

Deutsche Akkreditierungsstelle GmbH

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

Valid from: 01.02.2024

Date of issue: 01.02.2024

Holder of certificate:

GALAB Laboratories GmbH
Am Schleusen graben 7
21029 Hamburg

with the location

GALAB Laboratories GmbH
Am Schleusen graben 7
21029 Hamburg

The testing laboratory fulfils the requirements according to DIN EN ISO/IEC 17025:2018 to perform the conformity assessment activities listed in this annex.

The testing laboratory fulfils additional legal and normative requirements, where applicable, including those in relevant sectoral programmes, provided that these are expressly confirmed below.

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

The certificate together with the annex to the certificate reflects the status at the time of issue. The current status of the scope of accreditation can be found in the database of accredited bodies of the German Accreditation Body GmbH (www.dakks.de)

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

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Tests in the fields:

**physical, physicochemical and chemical investigations of water (wastewater, surface water, process water), soils, sediments, food, feed and consumer goods;
sampling of food and feed;
sensory and microbiological examinations of foodstuffs and consumer goods;
molecular biological investigations of food and feed,
selected immunological examinations of food;
microbiological tests in accordance with the Drinking Water Ordinance (old version), sampling of raw materials and drinking water for microbiological tests**

Within the test fields marked with */, the testing laboratory is permitted, without the need for prior information and consent from DAkkS,**

***) allows the free selection of standardised test methods or test methods equivalent to them.**

****) allows the modification as well as further and new development of test methods.**

The test methods listed are exemplary.

The testing laboratory is permitted, without the need for prior information and consent from DAkkS, to use standardized or equivalent test procedures listed here with different issue dates.

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

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1 Testing of food and feed

1.1 Physical, physicochemical and chemical investigations

1.1.1 Determination of Ingredients, pesticides and residues of pharmacologically active substances and contaminants by means of liquid chromatography with mass selective detector (MS/MS) in food and feed **

DIN EN 15662 2018-07	Plant-based food - Multimethod for the determination of pesticide residues with GC and LC after acetonitrile extraction/distribution and purification with dispersive SPE - Modular QuEChERS method (Restriction: <i>Analysis here only with LC-MS-MS</i>)
EURL-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-PO-method) (Modification: <i>column, running fluid; Extension of Method 4.1 to Matrin and Oxymatrine</i>)
SOP No. 91 2017-04	Determination of coccidiostats in food using LC-MS-MS
SOP No. 138 2017-03	Determination of Mykotoxins in cereal products, bakery products and baby food using LC-MS-MS
SOP No. 195 2017-07	Determination of tropane alkaloids in cereals, soaps and creams using LC-MS-MS
SOP No. 232 2011-06	Determination of glyphosate, AMPA and glufosinate in food and feed using LC-MS-MS
SOP No. 333 2013-08	Determination of quaternary ammonium compounds (QAV) in food and feed using LC-MS-MS
SOP No. 496 2016-08	Determination of guazatine acetate in bananas and citrus fruits
SOP No. 508 2018-05	Determination of alternariatoxins in cereals by LC-MS-MS
SOP No. 518 2017-06	Determination of ergot alkaloids in cereals and feed using LC-MS-MS
SOP No. 524 2018-01	Determination of sialic acid in dairy products and infant formula by LC-MS-MS

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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 cucurbits (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 from food using LC-MS-MS
SOP No. 545 2019-02	Determination of opium alkaloids in cereals and poppy seeds by LC-MS-MS
SOP No. 552 2019-11	Determination of β -lactams in food by LC-MS-MS
SOP No. 617 2020-06	Determination of sulfonamides in food by LC-MS-MS
SOP No. 622 2020-07	Determination of pyrrolizidine alkaloids in food by LC-MS-MS
SOP No. 623 2020-12	Determination of patulin in fruits, purees, concentrates and fruit preparations by LC-MS-MS
SOP No. 642 2021-02	Determination of cannabinoids in food using LC-MS-MS
SOP No. 650 2021-07	Determination of sudan dyes in spices, oleoresin and sauces by LC-MS-MS

1.1.2 Determination of ingredients and contaminants by gas chromatography with conventional detector (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
SOP No. 525 2017-11	Determination of cholesterol in dairy products and infant formula using GC-FID

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1.1.3 Determination of ingredients, pesticide residues and contaminants by gas chromatography with mass-selective detectors (MS, MS/MS) in food and feed **

