

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-14234-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from:

16.09.2020

Date of issue: 16.09.2020

Holder of certificate:

GALAB Laboratories GmbH Am Schleusengraben 7, 21029 Hamburg

Tests in the fields:

physical, physico-chemical and chemical investigations of water, soil, sediments, food, feed, consumer goods, tobacco and tobacco products and biota; sampling of food and animal feedstuffs; microbiological investigations of food and consumer goods; molecular biological investigations of food, animal feedstuffs, tobacco and tobacco products; sensory analyses of food and consumer goods; selected immunological investigations of food; microbiological investigations in accordance with the drinking water ordinance, sampling of raw and drinking water for microbiological investigations

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.
- **) the modification, development and refinement of testing methods.

The listed testing methods are exemplary.

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

The certificate together with its annex reflects the status at the time of the date of issue. The current status of the scope of accreditation can be found in the database of accredited bodies of Deutsche Akkreditierungsstelle GmbH. https://www.dakks.de/en/content/accredited-bodies-dakks

Abbreviations used: see last page

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This document is a translation. The definitive version is the original German annex to the accreditation certificate.



The testing laboratory is permitted to use the standardized or equivalent test procedures listed here with different issue dates without being required to inform and obtain prior approval from DAkkS.

The test laboratory has an up-to-date list of all test methods in the flexible accreditation area.

- 1 Investigation of food, animal feedstuffs, tobacco and tobacco products
- 1.1 Physical, physico-chemical and chemical investigations
- 1.1.1 Determination of ingredients, residues and contaminants by LC-MS-MS in food and feed **

DIN EN 15662 2018-07	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 (Deviation: here only with LC-MS-MS)
EU-SRM QuPPE 2019-05	Quick method for the analysis of numerous highly polar pesticides in food involving extraction with acidified methanol and LC-MS/MS measurement (QuPPE-Method) (Modifications: column, eluent Extension: Method 4.1 to Matrin and Oxymatrin)
SOP-No. 91 2017-04	Determination of coccidiostats in food by LC-MS-MS
SOP-No. 129 2016-10	Determination of sulfonamides in food by LC-MS-MS
SOP-No. 138 2017-03	Determination of mycotoxins in cereal products, baked goods and baby food by LC-MS-MS
SOP-No. 195 2017-07	Determination of alkaloids in cereal products and feed
SOP-No. 232 2011-06	Determination of glyphosate, AMPA and glufosinate in food and feed by LC-MS-MS
SOP-No. 333 2013-08	Determination of quaternary ammonium compounds (QAV) in food and feed by LC-MS-MS
SOP-No. 496 2016-08	Determination of guazatin acetate in bananas and citrus fruits

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SOP-No. 508 2018-05	Determination of alternariatoxins in cereals by LC-MS-MS
SOP-No. 518 2017-06	Determination of ergotalkaloids in cereals and feed by LC-MS-MS
SOP-No. 524 2018-01	Determination of silic acid in dairy products and infant formula by LC-MS-MS
SOP-No. 529 2018-01	Determination of shingomyelin in dairy products and infant formula by LC-MS-MS
SOP-No. 533 2018-03	Determination of cucurbitacins in pumpkin plants (zucchini, pumpkin, cucumber) and baby porridge by LC-MS-MS
SOP-No. 541 2018-08	Determination of furocoumarins in food by LC-MS-MS
SOP-No.543 2018-08	Determination of acrylamide in food by LC-MS-MS
SOP-No. 545 2019-02	Determination of opium alkaloids in cereals and poppies by LC-MS-MS

1.1.2 Determination of arsenic species in food and feed by ion chromatography and mass seletive detection (IC-ICP-MS) **

DIN EN 16802 2016-07	Foodstuffs - Determination of elements and their chemical species - Determination of inorganic arsenic in foodstuffs of marine and plant origin by anion-exchange HPLC-ICP-MS (Modification: <i>Extension to feed</i>)
SOP-No. 39 2016-10	Determination of arsenic compounds in food, feed and biota using IC-ICP-MS

Determination of ingredients, residues and contaminants by gas chromatography with conventional detectors (GC-FID) in food and feed **

DGF C-VI 10a 2000	Gas chromatography: analysis of fatty acids and fatty acid distribution (Modification: <i>Extraction</i>)
SOP-No. 418 2017-11	Determination of mineral oil (MOSH & MOAH) in food using online coupled LC-GC-FID

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DGF C-VI 10a

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SOP-No. 525 2017-11

Determination of cholesterol in dairy products and infant formula

by GC-FID

1.1.4 Determination of ingredients, residues and contaminants by gas chromatography with mass selective detection (GC-MSD, GC-MS-MS) in food and feed **

DIN EN 15662 2018-07

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 (Deviation: here only with GC-MS-MS)

ASU L 00.00-36/2 2004-07

Food investigation - Determination of bromide residues in low-fat

foods - Part 2: Determination of inorganic bromide

ASU L 00.00-49/2 1999-11

Food investigation - Low-fat foods - Determination of

dithiocarbamate and thiuram disulphide residues -

Part 2: Gas chromatographic method

(Modifications: Detector MSD; Reduction of reaction approach

1:10; Headspace Sampler; Incubation at 90°C)

