

# Deutsche Akkreditierungsstelle GmbH

## Annex to the Accreditation Certificate D-PL-11159-01-00 according to ISO/IEC 17025:2017

Period of validity: 21.04.2020 to 20.04.2025 Date of issue: 21.04.2020

Holder of certificate:

**SGS-CSTC Standards Technical Services Co. Ltd. Guangzhou Branch**  
**198 Kezhu Road, Sciencetech Park,**  
**Guangzhou Economic & Technological Development District,**  
**GUANGZHOU, GUANGDONG 510663, P. R. CHINA**

Tests in the fields:

**chemical and physical-chemical testing of textiles, leather and leather goods, toys, rubber, plastics, food contact material, fashion jewelry, automotive parts, electrical and electronic equipment, as well as articles coming into contact with skin;**  
**selected sensory testing of food contact material, vehicle interior and automotive parts;**  
**selected chemical and physical-chemical testing of food**

**Within the given testing field marked with \*, the testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, the following: the free choice of standard or equivalent testing methods.**

**Within the given testing field marked with \*\*, the testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, the following: the modification, development and refinement of testing methods.**

**The testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, to use standard or equivalent testing methods listed here with different issue dates for the entire scope of accreditation.**

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

Abbreviations used: see last page

**1 Chemical and Physical-Chemical Testing of Commodities and Specific Consumer Products (Textiles, Leather and Leather Goods, Toys, Rubber, Food Contact Material, Fashion Jewellery, Automotive Parts, Electrical and Electronic Equipment as well as Articles coming into Contact with Skin)**

**1.1 Sample preparation**

EPA 3050B 1996-12	Acid digestion of sediments, sludges, and soils (Modifications: <i>1: Applied for lead and cadmium analysis in metal – 2: Digestion procedures changed</i> )
EPA 3052 1996-12	Microwave assisted acid digestion of siliceous and organically based matrices (Modification: <i>Applied for metal, liquid, textiles, leather, ink, plastic, electronic products, paper</i> )
EPA 3550C 2007-02	Ultrasonic Extraction (Modification: <i>Applied for Hexabromocyclododecane (HBCDD), Tetrabromobisphenol A (TBBPA) analysis</i> )

**1.2 Determination of Organic Hazardous Substances using Gas Chromatography with Mass Selective Detectors (GC-MS/GC-MS-MS) \*\***

ISO 8124-6 2018-11	Safety of toys - Part 6: Certain phthalate esters in toys and children's products
ISO 14362-1 2017-02	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 fibers
ISO 14362-3 2017-02	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-aminoazobenzen
ISO 14389 2014-05	Textiles - Determination of the phthalate content - Tetrahydrofuran method
ISO 17070 2015-02	Leather - Chemical tests - Determination of tetrachlorophenol-trichlorophenol-, dichlorophenol-, trichlorophenol-, dichlorophenol-, monochlorophenol-isomers and pentachlorophenol content (Modification: <i>Applied for Trichlorophenol (TCP), Tetrachlorophenol (TECP), Pentachlorophenol (PCP) analysis</i> )
ISO 17234-1 2015-04	Leather - Chemical tests - Determination of certain azo colorants in dyed leathers

**Annex to the accreditation certificate D-PL-11159-01-00**

ISO 17234-2 2011-03	Leather - Chemical tests - Determination of certain azo colorants in dyed leathers
ISO 17353 2004-09	Water quality - Determination of selected organotin compounds - Gas chromatographic method (Modifications: <i>1: Applied only for textiles, leather, plastics and ink</i> <i>2: Extraction by ultrasonic extraction with ethanoic carbamate solution</i> )
ISO/TS 16179 2012-08	Footwear - Critical substances potentially present in footwear and footwear components - Determination of organotin compounds in footwear materials
ISO/TS 16181 2011-07	Footwear - Critical substances potentially present in footwear and footwear components - Determination of phthalates in footwear materials
ISO/TS 16186 2012-08	Footwear - Critical substances potentially present in footwear and footwear components - Test method to quantitatively determine dimethyl fumarate (DMFU) in footwear materials
EN ISO 14362-1 2017-02	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 fibers (ISO 14362-1:2017)
EN ISO 14389 2014-06	Textiles - Determination of the phthalate content - Tetrahydrofuran method (ISO 14389:2014)
EN ISO 14362-3 2017-02	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 (ISO 14362-3:2017)
EN 13130-1 2004-05	Materials and articles in contact with foodstuffs - Plastics substances subject to limitation - 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 (Determination of migration of PAHs, phthalates)
EN 14372 2004-08	Child use and care articles - Cutlery and feeding utensils - Safety requirements and tests (Section 6.3.2 Determination of phthalate content)
DIN EN ISO 14389 2014-10	Textiles - Determination of the phthalate content - Tetrahydrofuran method (ISO 14389:2014)

