave assisted acid digestion of aqueous samples and extracts (Matrix: <i>Acid digestion of consumer goods</i>) |
|------------------------------------|---|
| EPA 3050B Revision 2 1996-12 | Acid digestion of sediments, sludges and soils (Matrix: <i>Acid digestion of consumer goods</i>) |
| EPA 3051A Revision 1 2007-02 | Microwave assisted acid digestion of sediments, sludges, soils and oils (Matrix: <i>Acid digestion of consumer goods</i>) |
| DIN EN 16711-1 2016-02 | Textiles - Determination of metal content - Part 1: Determination of metals using microwave digestion (EN 16711-1:2015) (Restriction: <i>No determination of metals</i>) |

2.1.3 Mechanical sample preparation ¹⁾

| DIN EN 62321-2 2014-09 | Determination of certain substances in electrotechnical products - Part 2: Disassembly, disjointment and mechanical sample preparation (IEC 62321-2:2013, EN 62321-2:2014, VDE 0042-1-2:2014-09) |
|---------------------------|--|
| DIN EN 12472 2009-09 | Method for the simulation of wear and corrosion for the detection of nickel release from coated items (EN 12472:2005) |



2.2 Physical, physical-chemical and chemical analysis

2.2.1 Determination of organic compounds using gas chromatography with mass-selective detectors (MS detector)¹⁾

| DIN CEN ISO/TS 16179 2012-12 | Footwear - Critical substances potentially present in footwear and footwear components - Determination of organotin compounds in footwear materials (ISO/TS 16179:2012, CEN ISO/TS 16179:2012, DIN SPEC 91179:2012-12) (Modification: Adapted Extraction. Matrix: Textiles, Shoes and consumer goods) |
|---------------------------------|---|
| 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 (ISO/ TS 16186:2012, CEN ISO/TS 16186:2012, DIN SPEC 53280:2012-12) (Modification: <i>Preliminary test using headspace GC-MSD,</i> <i>quantification after extraction using GC/MSD;</i> Matrix: <i>Textiles, shoes</i> <i>and consumer goods</i>) |
| DIN EN ISO 14389 2014-10 | Textiles - Determination of the phthalate content - Tetrahydrofuran method (ISO 14389:2014, EN ISO 14389:2014) (Matrix: <i>Textiles, shoes and consumer goods, extension to include</i> <i>phthalate substitutes</i>) |
| DIN EN ISO 17070 2015-05 | Leather - Chemical tests - Determination of tetrachlorophenol-, trichlorophenol-, dichlorophenol-, monochlorophenol-isomers and pentachlorophenol content (ISO 17070:2015, EN ISO 17070:2015) (Modification: <i>Extraction using ASE based on EPA 3545A, automated</i> <i>derivatization. Extension to chlorocresols and o-phenylphenol</i>) |
| DIN EN ISO 17881-1 2016-09 | Textiles - Determination of certain flame retardants - Part 1: Brominated flame retardants (ISO 17881-1:2016, EN ISO 17881-1:2016) (Modification: Adapted extraction, Matrix: Textiles, shoes and consumer goods) |
| DIN EN ISO 18219 2016-02 | Leather - Determination of chlorinated hydrocarbons in leather - Chromatographic method for short-chain chlorinated paraffins (SCCP) (ISO 18219:2015, EN ISO 18219:2015) (Modification: <i>Adapted extraction</i> , Matrix: <i>Textiles, shoes and</i> <i>consumer goods</i>) |



