Deutsche Akkreditierungsstelle

Annex to the accreditation certificate D-PL-14171-01-01 according to DIN EN ISO/IEC 17025:2018

Valid from: **25.11.2025**

Date of issue: 25.11.2025

This annex is part of the accreditation certificate D-PL-14171-01-00.

Holder of the accreditation certificate:

Intertek Food Services GmbH
Olof-Palme-Straße 8, 28719 Bremen

with the locations

Intertek Food Services GmbH
Olof-Palme-Straße 8, 28719 Bremen

Intertek Food Services GmbH
Philipp-Reis-Straße 4, 35440 Linden

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

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

Tests in the fields:

Physical, physico-chemical, chemical, microbiological, molecular biological and immunological analysis of foodstuffs and feedstuffs
Sensory and microscopic analysis of foodstuffs
Microbiological analysis of fitment and utensils in food areas;
selected physical, physico-chemical, chemical and microbiological analysis of commodity goods

Flexible scope of accreditation:

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

[Flex A] To use standardised or equivalent test methods listed here with different issue dates.

[Flex B] To have the free choice of standardised or equivalent test methods.

[Flex C] To modify, develop or further develop test methods.

The test methods listed are examples. The testing laboratory has an up-to-date list of all test methods within the flexible scope of accreditation. The list is publicly available on the website of the testing laboratory.

Bremen location

1 Foodstuffs

1.1 Selected physical, physico-chemical and chemical analysis of foodstuffs

1.1.1 Sample preparation [Flex A]

DIN EN 13805 2014-12	Foodstuffs – Determination of trace elements – Pressure digestion

1.1.2 Liquid chromatography (LC)

1.1.2.1 Determination of ingredients and additives, enzyme activities and mycotoxins in foodstuffs by liquid chromatography (LC) with conventional detectors (UV, FLD, RI, DAD, ELSD) [Flex C]

ISO 12824 2016-09	Royal jelly – Specifications (Restriction: *Here only Annex B1: Determination of 10-HDA – HPLC-UV External Standard (Reference method)*)

DIN EN ISO 16050 2011-09	Foodstuffs – Determination of aflatoxin B_1, and the total content of aflatoxins B_1, B_2, G_1 and G_2 in cereals, nuts and derived products – High performance liquid chromatographic method
DIN EN 14132 2009-09	Foodstuffs – Determination of ochratoxin A in barley and roasted coffee – HPLC method with immunoaffinity column clean-up
DIN EN 14177 2004-03	Foodstuffs – Determination of patulin in clear and cloudy apple juice and apple purée – HPLC method with liquid-liquid partition clean-up (Modification: *Single shaking out*)
DIN EN 15891 2010-12	Foodstuffs – Determination of deoxynivalenol in cereals, cereal products and cereal based foods for infants and young children – HPLC method with immunoaffinity column clean-up and UV detection
DIN 10751-3 2018-09	Analysis of honey – Determination of the content of hydroxymethylfurfural – Part 3: High performance liquid chromatographic method (Modification: *For all foodstuffs, lower sample weight, shorter separation column*)
DIN 10758 1997-05 Corrigendum 2018-09	Analysis of honey – Determination of the content of saccharides fructose, glucose, sucrose, turanose and maltose – HPLC method (Modification: *Matrix also bee products*)
ASU L 00.00-28 2001-07	Analysis of foodstuffs – Determination of acesulfame-K, aspartame and saccharin sodium in foodstuffs – HPLC method
ASU L 00.00-29 2001-07	Analysis of foodstuffs – Determination of sodium cyclamate in foodstuffs – HPLC method
ASU L 00.00-134 2010-09	Analysis of foodstuffs – Determination of coumarin in foodstuffs containing cinnamon by HPLC/DAD or HPLC-MS/MS (Restriction: *Here only by HPLC/DAD*)
SLMB Chapter 22, Section 6.1 1999-09	Special food – Detection of sugars (extraction)
SLMB Chapter 22, Section 6.2 1999-09	Special foodstuffs – Determination of sugars by HPLC
PM DE01.028 2017-09	Analysis of honey – Determination of the content of methyl anthranilate by HPLC-UV

PM DE01.044 2012-09	Analysis of plant-based foodstuffs and feedstuffs – Determination of the content of zearalenone by HPLC-FLD (Restriction: *Here only foodstuffs*)
PM DE01.102 2020-05	Analysis of honey – Determination of β-fructofuranosidase activity with HPLC-RI
PM DE01.115 2011-01	Analysis of honey – Determination of β and γ-amylase activity
PM DE01.191 2022-04	Analysis of honey – Adulteration with sugar syrups – LC-ELSD – Non-honey oligosaccharides
PM DE01.192 2022-05	Determination of caffeine and theobromine in foodstuffs by HPLC-DAD
PM DE01.200 2012-11	Analysis of premixes for food supplements – Determination of fat-soluble vitamins A, D, E and K by HPLC-UV
PM DE01.201 2012-09	Analysis of premixes for food supplements – Determination of water-soluble vitamins B1, B2, B3, B6 and B9 by HPLC-UV
PM DE01.202 2012-10	Analysis of premixes for food supplements – Determination of water-soluble vitamin B5 (pantothenic acid) by HPLC-UV
PM DE01.203 2012-09	Analysis of premixes for food supplements – Determination of water-soluble vitamins B12 and biotin by HPLC-UV
PM DE01.242 2014-04	Analysis of bee products – Determination of the content of polyphenols by HPLC-DAD
PM DE01.302 2017-01	Determination of antioxidants in bone meal, fats and oils by HPLC (Restriction: *Here only foodstuffs*)
PM DE01.303 2017-01	Analysis of foodstuffs – Determination of the content of ascorbic acid (vitamin C) by HPLC
PM DE01.341 2022-04	Analysis of honey – Adulteration with sugar syrups – Detection of psicose with LC-ELSD
PM DE01.344 2020-09	Analysis of foodstuffs – Determination of the content of vitamin A palmitate with HPLC-FLD