**Annex to the accreditation certificate D-PL-11159-01-00**

DIN EN ISO 17070 2015-05	Leather - Chemical tests - Determination of tetrachlorophenol-trichlorophenol-, dichlorophenol-, trichlorophenol-, dichlorophenol-, monochlorophenol-isomers and pentachlorophenol content (ISO 17070:2015) <i>(Modification: Applied for Trichlorophenol (TCP), Tetrachlorophenol (TECP), Pentachlorophenol (PCP) analysis)</i>
DIN EN ISO 17353 2005-11	Water quality - Determination of selected organotin compounds - Gas chromatographic method <i>(Modifications: 1: Applied only for textiles, leather, plastics and ink 2: Extraction by ultrasonic extraction with ethanoic carbamate solution)</i>
DIN 54232 2010-08	Determination of Chlorinated Organic Carriers (COC) in Textile Commodity Article by GC-MS
BS EN ISO 14362-1 2017-02	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 fibers (ISO 14362-1:2017)
BS EN ISO 14362-3 2017-02	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 fibers (ISO 14362-1:2017)
BS EN ISO 14389 2014-06	Textiles - Determination of the phthalate content - Tetrahydrofuran method
BS EN ISO 17070 2015-02	Leather - Chemical tests - Determination of tetrachlorophenol-trichlorophenol-, dichlorophenol-, trichlorophenol-, dichlorophenol-, monochlorophenol-isomers and pentachlorophenol content <i>(Modification: Applied for Trichlorophenol (TCP), Tetrachlorophenol (TECP), Pentachlorophenol (PCP) analysis)</i>
BS EN ISO 17353 2004-09	Water quality - Determination of selected organotin compounds - Gas chromatographic method <i>(Modifications: 1: Applied only for textiles, leather, plastics and ink 2: Extraction by ultrasonic extraction with ethanoic carbamate solution)</i>

**Annex to the accreditation certificate D-PL-11159-01-00**

BS EN 13130-1 2004-06	Materials and articles in contact with foodstuffs - Plastics substances subject to limitation - 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 stimulants <i>(Modification: Here for the determination of migration of PAHs, phthalates)</i>
IEC 62321-6 2015-06	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 62321-8 2017-03	Determination of certain substances in electrotechnical products - Part 8: Phthalates in polymers by gas chromatography - mass spectrometry (GC-MS), gas chromatography - mass spectrometry using a pyrolyzer/thermal desorption accessory (Py-TD-GC-MS)
ASU B 82.02-2 2017-12	Investigation of consumer goods - Methods for determination of certain aromatic amines derived from azo colorants in textiles - Part 1: Detection of the use of certain azo dyes with and without extraction of the fibre
ASU B 82.02-3 2016-07	Leather - Chemical tests - Determination of certain azo colorants in dyed leathers
ASU B 82.02-8 2001-06	Investigation of commodity products - Detection and determination of Pentachlorophenol in commodity products especially those made of leather and textile (Reference method)
ASU B 82.02-15 2017-12	Verification of the use of azo dyes which can release 4-amino-Azobenzene
VDA 276 2005-12	Determination of organic substances as emitted from automotive interior products using a 1 m <sup>3</sup> test chamber
VDA 277 1995-01	Determination of organic emission of non-metallic materials from vehicle interior
VDA 278 2011-10	Thermal desorption analysis of organic emissions for the characterization of non-metallic automobile interior materials
AfPS GS 2014:01 PAK 2014-08	Testing and Evaluation of Polycyclic Aromatic Hydrocarbons for the Granting of GS Mark
CPSC-CH-C1001-09.4 2018-01	Standard Operating Procedure for Determination of Phthalates

**Annex to the accreditation certificate D-PL-11159-01-00**

FDA 21 CFR 177.1640 2011-04	Polystyrene and rubber-modified polystyrene (Modification: <i>Here for the determination of residual styrene monomer</i> )
EPA 5021A 2003-06	Volatile organic compounds in various sample matrices using equilibrium headspace analysis
EPA 8082A 2007-02	Polychlorinated biphenyls (PCBs) by gas chromatography (Modification: <i>Applied for PCBs analysis</i> )
EPA 8270E 2017-02	<i>Semivolatile organic compounds by gas chromatography/mass spectrometry (GC/MS)</i> (Modification: <i>Applied for Polyaromatic hydrocarbons (PAHs) analysis</i> )
GZTC CHEM-TOP-055-01 2018-03	Determination of the content of extractable phenol and its salts and esters in sample by GC-MS
GZTC CHEM-TOP-065 2018-04	Determination of Tetrabromobisphenol A (TBBPA) by GC-MS and HPLC-MS in solids and liquids
GZTC CHEM-TOP-092-02 2018-04	Determination of organic compounds of SVHC by GC-MS and HPLC-DAD/MS (Modification: <i>Applied for chemical formulations, metal, leather, textiles, plastic and finished products</i> )
GZTC CHEM-TOP-095 2018-04	Determination of Dimethyl fumarate (DMFU) in leather, textile, paper and desiccant by GC-MS