| DIN EN 62321-6 2016-05 | Determination of certain substances in electrotechnical products - Part 6: Polybrominated biphenyls and polybrominated diphenyl ethers in polymers by gas chromatography-mass spectrometry (GC-MS) (IEC 62321-6:2015, EN 62321-6:2015, VDE 0042-1-6:2016-05) (Modification: <i>Adapted extraction,</i> Matrix: <i>Textiles, shoes and</i> <i>consumer goods</i>) |
|-----------------------------------|--|
| AfPS GS 2019-01 | Testing and assessment of Polycyclic Aromatic Hydrocarbons (PAHs) in the awarding of GS Marks (Modification: <i>No column chromatographic purification of the extract</i>) |
| SOP-OC-404, Appendix 1 2017-06 | Determination of chlorophenols, o-phenylphenol and chlorocresols from textile samples using gas chromatography / mass spectrometry according to DIN EN ISO 17070:2015-05 (modified) with alternative extraction (ultrasound / KOH) and automatic derivatization with the Gerstel MPS2 |
| SOP-OC-535 2017-04 | Determination of fluorotelomer alcohols and fluorotelomer acrylates in consumer products using PCI-GC/MS |

2.2.2 Determination of volatile organic compounds, aromatic amines from azo dyes and free aromatic amines using gas chromatography with mass-selective detectors (MS detector)²⁾

| 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 (ISO/TS 16189:2013, DIN SPEC 52411:2013-12) (Modification: <i>Extension to additional VOCs. Matrix: Textiles, shoes</i> <i>and consumer goods</i>) |
|---------------------------------|---|
| ASU B 82.02-2 | Examination of consumer goods - Methods for the determination of certain aromatic amines from azo colorants - Part 1: Detection of the use of certain azo colorants accessible with and without extracting the fibres (DIN EN ISO 14362-1:2017-05) |
| 2017-12 | (Modification: Alternative solvent for extraction. Purification by I/I extraction (exceptions: 2,4-toluenediamine, 2,4-diamino-anisole, 4,4'-diaminodiphenylmethane, p-phenylenediamine)) |



| ASU B 82.02-3 2016-07 | Examination of consumer goods - 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 17234-1:2015-07) (Modification: <i>Purification by I/I extraction, (Exceptions:</i> 2,4-toluenediamine, 2,4-diaminoanisole, 4,4'- diaminodiphenylmethane, p-phenylenediamine)) |
|---------------------------|---|
| ASU B 82.02-9 2014-02 | Examination of consumer goods - Chemical tests for the determination of certain azo colorants in dyed leathers - Part 2: Determination of 4- amino-azobenzene (DIN EN ISO 17234-2:2011-06) (Modification: <i>Purification by I/I extraction</i>) |
| ASU B 82.02-15 2017-12 | Examination of consumer goods - Method for the determination of certain aromatic amines - Methods for the determination of certain aromatic amines from azo colorants - Part 3: Detection of the use of certain azo colorants, which may release 4-aminoazobenzene (DIN EN 14362-3:2017-05) (Modification: Alternative solvent for extraction, purification by I/I extraction) |
| DIN EN 17137 2019-02 | Textiles - Determination of the content of compounds based on chlorobenzenes and chlorotoluenes |
| SOP-OC-307 2020-02 | Determination of free aromatic amines |
| SOP-OC-408 2020-04 | Determination of dimethylformamide in consumer goods using headspace GC/MS |
| SOP-OC-508 2019-11 | Determination of vinyl chloride monomer content in consumer products using headspace GC-MS |
| SOP-OC-524 2019-11 | Determination of volatile organic compounds (VOC) in consumer products using headspace/GC/MS |



2.2.3 GC/MS screening analysis

| SOP-OC-501 | Screening analyses of textile and material samples using |
|------------|---|
| 2019-11 | headspace/GC/MSD analysis |
| SOP-OC-502 | Screening analyses of textile and material samples using GC/MSD |
| 2020-04 | analysis |