1.1.2.2 Determination of additives, plant protection product residues and residues of pharmacologically active substances and of organic contaminants in foodstuffs by liquid chromatography with mass-selective detectors (LC-MS/MS, LC-HRMS) [Flex C]

ASU L 00.00-76 2008-12	Analysis of foodstuffs – Determination of chlormequat and mepiquat in low-fat foods – LC-MS/MS method
ASU L 00.00-115 2018-10	Analysis of foodstuffs – Multiple analytical method for the determination of pesticide residues using GC and LC after acetonitrile extraction/partitioning and clean-up by dispersive SPE in plant-based foodstuffs – Modular QuEChERS method (Modification: *Matrix also honey and bee products*)
EURL-SRM QuPPe Version 11 2020-02	Quick Method for the Analysis of Numerous Highly Polar Pesticides in Food Involving Extraction with Acidified Methanol and LC-MS/MS Measurement – 1. Food of Plant Origin (QuPPe-PO-Method)
PM DE01.022 2020-07	Analysis of animal-based foodstuffs – Determination of the content of amphenicols by LC-MS/MS
PM DE01.031 2019-07	Analysis of animal-based foodstuffs – Determination of the content of nitrofuran metabolites by LC-MS/MS
PM DE01.032 2017-10	Analysis of honey – Determination of the content of coumaphos by LC-MS/MS
PM DE01.046 2019-07	Analysis of animal-based foodstuffs – Determination of the content of sulfonamides and trimethoprim by LC-MS/MS
PM DE01.054 2020-09	Analysis of bee products – Determination of the content of dapsone by LC-MS/MS
PM DE01.059 2022-05	Analysis of animal-based foodstuffs – Determination of the content of macrolides by LC-MS/MS
PM DE01.060 2009-08	Analysis of honey – Determination of the content of tetracyclines by LC-MS/MS
PM DE01.085 2022-04	Analysis of honey – Determination of the content of carbendazim by LC-MS/MS
PM DE01.101 2017-02	Analysis of bee products – Determination of the content of nitroimidazoles by LC-MS/MS

PM DE01.104 2011-12	Analysis of honey – Determination of streptomycin and dihydrostreptomycin by LC-MS/MS
PM DE01.105 2009-08	Analysis of meat – Determination of streptomycin and dihydrostreptomycin by LC-MS/MS
PM DE01.107 2009-08	Analysis of meat – Determination of the content of tetracyclines by LC-MS/MS
PM DE01.114 2009-08	Analysis of meat – Determination of the content of tiamulin by LC-MS/MS
PM DE01.116 2012-09	Analysis of honey – Screening method for determination of the content of tetracyclines by LC-MS/MS
PM DE01.118 2016-09	Analysis of honey, bee pollen and other foodstuffs – Determination of the content of pyrrolizidine alkaloids by LC-MS/MS
PM DE01.120 2010-09	Analysis of fish and shrimp – Determination of the content of tetracyclines by LC-MS/MS
PM DE01.125 2020-09	Analysis of animal-based foodstuffs – Determination of fluorchinolones by LC-MS/MS
PM DE01.131 2010-10	Analysis of fruit and fruit products – Determination of the content of streptomycin and dihydrostreptomycin by LC-MS/MS
PM DE01.132 2019-06	Analysis of animal-based foodstuffs – Determination of the content of β-lactam antibiotics by LC-MS/MS
PM DE01.138 2011-04	Analysis of cereals – Determination of fumonisin B1 and B2 by LC-MS/MS
PM DE01.141 2022-05	Analysis of honey – Determination of fumagillin by LC-MS/MS
PM DE01.146 2020-05	Determination of phenoxyalkyl carbonic acids (PAC) and other acidic herbicides in plant-based and animal-based foodstuffs by LC-MS/MS
PM DE01.147 2012-10	Analysis of animal-based foodstuffs – Determination of aminoglycosides by LC-MS/MS
PM DE01.148 2019-10	Analysis of meat, milk and milk products – Determination of novobiocin, rifaximin and bacitracin by LC-MS/MS