**1.3 Determination of Organic Hazardous Substances using Gas Chromatography with Conventional Detectors (ECD-, FID-Detector) \***

ISO 17070 2015-02	Leather - Chemical tests - Determination of tetrachlorophenol-trichlorophenol-, dichlorophenol-, trichlorophenol-, dichlorophenol-, monochlorophenol-isomers and pentachlorophenol content (Modification: <i>Applied for Trichlorophenol (TCP), Tetrachlorophenol (TECP), Pentachlorophenol (PCP) analysis</i> )
DIN EN ISO 17070 2015-05	Leather - Chemical tests - Determination of tetrachlorophenol-trichlorophenol-, dichlorophenol-, trichlorophenol-, dichlorophenol-, monochlorophenol-isomers and pentachlorophenol content (ISO 17070:2015) (Modification: <i>Applied for Trichlorophenol (TCP), Tetrachlorophenol (TECP), Pentachlorophenol (PCP) analysis</i> )

**Annex to the accreditation certificate D-PL-11159-01-00**

BS EN ISO 17070 2015-02	Leather - Chemical tests - Determination of tetrachlorophenol-trichlorophenol-, dichlorophenol-, trichlorophenol-, dichlorophenol-, monochlorophenol-isomers and pentachlorophenol content (Modification: <i>Applied for Trichlorophenol (TCP), Tetrachlorophenol (TECP), Pentachlorophenol (PCP) analysis</i> )
ASU B 82.02-8 2001-06	Investigation of commodity products - Detection and determination of Pentachlorophenol in commodity products especially those made of leather and textile (Reference method)
VDA 277 1995-01	Determination of organic emission of non-metallic materials from vehicle interior
EPA 8082A 2007-02	Polychlorinated biphenyls (PCBs) by gas chromatography (Modification: <i>Applied for PCBs analysis</i> )

**1.4 Determination of Organic Hazardous Substances using High Performance Liquid Chromatography Mass Spectrometer Detector (LC-MS/LC-MS-MS)\*\***

ISO 14362-1 2017-02	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 fibers
ISO 14362-3 2017-02	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
EN ISO 14362-1 2017-02	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 fibers (ISO 14362-1:2017)
EN ISO 14362-3 2017-02	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 (ISO 14362-3:2017)
EN 13130-1 2004-05	Materials and articles in contact with foodstuffs - Plastics substances subject to limitation - 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 stimulants (Modification: <i>Here for the determination of PFOS &amp; PFOA</i> )

**Annex to the accreditation certificate D-PL-11159-01-00**

EN 1400 + A2 2018-09	Child use and care articles - Soothers for babies and young children - Safety requirements and test methods (Modification: <i>Here for the determination of Nitrosamines and N-nitrosatable substances</i> )
EN 14350-2 2004-11	Child use and care articles - Drinking equipment - Part 2: Chemical requirements and tests (Modification: <i>Here for the determination of Bisphenol A (BPA), Nitrosamine and N-nitrosatable and volatile substances</i> )
EN 14372 2004-08	Child use and care articles - Cutlery and feeding utensils - Safety requirements and tests (Modification: <i>Here for the determination of Bisphenol A (BPA)</i> )
DIN 54231 2005-11	Textiles - Detection of Disperse Dyestuffs (Modification: <i>Applied for Carcinogenic dyestuffs, Allergenic disperse dyestuffs and Navy Blue colorants</i> )
BS EN ISO 14362-1 2017-02	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 fibers (ISO 14362-1:2017)
BS EN ISO14362-3 2017-02	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 fibers (ISO 14362-1:2017)
BS EN 13130-1 2004-06	Materials and articles in contact with foodstuffs - Plastics substances subject to limitation - 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 stimulants (Modification: <i>Here for the determination of PFOS &amp; PFOA</i> )
CEN/TS 13130-13 2005-02	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
ASU B 82.02-2 2017-12	Investigation of consumer goods - Methods for determination of certain aromatic amines derived from azo colorants in textiles - Part 1: Detection of the use of certain azo dyes with and without extraction of the fibre
VDA 276 2005-12	Determination of organic substances as emitted from automotive interior products using a 1 m <sup>3</sup> test chamber