ASU L 00.00-49/2

Correction 2002-12

Food investigation - Low-fat foods - Determination of

dithiocarbamate and thiuram disulphide residues -

Part 2: Gas chromatographic process

(Modifications: Detector MSD; Reduction of reaction approach

1:10; Headspace Sampler; Incubation at 90°C)

DGF C-VI 18(10)

21. Auflage 2015

Fatty acid-linked 3-chloropropane-1,2-diol (3-MCPD ester) and

2,3-epoxipropane-1-ol (glycidol). Determination in greases and

oils by GC-MS (difference method)

SOP-No. 86

2010-05

Determination of PCBs in food and feed by GC-MSD

SOP-No. 109

2019-10

Determination of EC and EPA PAHs in food and feed by GC-MSD

SOP-No. 132

2017-07

Determination of phthalic acid esters and plasticizers in food by

GC-MSD

SOP-No. 139

2010-03

Determination of patulin in fruit and vegetables and their

products by GC-MSD

SOP-No. 303

2014-01

Determination of phenoxy carboxylic acids in food by GC-MSD

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Determination of contaminants using high-resolution gas chromatography / high-resolution mass spectrometry (HRGC-HRMS) in food and feed

EU VO 2017/644

Determination of the sampling procedures and analysis methods

2017-04

2017-05

for the control of the levels of dioxins and dioxin-like PCBs in

certain foods

(Modification: internal standard OCDD for OCDF)

EU VO 2017/711

Determination of the sampling procedures and analysis methods

for the control of the levels of dioxins and dioxin-like PCBs in

certain feed

(Modification: internal standard OCDD for OCDF)

Determination of ingredients and additives by means of high-performance Anion Exchange Chromatography (HPAEC) in food

AOAC 2001.02

Determination of trans-Galactooligosaccharides (TGOS) in

2002

selected food products

(Modification: Method only to GOS raw materials)

SOP-No. 248

Determination of galactooligosaccharides (GOS) in baby food by

2017-01

HPAEC-PAD

SOP-No. 569

Determination of sugars by HPAEC-PAD

2019-10

Determination of elements in food and feed using inductively coupled plasma mass spectrometry (ICP-MS) **

ASU L 00.00-93

Food investigation - Determination of iodine in food -

2008-12

ICP-MS method

DIN EN ISO 17294-2

Water Quality - Application of inductively coupled plasma mass

2017-01

spectrometry (ICP-MS) - Part 2: Determination of selected

elements including Uranium isotopes

(Deviation: extension of the elements Ta, Ti; Extension to digestion

solutions of food and feed)

SOP-No. 66

Determination of free ionizable copper in Cu-chlorophyll

2017-09

by extraction/ICP-MS

SOP-No. 81

Determination of methylmercury in food, feed and oils by

2020-03

distillation/ICP-MS

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Determination of ingredients and key figures by means of titrimetric examinations in food *

ASU L 00.00-46/1

Food Investigation - Determination of Sulphite in Food -

1999-11

Part 1: Optimized Monier-Williams Process

ASU L 01.00-10/1

food testing; Determination of the nitrogen content of milk

2016-03

2014-08

according to Kieldahl and calculation of the crude protein content

ASU L 06.00-7

Food investigation - Determination of crude protein content in

meat and meat products - Titrimetric method according to

Kieldahl - Reference method

(Modification: Extension to Fish)

ASU L 13.00-5

Food investigation - Determination of acidity and acidity of animal

and vegetable fats and oils

ASU L 13.00-10

Food investigation - Animal and vegetable fats and oils -

2019-07

2012-01

Determination of iodine count

ASU L 13.00-37

Food investigation - Determination of peroxide count in animal

2018-06

and vegetable fats and oils - Iodometric (visual) endpoint

determination

SOP-No. 567

Total protein in fruits and vegetables (and their products)

2019-09

IFU₃

Titratable Acidity

IFU 30

Determination of Formol Number

Rev. 2005

Rev. 2017

Determination of ingredients and additives by photometric examinations in food *

ASU L 02.00-12

Determination of food - Determination of the content of sucrose

2009-06

and glucose in dairy products and ice cream - enzymatic process

ASU L 48.02.07-2

Determination of maltose in children's biscuits and biscuit flour

1985-05

IFU 21

Determination of L-malic acid (enzymatic)

Rev.2005

Determination of citric acid (enzymatic)

IFU 22 Rev.2005

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IFU 52

Determination of alcohol (enzymatic)

Rev.2005

IFU 53 Determination of lactic acid (enzymatic)

Rev.2005

Determination of D-isocitric Acid (enzymatic)

Determination of sucrose (enzymatic)

Rev.2005

IFU 54

IFU 55 Determination of glucose und fructose (enzymatic)