PM DE01.185 2012-06	Analysis of honey – Determination of E150d by LC-MS/MS
PM DE01.188 2012-07	Analysis of meat – Determination of the content of lincosamides by LC-MS/MS
PM DE01.189 2018-12	Analysis of foodstuffs and feedstuffs – Determination of the content of acrylamide by LC-MS/MS (Restriction: *Here only foodstuffs*)
PM DE01.190 2022-04	Analysis of honey – LC-MS/MS detection of adulteration with syrups (SM-R, SM-B, 4-MEI, E150d)
PM DE01.194 2012-07	Analysis of essential oils and plant extracts – Determination of pesticide residues with LC-MS/MS and GC-MS/MS)
PM DE01.207 2012-09	Analysis of fish – Determination of the content of malachite green and crystal violet by LC-MS/MS
PM DE01.225 2022-04	Analysis of honey – Determination of the content of bee medicines and other active ingredients used in apiculture (bromopropylate, coumaphos, 4,4'-dibromobenzophenone, fluvalinate, acrinathrin, amitraz, cymiazole, flumethrin, malaoxone, chlorfenvinphos, DEET, malathion, tetradifon by GC-MS/MS and LC-MS/MS
PM DE01.229 2020-02	Analysis of plant-based foodstuffs and feedstuffs for nicotine by LC-MS/MS (Restriction: *Here only foodstuffs*)
PM DE01.243 2014-04	Analysis of foodstuffs of animal origin – Determination of promazines and colchicine by LC-MS/MS
PM DE01.280 2015-05	Determination of pesticides in propolis with GC-MS and LC-MS/MS
PM DE01.282 2015-09	Analysis of foodstuffs and feedstuffs – Determination of tropane alkaloid content by LC-MS/MS (Restriction: *Here only foodstuffs*)
PM DE01.295 2020-02	Analysis of honey – Determination of para-chloramphenicol isomers by LC-MS/MS
PM DE01.297 2017-02	Analysis of animal-based foodstuffs – Determination of ethoxyquin and ethoxyquin metabolites by LC-MS/MS

PM DE01.347 2020-09	Analysis of honey – LC-HRMS detection of adulteration with sugar beet syrup (SM-B)
PM DE01.348 2023-08	Analysis of honey – LC-HRMS detection of adulteration with rice syrup (SM-R) and process markers
PM DE01.349 2022-05	Analysis of honey – LC-HRMS detection of E150d
PM DE01.350 2022-05	Analysis of honey – LC-HRMS detection of adulteration with starch-based syrups by polysaccharides DP12 - 20
PM DE01.351 2022-05	Analysis of honey – LC-HRMS detection of 4-methylimidazole and 2-methylimidazole

1.1.3 Determination of ingredients and additives in foodstuffs by ion chromatography (IC) with conventional detectors (PAD, CD and UV) [Flex C]

PM DE01.275 2019-03	Determination of the content of sugars in foodstuffs by ion chromatography (IC-PAD)
PM DE01.276 2017-05	Determination of the content of organic acids and anions in honey and other foodstuffs by ion chromatography (IC-CD)
PM DE01.277 2017-05	Determination of the content of sugar alcohols in honey and other foodstuffs by ion chromatography (IC-PAD)
PM DE01.278 2017-05	Determination of the content of nitrate and nitrite in foodstuffs by ion chromatography (IC-UV)

1.1.4 Gas chromatography (GC)

1.1.4.1 Determination of fatty acids and paraffins in foodstuffs by gas chromatography (GC) with conventional detectors (FID) [Flex C]

PM DE01.077 2022-09	Fatty acid spectrum in animal and vegetable fats and oils by GC-FID

1.1.4.2 Determination of plant protection products and residues of pharmacologically active substances and of polycyclic aromatic hydrocarbons and polychlorinated biphenyls in foodstuffs by chromatography (GC) with mass-selective detectors (MS, MS/MS) [Flex C]

ASU L 00.00-115 2018-10	Analysis of foodstuffs – Multiple analytical method for the determination of pesticide residues using GC and LC after acetonitrile extraction/partitioning and clean-up by dispersive SPE in plant-based foodstuffs – Modular QuEChERS method (Modification: Matrix also honey and bee products)
AOCS Official Method Cd 29b-13 2015	Determination of Bound Monochloropropanediol- (MCPD-) and Bound 2,3-epoxy-1-propanol (glycidol-) by Gas Chromatography/Mass Spectrometry (GC/MS) (Modification: Response factor is determined using standards)
PM DE01.050 2020-02	Analysis of honey and beeswax – Determination of the content of amitraz by GC-MS
PM DE01.051 2022-04	Analysis of honey, royal jelly and pollen – Determination of the content of bromopropylate, coumaphos, 4,4'-dibromobenzophenone and fluvalinate by GC-MS
PM DE01.055 2022-04	Analysis of honey and bee products – Determination of para-dichlorobenzene, thymol, phenol, benzaldehyde, phenylacetaldehyde, nitrobenzene and naphthalene by GC-MS
PM DE01.128 2022-04	Analysis of foodstuffs and additives – Determination of EU PAHs by GPC and GC-MS
PM DE01.129 2013-11	Analysis of animal fat – Determination of DDT isomers and metabolites by GC-MS
PM DE01.194 2012-07	Analysis of essential oils and plant extracts – Determination of pesticide residues with LC-MS/MS and GC-MS/MS)
PM DE01.225 2022-04	Analysis of honey – Determination of the content of bee medicines and other active ingredients used in apiculture (bromopropylate, coumaphos, 4,4'-dibromobenzophenone, fluvalinate, acrinathrin, amitraz, cymiazole, flumethrin, malaoxone, chlorfenvinphos, DEET, malathion, tetradifon by GC-MS/MS and LC-MS/MS
PM DE01.280 2015-05	Determination of pesticides in propolis with GC-MS and LC-MS

PM DE01.328 2018-08	Analysis of plant-based foodstuffs and feedstuffs – Determination of the content of dithiocarbamates as CS2 by GC-MS (Restriction: *Here only foodstuffs*)