**Annex to the accreditation certificate D-PL-11159-01-00**

GZTC CHEM-TOP-065 2018-04	Determination of Tetrabromobisphenol A (TBBPA) by GC-MS and HPLC-MS in solids and liquids
GZTC CHEM-TOP-092-02 2018-04	Determination of organic compounds of SVHC by GC-MS and HPLC-DAD/MS <i>(Modification: Applied for chemical formulations, metal, leather, textiles, plastic and finished products)</i>

**1.5 Determination of Organic Hazardous Substances using High Performance Liquid Chromatography with Conventional Detector (DAD-Detector) \***

ISO 17075-2 2017-02	Leather - Chemical determination of chromium(VI) content in leather- Part 2: Chromatographic method Annex B (HPLC-DAD- no Mass Spectrometer Detector)
ISO 17226-1 2018-12	Leather - Chemical determination of formaldehyde content - Part 1: Method using high performance liquid chromatography
DIN EN ISO 17075-2 2017-02	Leather - Chemical determination of chromium(VI) content in leather- Part 2: Chromatographic method (ISO 17075-2:2017) Annex B (HPLC-DAD- no Mass Spectrometer Detector)
BS EN ISO 17075-2 2017-02	Leather - Chemical determination of chromium(VI) content in leather- Part 2: Chromatographic method (ISO 17075-2:2017) Annex B (HPLC-DAD- no Mass Spectrometer Detector)
ASU B 82.02-3 2016-07	Leather - Chemical tests - Determination of certain azo colorants in dyed leathers
ASU B 82.02-15 2017-12	Verification of the use of azo dyes which can release 4-amino-Azobenzene
VDA 278 2011-10	Thermal desorption analysis of organic emissions for the characterization of non-metallic automobile interior materials

**1.6 Determination of Heavy Metals using Inductive-coupled Plasma Atomic Emission Spectrometry with Conventional Detector (ICP-OES) \*\***

ISO 8124-3 /Amd2 2018-09	Safety of toys - Part 3: Migration of certain elements
EN 71-3 + A3 2018-06	Safety of toys - Part 3: Migration of certain elements
EN 645 1993-10	Paper and board intended to come into contact with foodstuffs - Preparation of a cold water extract (Modification: <i>Here for the determination of Leachable heavy metal</i> )
EN 647 1993-10	Paper and board intended to come into contact with Foodstuffs: Preparation of a hot water extract (Modification: <i>Here for the determination of Leachable heavy metal</i> )
EN 1811+A1 2015-07	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 12472+Amendment 1 2005-12 2009-06	Method for the simulation of wear and corrosion for the detection of nickel release from coated items
EN 14350-2 2004-11	Child use and care articles - Drinking equipment - Part 2: Chemical requirements and tests (Modification: <i>Here for the determination of Migration of certain elements</i> )
EN 14372 2004-08	Child use and care articles - Cutlery and feeding utensils - Safety requirements and tests (Modification: <i>Here for the determination of Migration of certain elements</i> )
DIN EN 71-3 + A3 2018-08	Safety of toys - Part 3: Migration of certain elements
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
BS EN 71-3 + A3 2018-07	Safety of Toys. Migration of Certain Elements

**Annex to the accreditation certificate D-PL-11159-01-00**

BS EN 1811 2015-08	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
Council Directive 84/500/EEC & 2005/31/EC 2005-04	Council Directive 84/500/EEC of 15 October 1984 on the approximation of the laws of the Member States relating to ceramic articles intended to come into contact with foodstuffs (Modification: <i>Here for the determination of Leachable Lead and Cadmium</i> )
Health Canada, Product Safety Bureau, Test method C-02.2 2017-07	Determination of Total Lead in Surface Coating Materials in Consumer Products by Flame Atomic Absorption Spectrometer (Modification: <i>Use of ICP-OES instead of AAS</i> )
Health Canada, Product Safety Bureau, Test method C-03 2018-08	Determination of Leachable Arsenic (As), Selenium (Se), Cadmium (Cd), Antimony (Sb), and Barium (Ba) in Applied Coatings (Modification: <i>Use of ICP-OES instead of ICP-MS</i> )
IEC 62321-4 2017-07	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 62321-5 2013-06	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
ASTM F963 2017-05	Standard Consumer Safety Specification for Toy Safety - Clause 4.3.5 (Modification: <i>Applied for soluble heavy metal and total lead content in paint and surface coating</i> )
Italian D.M. 21/03/1973 and its amendments 1973-3-21	Disciplina igienica degli imballaggi, recipienti, utensili, destinati a venire in contatto con le sostanze alimentari o con sostanze d'uso personale (Modification: <i>Here for the determination of Leachable heavy metal</i> )
CPSC-CH-E1001-08.3 2012-11	Standard operation procedure - Determination to total lead in child metal product (including child metal jewelry)
CPSC-CH-E1002-08.3 2012-11	Standard Operating Procedure for Determining Total Lead (Pb) in Non-metal Children's Products
CPSC-CH-E1003-09.1 2011-02	Standard Operating Procedure for Determining Lead (Pb) in Paint and Other Similar Surface Coatings