2.2.4 Determination of aromatic amines from azo dyes and free aromatic amines as well as Nnitrosamines, alkylphenols and alkylphenol ethoxylates, bisphenols, perfluorinated surfactants and 2-mercaptobenzothiazole using liquid chromatography with mass-selective detectors (MS and MS/MS detectors)²⁾

| ASU B 82.02-2 2017-12 | Examination of consumer goods - Methods for the determination of certain aromatic amines from azo colorants - Part 1: Detection of the use of certain azo colorants accessible with and without extracting the fibres (DIN EN ISO 14362-1:2017-05) (Modification: Alternative solvent for extraction. Purification by I/I extraction (exceptions: 2,4-toluenediamine, 2,4-diamino-anisole, 4,4'- diaminodiphenylmethane, p-phenylenediamine)) |
|---------------------------|---|
| ASU B 82.02-3 2016-07 | Examination of consumer goods - 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 17234-1:2015-07) (Modification: <i>Purification by I/I extraction, (Exceptions:</i> 2,4-toluenediamine, 2,4-diaminoanisole, 4,4'- diaminodiphenylmethane, p-phenylenediamine)) |
| ASU B 82.02-9 2014-02 | Examination of consumer goods - Chemical tests for the determination of certain azo colorants in dyed leathers - Part 2: Determination of 4- amino-azobenzene (DIN EN ISO 17234-2:2011-06) (Modification: <i>Purification by I/I extraction</i>) |
| ASU B 82.02-15 2017-12 | Examination of consumer goods - Method for the determination of certain aromatic amines - Methods for the determination of certain aromatic amines from azo colorants - Part 3: Detection of the use of certain azo colorants, which may release 4-aminoazobenzene (DIN EN 14362-3:2017-05) (Modification: <i>Alternative solvent for extraction, purification by I/I</i> <i>extraction</i>) |



| DIN EN ISO 18218-1 2015-11 | Leather - Determination of ethoxylated alkylphenols - Part 1: Direct method (ISO 18218-1:2015, EN ISO 18218-1:2015) (Modification: Extension to include nonylphenol and octylphenol. Adapted extraction for plastics. Determination with LC/MS/MS; Matrix: textiles, shoes and consumer goods) |
|-------------------------------|---|
| DIN EN ISO 18254-1 2016-09 | Textiles - Method for the detection and determination of alkylphenol ethoxylates (APEO) - Part 1: Method using HPLC-MS (ISO 18254- 1:2016, EN ISO 18254-1:2016) (Modification: <i>Extension to include nonylphenol and octylphenol.</i> <i>Adapted extraction for plastics. Determination with LC/MS/MS;</i> <i>Matrix: textiles, shoes and consumer goods</i>) |
| DIN EN 12868 2017-04 | Child use and care articles - Method for determining the release of N- nitrosamines and N-nitrosatable substances from elastomer or rubber teats and soothers (EN 12868:2017) (Modification: <i>Matrix: Textiles, Shoes and consumer goods</i>) |
| DIN CEN/TS 15968 2010-11 | Determination of extractable perfluorooctanesulfonate (PFOS) in coated and impregnated solid articles, liquids and fire fighting foams - Method for sampling, extraction and analysis by LC-qMS or LC- tandem/MS (DIN SPEC 1038:2010-11) (Modification: <i>Extracts from consumer goods, extension to include</i> <i>further fluorinated compounds</i>) |
| ASTM D7574 2016 | Standard Test Method for Determination of Bisphenol A in Environmental Waters by Liquid Chromatography/Tandem Mass Spectrometry (Modification: Expansion to 17 bisphenols (Bisphenol S, A, C1, C2, F, T, P, AP, AF, M, B, E, Z, FL, PH, BP, G) in extracts from commodities) |
| SOP-OC-307 2020-02 | Determination of free aromatic amines |
| SOP-OC-519 2019-11 | Determination of 2-mercaptobenzothiazole using LC-MS/MS |
| SOP-OC-540 2021-04 | Determination of azodicarboxamide (ADCA) in consumer products using LC/QQQ |