DIN EN 15662 2018-07	Plant-based food - Multimethod for the determination of pesticide residues with GC and LC after acetonitrile extraction/distribution and purification with dispersive SPE - Modular QuEChERS method (Restriction: <i>Analysis here only with GC-MS-MS</i>)
ASU L 00.00-36/2 2004-07	Investigation of foodstuffs - Determination of bromide residues in low-fat foods - Part 2: Determination of inorganic bromide
ASU L 00.00-49/2 1999-11	Examination of foodstuffs - Low-fat foods - Determination of dithiocarbamate and thiuram disulfide residues - Part 2: Gas chromatographic method (Modification: <i>Detector MS; Reduction of reaction approach 1:10; Headspace Sampler; Incubation at 90°C</i>)
ASU L 00.00-49/2 Correction 2002-12	Examination of foodstuffs - Low-fat foods - Determination of dithiocarbamate and thiuram disulfide residues - Part 2: Gas chromatographic method (Modification: <i>Detector MS; Reduction of reaction approach 1:10; Headspace Sampler; Incubation at 90°C</i>)
DGF C-VI 18(10) 2015	Fatty acid-bound 3-chloropropane-1,2-diol (3-MCPD ester) and 2,3-epoxypropane-1-ol (glycidol). Determination in fats and oils by GC-MS (difference method)
SOP No. 109 2019-10	Determination of EC and EPA PAHs in food and feed using GC-MS
SOP No. 132 2017-07	Determination of phthalic acid esters and plasticizers in food using GC-MS
SOP No. 303 2014-01	Determination of phenoxy-carboxylic acids in food using GC-MS
SOP No. 636 2021-06	Determination of ethylene oxide in cereals using headspace GC-MS
SOP No. 653 2021-11	Determination of 2-chloroethanol and ethylene oxide in food using GC-MS-MS

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1.1.4 Determination of contaminants by high-resolution gas chromatography with high-resolution mass spectrometry (HRMS) in food and feed

EU-Regulation 2017/644 2017-04	Determination of sampling methods and analytical methods for the control of levels of dioxins and dioxin-like PCBs in certain foodstuffs (Modification: <i>internal standard OCDD for OCDF</i>)
EU-Regulation 2017/771 2017-05	Determination of sampling methods and methods of analysis for the control of levels of dioxins and dioxin-like PCBs in certain feedingstuffs (Modification: <i>internal standard OCDD for OCDF</i>)
SOP No. 559 2019-05	Determination of phosphine in food using HS-GC-MS

1.1.5 Determination of Ingredients and Additives Using High-performance Anion Exchange Chromatography (HPAEC) in food

AOAC 2001.02 2002	Determination of trans-Galactooligosaccharides (TGOS) in selected food products (Restriction: <i>here only examination of GOS raw materials</i>)
SOP No. 248 2017-01	Determination of galactooligosaccharides (GOS) in infant formula using HPAEC-PAD
SOP No. 569 2019-10	Determination of sugars in foods using HPAEC-PAD

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1.1.6 Determination of Elements in Food and Feed by Inductively Coupled Plasma Mass Spectrometry (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 (Extension: <i>Analytes here also Ta, Ti; investigation of digestion solutions of food and feed</i>)
ASU L 00.00-93 2008-12	Testing of foodstuffs - Determination of iodine in food - ICP-MS method
SOP No. 66 2020-06	Determination of free ionizable copper in Cu-chlorophyll by extraction/ICP-MS
SOP No. 81 2021-01	Determination of methylmercury in food, feed and oils by distillation /ICP-MS

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

ASU L 00.00-46/1 1999-11	Examination of foodstuffs - Determination of sulfite in Food - Part 1: Optimised Monier-Williams process
ASU L 01.00-10/1 2016-03	Examination of foodstuffs; Determination of the nitrogen content of milk according to Kjeldahl and calculation of the crude protein content
ASU L 06.00-7 2014-08	Examination of foodstuffs - Determination of the crude protein content in meat and meat products - Titrimetric method according to Kjeldahl - Reference method (<i>Extension: Matrix here also fish</i>)
ASU L 13.00-5 2012-01	Examination of foodstuffs - determination of the acidity and acidity of animal and vegetable fats and oils
ASU L 13.00-10 2019-07	Examination of foodstuffs - Animal and vegetable fats and oils - Determination of iodine count
ASU L 13.00-37 2018-06	Examination of foods - Determination of the peroxide number in animal and vegetable fats and oils - Iodometric (visual) endpoint determination

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IFU 3 Rev. 2017	Titrateable Acidity
IFU 30 Rev. 2005	Determination of Formol Number
SOP No. 659 2022-01	Determination of fat indicators in animal and vegetable fats and oils (automatic titration)

1.1.8 Determination of ingredients and additives by means of photometric tests in foodstuffs *

ASU L 02.00-12 2009-06	Determination of foodstuffs - Determination of the content of sucrose and glucose in milk products and ice cream - Enzymatic method
ASU L 06.00-8 2017-10	Determination of hydroxyproline content in meat and meat products
ASU L 08.00-14 2008-06	Investigation of foodstuffs - Determination of nitrate and nitrite content in sausage products after enzymatic reduction of nitrate to nitrite - Spectrophotometric method
IFU 21 Rev.2005	Determination of L-malic acid (enzymatic)
IFU 22 Rev.2005	Determination of citric acid (enzymatic)
IFU 52 Rev.2005	Determination of alcohol (enzymatic)
IFU 53 Rev.2005	Determination of lactic Acid (enzymatic)
IFU 54 Rev.2005	Determination of D-Isocitric Acid (enzymatic)
IFU 55 Rev.2005	Determination of glucose und fructose (enzymatic)

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IFU 56 Determination of Sucrose (enzymatic)
Rev.2005

IFU 62 D-Sorbitol (enzymatic)
Rev.2005

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1.1.9 Determination of ingredients by means of gravimetric tests in food and feed *