GZTC CHEM-TOP-092-01  
2018-04      Determination of inorganic compounds of SVHC by ICP-OES  
(Modification: *Applied for chemical formulations, metal, leather, textiles, plastic and finished products*)

**1.7 Determination of Heavy Metals using Atomic Absorption Spectrometry (AAS) \***

EN 645  
1993-10      Paper and board intended to come into contact with foodstuffs -  
Preparation of a cold water extract  
(Modification: *Here for the determination of Leachable heavy metal*)

EN 647  
1993-10      Paper and board intended to come into contact with Foodstuffs:  
Preparation of a hot water extract  
(Modification: *Here for the determination of Leachable heavy metal*)

EN 1122 Method B  
2001-03      Plastics - Determination of cadmium - Wet decomposition method

EN 1388-1  
1995-10      Silicate surfaces Part 1: Determination of the release of lead and  
cadmium from ceramic ware

EN 1388-2  
1995-10      Silicate surfaces Part 2: Determination of the release of lead and  
cadmium from silicate surfaces other than ceramic ware

DIN EN 1122 Method B  
2002-02      Plastics - Determination of cadmium - Wet decomposition method

BS EN 1122 Method B  
2001-05      Plastics - Determination of cadmium - Wet decomposition method

BS 6748+A1  
2011-10      Specification for limits of metal release from ceramic ware,  
glassware, glass ceramic ware and vitreous enamel ware

ASTM C927  
2014-05      Standard Test Method for Lead and Cadmium Extracted from the Lip  
and Rim Area of Glass Tumblers Externally Decorated with Ceramic  
Glass Enamels

IEC 62321-4  
2017-07      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 62321-5  
2013-06      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

NIOSH 9100  
1994-08      Lead in Surface Wipe Samples

Italian D.M. 21/03/1973 and its amendments  
1973-3-21

Disciplina igienica degli imballaggi, recipienti, utensili, destinati a venire in contatto con le sostanze alimentari o con sostanze d'uso personale  
(Modification: *Here for the determination of Leachable heavy metal*)

**1.8 Determination of Heavy Metals using Inductively-couple Plasma Mass Spectrometry \*\***

ISO 17072-1 2019-02	Leather - Chemical determination of metal content - Part 1: Extractable metals
ISO 17072-2 2019-02	Leather - Chemical determination of metal content - Part 2: Total metal content
EN 71-3 + A3 2018-06	Safety of toys - Part 3: Migration of certain elements
EN 645 1993-10	Paper and board intended to come into contact with foodstuffs - Preparation of a cold water extract (Modification: <i>Here for the determination of Leachable heavy metal</i> )
EN 647 1993-10	Paper and board intended to come into contact with Foodstuffs: Preparation of a hot water extract (Modification: <i>Here for the determination of Leachable heavy metal</i> )
EN 14602 2012-08	Footwear - Test methods for the assessment of ecological criteria (4.1 Determination of total heavy metals content)
DIN EN 71-3 + A3 2018-08	Safety of toys - Part 3: Migration of certain elements
DIN EN 14602 2012-10	Footwear - Test methods for the assessment of ecological criteria (4.1 Determination of total heavy metals content)
BS EN 71-3 + A3 2018-07	Safety Of Toys. Migration Of Certain Elements
BS EN 14602 2012-08	Footwear - Test methods for the assessment of ecological criteria (4.1 Determination of total heavy metals content)
IEC 62321-4 2017-07	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

**Annex to the accreditation certificate D-PL-11159-01-00**

IEC 62321-5 2013-06	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
NIOSH 9100 1994-08	Lead in Surface Wipe Samples
Italian D.M. 21/03/1973 and its amendments 1973-3-21	Disciplina igienica degli imballaggi, recipienti, utensili, destinati a venire in contatto con le sostanze alimentari o con sostanze d'uso personale (Modification: <i>Here for the determination of Leachable heavy metal</i> )
GZTC CHEM-TOP-043-01 2018-04	Determination of extractable heavy metals by ICP-MS (with reference ISO 105 E04:2013 for preparation of perspiration solution)
GZTC CHEM-TOP-044-02 2016-08	Determination of migration of heavy metals from metal and alloy in contact with food by ICP-MS