1.1.5 Determination of ingredients and additives in foodstuffs by photometry [Flex C]

DIN EN 1988-2 1998-05	Foodstuffs – Determination of sulphite – Part 2: Enzymatic method
DIN 10754 2002-08	Analysis of honey – Determination of proline content
DIN 10759 2016-12	Analysis of honey – Determination of saccharase activity – Siegenthaler method (Modification: *Matrix also bee products*)
ASU L 06.00-8 2017-10	Analysis of foodstuffs – Determination of hydroxyproline content in meat, meat products and sausages – Photometric method after acid digestion (Modification: *Matrix foodstuffs in general*)
ASU L 40.00-1 2010-01	Analysis of foodstuffs – Determination of diastase activity in honey (Modification: *Matrix also bee products*)
IFU Analysis No. 21 2005	Determination of malic acid, enzymatic
IFU Analysis No. 22 2005	Determination of citric acid, enzymatic
IFU Analysis No. 49 2005	Determination of proline (Modification: *Single determination: Modified measurement solution)*
IFU Analysis No. 50 2005	Determination of phosphate
IFU Analysis No. 52 2005	Determination of alcohol, enzymatic

IFU Analysis No. 53 2005	Determination of lactic acid, enzymatic
IFU Analysis No. 54 2005	Determination of isocitric acid, enzymatic
IFU Analysis No. 55 2005	Determination of glucose and fructose, enzymatic
IFU Analysis No. 56 2005	Determination of sucrose, enzymatic
IHC Methods 6.2 2009	Analysis of honey – Determination of diastase activity, Phadebas method
R-Biopharm AG Enzytec™ Liquid Ethanol E8340 2022-07	UV test for determination of ethanol in foodstuffs and other sample materials (Restriction: *Here only foodstuffs*)
R-Biopharm AG Enzytec™ Liquid Glycerol E8360 2022-08	UV test for determination of glycerine in foodstuffs and other sample materials (Restriction: *Here only honey and bee products*)
R-Biopharm AG Nitrate (NO3-) 10905658035 2021-08	UV test for determination of nitrate (NO3-) in foodstuffs and other sample materials (Restriction: *Here only foodstuffs*)
PM DE01.049 2020-02	Analysis of honey – Determination of colour by photometry
PM DE01.089 2018-03	Analysis of honey – Determination of saccharase activity, Siegenthaler method (automated method)
PM DE01.090 2022-04	Analysis of honey – Determination of diastase activity and thermostable α-amylases with AutoAnalyzer
PM DE01.091 2018-03	Analysis of honey – Determination of glycerol content with AutoAnalyzer

PM DE01.103 2008-08	Analysis of honey – Determination of the content pf L-ascorbic acid by AutoAnalyzer
PM DE01.249 2014-04	Determination of total polyphenol content in polyphenol-containing foods and propolis
PM DE01.250 2014-04	Determination of flavonoids using aluminium chloride (e.g. quercetin and rutin)
PM DE01.255 2014-04	Determination of flavonoids in propolis calculated as hyperoside
PM DE01.274 2022-04	Determination of non-honey amylase in honey with AutoAnalyzer (foreign amylase profile FAmyP)

1.1.6 Physical, physico-chemical and chemical analysis [Flex A]

DIN 10752-2 2018-09	Analysis of honey – Determination of water content – Part 2: Digital refractometric method (Modification: *Measurement at 40 °C, correction to 20 °C*)
DIN 55540-1 1978-05	Testing of packaging; determining the filling ratio of standard capacity prepacks; prepacks whose contents are indicated by weight (Modification: *Matrix also honey and bee products*)
Regulation (EC) 152/2009 Annex III, Method L 2009-01 Last amended 2022-06	Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed – Methods of analysis to control the composition of feed materials and compound feed – Determination of starch (Modification: *Matrix foodstuffs*)
ASU L 13.00-21 2004-12	Analysis of foodstuffs – Determination of the melting point of vegetable and animal fats and oils in open capillary tubes
ASU L 40.00-2/2 2019-07	Analysis of foodstuffs – Analysis of honey – Determination of water content – Part 2: Digital refractometric method (Modification: *Measurement at 40 °C, correction to 20 °C*)
ASU L 41.00-1 1993-08	Analysis of foodstuffs; determination of the content of soluble solids in jams, jellies, marmalades and fruit preparations; refractometer method
IFU Analysis No. 08 2005	Determination of soluble solids (indirect refractometry)

IHC Methods 11 2009	Determination of specific rotation in honey
Ph. Eur. 9.0, Monographs B 0069/0070 + Assay 2.2.17 2008-01	Drop point; Cera alba/cera flava (Modification: *Here for analysis of foodstuffs*)
Ph. Eur. 9.0, Monographs B 0069/0070 2008-01	Ceresin, paraffins and certain other waxes (saponification opacity test); Cera alba/cera flava (Modification: *Here for analysis of foodstuffs*)
PM DE01.248 2014-04	Determination of water activity in foodstuffs with the LabMaster-aw

1.1.7 Determination of parameters in foodstuffs by electrode measurement [Flex B]

DIN 10753 2021-06	Analysis of honey – Determination of electrical conductivity
ASU L 06.00-2 1980-09	Measurement of pH in meat and meat products
SLMB Section 29.11 2000-07	Jams, marmalades, spreads – pH value, analysis method (Modification: *Matrix foodstuffs*)
IFU Analysis No. 11 2005	Determination of pH (Modification: *Here for foodstuffs*)
IHC Methods 4 2009	Analysis of honey – Determination of the pH value
PM DE01.042 2022-04	Analysis of honey – Determination of conductivity, pH and free acid content (potentiometry) by titrator