ISO 659 2009-07	Oilseeds - determination of oil content (modification: <i>grinding, extraction time</i>)
ISO 665 2000-09	Oilseeds - Determination of moisture and volatile matter content
ISO 24557 2009-10	Pulses - Determination of moisture content - Air oven method
ASU L 00.00-18 1997-01 Correction 2017-10	Examination of foods - Determination of dietary fibres in foods
ASU L 01.00-9 2012-01	Examination of foodstuffs - Determination of fat content in milk - Gravimetric method (reference method)
ASU L 01.00-20 2013-08	Examination of foodstuffs - Determination of the fat content of milk and dairy products according to the gravimetric Weibull-Berntrop method
ASU L 01.00-27 1988-12	Examination of foodstuffs; Determination of the dry matter content of milk and cream (cream); Reference method
ASU L 01.00-77 2002-05	Examination of foodstuffs - determination of the total ash of milk and dairy products
ASU L 02.06-E(EG) and 1(EG) to 8(EG) 1981-01	Methods of analysis of the composition of certain partially or wholly dried preserved dairy products Chapter III/Method 2: Determination of water content
ASU L 06.00-3 2014-08	Examination of foodstuffs - Determination of the water content in meat and meat products - Gravimetric method - Reference method (Extension: <i>Matrix here also fish</i>)
ASU L 06.00-4 2017-10	Examination of foodstuffs – determination of ash in meat and meat products (Extension: <i>Matrix here also fish</i>)
ASU L 06.00-6 2014-08	Examination of foodstuffs – Determination of the total fat content in meat and meat products – Gravimetric method according to Weibull-Stoldt – Reference method (Extension: <i>Matrix here also fish</i>)

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ASU L 15.00-7 2012-01	Investigation of foodstuffs - determination of ash content in cereals, legumes and by-products by combustion
ASU L 15.00-8 2012-01	Examination of Foodstuffs - Determination of Crude Fat Content and Total Fat Content in Cereals and Cereal Products and Feedingstuffs Randall Extraction Method (Modification: <i>weighing, hydrolysis, extraction</i>)
ASU L 16.01-1 2008-12	Determination of the moisture content in cereal flour
ASU L 16.00-5 2017-10	Examination of foodstuffs - Determination of the total fat content in cereal products after acid digestion by extraction and gravimetry
ASU L 31.00-4 1997-01	Examination of foodstuffs - determination of ash in fruit and vegetable juices
ASU L 31.00-18 1997-09	Examination of foodstuffs - Determination of the total dry matter in fruit and vegetable juices - Gravimetric method with mass loss during drying (Modification: <i>drying conditions, weighing;</i> <i>Extension: Matrix here also purees, puree and juice concentrates, dried fruits</i>)
ASU L 39.00-E(EG) and 1(EG) to 10(EG) 1981-01	Methods of analysis for determining the composition of certain sugars intended for human consumption Method 1: Determination of mass loss due to drying
ASU L 44.00-4 1985-12	Examination of foods - Determination of the total fat content in chocolate (Modification: <i>Hydrolysis, Extraction</i>)
DGF B-II 3 1987	Water and volatiles in feed
IFU 36 2005	Determination of sulphate
IFU 60 2005	Determination of centrifugable pulp in fruit juices (Modification: <i>vessels, centrifugation, measurement of measured values</i>)
VDLUF A III 3.1 1976	Determination of moisture in feed and cereals

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SOP No. 585 2019-11	Gravimetric determination of dry matter in food
SOP No. 586 2019-11	Gravimetric determination of total ash in food
SOP No. 587 2019-11	Gravimetric determination of total fat content in food
SOP No. 588 2019-11	Gravimetric determination of total protein in food
SOP No. 651 2022-01	Fully automatic determination of water and ash content in food using prepASH

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1.1.10 Further physicochemical investigations

ASU L 26.00-1 2018-10	Testing of Foodstuffs - Determination of Nitrate Content in Vegetable Products - HPLC/IC Method (Modification: <i>pre-column omitted</i>)
ASU L 31.00-2 1997-01	Examination of foodstuffs - Determination of the pH value of fruit and vegetable juices
IFU 1A Rev. 2005	Relative Density (Method using density meter)
IFU 8 Rev. 2017	Determination of Soluble Solids (indirect method by refractometry)
SOP No. 473 2019-12	Determination of oligosaccharides in food using HPLC-FLD
SOP No. 544 2018-09	Determination of viscosity according to Bostwick

1.2 Determinations from Allergens and residues of pharmacologically active substances by enzyme immunoassay (ELISA) in food *

Neogen Veratox for Gliadin R5 (Quantitativ), Rev.: 8510 2014-01	Immunological determination of gliadin in food using ELISA (test kit) (Modification: <i>wavelength 450 nm, colorless sulfuric acid, shortening of the incubation time to 9min</i>)
Neogen Veratox for Mustard (Quantitative) Ref.: 8400 2018-05	Immunological determination of mustard allergen content in food using ELISA (test kit) (Modification: <i>wavelength 450 nm, colorless sulfuric acid, shortening of the incubation time to 6min</i>)
Neogen Veratox for Egg Allergen (Quantitative) Ref.: 8450 2018-05	Immunological determination of the chicken egg allergen content in food using ELISA (test kit) (Modification: <i>wavelength 450 nm, colorless sulfuric acid, shortening of the incubation time to 8min</i>)