**1.9 Determination of Heavy Metals using Hg Analyzer**

Health Canada, Product Safety Bureau, Test method C-07 2018-06	Determination of Total Mercury in Surface Coating Materials, Applied Coatings, and Cosmetic Samples by Direct Mercury Analyzer (DMA)
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**1.10 Determination of Chemical Substance using UV-VIS Spectrophotometer \***

ISO 3613 2010-12	Metallic and other inorganic coatings - Chromate conversion coatings on zinc, cadmium, aluminium-zinc alloys and zinc- aluminium alloys - Test methods
ISO 4614 1977-07	Plastics - Melamine-formaldehyde mouldings - Determination of extractable formaldehyde
ISO 14184-1 2011-08	Textiles - Determination of formaldehyde - Part 1: Free and hydrolyzed formaldehyde (water extraction method)
ISO 14184-2 2011-08	Textiles - Determination of formaldehyde - Part 2: Released formaldehyde (vapour absorption method)
ISO 17075-1 2017-02	Leather - Chemical determination of chromium(VI) content in leather - Part 1: Colorimetric method

**Annex to the accreditation certificate D-PL-11159-01-00**

ISO 17226-2 2018-12	Leather - Chemical determination of formaldehyde content - Part 2: Method using colorimetric analysis
EN ISO 3613 2010-12	Metallic and other inorganic coatings - Chromate conversion coatings on zinc, cadmium, aluminium-zinc alloys and zinc-aluminium alloys - Test methods
EN ISO 14184-1 2011-08	Textiles - Determination of formaldehyde - Part 1: Free and hydrolyzed formaldehyde (water extraction method)
EN ISO 14184-2 2011-08	Textiles - Determination of formaldehyde - Part 2: Released formaldehyde (vapour absorption method)
EN 645 1993-10	Paper and board intended to come into contact with foodstuffs - Preparation of a cold-water extract (Modification: <i>Here for the determination of formaldehyde</i> )
EN 647 1993-10	Paper and board intended to come into contact with Foodstuffs - Preparation of a hot water extract (Modification: <i>Here for the determination of formaldehyde</i> )
EN 1541 2001-06	Paper and board intended to come into contact with foodstuffs - Determination of formaldehyde in an aqueous extract
DIN EN ISO 14184-1 2011-12	Textiles - Determination of formaldehyde - Part 1: Free and hydrolyzed formaldehyde (water extraction method) (ISO 14184-1:2011)
DIN EN ISO 14184-2 2011-12	Textiles - Determination of formaldehyde - Part 2: Released formaldehyde (vapour absorption method) (ISO 14184-2:2011)
DIN EN ISO 17075-1 2017-02	Leather - Chemical determination of chromium(VI) content in leather - Part 1: Colorimetric method (ISO 17075-1:2017)
BS EN ISO 3613 2011-1	Metallic and other inorganic coatings - Chromate conversion coatings on zinc, cadmium, aluminium-zinc alloys and zinc-aluminium alloys - Test methods
BS EN ISO 14184-1 2011-08	Textiles - Determination of formaldehyde - Part 1: Free and hydrolyzed formaldehyde (water extraction method)
BS EN ISO 14184-2 2011-08	Textiles - Determination of formaldehyde - Part 2: Released formaldehyde (vapour absorption method)
BS EN ISO 17075-1 2017-02	Leather - Chemical determination of chromium(VI) content in leather - Part 1: Colorimetric method (ISO 17075-1:2017)

**Annex to the accreditation certificate D-PL-11159-01-00**

IEC 62321-7-1 2015-09	Determination of certain substances in electrotechnical products - Part 7-1: Hexavalent chromium - Presence of hexavalent chromium (Cr(VI)) in colourless and coloured corrosion-protected coatings on metals by the colorimetric method Metallic and other inorganic coatings - Chromate conversion
IEC 62321-7-2 2017-03	Determination of certain substances in electrotechnical products - Part 7-2: Hexavalent chromium - Determination of hexavalent chromium (Cr(VI)) in polymers and electronics by the colorimetric method
CEN/TS 13130-23 2005-02	Materials and articles in contact with foodstuffs - Plastics substances subject to limitation - Part 23: Determination of formaldehyde and hexamethylenetetramine in food stimulants
ASU L 00.00-6 2002-12	Evaluation of primary amines in aqueous foodstuffs
VDA 275 1994-07	Determination of Formaldehyde from Vehicle Interior with Modified flask method
VW PV 3925 2009-06	Measuring Emissions of Formaldehyde
EPA 3060A 1996-12	Alkaline digestion for hexavalent chromium
EPA 7196A 1992-07	Chromium, hexavalent (colorimetric)
AATCC 112 2008-05	Formaldehyde Release from Fabric, Determination of Sealed Jar Method
Japanese Law No. 112 1973-10	Law for the Control of Household Products Containing Harmful Substances (Determination of formaldehyde in textile, leather and liquid sample)
JIS L1041 2011-07	Japan Industrial Standards - Test Methods for Resin Finished Textile (Modification: <i>Applied only for formaldehyde</i> )