2.2.5 Determination of disperse dyes, preservatives and flame retardants using liquid chromatography with conventional detectors (DAD detector) ¹⁾

| ASU B 82.02-10 2007-03 | Examination of consumer goods - detection of disperse dyes in textiles (DIN 54231:2005-11) |
|-------------------------------|--|
| DIN EN ISO 13365 2011-04 | Leather - Chemical tests - Determination of the preservative (TCMTB, PCMC, OPP, OIT) content in leather by liquid chromatography (ISO 13365:2011, EN ISO 13365:2011) (Modification: <i>Extraction in organic solvent, extension to include</i> <i>additional preservatives, Matrix: Textiles, shoes and consumer goods</i>) |
| DIN EN ISO 17226-1 2019-04 | Leather - Chemical determination of formaldehyde content - Part 1: Method using high performance liquid chromatography (ISO 17226-1:2018, EN ISO 17226-1:2019) |
| DIN 54231 2005-11 | Textiles - Detection of disperse dyestuffs (Modification: <i>Expansion to include additional dyes</i>) |

2.2.6 Determination of disperse dyes, preservatives and flame retardants using liquid chromatography with mass-selective detectors (MS/DAD detector) ¹⁾

| ASU B 82.02-10 2007-03 | Examination of consumer goods - detection of disperse dyes in textiles (DIN 54231:2005-11) |
|-------------------------------|--|
| DIN EN ISO 13365 2011-04 | Leather - Chemical tests - Determination of the preservative (TCMTB, PCMC, OPP, OIT) content in leather by liquid chromatography (ISO 13365:2011, EN ISO 13365:2011) (Modification: <i>Extraction in organic solvent, extension to include</i> <i>additional preservatives, Matrix: Textiles, shoes and consumer goods</i>) |
| DIN EN ISO 17226-1 2019-04 | Leather - Chemical determination of formaldehyde content - Part 1: Method using high performance liquid chromatography (ISO 17226- 1:2018, EN ISO 17226-1:2019) |
| DIN EN ISO 17881-2 2016-09 | Textiles - Determination of certain flame retardants - Part 2: Phosphorus flame retardants (ISO 17881-2:2016, EN ISO 17881-2:2016) (Modification: Adapted extraction. Detection with LC-MSD, Matrix: Textiles, shoes and consumer goods) |
| DIN 54231 2005-11 | Textiles - Detection of disperse dyestuffs (Modification: <i>Expansion to include additional dyes</i>) |



2.2.7 Element determination using ICP-OES

| DIN EN ISO 17072-1 | Leather - Chemical determination of metal content - Part 1: Extractable |
|--------------------|---|
| 2019-07 | metals (ISO 17072-1:2019, EN ISO 17072-1:2019) |

| 2.2.8 | Element determination | using inductively coupled plasma mass spectrometry (ICP-MS) ¹⁾ |
|--------------------------------|-----------------------|---|
| DIN EN 2019-07 | ISO 17072-1 7 | Leather - Chemical determination of metal content - Part 1: Extractable metals (ISO 17072-1:2019, EN ISO 17072-1:2019) |
| DIN EN 2017-0: | ISO 17294-2 1 | Water quality - Application of inductively coupled plasma mass spectrometry (ICP-MS) - Part 2: Determination of selected elements including uranium isotopes (ISO 17294-2:2016, EN ISO 17294-2:2016) (Modification: <i>Matrices: Acid digestions, extracts and migrates</i>) |
| DIN EN 2015-1(| - | 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 (EN 1811:2011+A1:2015) |
| DIN EN 2018-05 | 62321-4 5 | Determination of certain substances in electrotechnical products - Part 4: Mercury in polymers, metals and electronics by CV-AAS, CV- AFS, ICP-OES and ICP-MS (IEC 62321-4:2013+A1:2017, EN 62321- 4:2014+A1:2017, VDE 0042-1-4:2018-05) (Restriction: <i>here only ICP-MS</i>) |
| DIN EN 2014-10 | 62321-5 D | Determination of certain substances in electrotechnical products - Part 5: Cadmium, lead and chromium in polymers and electronics and cadmium and lead in metals by AAS, AFS, ICP-OES and ICP-MS (IEC 62321-5:2013, EN 62321-5:2014, VDE 0042-1-5:2014-10) |
| EPA 602 Revision 2007-07 | n 1 | Inductively coupled plasma-mass spestrometry (Determination of aluminum, antimony, arsenic, barium, beryllium, lead, boron, cadmium, chromium, cobalt, iron, copper, lithium, manganese, molybdenum, nickel, mercury, selenium, silver, strontium, thallium, titanium, vanadium, zinc and zirconium in disgests or migrates) |