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<p>Neogen Veratox for Milk Allergen (Quantitative) Ref.: 8470 2018-05</p>	<p>Immunological determination of the milk allergen content in food using ELISA (test kit) (Modification: <i>wavelength 450 nm, colorless sulfuric acid, shortening of the incubation time to 9min</i>)</p>
<p>Euro Proxima Neomycin ELISA Ref.: 5111NEO 2011-10</p>	<p>Immunological determination of neomycin in food using ELISA (test kit)</p>
<p>Euro Proxima Gentamicin ELISA Ref. 5111GEN 2020-04</p>	<p>Immunological determination of gentamicin in food using ELISA (test kit)</p>
<p>Euro Proxima Streptomycin ELISA Ref.:5111STREP 2020-04</p>	<p>Immunological determination of streptomycin in food using ELISA (test kit)</p>
<p>R-Biopharm AG RIDASCREEN Gliadin (quantitativ) Ref.: R7001 2009-10</p>	<p>Sandwich ELISA for the quantitative determination of gliadins and related prolamins in food</p>

1.3 Determination and detection of bacteria, yeasts and moulds by means of culture microbiological tests in food *

<p>ASU L 00.00-20 2018-03</p>	<p>Testing of foodstuffs - Horizontal method for the detection, counting and serotyping of Salmonella - Part 1: Detection of Salmonella spp. (adoption of the standard of the same name DIN EN ISO 6579-1, July 2017) (Restriction: without Appendix D)</p>
<p>ASU L 00.00-22 2018-03</p>	<p>Examination of foodstuffs - Horizontal method for the detection and counting of - Listeria monocytogenes and of Listeria spp. - Part 2: Counting method (adoption of the standard of the same name DIN EN ISO 11290-2, September 2017)</p>
<p>ASU L 00.00-32/1 2018-03</p>	<p>Examination of foodstuffs - Horizontal method for the detection and counting of - Listeria monocytogenes and Listeria spp. - Part 1: Detection method (adoption of the standard of the same name DIN EN ISO 11290-1, September 2017)</p>

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ASU L 00.00-88/1 2015-06	Examination of foodstuffs - Horizontal method for counting microorganisms - Part 1: Colony counting at 30 °C using the cast plate method (adoption of the standard of the same name DIN EN ISO 4833-1, December 2013 edition)
ASU L 00.00-88/2 2015-06	Examination of foodstuffs - Horizontal method for counting microorganisms - Part 2: Colony counting at 30 °C by surface method (adoption of the standard of the same name DIN EN ISO 4833-2, May 2014 edition)
ASU L 00.00-91 2006-12	Testing of foodstuffs - Horizontal method for the detection of <i>Shigella</i> spp. in foodstuffs
ASU L 00.00-107 2007-04	Horizontal method for the detection and counting of <i>Campylobacter</i> spp. in food - Detection method (according to DIN EN ISO 10272-1)
ASU L 00.00-132/2 2010-09	Examination of foodstuffs - Horizontal method for the counting of β -glucuronidase-positive <i>Escherichia coli</i> in food - Part 2: Colony counting method with 5-bromo-4-chloro-3-indole- β -D-glucuronide (adoption of the standard of the same name DIN ISO 16649-2, edition December 2009)
ASU L 00.00-133/2 2018-03	Examination of foodstuffs - Horizontal method for the detection and counting of Enterobacteriaceae - Part 2: Colony counting method (adoption of the standard of the same name DIN EN ISO 21528-2, September 2017)
ASU L 01.00-3 1987-03	Examination of foodstuffs; Determination of coliform germs in milk, dairy products, butter, cheese and ice cream; Processes with solid culture medium (Modifikation: <i>Cromocult Coliformen Agar; Spiralplater</i>)
ASU L 01.00-37 1991-12	Examination of foodstuffs; Determination of the number of yeasts and molds in milk and dairy products; Reference method (Modification: <i>Spiral plates</i> <i>Extension: here also examination of other foods</i>)
IFU Method No. 12 2004-09	Method for detecting spoilage-causing alicyclobacillus in fruit juices
SOP No. 489 2016-10	Qualitative detection of methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) in food; Enrichment in Müller-Hinton and selective tryptone soy broth and chromogenic MRSA selective agar
SOP No. 494	Screening for broad-spectrum β -lactamase (ESBL)-producing

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2016-08 Enterobacteriaceae in food

1.4 Hygrometric determinations

ISO 21807 Microbiology of food and feed - Horizontal method for
2004-09 determining water activity

1.5 Molecular biological investigations

1.5.1 Detection of specific DNA sequences, genetically modified organisms and identification of animal species by real-time PCR in food, feed and consumer goods *

ASU L 00.00-105 Investigation of foodstuffs - Methods for the detection of
2014-02 genetically modified organisms and their products - Quantitative
methods based on nucleic acids

ASU L 00.00-122 Testing of food - Detection of a specific DNA sequence from the
2008-06 cauliflower mosaic virus (CaMV 35S promoter, P35S) and
Agrobacterium tumefaciens (T-nos) in food, commonly used in
genetically modified organisms (GMOs) - Screening methods
(Extension: Matrix *here also feed*)