1.1.8 Determination of ingredients and additives and of characteristics in foodstuffs by titrimetry [Flex B]

DIN EN ISO 5943 2007-01	Cheese and processed cheese – Determination of chloride content – Potentiometric titration method (Modification: *Matrix foodstuffs*)

DIN EN 1988-1 1998-05	Foodstuffs – Determination of sulphite – Part 1: Optimised Monier-Williams method
DIN 10756 2021-06	Analysis of honey – Determination of the free acid content (Modification: *Matrix also bee products*)
ASU L 06.00-7 2014-08	Analysis of foodstuffs – Determination of raw protein content in meat and meat products –Kjeldahl titrimetric method – Reference method (Modification: *Matrix foodstuffs*)
ASU L 10.00-3 1988-12	Analysis of foodstuffs; determination of content of volatile nitrogenous bases (TVB-N) in fish and fish products; reference method (Modification: *Matrix foodstuffs*)
ASU L 13.00-39 2018-06	Analysis of foodstuffs – Animal and vegetable fats and oils – Determination of water content – Karl Fischer method (pyridine-free) (Modification: *Matrix foodstuffs; by volumetric Karl Fischer titration; additional analysis of raw materials and micronised products*)
ASU L 31.00-3 1997-09	Analysis of foodstuffs – Determination of the titratable acidity of fruit and vegetable juices (Modification: *Matrix foodstuffs*)
Regulation (EC) 152/2009 Annex III, Method J 2009-01 Last amended 2013-02	Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed – Methods of analysis to control the composition of feed materials and compound feed – Determination of sugar (Modification: *Matrix foodstuffs*)
DGF C-V2 (06) 2012	Determination of acid number and free fatty acids in fats and oils (Modification: *Matrix foodstuffs*)
DGF C-V3 (02) 2002-05	Determination of the saponification value of fats and oils (Modification: *Matrix foodstuffs*)
DGF C-V 11d (14) 2014	Determination of the Wijs iodine value of fats and oils (Modification: *Matrix foodstuffs*)
DGF C-VI6a – Part 1 (05) 2005-12	Determination of Wheeler peroxide value
DGF M-IV2 (57) 1957	Determination of the acidity and saponification value of waxes

IFU Analysis No. 03 2015	Determination of titratable acidity (Restriction: *Matrix here drinks*)
IFU Analysis No. 30 2005	Determination of formol number (Restriction: *Matrix here drinks*)
Ph. Eur. 9.0, Monographs B 0069/0070 2008-01	Acid value; Cera alba/cera flava (Modification: *Here for analysis of foodstuffs*)
Ph. Eur. 9.0, Monographs B 0069/0070 2008-01	Saponification value; Cera alba/cera flava (Modification: *Here for analysis of foodstuffs*)
Ph. Eur. 9.0, 2.05.05.00 2016-01	Peroxide value in waxes (Modification: *Here for analysis of foodstuffs*)

1.1.9 Determination of ingredients and additives and of characteristics in foodstuffs by gravimetry [Flex B]

DIN 10743 2013-05	Analysis of honey – Determination of water-insoluble solids (Modification: *Matrix also bee products; here sediment*) (Restriction: *Only for analysis of foodstuffs*)
DIN 10755 2001-04	Analysis of honey – Determination of mineral content (Modification: *Matrix also bee products*) (Restriction: *Only for analysis of foodstuffs*)
ASU L 00.00-18 1997-01 Corrigendum 2017-10	Analysis of foodstuffs – Determination of fibre in food (Modification: *Use of buffer in accordance with AOAC 985.29 (2005): 0.08 M phosphate buffer, pH 6.0*)
ASU L 01.00-38 2009-06	Analysis of foodstuffs – Determination of fat content in skimmed milk, whey and buttermilk – Gravimetric method (reference method) (Modification: *Matrix foodstuffs; Restriction: Here only Röse-Gottlieb method*)
ASU L 06.00-6 2014-08	Analysis of foodstuffs – Determination of total fat content in meat and meat products – Weibull-Stoldt gravimetric method – Reference method
DGF C-III 1 2014	Unsaponifiable – Determination with diethyl ether or petroleum ether

SLMB Section 29.8.1 2000-07	Analysis of jams, spreads – ash, determination (Modification: *Matrix foodstuffs*)
IFU Analysis No. 09 2005	Determination of ash (Modification: *Use of porcelain crucibles*)
PM DE01.098 2015-08	Determination of dry matter in meat and meat products, cereals and cereal products and other foodstuffs as gravimetric method

1.1.10 Determination of elements in foodstuffs using inductively coupled plasma mass spectrometry (ICP-MS) [Flex C]

DIN EN 15763 2010-04	Foodstuffs – Determination of trace elements – Determination of arsenic, cadmium, mercury and lead in foodstuffs by inductively coupled plasma mass spectrometry (ICP-MS) after pressure digestion (Modification: *Additional determination of iron, copper, zinc, tin, aluminium*)
VDLUFA Methodenbuch Volume III, 11.7.1 2006	Trace elements, essentials – Determination of extractable iodine content in feedstuffs by ICP-MS (Modification: *Matrix here foodstuffs*)
PM DE01.205 2012-10	Analysis of honey – Determination of trace marker TM-R (trace marker rice syrup) by ICP-MS
PM DE01.345 2020-09	Determination of the geographical origin of honey by examination of the trace element profile with ICP-MS