### 1.11 Determination of Halogen and Sulfur using Ion Chromatography

EN 14582 2016-08	Characterization of waste - Halogen and sulfur content - Oxygen combustion in closed systems and determination methods
BS EN 14582 2016-08	Characterization of waste - Halogen and sulfur content - Oxygen combustion in closed systems and determination methods

### 1.12 Determination of Heavy Metals and Bromine using X-ray Fluorescence Spectrometry

IEC 62321-3-1 2013-06	Determination of certain substances in electrotechnical products - Part 3-1: Screening - Lead, mercury, cadmium, total chromium and total bromine by X-ray fluorescence spectrometry
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### 1.13 Determination of PVC qualitative using Infrared Spectra\*\*

ASTM E1252 2013-01	Standard Practice for General Techniques for Obtaining Infrared Spectra for Qualitative Analysis (Modification: <i>Applied for PVC qualitative analysis</i> )
GZTC CHEM-TOP-066-01 2017-03	Detection of Polyvinyl Chloride (PVC) in Materials

### 1.14 Determination of Overall Migration using Gravimetric Analysis \*

EN 1186-1 2002-04	Materials and articles in contact with foodstuffs - Plastics - Part 1: Guide to the selection of conditions and test methods for overall migration
EN 1186-2 2002-04	Materials and articles in contact with foodstuffs - Plastics - Part 2: Test methods for overall migration into olive oil by total Immersion
EN 1186-3 2002-04	Materials and articles in contact with foodstuffs - Plastics - Part 3: Test methods for overall migration into aqueous food simulants by total immersion
EN 1186-9 2002-04	Materials and articles in contact with foodstuffs - Plastics - Part 9: Test methods for overall migration into aqueous food simulants by article filling
EN 1186-14 2002-09	Materials and articles in contact with foodstuffs - 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

**Annex to the accreditation certificate D-PL-11159-01-00**

FDA 21 CFR 175.300 2011-04	Resinous and polymeric coatings (Modification: <i>Here for the determination of Overall Migration</i> )
FDA 21 CFR 176.170 2011-04	Components of paper and paperboard in contact with aqueous and fatty foods (Modification: <i>Here for the determination of Overall Migration</i> )
FDA 21 CFR 177.1210 2011-04	Closures with sealing gaskets for food containers (Modification: <i>Here for the determination of Overall Migration</i> )
FDA 21 CFR 177.1350 2011-04	Ethylene-vinyl acetate copolymers (Modification: <i>Here for the determination of Overall Migration</i> )
FDA 21 CFR 177.1500 2011-04	Nylon resins (Modification: <i>Here for the determination of Overall Migration</i> )
FDA 21 CFR 177.1520 2011-04	Olefin polymer (Modification: <i>Here for the determination of Overall Migration</i> )
FDA 21 CFR 177.1580 2011-04	Polycarbonate resins (Modification: <i>Here for the determination of Overall Migration</i> )
FDA 21 CFR 177.1630 2011-04	Polyethylene phthalate polymers (Modification: <i>Here for the determination of Overall Migration</i> )
FDA 21 CFR 177.2355 2011-04	Mineral reinforced nylon resins (Modification: <i>Here for the determination of Overall Migration</i> )
FDA 21 CFR 177.2600 2011-04	Rubber articles intended for repeated use (Modification: <i>Here for the determination of Overall Migration</i> )

**1.15 Physico-Chemical Testing**

ISO 3071 2005-06	Textile - Determination of pH of aqueous extract
ISO 4045 2018-05	Leather-Chemical tests-Determination of pH and difference figure
EN ISO 3071 2006-03	Textile - Determination of pH of aqueous extract
EN 14350-2 2004-11	Child use and care articles - Drinking equipment - Part 2: Chemical requirements and tests (Modification: <i>Here for the determination of Volatile Compounds</i> )