ASU L 00.00-125 GMO screening for the detection of the CTP2-CP4-EPSPS sequence
2008-12 in food by real-time PCR

ASU L 00.00-148 Detection of a DNA sequence of the FMV promoter (pFMV) in food
2014-02 by real-time PCR (element-specific method)

ASU L 00.00-169 Examination of food – detection and determination of peanuts in
2019-07 food using real-time PCR

ASU L 10.00-12 Investigation of Food - Fish Species Identification in Raw Fish and
2012-07 Fish Products by Sequence Analysis of Cytochrome B Sequences

ASU L 18.00-21 Examination of foods - Detection and determination of Brazil nut
2014-08 (*Bertholletia excelsa*) in rice and wheat biscuits as well as in sauce
powder using real-time PCR method principles

ASU L 23.04/03-1 Examination of food - Construct-specific real-time PCR method for
2010-09 the detection of genetic modification in flaxseed and flaxseed
products

CRLVL01/09VP Event-specific detection of genetically modified soybean CV127 in
2011-09 food using real-time PCR

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CRLVL07/09VP 2012-01	Event-specific detection of genetically modified soybean MON87769 in food using real-time PCR
CRLVL07/07VP 2009-01	Event-specific detection of genetically modified soybean DP-305423-1 in food by real-time PCR
EURL-VL 10/10VP 2012-11	Event-specific detection of genetically modified maize DAS-40278-9 in food and feed by real-time PCR
EURL-VL-02/11VP 2013-05	Event-specific detection of genetically modified soybean MON87708 in food using real-time PCR
IWA 32 2019-04	Screening of genetically modified organisms (GMOs) in cotton and textiles
SOP No. 193 2017-04	GMO screening for the detection of the construct P35:BAR in genetically modified rice by 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 by real-time PCR
SOP No. 316 2017-03	Qualitative detection of animal species in food
SOP No. 400 2014-01	Detection of a specific DNA sequence from cashews in food using real-time PCR
SOP No. 402 2014-01	Detection of a specific DNA sequence from almonds in food using real-time PCR
SOP No. 403 2017-02	Detection of a specific DNA sequence from sesame seeds in food using real-time PCR
SOP No. 406 2014-03	Animal species quantification in food
SOP No. 429 2015-03	RT-PCR for amplification of a DNA sequence of the cryIAb/CryIAc gene in rice
SOP No. 491 2016-08	Detection of a specific DNA sequence from pecan nut in food using real-time PCR
SOP No. 492 2016-08	Detection of a specific DNA sequence from macadamia in food using real-time PCR
SOP No. 493 2016-08	Detection of a specific DNA sequence from pistachio in food using real-time PCR

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SOP No. 530 2018-02	Detection of a specific DNA sequence from fish in food using real-time PCR
SOP No. 618 2020-06	GMO screening for the detection of the otp/mepsps sequence in cotton by real-time PCR

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

ASU L 00.00-98 2007-04	Testing of food - Qualitative detection of Salmonella in food - Real-time PCR method
ASU L 00.00-147/2 (V) 2014-02	Examination of foodstuffs - Horizontal method for the determination of - Hepatitis A virus and norovirus in food - Part 2: Method for qualitative detection - Real-time RT-PCR (Restriction: <i>here only detection of norovirus;</i> (Modification: <i>MS2 phage as process control</i>)
SOP No. 396 2015-04	Examination of food - Qualitative detection of Listeria monocytogenes by real-time PCR
SOP No. 422 2018-02	Qualitative Detection of Hepatitis A on Soft Fruit by Real-Time PCR
SOP No. 427 2016-10	Qualitative Detection of Alicyclobacillus spp. in Fruit Juices and Fruit Juice Concentrates by Real-time PCR
SOP No. 444 2014-12	Testing in food - Qualitative detection of Shiga toxin-producing Escherichia coli (STEC) & enterohaemorrhagic Escherichia coli (EHEC) by real-time PCR
SOP No. 490 2016-08	Qualitative detection of Shigella spp. in milk and dairy products by real-time PCR

1.6 Sensory Testing of Food

1.6.1 Simple descriptive sensory examinations of food *

ASU L 00.90-6 2015-06	Examination of foodstuffs - Sensory test methods - Simple descriptive testing
ASU L 00.90-7 2007-12	Examination of foodstuffs - Sensory test methods - Triangular testing

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ASU L 00.90-8 2007-12	Examination of foodstuffs - Sensory test methods - Pairwise comparative testing
ASU L 00.90-14 2004-12	Examination of foodstuffs - Sensory test methods - Descriptive testing followed by quality assessment

1.6.2 Special sensory testing of olive oil

Regulation (EC) No. 640/2008 2008-07	Characteristics of olive oils and olive pomace oils and the procedures for their determination: Organoleptic testing of virgin olive oils
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1.7 Food Sampling