Rev.2005

IFU 56

Rev.2005

IFU 62

D-Sorbitol (enzymatic) Rev.2005

ASU L 06.00-8

Determination of the hydroxyproline content in meat and meat

2017-10 products

ASU L 08.00-14

Food investigation - Determination of nitrate and nitrite content in 2008-06

sausages after enzymatic reduction of nitrate to nitrite - Spectral

photometric method

IFU 49

Determination of Proline

Rev.2005

1.1.10 Gravimetric determinations of ingredients in food and feed*

ISO 659 Oilseeds - Determination of the oil content 2009-07 (Modification: Grinding, extraction time)

Oilseeds - Determination of moisture and volatile matter content **ISO 665** 2000-09

ISO 24557 Pulses - Determination of moisture content - Air oven method

2009-10

ASU L 00.00-18 Food investigation - Determination of fibre in food

1997-01 Correction 2017-10

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ASU L 01.00-9 2012-01	Investigation of food - Determination of fat content in milk - Gravimetric method (reference method)
ASU L 01.00-20 2013-08	Food investigation - Determination of the fat content of milk and dairy products using the gravimetric Weibull-Berntrop method
ASU L 01.00-27 1988-12	food testing; Determination of the dry matter content of milk and cream; Reference method
ASU L 01.00-77 2002-05	Food investigation - Determination of total ash of milk and dairy products
ASU L 02.06-E(EG) und 1(EG) bis 8(EG) 1981-01	Analytical methods concerning the composition of certain partially or completely dried, preserved dairy products Chapter III/Method 2: Determination of water content
ASU L 06.00-3 2014-08	Food investigation - Determination of water content in meat and meat products - Gravimetric method - Reference method (Extension to fish)
ASU L 06.00-4 2017-10	Food investigation - Determination of ash in meat and meat products (Extension to fish)
ASU L 06.00-6 2014-08	Investigation of foodstuffs - Determination of the total fat content in meat and meat products - Gravimetric method according to Weibull-Stoldt - Reference method (Extension to fish)
ASU L 15.00-7 2012-01	Food investigation - Determination of ash content in cereals, legumes and by-products by incineration
ASU L 15.00-8 2012-01	Investigation of food - Determination of the crude fat content and the total fat content in cereals and cereal products and feed extraction methods according to Randall (Modification: weighing, hydrolysis, extraction)
ASU L 16.01-1 2008-12	Determination of the moisture content in cereal flour
ASU L 16.00-5 2017-10	Food investigation - Determination of the total fat content in cereal products after acid digestion by extraction and gravimetry
ASU L 31.00-4 1997-01	Food investigation - Determination of ash in fruit and vegetable juices

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ASU L 31.00-18

1997-09

Investigation of food - Determination of the entire dry substance in fruit and vegetable juices - Gravimetric method with mass loss

during drying (Modifications:

- Drying conditions.

weighting

Extension to purees, puree and juice concentrates, dried fruits)

ASU L 39.00- E(EG) und 1(EG)

bis 10(EG) 1981-01

Analytical methods for determining the composition of certain

sugars intended for human consumption

Method 1: Determination of mass loss by drying

ASU L 44.00-4 1985-12

Investigation of food - Determination of the total fat content in

chocolate

(Modification: hydrolysis, extraction)

DGF B-II 3 1987

Water and volatile components in feed

IFU 36 2005

Determination of sulphate

IFU 60 2005

Determination of centrifugable pulp in fruit and juices

(Modifications: vessel, centrifugation, determination of

measurement value)

VDLUFA III 3.1

1976

Determination of moisture in feed and cereals

1.1.11 Refractometric investigations in food

IFU 8

Determination of Soluble Solids (indirect method by

Rev. 2017

refractometry)

1.1.12 Further physico-chemical investigations and parameters

1.1.12.1 Measurement with electrodes

ASU L 31.00-2

1997-01

Food investigation - Determination of the pH of fruit and

vegetable juices

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1.1.12.2 Viscosimetry

SOP- No. 544

Determination of viscosity according to Bostwick

2018-09

IFU 1A Relative Density (Method using density meter)

Rev. 2005

1.1.13 Determination of ingredients in food by HPLC/IC

ASU L 26.00-1

Food investigation - Determination of nitrate content in vegetable

2018-10 products - HPLC/IC process

(Modification: Pre-column is no longer necessary)

1.2 Determination of ingredients and additives, allergens and pharmaceutical residues by ELISA in foods *

Veratox for Gliadin R5

(Quantitative),

Produkt 8510

V-GliadinR5_0114_ENSP

Immunological determination of gliadin in food by ELISA (test kit)

(Deviation: wavelength 450 nm, colourless sulphuric acid,

shortening of the incubation time to 9min)

Veratox for mustard

(Quantitative)

Artikel 8400

V-Mustard ENSP 0712

Immunological determination of mustard allergen content in food

by ELISA (test kit)

(Modification: Wavelength 450 nm, colorless sulphuric acid,

shortening of the incubation time to 6min)

Veratox for egg allergen

(Quantitative) Artikel 8450

V-Egg_ES_1015

Immunological determination of chicken egg allergen content in

food by ELISA (test kit)

(Modification: Wavelength 450 nm, colorless sulphuric acid,

shortening of the incubation time to 8min)

Veratox for milk allergen

(Quantitative) Artikel 8470

V-TotalMilk_0215

Immunological determination of milk allergen content in food by

ELISA (test kit)