2.2.9 Element determination using ion chromatography

| DIN EN ISO 17075-2 | Leather - Chemical determination of chromium(VI) content in leather - |
|--------------------|---|
| 2017-05 | Part 2: Chromatographic method |
| | (ISO 17075-2:2017; EN ISO 17075-2:2017) |



2.2.10 Photometric determinations (UV-VIS)

| ISO 11083 1994-08 | Water quality - Determination of chromium(VI) - Spectrometric method using 1,5-diphenylcarbazide (Modification: <i>Determination of chromium(VI) in textiles</i>) |
|-------------------------------|---|
| DIN EN ISO 3613 2011-04 | Metallic and other inorganic coatings - Chromate conversion coatings on zinc, cadmium, aluminium-zinc alloys and zinc-aluminium alloys - Test methods (ISO 3613:2010, EN ISO 3613:2010) |
| DIN EN ISO 14184-1 2011-12 | Textiles - Determination of formaldehyde - Part 1: Free and hydrolysed formaldehyde (water extraction method) (ISO 14184-1:2011, EN ISO 14184-1:2011) |
| DIN EN ISO 17075-1 2017-05 | Leather - Chemical determination of chromium(VI) content in leather - Part 1: Colorimetric method (ISO 17075-1:2017, EN ISO 17075-1:2017) |
| DIN EN 717-3 1996-05 | Wood-based panels - Determination of formaldehyde release - Part 3: Formaldehyde release by the flask method (EN 717-3:1996) |

2.2.11 Determination of the pH value using electrode measurement ¹⁾

| 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, EN ISO 787-9:2019) |
|-----------------------------|---|
| DIN EN ISO 3071 2020-05 | Textiles - Determination of pH of aqueous extract (ISO 3071:2020, EN ISO 3071:2020) |
| DIN EN ISO 4045 2018-09 | Leather - Chemical tests - Determination of pH and difference figure (ISO 4045:2018, EN ISO 4045:2018) |

2.2.12 Gravimetric methods

| Bundesgesundheitsblatt 46 (2003) 362 | 61st communication on the investigation of plastics, Federal Health Gazette, health research, Health Protection 46 (2003) 362, Volatile substances in silicone |
|---|--|
| SOP-CG-210 2021-04 | Determination of extractable components in consumer goods made from silicone with food contact |
| SOP-CG-211 2016-11 | Determination of volatile organic components in consumer goods made from plastic with food contact |
| | |