1.1.11 Determination of elements in foodstuffs by liquid chromatography with inductively coupled plasma mass spectrometry (LC-ICP-MS)

PM DE01.198 2017-11	Analysis of rice and – Determination of the arsenic species As(III), DMA, MMA and As(V) by LC-ICP-MS

1.1.12 Detection of ingredients and additives in foodstuffs by nuclear magnetic resonance spectroscopy (^{1}H NMR) [Flex C]

Bruker BioSpin GmbH AA-72-01-05 (SGF Profiling) 2020-09	Determination of fruit juice ingredients by ^{1}H NMR spectroscopy without data evaluation; sample preparation and measurement in accordance with the specifications of Bruker BioSpin GmbH
Bruker BioSpin GmbH AA-72-03-05 (Honey Profiling) 2020-09	Determination of honey ingredients by ^{1}H NMR spectroscopy without data evaluation; sample preparation and measurement in accordance with the specifications of Bruker BioSpin GmbH
PM DE01.299 2022-05	Determination of 16-O-methylcafestol in coffee by ^{1}H-NMR
PM DE01.300 2017-09	Determination of DHA, MGO and HMF in honey by ^{1}H-NMR
PM DE01.301 2017-01	Analysis of honey by ^{1}H-NMR coupled with chemometrics for ingredients and characteristics of authenticity and quality
PM DE01.309 2022-05	Additives – Identity verification, purity testing and content determination by nuclear magnetic resonance spectroscopy
PM DE01.330 2022-05	Determination of the authenticity of beeswax by proton nuclear magnetic resonance spectroscopy (^{1}H NMR)
PM DE01.340 2020-04	Determination of the purity of sucralose by 1H nuclear magnetic resonance spectroscopy
PM DE01.359 2023-09	Authenticity assessment of agave syrup using ^{1}H-NMR profiling

1.1.13 Determination of C4/C3 sugars in honey, agave syrup, maple syrup, coconut sugar and fruit and vegetable juices by elemental analysis with isotope ratio mass spectrometry detection (EA-IRMS) [Flex C]

AOAC 998.12 2014	C-4 Plant Sugars in Honey – Stable Carbon Isotope Ratio Method
PM DE01.094 2022-04	Analysis of honey – Determination of honey adulteration by ^{13}C EA/LC-IRMS (C4/C3 sugars)

PM DE01.228 2022-04	Analysis of agave syrup – Detection of adulteration with sugar syrups by LC-ELSD and EA-/LC-IRMS
PM DE01.284 2017-02	Analysis of fruit and vegetable juices – Determination of extraneous sugar content (adulteration) by C13 isotope analysis
PM DE01.355 2022-11	Analysis of maple syrup, detection of adulteration with sugar syrups with EA-IRMS
PM DE01.356 2022-04	Analysis of coconut sugar, detection of adulteration with extraneous sugars with EA-IRMS

1.1.14 Determination of C4/C3 sugars in honey and agave syrup by ELSD

PM DE01.228 2022-04	Analysis of agave syrup – Detection of adulteration with sugar syrups by LC-ELSD and EA-/LC-IRMS

1.1.15 Determination of the authenticity of beeswax by Fourier transform infrared spectrometry (FTIR)

PM DE01.329 2022-05	Determination of the authenticity of beeswax by Fourier transform infrared (FT-IR) spectroscopy (Restriction: *Here analysis of foodstuffs*)

1.2 Sensory analysis of foodstuffs [Flex A]

DIN 10964 2014-11	Sensory analysis – Simple descriptive test
PM DE01.070 2009-08	Analysis of honey – Sensors (profiling)

1.3 Microbiological analysis of foodstuffs

1.3.1 Detection and determination of bacteria, yeasts and moulds in foodstuffs by cultural microbiological analysis [Flex B]

ISO 15213 2003-05	Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of sulphite-reducing bacteria growing under anaerobic conditions (Restriction: *Here only foodstuffs*)

ISO 21527-1 2008-07	Horizontal method for enumeration of yeasts and moulds – Part 1: Colony count technique in products with water activity greater than 0.95 (Restriction: *Here only foodstuffs*)
ISO 21527-2 2008-07	Horizontal method for enumeration of yeasts and moulds – Part 2: Colony count technique in products with water activity equal to or less than 0.95 (Restriction: *Here only foodstuffs*)
DIN ISO 16649-2 2020-12	Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of β-glucuronidase-positive Escherichia coli – Part 2: Colony count technique at 44 °C using 5-bromo-4-chloro-3-indolyl β-D-glucuronide (Restriction: *Here only foodstuffs*)
DIN EN ISO 21528-2 2019-05	Microbiology of the food chain – Horizontal method for the detection and enumeration of Enterobacteriaceae – Part 2: Colony-count technique (Restriction: *Here only foodstuffs*)
DIN EN ISO 4833-2 2022-05	Microbiology of the food chain – Horizontal method for the enumeration of microorganisms – Part 2: Colony count at 30 °C by the surface plating technique (Restriction: *Here only foodstuffs*)
DIN EN ISO 6888-1 2022-06	Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species) – Part 1: Technique using Baird-Parker agar medium (Restriction: *Here only foodstuffs*)
bioMérieux BACARA® 2 423849 2022-04	Determination of the bacterial count of the group *Bacillus cereus* (Restriction: *Here only foodstuffs*)