(Deviation: wavelength 450 nm, colorless sulphuric acid,

shortening of the incubation time to 9min)

Neomycin Artikel 52400

Stand:

September'05-9 [07.2005-10]

Immunological determination of neomycin in food by ELISA (test

kit)

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Gentamicin

Immunological determination of gentamicin in food by ELISA (test

Artikel 52300

Stand: 28. Februar 2012

[12]02.12

Streptomycin Immunological determination of streptomycin in food using ELISA

Artikel 52500

(test kit)

5111STREP[16]02.12 Stand: 13. August 2014

RIDASCREEN Gliadin

(quantitative) Artikel R7001 2009-10

Sandwich-ELISA for the quantitative determination of gliadins and

related prolamines in food

1.3 Microbiological investigations

1.3.1 Determination and detection of bacteria, yeasts and moulds by means of cultural bacteriological processes in food*

ASU L 00.00-20

2018-03

Food investigation - Horizontal method for the detection, counting

and serotyping of salmonella - Part 1: Detection of Salmonella spp. (Acquisition of the eponymous standard DIN EN ISO 6579-1, July

2017)

ASU L 00.00-91

2006-12

Food investigation - Horizontal procedure for the detection of

Shigella spp. in food

ASU L 00.00-32/1

2018-03

Food investigation - Horizontal method for the detection and

counting of - Listeria monocytogenes and Listeria spp. -

Part 1: Detection procedure (acceptance of the eponymous

standard DIN EN ISO 11290-1, September 2017)

ASU L 00.00-22

2018-03

Food investigation - Horizontal method for the detection and

counting of - Listeria monocytogenes and Listeria spp. -Part 2: Counting procedure (acceptance of the eponymous

standard DIN EN ISO 11290-2, September 2017)

ASU L 00.00-107

2007-04

Horizontal method for detection and counting Campylobacter spp.

in food - detection method (according to DIN EN ISO 10272-1)

IFU Method No. 12

2004-09

Method on the Detection of taint producing Alicyclobacillus in

Fruit Juices

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ASU L 00.00-88/1

2015-06

Food investigation - Horizontal method for counting

microorganisms - Part 1: Colony counting at 30 °C by means of a cast plate method (acceptance of the eponymous standard DIN EN

ISO 4833-1, December 2013 edition)

ASU L 00.00-88/2

2015-06

Food investigation - Horizontal method for counting

microorganisms - Part 2: Colony counting at 30 °C by surface

method.

ASU L 00.00-132/2

2010-09

Food Investigation - Horizontal method for the counting of glucuronidase-positive Escherichia coli in food - Part 2: Colony

counting method with 5-bromine-4-chloro-3-indole-D-glucuronide (acceptance of the eponymous standard DIN ISO 16649-2, issue

December 2009)

ASU L 00.00-133/2

2018-03

Food Investigation - Horizontal procedure for the detection and

counting of Enterobacteriaceae - Part 2: Colony counting procedure (acquisition of the eponymous standard DIN EN ISO

21528-2, September 2017)

ASU L 01.00-3

1987-03

food testing; determination of coliform germs in milk, dairy products, butter, cheese and ice cream; Solid soil processes

(Modification: Cromocult Coliformen Agar; Spiralplater)

ASU L 01.00-37

1991-12

food testing; Determination of the number of yeasts and moulds

in milk and dairy products; Reference method

(Modification: also for food in general; Spiralplater)

SOP-No. 489

2016-10

Qualitative detection of methicillin-resistant Staphylococcus aureus (MRSA) in food; Enrichment in Müller-Hinton- and selective

trypton-soy-bouillon and chromogenic MRSA-selective agar

SOP-No. 494

2016-08

Screening of broad spectrum β-lactameses (ESBL) forming

enterobacteriaceae in food

1.3.2 Hygrometric Investigations

ISO 21807 2004-09

Microbiology of food and feed - Horizontal method for

determining water activity

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1.4 Molecular biological investigations

1.4.1 Detection of specific DNA sequences and identification of animal species by means of realtime PCR in food, feed, tobacco and tobacco products *

ASU L 00.00-105 2014-02	Investigation of food - Methods for the detection of genetically modified organisms and their products - quantitative methods based on nucleic acids
ASU L 00.00-122 2008-06	Investigation of food - Detection of a certain DNA sequence frequently employed in genetically modified organisms (GMO) from the cauliflower mosaic virus (CaMV 35S-Promotor, P35S) and Agrobacterium tumefaciens (T-nos) in food - Screening method
ASU L 00.00-148 2014-02	Detection of a DNA sequence of the FMV promoter (pFMV) in food by real-time PCR (element-specific method)
ASU L 10.00-12 2012-07	Investigation of food - determination of fish species in raw fish and fish products by sequential analysis of cytochrome-b sequences
ASU L 18.00-21 2014-08	Investigation of food - Construct-specific real-time PCR method for the detection of genetic modifications in linseed and linseed products
ASU L 23.04/03-1 2010-09	Investigation of food, animal feedstuffs and tobacco - GMO screening for the detection of DNA from the cauliflower mosaic virus and the terminator from Agrobacterium tumefaciens by real-time PCR
ASU L 00.00-122 2008-07	Investigation of food, feed and tobacco – GMO screening for the detection of DNA of the promoter from the cauliflower mosaic virus and the terminator from Agrobacterium tumefaciens using real-time PCR
SOP-No. 193 2017-04	GMO screening for the detection of the construct P35:BAR by real- time PCR in genetically modified rice
ASU L 00.00-125 2008-12	GMO screening for the detection of the CTP2-CP4-EPSPS sequence by real-time PCR
CRLVL07/09VP 2012-01	Event-specific detection of genetically modified soy MON87769 in food using real-time PCR
CRLV01/09VP 2011-09	Event-specific detection of genetically modified soy CV127 in food using real-time PCR