2.2.13 Titrimetric methods

| SOP-CG-209 2017-06 | Titrimetric determination of the peroxide number in silicone and plastics |
|--|--|
| 2.2.14 Other tests | |
| DIN EN 62321-3-1 2014-10 | Determination of certain substances in electrotechnical products - Part 3-1: Screening - Lead, mercury, cadmium, total chromium and total bromine by X-ray fluorescence spectrometry (IEC 62321-3- 1:2013, EN 62321-3-1:2014, VDE 0042-1-3-1:2014-10) |
| FD A06-222:2002-06-01; FD CR 12471:2002-06-01 | Screening test for nickel release from alloys and coatings in items that come into direct and prolonged contact with the skin |
| SOP-OC-521 2018-11 | Material determination using FT-IR spectroscopy |
| SOP-OC-525 2016-05 | Identification of polyvinyl chloride (PVC) |
| 2.3 Migration tests | |
| ASU B 80.03-2(EG) 2007-03 | Examination of consumer goods - analysis method for determining lead and cadmium permeability |
| ASU B 80.03-3 2008-10 | Examination of consumer goods - Silicate surfaces - Part 1: Determination of the release of lead and cadmium from ceramic ware (DIN EN 1388-1:1995-11) |
| ASU B 80.03-4 2008-10 | Examination of consumer goods - Silicate surfaces - Part 2: Determination of the release of lead and cadmium from silicate surfaces other than ceramic ware (DIN EN 1388-2:1995-11) |
| ASU B 80.30-1(EG) 1998-01 | Examination of consumer goods - Basic rules for determining migration - appendix |
| ASU B 80.30-3(EG) 2008-04 | Examination of consumer goods - Further regulations for testing compliance with migration limit values |



| ASU B 80.30-4 2008-10 | Examination of consumer goods - plastics - Part 1: Guide for the selection of test conditions and test methods for overall migration (DIN EN 1186-1:2002-07) |
|-------------------------------|---|
| ASU B 80.30-6 2008-10 | Examination of consumer goods - plastics - Part 3: Test methods for overall migration into aqueous simulants by total immersion (DIN EN 1186-3:2002-07) |
| ASU B 80.30-8 2008-10 | Examination of consumer goods - plastics - Part 5: Test methods for overall migration into aqueous food simulants by cell (DIN EN 1186-5:2002-07) |
| ASU B 80.30-12 2008-10 | Examination of consumer goods - Plastics - Part 9: Test methods for overall migration into aqueous simulants by article filling (DIN EN 1186-9:2002-07) |
| ASU B 80.30-17 2008-10 | Examination of consumer goods - plastics - Part 14: Test methods for 'substitute tests' for overall migration from plastics intended to come into contact with fatty foodstuffs using test media iso-octane and 95 % ethanol (DIN EN 1186-14:2002-12) |
| ASU B 80.30-19 2008-10 | Examination of consumer goods - Substances in plastics that are subject to restrictions - Part 1: Guide to test methods for the specific migration of substances from plastics to foods and food simulants and the determination of substances in plastics and the selection of conditions of exposure to food simulants (DIN EN 13130-1:2004-08) |
| ASU B 80.30-21 2008-10 | Investigation of consumer goods - Substances in plastics that are subject to restrictions - Part 3: Determination of acrylonitrile in food and food simulants (DIN EN 13130-3:2004-08) |
| ASU B 80.30-22 2008-10 | Examination of consumer goods - Substances in plastics that are subject to restrictions - Part 4: Determination of 1,3-butadiene in plastics (DIN EN 13130-4:2004-08) |
| 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 (ISO 17294-2:2016, EN ISO 17294-2:2016) (Modification: <i>Matrices: Acid digestions, extracts and migrates</i>) |