DIN CEN/TS 15568 2007-03	Food – Methods for the detection of genetically modified organisms and their products – Sampling strategies (Restriction: <i>here only sampling</i>)
VO (EG) Nr. 333/2007 2007-03	Commission Regulation (EC) No 333/2007 of 28 March 2007 laying down the sampling methods and methods of analysis for the control of the content of lead, cadmium, mercury, inorganic tin, 3-MCPD and benzo(a)pyrene in foodstuffs (Restriction: <i>here only sampling</i>)
VO (EG) Nr. 401/2006 2014-07	Commission Regulation (EC) No 401/2006 of 23 February 2006 laying down the methods of sampling and analysis for the official control of the mycotoxin content of foodstuffs (Restriction: <i>here only sampling</i>)
VO (EG) Nr. 1882/2006 2006-12	Commission Regulation (EC) No. 1882/2006 of 19 December 2006 laying down the sampling methods and methods of analysis for the official control of the nitrate content of certain foodstuffs (restriction: <i>here only sampling</i>)
VO (EG) Nr. 1883/2006 2006-12	Commission Regulation (EC) No 1883/2006 of 19 December 2006 laying down the methods of sampling and analysis for the official control of the levels of dioxins and dioxin-like PCBs in certain foodstuffs (restriction: <i>here only sampling</i>)
Directive 2002/63/EC 2002-07	Commission Directive 2002/63/EC of 11 July 2002 laying down Community sampling methods for the official control of pesticide residues in and on products of plant and animal origin and repealing Directive 79/700/EEC
SOP No. 307	Sampling for microbiological analysis of food

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2013-08

1.8 Sampling of feed

Regulation (EC) 152/2009
Annex 1
2014-07

Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official inspection of feedingstuffs, feed sampling

Regulation (EC) 691/2013
2013-07

Commission Regulation (EU) No 691/2013 of 19 July 2013 amending Regulation (EC) No 152/2009 as regards methods of sampling and analysis
(Modification: *here also for matrix foods*;
(Restriction: *here only sampling*)

1.9 Sample preparation of food and feed

ASU L 00.00-19/12015-06

Determination of Element Traces in Food - Pressure Digestion
(Extension: *Matrix here also Feed*)

DGF C-VI 11d1998

Fatty acid methyl ester (alkaline transesterification)

2 Examination of consumer goods

2.1 Physical, physicochemical and chemical investigations

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

SOP No. 214
2016-06

Determination of nicotine in textiles using LC-MS-MS

SOP No. 340
2013-08

Determination of quaternary ammonium compounds (QAV) in consumer goods using LC-MS-MS

SOP No. 625
2020-10

Determination of isothiazolins in consumer goods, cosmetics, hygiene products, aqueous extracts and hot melts using LC-MS-MS

2.1.2 Determination of chromium (VI) by ion chromatography and inductively coupled plasma mass spectrometry (IC-ICP-MS) in consumer goods **

DIN EN 71-3
2021-06

Safety of toys - Part 3: Migration of certain elements
(Restriction: *here only analysis of chromium(VI)*)
(Modification: *Matrix here also pigments*)

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SOP No. 304
2021-08 Determination of extractable chromium(VI) in textiles by IC-ICP-MS after extraction with acidic synthetic welding solution

2.1.3 Determination of Contaminants by Gas Chromatography with Standard Detectors (GC-FID) in Consumer Goods

SOP No. 261
2016-09 Determination of MOSH and MOAH in food and consumer goods using GC-FID
(Restriction: *here only examination of consumer goods*)

2.1.4 Determination of Ingredients, residues and contaminants by gas chromatography with mass-selective detectors (-MS) in consumer goods **

DIN EN 71-3
2019-08 Safety of toys - Part 3: Migration of certain elements
(Restriction: *here only analysis of organotin compounds*)

SOP No. 31
2007-01 Determination of phthalic acid esters in consumer goods and hygiene products using GC-MS

SOP No. 55
2004-07 Determination of alkylphenols, alkylphenol ethoxylates and bisphenol A in consumer goods by GC-MS

SOP No. 293
2012-04 Determination of phenol and chlorophenols in consumer goods using GC-MS

SOP No. 341
2019-02 Determination of EC and EPA PAHs in consumer goods using GC-MS

SOP No. 342
2013-08 Determination of pesticides in consumer goods and environmental samples using GC-MS
(Restriction: *here only examination of consumer goods*)

SOP No. 558
2019-02 Determination of rosin from consumer goods using GC-MS

SOP No. 620
2021-06 Determination of allergenic fragrances in consumer goods using GC-MS

SOP No. 628
2020-12 Determination of aldehydes in consumer goods by GC-MS

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**2.1.5 Determination of elements by means of inductive
Coupled Plasma Mass Spectrometry (ICP-MS) in consumer goods ****

ISO 7086-1 2000-03	Glass jars for foodstuffs - Discharge of lead and cadmium - Part 1: Test Methods (Extension: <i>here also examination of plastic containers</i>)
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: <i>Analytes here also Ta, Ti; Investigation also of digestion solutions of consumer goods including pressure digestion as well as of heavy metals in textiles</i>)
DIN EN 71-3 2021-06	Safety of toys - Part 3: Migration of certain elements (Extension: <i>Matrix here also pigments for the production of consumer goods</i>)
DIN EN 16711-2 2016-02	Textiles - Determination of metal content - Part 2: Determination of extractable metals with acidic synthetic welding solution by ICP-MS (Extension: <i>Analytes here also Mn, Se, Sn and Zn</i>)
Resolution AP (89) 1 1989-09	Resolution AP (89) 1 on the use of colourants in plastic materials coming into contact with food (Modification: <i>Analysis here using ICP-MS</i>)
SOP No. 272 2018-11	Determination of extractable metals in consumer goods with isotonic saline solution using ICP-MS