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CRLV07/07VP 2009-01	Event-specific detection of genetically modified soy DP-305423-1 in food using real-time PCR
EURL-VL 10/10VP 2012-11	Event-specific detection of genetically modified maize DAS-40278-9 in food and feed using real-time PCR
SOP-No. 216 2009-08	GMO screening for the detection of the pat and bar gene sequence in genetically modified oilseed rape using real-time PCR
SOP-No. 316 2017-03	Qualitative determination of animal species in food
SOP-No. 400 2014-01	Detection of a specific cashew DNA sequence in food by real-time PCR
SOP-No. 402 2014-01	Detection of a specific almond DNA sequence in food by real-time PCR
SOP-No. 403 2017-02	Detection of a specific sesame DNA sequence in food by real-time PCR
SOP-No. 406 2014-03	Animal species quantification
SOP-No. 429 2015-03	RT-PCR for the amplification of a DNA sequence of the crylAb /crylAC gene in rice
SOP-No. 475 2016-08	Event-specific detection of genetically modified soya MON87708 in food by real-time PCR (according to EURL-VL-02/11VP)
SOP-No. 491 2016-08	Detection of a specific DNA sequence of pecan nuts in food by real-time PCR
SOP-No. 492 2016-08	Detection of a specific DNA sequence of macadamia nuts in food by real-time PCR
SOP-No. 493 2016-08	Detection of a specific DNA sequence of macadamia nuts in food by real-time PCR
SOP-No. 530 2018-02	Detection of a specific DNA sequence of fish in food by real-time PCR
SOP-No. 618 2020-06	GMO screening for the detection of the otp / mepsps sequence in cotton using real-time PCR

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1.4.2 Determination of bacteria and viruses in food by real-time PCR **

ASU L 00.00-98 Food Investigation - Qualitative Detection of Salmonella in Food -2007-04 Real-time PCR Process ASU L 00.00-147/2 (V) Food Investigation - Horizontal procedure for the determination of 2014-02 - Hepatitis A virus and norovirus in food - Part 2: Methods for qualitative detection - Real-time RT-PCR (Modifications: here only detection of norovirus, MS2-Phage as process control) SOP-No. 396 Food Investigation - Qualitative Detection of Listeria 2015-04 monocytogenes using Real-time PCR SOP-No. 422 Qualitative detection of hepatitis A on soft fruit using real-time 2018-02 PCR SOP-No. 427 Qualitative proof of Alicyclobacillus spp. in fruit juices and fruit 2016-10 juice concentrates using real-time PCR SOP-No. 444 Food Investigation - Qualitative Detection of Shigatoxin-Forming 2014-12 Escherichia coli (STEC) & Enterohaemorrhagic Escherichia coli (EHEC) using Real-time PCR SOP-No. 490

Qualitative proof of Shigella spp. in milk and dairy products using

1.5 Sensory examinations of food

1.5.1 Simply descriptive sensory examinations of foods *

real-time PCR

ASU L 00.90-6 2015-06	Food Investigation - Sensory testing methods - Simple descriptive test
ASU L 00.90-7 2007-12	Food Investigation - Sensory Testing Methods - Triangular testing
ASU L 00.90-8 2007-12	Food Investigation - Sensory Test Methods - Pairwise comparative test
ASU L 00.90-14 2004-12	Food investigation - Sensory testing methods - Descriptive test followed by quality assessment

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2016-08

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Special sensory examinations in olive oil

VO (EG) No. 640/2008

2008-07

Characteristics of olive oils and olive-pomace oils and the methods used to determine them: organoleptic testing of virgin olive oils

1.6 Sampling of food

VO (EG) No. 401/2006

2014-07

Commission regulation establishing sampling methods and analytical methods for the official control of the mycotoxin

content of foodstuffs

SOP-No. 307

2013-08

Sampling for the microbiological analysis of food

1.7 Sampling of feed

VO (EG) 152/2009

Anhang 1 2014-07

Sampling of feed

1.8 Sample preparation of food and feed

ASU L 00.00-19/1

2015-06

Determination of element traces in food - pressure digestion

(Modification: application also to feed)

DGF C-VI 11d

1998

Fatty acid methyl ester (alkaline transesterification)

2 **Examination of consumer goods and textiles**

2.1 Physical, physico-chemical and chemical investigations

Determination of residues and contaminants by liquid chromatography and mass selective detection (LC-MS-MS) in consumer goods and textiles **