| DIN EN 16889 2016-10 | Food hygiene - Production and dispense of hot beverages from hot beverage appliances - Hygiene requirements, migration test (EN 16889:2016) |
|----------------------------------|--|
| DIN CEN/TS 13130-9 2005-05 | Materials and articles in contact with foodstuffs - Plastics substances subject to limitation - Part 9: Determination of acetic acid, vinyl ester in food simulants (CEN/TS 13130-9:2005) |
| DIN CEN/TS 13130-13 2005-05 | Materials and articles in contact with foodstuffs - Plastics substances subject to limitation - Part 13: Determination of 2,2-bis(4- hydroxyphenyl)propane (Bisphenol A) in food simulants (CEN/TS 13130-13:2005) |
| DIN CEN/TS 13130-15 2005-05 | Materials and articles in contact with foodstuffs - Plastics substances subject to limitation - Part 15: Determination of 1,3-butadiene in food simulants (CEN/TS 13130-15:2005) |
| DIN CEN/TS 13130-16 2005-05 | Materials and articles in contact with foodstuffs - Plastics substances subject to limitation - Part 16: Determination of caprolactam and caprolactam salt in food simulants (CEN/TS 13130-16:2005) |
| DIN CEN/TS 13130-23 2005-05 | Materials and articles in contact with foodstuffs - Plastics substances subject to limitation - Part 23: Determination of formaldehyde and hexamethylenetetramine in food simulants (CEN/TS 13130-23:2005) |
| SOP-OC-306 2016-05 | Determination of primary aromatic amines (PAA) in migrates of consumer goods using LC/MSMS |
| SOP-OC-401 Appendix 4 2018-06 | Determination of phthalates (PHT) in a specific migrate using GC/MS |
| SOP-OC-505 Appendix 3 2016-05 | Determination of polycyclic aromatic hydrocarbons (PAH) in a specific migrate |
| SOP-OC-514 2019-12 | Determination of nonylphenol in migrates from consumer goods using LC/MSMS |



2.4 Sensoric tests

| ASU B 80.00-4 2008-10 | Examination of consumer goods - Sensory analysis - Testing of packaging materials and packages for foodstuffs (DIN 10955:2004-06) |
|--------------------------|--|
| ASU B 80.56-6 2016-07 | Examination of consumer goods - Paper and board intended to come into contact with foodstuffs - Sensory analysis - Part 1: Odour (DIN EN 1230-1:2010-02) |
| ASU B 80.56-7 2019-02 | Examination of consumer goods - Paper and board intended to come into contact with foodstuffs - Sensory analysis - Part 2: Off-flavour (taint) (DIN EN 1230-2:2018-10) |
| DIN EN 1230-1 2010-02 | Paper and board intended to come into contact with foodstuffs - Sensory analysis - Part 1: Odour (EN 1230-1:2009) |
| DIN EN 1230-2 2018-10 | Paper and board intended to come into contact with foodstuffs - Sensory analysis - Part 2: Off-flavour (taint) (EN 1230-2:2009) |
| DIN 10955 2004-06 | Sensory analysis - Testing of packaging materials and packages for foodstuffs |
| SNR 195651 2015-09 | Textiles; Determination of the odor development of equipment (sensory test) (Modification: Adjustment of the storage vessels depending on the sample size) |
| SNR 195651 2015-09 | Textiles; Determination of the odor development of equipment (sensory test) |

3 Tests of/on toys

3.1 Sample preparation

| DIN EN 71-10 | Safety of toys - Part 10: Organic chemical compounds - Sample |
|--------------|---|
| 2006-03 | preparation and extraction (EN 71-10:2005) |



| 3.2 | 2 Determination of elements in toys using ICP-MS and ion chromatography and determination of organotin compounds using GC-MS | |
|--|--|--|
| DIN EN 2019-0 | | Safety of toys - Part 3: Migration of certain elements (EN 71-3:2019) |
| 3.3 Determination of organic pollutants (primary aromatic amines, solvents, wood preservatives) in toys using gas chromatography with mass-selective detectors (MS detector) ¹⁾ | | |
| DIN EN 2020-0 | | Safety of toys - Part 7: Finger paints - Requirements and test methods (EN 71-7:2014+A3:2020) (Restriction: Only for the determination of aromatic amines from azo dyes and free aromatic amines) |
| DIN EN 2006-0 | N 71-11)1 | Safety of toys - Part 11: Organic chemical compounds - Methods of analysis (EN 71-11:2005) (Restrictions: <i>No procedure for solvent inhalation</i>) |
| 3.4 Determination of organic pollutants (flame retardants, colorants, primary aromatic amines, monomers, preservatives, plasticizers, N-nitrosamines) in toys using liquid chromatography | | |