**Annex to the accreditation certificate D-PL-11159-01-00**

EN 14372 2004-08	Child use and care articles - Cutlery and feeding utensils - Safety requirements and tests (Modification: <i>Here for the determination of Volatile Compounds</i> )
DIN EN ISO 3071 2006-05	Textile - Determination of pH of aqueous extract
BS EN ISO 3071 2006-03	Textile - Determination of pH of aqueous extract
ASTM D792 2013-11	Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement
AATCC 81 2016-01	pH of the Water-Extract from Wet Processed Textiles
FDA 21 CFR 177.1500 2011-04	Nylon resins (Modification: <i>Here for the determination of Gravity, Solubility</i> )
FDA 21 CFR 177.2355 2011-04	Mineral reinforced nylon resins (Modification: <i>Here for the determination of Ashes</i> )
Kunststoffe im Lebensmittelverkehr Part B IIIX	Colour Release
Bundesgesundheitsbl 14 (1971) 265	Volatile Organic Matter of plastics
Bundesgesundheitsbl 46 (2003) 362	Volatile Organic Matter of silicone rubber
French Arrêté du 25 Annex III	Volatile Organic Matter of silicone rubber

**1.16 Screening of solvents, cleaners, adhesives, paints, Inks, dyes, pigments, auxiliaries and pre-treatment agents using Inductive-Coupled Plasma Atomic Emission Spectrometry/Gas Chromatography with Mass Selective Detectors/High Performance Liquid Chromatography/Liquid Chromatography Mass Spectrometer Detector**

GZTC CHEM-092-05 2018-04	Chemical Screening test method for MRSL substances in various chemical formulations with ICP-OES (Applied only for solvents, cleaners, adhesives, paints, Inks, dyes, pigments, auxiliaries and pre-treatment agents)
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GZTC CHEM-092-06  
2018-04

Chemical Screening test method for MRSL substances in various chemical formulations with GC-MS, HPLC-DAD/MS  
(Applied only for solvents, cleaners, adhesives, paints, Inks, dyes, pigments, auxiliaries and pre-treatment agents)

**2 Selected Sensory Testing of Odour and Flavor in Food Contact Materials, Vehicle Interior and Automotive Parts using Simple Descriptive Tests \***

EN 1230-2  
2009-10

Paper and board intended to come into contact with foodstuffs -  
Sensory analysis - Part 2: Off-flavour (taint)

DIN 10955  
2004-06

Sensory analysis - Testing of packaging materials and packages for foodstuffs

VDA 270  
2016-11

Determination of the odour characteristics of trim material in motor vehicles

**3 Chemical and Physical-Chemical Testing of Food**

**3.1 Determination of Pesticide Residues of Plant Origin using Gas Chromatography Mass Spectrometer Detector / Liquid Chromatography-Tandem Mass Spectrometer Detector**

EN 15662  
2018-05

Foods of plant origin - Multimethod for the determination of pesticide residues using GC- and LC- based analysis following acetonitrile extraction/partitioning and clean-up by dispersive SPE - Modular QuEChERS-method  
(Modification: *Applied only for food with:*  
*1. High water content*  
*2. High acid content and high-water content*  
*3. Tea*)

BS EN 15662  
2018-05

Foods of plant origin - Multimethod for the determination of pesticide residues using GC- and LC- based analysis following acetonitrile extraction/partitioning and clean-up by dispersive SPE - Modular QuEChERS-method  
(Modification: *Applied only for food with:*  
*1. High water content*  
*2. High acid content and high-water content*  
*3. Tea*)

### 3.2 Determination of Fat compounds in Foods using Gas Chromatography/ Gas Chromatography with mass selective detectors

AOAC 996.06 2001	Fat (Total, Saturated, and Unsaturated) in Foods Hydrolytic Extraction Gas Chromatographic Method
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#### Abbreviations used:

AATCC	The American Association of Textile Chemists and Colorists
AfPS	Ausschuss für Produktsicherheit - Committee for Product Safety: specification according to §21 Clause 1 No. 3 German Law on Product Safety
AOAC	Association of Official Agricultural Chemists
AS/NZS	Australian/New Zealand Wiring Rules
ASTM	American Society for Testing and Materials
ASU	Amtliche Sammlung von Untersuchungsverfahren nach § 64 LFGB
BS	British Standard
CEN/TS	Standard of European committee for standardization
CPSC	U.S. Consumer Product Safety Commission
DIN	Deutsches Institut für Normung e. V.
EC (EEC)	Official Journal of the European Communities
EN	European Standard
EPA	U.S. Environmental Protection Agency
FDA	U.S. Food and Drug Administration
GZTC CHEM-TOP-xxx	Laboratory in-house test methods of SGS Guangzhou
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
JETRO	Japan External Trade Organisation
JIS	Japanese Industrial Standards
NIOSH	National Institute of Occupational Safety and Health
NTC	National Train Control
VW PV	VOLKSWAGEN Prüfverfahren
SOR	Standard Options Recommendations
TS	Technical Standard
VDA	Verein Deutscher Automobilhersteller