SOP-No. 214

Determination of nicotine in textiles using LC-MS-MS

2016-06

SOP-No. 340

Determination of quaternary ammonium compounds (QAV) in

2013-08

commodities by LC-MS-MS

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2.1.2 Determination of chromium (VI) in consumer goods and textiles by means of IC-ICP-MS **

DIN EN ISO 17075-2 Leather - Chemical determination of chromium (VI) content in 2017-05 leather - Part 2: chromatography (Modifications: Application only to paper-based materials, quantification by IC-ICP-MS) **DIN EN 71-3** Safety of toys - Part 3: Migration of certain elements 2019-08 (Deviation: here only chromium (VI) and extension to pigments) SOP-No. 304 Determination of extractable chromium (VI) in textiles by IC-ICP-2018-03 MS after extraction with acidic synthetic welding solution

2.1.3 Determination of residues and contaminants in commodities by gas chromatography with standard detectors (GC-FID)

SOP-No. 261 Determination of MOSH and MOAH in food and consumer goods 2016-09 by GC-FID (here only for consumer goods)

Determination of residues and contaminants in consumer goods using gaschromatography with mass selective detectors (GC-ICP-MS, GC-MSD) **

DIN EN 71-3 2019-08	Safety of toys - Part 3: Migration of certain elements (Deviation: here only organotin compounds)
SOP-No. 31 2007-01	Determination of phthalic acids in consumer goods and hygienic products by GC-MSD
SOP-No. 55 2004-07	Determination of alkaline phenols, alkaline phenol ethoxylates and bisphenol A in consumer goods by GC-MSD
SOP-No. 293 2012-04	Determination of phenol and chlorophenols in consumer goods by GC-MSD
SOP-No. 341 2019-02	Determination of EC and EPA PAH in environmental samples and consumer goods by GC-MSD
SOP-No. 342 2013-08	Determination of pesticides in consumer goods and environmental samples by GC-MSD (QuEChERS) (here for consumer goods)

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Determination of elements in consumer goods and textiles by ICP-MS **

ISO 7086-1

Glass hollowware in contact with food - Release of lead and

2000-03

cadmium - Part 1: Test method

(Deviation: Extension to plastic containers)

DIN EN ISO 17294-2

2017-01

Water quality - Application of inductively coupled plasma mass spectrometry (ICP-MS) - Part 2: Determination of 62 elements

(Deviation: Extension to the elements Ta, Ti; extension to digestion solutions including pressure digestion, also for heavy metals in

textiles)

DIN EN 16711-2

2016-02

Textiles - Part 2: Determination of metals extracted by acidic

artificial perspiration solution by ICP-MS

(Deviation: Extension to the elements Mn, Se, Sn and Zn)

DIN EN 71-3

2019-08

Safety of toys - Part 3: Migration of certain elements

(Deviation: Extension to pigments)

Resolution AP (89) 1

1989-09

Resolution AP (89) 1 on the use of colourants in plastic materials

coming into contact with food

(Deviation: Extension to quantification by ICP-MS)

SOP-No. 272 2018-11

Determination of elements As, Ba, Cd, Co, Cr, Cu Hg, Ni, Pb, Sb, Se, Sn, Zn in consumer goods following saline extraction by ICP-MS

2.1.6 Photometric determinations of contaminants in consumer goods and textiles *

ASU B 82.02-1

1985-06

Investigations of consumer goods - Determination of formaldehyde emissions from textile consumer goods

(here: by UV/VIS)

SOP-No. 13 ECB

2011-11

Determination of free and hydrolysed formaldehyde in solid

paper-based material by spectrophotometry

Gravimetric Investigations of consumer goods

ASU B 80.30-1(EG)

Investigation of consumer goods - Basic rules for the

1998-01

determination of migration - Annex

ASU B 80.30-4

2008-10

Investigation of consumer goods - Plastics - Part 1: Guidelines for

the selection of test conditions and test methods for overall

migration

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ASU B 80.30-6 2008-10	Investigation of consumer goods Plastics - Part 3: Test methods for overall migration in aqueous food test samples by total immersion
ASU B 80.30-8 2008-10	Investigation of consumer goods - Plastics - Part 5: Test methods for overall migration in aqueous food test samples by cells
ASU B 80.30-10 2008-10	Investigation of consumer goods - Plastics - Part 7: Test methods for overall migration in aqueous food test samples with a pouch
ASU B 80.30-12 2008-10	Investigation of consumer goods - Plastics - Part 9: Test methods for overall migration in aqueous food test samples filling of the object
ASU B 80.30-17 2008-10	Investigation of consumer goods - Plastics - Part 14: Test methods for "alternative tests" for overall migration from plastics coming into contact with high-fat food, by the test media isooctane and 95% ethanol
ASU B 80.30-18 2008-10	Untersuchung von Bedarfsgegenständen - Kunststoffe - Teil 15: Alternative Prüfverfahren zur Bestimmung der Migration in fettige Prüflebensmittel durch Schnellextraktion in Iso-Octan und/oder 95%igem Ethanol
ASU B 80.30-19 2008-10	Investigation of consumer goods - Substances in plastics subject to restrictions - Part 1: Guidelines for the test methods for the specific migration of substances from plastics into food and food test samples - Determination of substances in plastics and selection of contact conditions with food test samples