with mass-selective detectors (MS detector) ¹⁾

| DIN EN 71-7 2020-06 | Safety of toys - Part 7: Finger paints - Requirements and test methods (EN 71-7:2014+A3:2020) (Restriction: Only for the determination of aromatic amines from azo dyes and free aromatic amines) |
|-------------------------|--|
| DIN EN 71-11 2006-01 | Safety of toys - Part 11: Organic chemical compounds - Methods of analysis (EN 71-11:2005) (Restrictions: <i>No procedure for solvent inhalation</i>) |
| DIN EN 71-12 2017-03 | Safety of toys - Part 12: N-Nitrosamines and N-nitrosatable substances (EN 71-12:2016) |

3.5 Determination of formaldehyde in toys using photometry (UV-VIS)

| DIN EN 71-11 | Safety of toys - Part 11: Organic chemical compounds - Methods of |
|--------------|---|
| 2006-01 | analysis (EN 71-11:2005) |
| | (Restrictions: No procedure for solvent inhalation) |



4 Procedures of the Consumer Product Safety Improvement Act (CPSIA 2008)[#]

| CPSC-CH-E1001-08.1 June 21, 2010 | Standard Operating Procedure for Determining Total Lead (Pb) in Children's Metal Products (Including Children's Metal Jewelry) |
|---|--|
| CPSC-CH-E1001-08.3 November 15, 2012 | Standard Operating Procedure for Determining Total Lead (Pb) in Children's Metal Products (Including Children's Metal Jewelry) |
| CPSC-CH-E1002-08.1 June 21, 2010 | Standard Operating Procedure for Determining Total Lead (Pb) in Nonmetal Children's Products |
| CPSC-CH-E1002-08.3 November 15, 2012 | Standard Operating Procedure for Determining Total Lead (Pb) in Nonmetal Children's Products |
| CPSC-CH-E1003-09.1 February 25, 2011 | Standard Operating Procedure for Determining Lead (Pb) in Paint and Other Similar Surface Coatings |
| CPSC-CH-E1004-11 February 03, 2011 | Standard Operating Procedure for Determining Cadmium (Cd) Extractability from Children's Metal Jewelry |
| CPSC-CH-C1001-09.3 April 1st, 2010 | Standard Operating Procedure for Determination of Phthalates |
| 16 CFR Part 1303 January 1, 2016 | Ban of lead-containing paint and certain consumer products bearing lead-containing paint |
| ASTM F963 Part 4.3.5.1 2017 | Standard Consumer Safety Specification for Toy Safety Heavy Elements: Paint and Similar Surface-Coating Materials |
| ASTM F963 Part 4.3.5.2 2017 | Standard Consumer Safety Specification for Toy Safety Heavy Elements: Substrate Materials |
| ASTM E1645a 2020 | Standard Practice for Preparation of Dried Paint Samples by Hotplate or Microwave Digestion for Subsequent Lead Analysis |
| ASTM F2923 2020 | Standard Specification for Consumer Product Safety for Children's Jewelry |

[#] This accreditation does not replace the recognition or approval process of the responsible authority in accordance with the requirements of the legislature.



Abbreviations used:

| AATCC | American Association of Textile Chemists and Colorists |
|-------------|---|
| ASTM | American Society for Testing and Materials |
| ASU | Official Collection of Methods of Analysis according to § 64 German Food and Feed Act |
| BfR | German Federal Institute for Risk Assessment |
| BS | British Standard |
| DIN | Deutsches Institut für Normung e.V. – German institute for standardization |
| EN | Europäische Norm – European Standard |
| EPA | Environmental Protection Agency, USA |
| FD CR | Final draft CEN Report |
| IEC | International Electrotechnical Commission |
| ISO | International Organization for Standardization |
| JIS | Japan Industrial Standard |
| SNR | Swiss rule |
| SOP-XX-YYYY | In-house method of Prüfinstitut HANSECONTROL GmbH |
| VDE | Association for Electrical, Electronic & Information Technologies |