2.1.6 Photometric determinations of contaminants in consumer goods *

ASU B 82.02-1 1985-06	Examinations of consumer goods; Determination of formaldehyde release from textile consumer goods (Modification: <i>Analyse hier mittels UV/VIS</i>)
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2.1.7 Gravimetric examinations of consumer goods

ASU B 80.30-6 2008-10	Examination of consumer goods - plastics - Part 3: Test methods for total migration into aqueous test foods by total immersion
ASU B 80.30-8 2008-10	Examination of consumer goods - plastics - Part 5: Test methods for total migration into aqueous test foods by cell

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ASU B 80.30-10 2008-10	Examination of consumer goods - plastics - Part 7: Test methods for total migration into aqueous test foods with a pouch
ASU B 80.30-12 2008-10	Examination of consumer goods - plastics - Part 9: Test methods for total migration into aqueous test foods by filling the object
ASU B 80.30-17 2008-10	Examination of consumer goods - plastics - Part 14: Test methods for "substitute tests" for total migration from plastics intended for contact with fatty foods using the test media iso-octane and 95% ethanol
ASU B 80.30-18 2008-10	Examination of consumer goods - plastics - Part 15: Alternative test methods for determining migration into fatty test foods by rapid extraction in iso-octane and/or 95% ethanol

2.1.8 Simple visual examinations to determine the color permeability of Commodities *

ASU B 82.02-13 2011-12	Determination of the colour permeability of articles of daily use - Part 2: Testing with welding simulance
ASU B 82.92-3 2011-12	Determination of the colour permeability of articles of daily use - Part 1: Testing with saliva simulance

2.1.9 Determination of organic chemical residues in consumer goods

SOP No. 315 2013-01	Determination of acrylic acid and residual monomers from superabsorbents using HPLC-UV-VIS
SOP No. 517 2017-03	Determination of Acrylic Acid in Hygiene Products Using HPLC- DAD

2.2 Determination and detection of bacteria by means of cultural microbiological examinations on furnishings and consumer goods in the food sector *

ASU B 80.00-1 1998-01	Examination of consumer goods - Determination of surface microbial content on furnishings and consumer goods in the food sector - Part 1: Quantitative swab method
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ASU B 80.00-2 1998-01	Examination of consumer goods - Determination of surface microbial content on furnishings and consumer goods in the food sector - Part 2: Semi-quantitative swab method
ASU B 80.00-3 1998-01	Examination of consumer goods - Determination of surface microbial content on furnishings and consumer goods in the food sector - Part 3: Semi-quantitative method with culture medium-coated removal devices, contact method
ASU B 80.56-5 2008-10	Investigation of consumer goods - Paper and cardboard intended for contact with foodstuffs - Determination of the transfer of antimicrobial components
Ph. Eur. 2.6.12 8th edition 2014-01	Microbiological testing of non-sterile products: counting of reproducible microorganisms
Ph. Eur. 2.6.13 8th edition 2014-01	Microbiological testing of non-sterile products: detection of specified microorganisms

2.3 Special sensory testing of the smell and taste of consumer goods *

DIN EN 1230-1 2010-02	Paper and paperboard intended for contact with foodstuffs - Sensory analysis - Part 1: Odour
DIN EN 1230-2 2010-02	Paper and cardboard intended for contact with foodstuffs - Sensory analysis - Part 2: Taste transfer (Restriction: <i>here only verification by means of a triangle test</i>)
ASU B 80.00-4 2008-10	Examination of consumer goods - Sensory testing - Testing of packaging materials and packaging materials for foodstuffs (Restriction: <i>here only verification by means of a triangle test</i>)

3 Investigation of water (wastewater, surface water, process water)

3.1 Physical, physico-chemical, chemical investigations

3.1.1 Determination of organic and metal-organic compounds by gas chromatography with mass-selective detectors (GC-MS, GC-ICP-MS) **

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DIN EN ISO 17353 (F 13) 2005-11	Water quality - Determination of selected organotin compounds - Method by gas chromatography (Modification: Analysis here using GC-ICP-MS)
SOP No. 85 2005-04	Determination of chlorobenzenes in water by GC-MS
SOP No. 154 2008-05	Determination of phthalates in water using GC-MS
SOP No. 156 2008-05	Determination of alkylphenols, alkylphenol ethoxylates and bisphenols in water by GC-MS

3.1.2 Determination of elements using 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 (extension: analytes here also Ta, Ti)
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3.1.3 Further chromatographic examinations

DIN EN ISO 10304-1 2009-07	Water quality - Determination of dissolved anions by liquid ion chromatography - Part 1: Determination of bromide, chloride, fluoride, nitrate, nitrite, phosphate and sulphate
SOP No. 234 2009-11	Determination of glyphosate, AMPA and glufosinate in water using LC-MS-MS