1.3.2 Identification of bacteria, yeasts and fungi by MALDI-TOF-MS

PM DE01.241 2024-03	Identification of microorganisms (bacteria, yeasts, fungi) using the MALDI Biotyper (BDAL database revision 12, 01.09.2023, Filamentous Fungi database revision 3, 26.03.2020) (Restriction: *Here only foodstuffs*)

1.4 Molecular biological analysis of foodstuffs

1.4.1 Qualitative detection of bacteria in foodstuffs by real-time PCR [Flex B]

DIN CEN ISO/TS 17919 2014-03	Microbiology of the food chain – Polymerase chain reaction (PCR) for the detection of food-borne pathogens – Detection of botulinum type A, B, E and F neurotoxin-producing clostridia
CONGEN Biotechnologie GmbH SureFast® Clostridium Perfringens PLUS F5123 2019-07	Real-time PCR for detection of the DNA sequence of the alpha toxin of Clostridium perfringens (Restriction: *Here only foodstuffs*)

1.4.2 Detection of animal species in foodstuffs by real-time PCR [Flex B]

GEN-IAL GmbH GEN-IAL® First-Pig PCR Kit 5207081 2014-01	Real-time PCR kit for the detection of porcine DNA in raw materials, foodstuffs and feedstuffs (Restriction: *Here only foodstuffs*)
GEN-IAL GmbH GEN-IAL® First-Goat PCR Kit 5207085 2014-01	Real-time PCR kit for the detection of goat DNA in raw materials, foodstuffs and feedstuffs (Restriction: *Here only foodstuffs*)
GEN-IAL GmbH GEN-IAL® First-Chicken PCR Kit 5207083 2014-01	Real-time PCR kit for the detection of chicken DNA in raw materials, foodstuffs and feedstuffs (Restriction: *Here only foodstuffs*)
GEN-IAL GmbH GEN-IAL® First-Turkey PCR Kit 5207087 2014-01	Real-time PCR kit for the detection of turkey DNA in raw materials, foodstuffs and feedstuffs (Restriction: *Here only foodstuffs*)
GEN-IAL GmbH GEN-IAL® First-Sheep PCR Kit 5207086 2014-01	Real-time PCR kit for the detection of ovine DNA in raw materials, foodstuffs and feedstuffs (Restriction: *Here only foodstuffs*)

GEN-IAL GmbH GEN-IAL® First-Ruminant PCR Kit 5207207 2015-05	Real-time PCR kit for the detection of ruminant DNA in feedstuffs and foodstuffs (Restriction: *Here only foodstuffs*)

1.4.3 Detection of plant species and genetically modified organisms (GMOs) in foodstuffs by real-time PCR [Flex B]

GEN-IAL GmbH GEN-IAL® First Rice PCR Kit 5207097 2014-01	Real-time PCR kit for the detection of rice DNA (Restriction: *Here only foodstuffs*)
GEN-IAL GmbH GEN-IAL® gencontrol RT Bt11 Maize Kit 5207152 2014-01	Real-time PCR kit for the detection of Bt11 maize (Restriction: *Here only foodstuffs*)
PM DE01.181 2024-03	Detection of genetically modified organisms (GMOs) in pollen, foodstuffs and feedstuffs by real-time PCR (Restriction: *Here only foodstuffs*)

1.4.4 Detection of bacteria, plant species and genetically modified organisms (GMOs) in foodstuffs by multiplex real-time PCR [Flex B]

GEN-IAL GmbH GEN-IAL® gencontrol RT-Triplex Soy 1 5207200 2015-03	Real-time PCR kit for the detection of A2704-12 / A5547-127 / DP356043-5 soya (Restriction: *Here only foodstuffs*)
CONGEN Biotechnologie GmbH SureFast® STEC 4plex F5165 2019-07	Detection and differentiation of DNA sequences of Escherichia coli virulence factors stx1 (subtype a-d), stx2 (subtype a-g) and eae as well as Escherichia coli serotype O157 (Restriction: *Here only foodstuffs*)
r-biopharm SureFood® GMO Plant 4plex Corn/Soya/Canola/Cotton S2156 2018-03	Multiplex test for the detection of maize, soybean, rapeseed and cotton DNA (Restriction: *Here only foodstuffs*)

r-biopharm SureFood® GMO SCREEN 4plex BAR/NPTII/PAT/CTP2:CP4 EPSPS S2127 2016-12	Screening for genetically modified organisms (GMOs) in food, feed and seeds (Restriction: *Here only foodstuffs*)

1.5 Determination of ingredients in honey by optical microscopy [Flex C]

DIN 10760 2002-05	Analysis of honey – Determination of the relative frequency of pollen
PM DE01.037 2009-08	Analysis of honey – Determination of starch content by microscopy (Modification: *Here sample preparation in accordance with ASU L 40.00-11*: *2003-12; Analysis of foodstuffs – Analysis of honey –* Determination of the relative frequency of pollen
PM DE01.040 2009-08	Analysis of honey – Determination of yeast content by microscopy

1.6 Detection of allergens and residues of pharmacologically active substances in foodstuffs by enzyme immunoassay (ELISA) [Flex B]