2.1.8 Simple visual determination of additives in consumer products *

ASU B 82.02-13	Determination of the colourfastness of articles for common use -
2011-12	Part 2: Test with artificial sweat
ASU B 82.92-3	Determination of the colourfastness of articles for common use -
2011-12	Part 1: Test with artificial saliva

2.1.9 Determination of PCDD / PCDF and dioxin-like PCBs using high-resolution gas chromatography high-resolution mass spectrometry (HRGC / HRMS)

SOP-No. 230 Determination of the mass concentration of PCDD / PCDF and 2020-04 dioxin-like PCBs in commodities and hygiene articles

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2.2 Determination and detection of bacteria using cultural bacteriological methods on furnishings and utensils in the food sector*

ASU B 80.56-5

2008-10

Investigation of consumer goods - Paper and cardboard coming

into contact with food - Determination of anti-microbial fraction

transfer

ASU B 80.00-1

1998-01

Investigation of consumer goods - Determination of surface colony

count on fitment and utensils in food areas -

Part 1: Quantitative swab method

ASU B 80.00-2

1998-01

Investigation of consumer goods - Determination of surface colony

count on fitment and utensils in food areas -

Part 2: Semiguantitative swab method

ASU B 80.00-3

1998-01

Investigation of consumer goods - Determination of surface colony

count on fitment and utensils in food areas -

Part 3: Semiquantitative method with culture media laminated

taking up equipment, squeeze method

Ph. Eur. 2.6.12

8. Ausgabe 2014-01

Microbiological examination of non-sterile products: total viable

aerobic count

Ph. Eur. 2.6.13

8. Ausgabe 2014-01

Microbiological examination of non-sterile products: test for specified micro-organisms

2.3 Special sensory testing for the odour and taste of paper, cardboard and consumer goods *

DIN EN 1230-1

Paper and board intended to come into contact with food -

2010-02

Sensory analysis - Part 1: Odour

DIN EN 1230-2

Paper and board intended to come into contact with food -

2010-02

Sensory analysis - Part 2: Off-flavour (taint)

(here: Triangular test)

ASU B 80.00-4

2008-10

Investigation of consumer goods - Sensory testing of packaging

materials and packaging for food

(here: Triangular test)

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3 Investigation of cosmetic products

SOP-No. 452

Determination of polysilicon-15 in cosmetics by HPLC

2015-03

4 Investigation of chemical products

SOP-No. 249

Determination of mass polymer stabilisers by HPLC DAD

2010-11

2013-01

SOP-No. 315

Determination of acrylic acids and residual monomers from super

absorbent polymers after EDANA by HPLC-UV-VIS

5 Investigation of water

5.1 Physical, physico-chemical and chemical Investigations

5.1.1 Determination of organic and organometallic compounds by means of gas chromatography (GC-MSD, GC-ICP-MS) **

DIN EN ISO 17353 (F 13)

Water quality - Determination of selected organotin compounds -

2005-11

Gas chromatographic method

SOP-No. 85

Determination of chlorobenzenes in water by GC-MSD

2005-04

2008-05

SOP-No. 154

Determination of phthalates in water by GC-MSD

SOP-No. 156

Determination of alkylphenols, alkylphenol ethoxylates and

2008-05

bisphenols in water by GC-MSD

5.1.2 Determination of elements by ICP-MS

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

(Modification: Extension to the elements Ta, Ti)

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5.1.3 **Further chromatographic Investigations**

DIN EN ISO 10304-1

2009-07

Water quality - Determination of dissolved anions by liquid

chromatography of ions - Part 1: Determination of bromide,

chloride, fluoride, nitrate, nitrite, phosphate and sulfate

SOP-No. 234

Determination of glyphosate, AMPA und glufosinate in water

2009-11

by LC-MS-MS

6 Investigation of sediments, soils and sludges

6.1 Sample preparation

DIN EN 16174

Sludge, treated bio waste and soil - Digestion of aqua regia soluble

2012-11

fractions of elements (here: only method A))

6.2 Physical, physico-chemical and chemical Investigations

6.2.1 Determination of organic compounds by liquid chromatography (LC-MS-MS) **

SOP-No. 233

Determination of glyphosate, AMPA und glufosinate in sediments

2009-11

by LC-MS-MS

6.2.2 Determination of organic and metal-organic compounds by gas chromatography (GC-MSD and GC-ICP-MS) **

DIN EN ISO 23161

Soil quality - Determination of selected organotin compounds -

2019-04

Gas-chromatographic method

DIN EN ISO 18287

2006-05

Soil quality - Determination of polycyclis aromatic hydrocarbons

(PAH) - Gas chromatographic method with detection by mass

spectrometry (GC-MS) (ISO 18297:2006)

SOP-No. 1

Determination of organotin compounds in sediments by

2018-01

GC-ICP-MS

SOP-No. 342

2013-08

Determination of pesticides in consumer goods and environmental samples by GC-MSD (QuEChERS)