3.1.4 Physicochemical parameter

DIN 38404-C 4 1976-12	Determination of temperature
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4 Investigation of sediments, soils and sludge

4.1 Sample preparation

DIN EN 16174 2012-11	Sludge, treated biowaste and soil - Digestion of aqua regia soluble fractions of elements (Restriction: <i>here only application of procedure A</i>)
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4.2 Physical, physicochemical and chemical investigations

4.2.1 Determination of Organic Compounds by Liquid Chromatography Using Mass Selective Detector (LC-MS-MS)

SOP No. 233 2009-11	Determination of glyphosate, AMPA and glufosinate in sediments by LC-MS-MS
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4.2.2 Determination of organic and metal-organic compounds by gas chromatography with mass-selective detectors (GC-MS and GC-ICP-MS) **

DIN EN ISO 18287 2006-05	Soil conditions - Determination of polycyclic aromatic hydrocarbons (PAHs) - Gas chromatographic method detected by mass spectrometry (GC-MS) (ISO 18287:2006)
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DIN EN ISO 23161 2019-04	Soil conditions - Determination of selected organotin compounds - Gas chromatographic methods
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SOP No. 1 2018-01	Determination of organotin compounds in sediments using GC-ICP-MS
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SOP No. 342 2013-08	Determination of pesticides in consumer goods and environmental samples using GC-MS (Restriction: <i>here only examination of sediments and soils</i>)
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4.2.3 Determination of PCDD/PCDF and dioxin-like PCBs by means of HRGC/HRMS

SOP No. 231 2020-05	Determination of the mass concentration of PCDD/PCDF and dioxin-like PCBs in environmental samples
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4.2.4 Determination of elements by inductively coupled plasma mass spectrometry (ICP-MS)

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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: *for sediments, soil and sludge determination in aqua regia digestions*)

4.2.5 Gravimetric determinations

DIN EN 15934
2012-11

Sludge, treated biowaste, soil and waste - Calculation of dry matter content after determination of dry residue or water content
(Restriction: *here only application of procedure A*)

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

Ordinance of the quality of water intended for human consumption (Drinking water Ordinance – TrinkwV 2001) in the version published on 10 March 2016 (BGBl. p. 459), which was amended by the Ordinance of 22 September 2021 (BGBl p.4343)

Sampling

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

APPENDIX 1: MICROBIOLOGICAL PARAMETERS

PART I: General requirements for drinking water

Lfd. Nr.	Parameter	Procedure
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 intended for sale in sealed containers

Lfd. Nr.	Parameter	Procedure
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

APPENDIX 2: CHEMICAL PARAMETERS

not used

APPENDIX 3: INDICATOR PARAMETERS

Part I: General indicator parameters

Lfd. Nr.	Parameter	Procedure
1	Aluminium	not used
2	Ammonium	not used
3	Chloride	not used
4	Clostridium perfringens (including spores)	DIN EN ISO 14189 (K 24) 2016-11
5	The coliform bacterium	DIN EN ISO 9308-1 (K 12) 2017-09
6	Iron	not used
7	Staining (spectral absorption coefficient Hg 436 nm)	not used
8	Smell (as CLAY)	not used
9	Taste	not used
10	Colony count at 22 °C	DIN EN ISO 6222 (K 5) 1999-07 TrinkwV §15 paragraph (1c)
11	Colony count at 36 °C	DIN EN ISO 6222 (K 5) 1999-07 TrinkwV §15 paragraph (1c)
12	Conductivity	not used

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Lfd. Nr.	Parameter	Procedure
13	Manganese	not used
14	Sodium	not used
15	Organically Bound Carbon (TOC)	not used
16	Oxidizability	not used
17	Sulfate	not used
18	Turbidity	not used
19	Hydrogen ion concentration	not used
20	Calcite dissolving capacity	not used

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

Parameter	Procedure
Legionella spec.	ISO 11731 2017-05 UBA Recommendation 18 December 2018

ANNEX 3a: Requirements for drinking water in relation to radioactive substances

not used

Parameters not included in Appendices 1 to 3 of the Drinking Water Ordinance

Other periodic examinations

not used

Accreditation does not replace the recognition or approval procedure of the competent authority in accordance with Section 15 (4) of the Drinking Water Ordinance.

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Abbreviations used:

AP	Analytical procedure, Council of Europe Committee of Ministers
ASU	Official Collection of Investigation Procedures according to §64 LFGB
CRL	European Commission, Community Reference Laboratory
DGF	German Society for Fat Science
DIN	German Institute for Standardization
ECB	European Central Bank
EDANA	European Disposables and Nonwovens Association
EN	European Standard
EPA	Environmental Protection Agency
EURL	European Union Reference Laboratory
GMOs	Genetically modified organisms
HRGC/HRMS	high-resolution gas chromatography/high resolution mass spectrometry
IFU	International Federation of Fruit Juice Producers
IEC	International Electrotechnical Commission
ISO	International Standards Organization
IWA	International Workshop Agreement
LFGB	Food and Feed Code
Ph. Eur.	Pharmacopoea Europa
SOP	In-house procedures of GALAB Laboratories GmbH
TrinkwV	Drinking water ordinance
VDLUFA	Association of German Agricultural Research Institutes
VO (EG)	Regulation of the European Commission