(here for sediments and soils)

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6.2.3 Determination of PCDDs/PCDFs and dioxin-like PCBs by HRGC-HRMS

EPA 1613

Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope

1994-10

Dilution HRGC/HRMS

Determination of elements by ICP-MS

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

(Deviation for sediments, soil and sludges: determination in aqua

regia digestion solutions)

6.2.5 Gravimetric determinations

DIN EN 15934

2012-11

Sludge, treated bio waste, soil and waste - Calculation of dry

matter content after determination of dry residue or water

content

(here: only method A)

7 Investigation of biota

ASU L 00.00-19/1

2015-06

Food - Determination of trace elements - Pressure digestion

(takeover of the standard DIN EN 13805 with the same name,

version of December 2014) (Deviation: Here for biota)

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

(Deviation for biota: Determination in digestion solutions)

SOP-No. 39

Determination of arsenic compounds in food and animal

2016-10

feedstuffs and biota by IC-ICP-MS

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8 Investigations in accordance with the Drinking Water Ordinance - TrinkwV -

Sampling

Method	Title
DIN EN ISO 19458 (K 19)	Water quality - Sampling for microbiological analysis
2006-12	

Annex 1: MICROBIOLOGICAL PARAMETERS

PART I: General requirements for drinking water

Lfd. No.	Parameter	Method
1	Escherichia coli (E. coli)	DIN EN ISO 9308-1 (K 12) 2017-09
2	Enterokokken	DIN EN ISO 7899-2 (K 15) 2000-11

PART II: Requirements for drinking water dispensed from closed containers

Lfd. No.	Parameter	Method
1	Escherichia coli (E. coli)	DIN EN ISO 9308-1 (K 12) 2017-09
2	Enterokokken	DIN EN ISO 7899-2 (K 15) 2000-11
3	Pseudomonas aeruginosa	DIN EN ISO 16266 (K 11) 2008-05

ANNEX 2: CHEMICAL PARAMETERS

PART I: Chemical parameters whose concentration does not usually increase in the distribution network including the drinking water installation

not applicable

PART II: Chemical parameters whose concentrations in the distribution network including the drinking water installation can increase

not applicable

ANNEX 3: INDICATOR PARAMETERS

Part I: General indicator parameters

Lfd. No.	Parameter	Method
1	Aluminium	Not applicable
2	Ammonium	Not applicable
3	Chloride	Not applicable
4	Clostridium perfringens (einschließlich Sporen)	DIN EN ISO 14189 (K 24) 2016-11
5	Coliform bacteria	DIN EN ISO 9308-1 (K 12) 2017-09
6	Iron	Not applicable
7	Colouring (spectral absorption coefficient Hg 436 nm	Not applicable
8	Odour	Not applicable

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Lfd. No.	Parameter	Method
9	Taste	Not applicable
10	Colony count at 22 °C	DIN EN ISO 6222 (K 5) 1999-07
		TrinkwV §15 Absatz (1c)
11	Colony count at 36 °C	DIN EN ISO 6222 (K 5) 1999-07
		TrinkwV §15 Absatz (1c)
12	Electrical conductivity	Not applicable
13	Manganese	Not applicable
14	Sodium	Not applicable
15	Total organic carbon (TOC)	Not applicable
16	Oxidizability	Not applicable
17	Sulphate	Not applicable
18	Turbidity	Not applicable
19	Hydrogen ion concentration	Not applicable
20	Calcite solubility	Not applicable

Part II: Special requirements for drinking water in drinking water installation facilities

Parameter	Method
Logionalla spos	ISO 11731 2017-05
Legionella spec.	UBA recommendation 18. December 2018

ANNEX 3a: Requirements for drinking water in relation to radioactive substances not applicable

Parameters that are not included in Annex 1 to 3 of the German drinking water ordinance Other regular examinations

not applicable

The accreditation does not replace the validation or certification process requirement of the relevant authority in accordance with Article 15, Paragraph 4 of the Drinking Water Ordinance.

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Abbreviations used:

ΑP Analytical procedure, Council of Europe Committee of Ministers

ASU Official Collection of Investigations according to § 64 LFGB

(amtliche Sammlung von Untersuchungen nach § 64 LFGB)

CRL European Commission, Community Reference Laboratory

DGF German Society for Fat Research

(Deutsche Gesellschaft für Fettwissenschaft e. V.)

DIN German Institute for Standardisation (Deutsches Institut für Normung e. V.)

ECB European Central Bank

EDANA European Disposables and Nonwovens Association

EN European standard

EPA Environmental Protection Agency

GVO Genetically-modified organisms (Gentechnisch veränderte Organismen)

IFU International Federation of Fruit Juice Producers **IEC** International Electrotechnical Commission ISO International Standards Organization

LFGB German Food and Feed Code

(Lebensmittel-, Bedarfsgegenstände- und Futtermittelgesetzbuch)

Ph. Eur. Pharmacopoea Europaea

SOP Laboratory in-house test method of GALAB Laboratories GmbH

TrinkwV Drinking water ordinance

VDLUFA Association of German agricultural investigation and research institutions

VO (EG) Commission regulation

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