R-Biopharm AG RIDASCREEN® ß-Lactoglobulin R4901 2016-11	Competitive enzyme immunoassay for quantitative determination of β-lactoglobulin in hydrolysed milk products, including hypoallergenic baby food
R-Biopharm AG RIDASCREEN® Chloramphenicol R1511 2021-02	Enzyme immunoassay for quantitative determination of chloramphenicol in milk, milk powder and milk products, honey and royal jelly, meat, fish, shrimp, eggs, urine (also chloramphenicol glucuronide), plasma/serum and animal feedstuffs (Restriction: *Here only for honey and bee products*)
R-Biopharm AG RIDASCREEN® Gliadin R7001 2021-10	Sandwich enzyme immunoassay (ELISA) for quantitative determination of contamination by prolamins from wheat (gliadin), rye (secalin) and barley (hordein) in raw materials such as flour (buckwheat, rice, maize, oats, teff) and in processed foods such as pasta, ready meals, bakery products, sausages, beverages and ice cream

R-Biopharm AG RIDASCREEN® FAST ß-Lactoglobulin R4912 2017-11	Sandwich enzyme immunoassay for quantitative determination of β-lactoglobulin in rice cakes, chocolate and sausage (Modification: *Here also for honey*)
R-Biopharm AG RIDASCREEN® FAST Casein R4612 2022-05	Sandwich enzyme immunoassay for quantitative determination of casein in foodstuffs
R-Biopharm AG RIDASCREEN® FAST Soya R7102 2016-07	Sandwich enzyme immunoassay for quantitative determination of native and processed soya protein in foodstuffs

2 Feedstuffs

2.1 Physical, physico-chemical and chemical analysis of feedstuffs

2.1.1 Physical, physico-chemical and chemical analysis [Flex A]

Regulation (EC) 152/2009 Annex III, Method I 2009-01 Last amended 2022-06	Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed – Methods of analysis to control the composition of feed materials and compound feed – Determination of starch – Polarimetric method
VDLUFA Methodenbuch Volume III, 4.2.1 1976	Nitrogen compounds – Determination of fermentable soluble crude protein
VDLUFA Methodenbuch Volume III, 5.4.6 1983	Fat – Determination of the melting point of feed fats

2.1.2 Determination of ingredients and characteristics in feedstuffs by photometry [Flex B]

ASU L 06.00-8 2017-10	Analysis of foodstuffs – Determination of hydroxyproline content in meat, meat products and sausages – Photometric method after acid digestion (Modification: *Application on feedstuffs*)

DGF C-VI 6e 2012-07	Fats – Special methods – Anisidine value

2.1.3 Determination of ingredients and characteristics in feedstuffs by titrimetry [Flex B]

Regulation (EC) 152/2009 Annex III, Method J 2009-01 Last amended 2022-06	Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed – Methods of analysis to control the composition of feed materials and compound feed – Determination of sugar
ASU L 06.00-7 2014-08	Analysis of foodstuffs – Determination of raw protein content in meat and meat products –Kjeldahl titrimetric method – Reference method (Modification: *Matrix feedstuffs*)
ASU L 10.00-3 1988-12	Analysis of foodstuffs; determination of content of volatile nitrogenous bases (TVB-N) in fish and fish products; reference method (Modification: *Matrix feedstuffs*)
DGF C-V 3 (02) 2002-05	Fats – Chemical characteristics – Saponification number (Modification: *Matrix feedstuffs*)
DGF C-V 11d (14) 2014	Fats – Chemical characteristics – Wijs iodine value (Modification: *Matrix feedstuffs*)
DGF C-VI 6a – Teil 1 (05) 2005	Fats – Special methods – Determination of peroxide value (Modification: *Matrix feedstuffs*)
VDLUFA Methodenbuch Volume III, 5.2.1 1976	Fat – Determination of free fatty acids
VDLUFA Methodenbuch Volume III, 5.4.5 1976	Fat – Determination of acid value
VDLUFA Methodenbuch Volume III, 10.5.2 2007	Quantity elements – Determination of chlorides

2.1.4 Determination of ingredients in feedstuffs by gravimetry [Flex B]

DGF C-III 1 (14) 2014	Fats – Determination of main and minor constituents – Unsaponifiable – Determination with diethyl ether or petroleum ether
VDLUFA Methodenbuch Volume III, 3.1 2007	Moisture, water – Determination of moisture
VDLUFA Methodenbuch Band III, 5.1.1, A and B 1988	Fat – Determination of crude fat
VDLUFA Methodenbuch Volume III, 6.1.1 1993	Vegetable structural substances – Determination of crude fibre
VDLUFA Methodenbuch Volume III, 8.1 2007	Ash – Determination of crude ash
VDLUFA Methodenbuch Volume III, 8.2 2007	Ash – Determination of ash insoluble in hydrochloric acid

2.1.5 Liquid chromatography (LC)

2.1.5.1 Determination of mycotoxins and antioxidants in feedstuffs by liquid chromatography (LC) with conventional detectors (FLD, UV) [Flex C]

VDLUFA Methodenbuch Volume III, 16.1.4 1997	Unwanted substances – Determination of aflatoxin B1: Extract purification by immunoaffinity chromatography (Modification: *Different extractant; replacement of coring cell by UVE cell*)
PM DE01.039 2012-09	Analysis of plant-based foodstuffs and feedstuffs – Determination of the content of ochratoxin A by HPLC-FLD (Restriction: *Here only for feedstuffs*)
PM DE01.043 2012-09	Analysis of plant-based foodstuffs and feedstuffs – Determination of the content of deoxynivalenol (DON) by HPLC-UV (Restriction: *Here only for feedstuffs*)

PM DE01.044 2012-09	Analysis of plant-based foodstuffs and feedstuffs – Determination of the content of zearalenone by HPLC-FLD (Restriction: *Here only for feedstuffs*)
PM DE01.302 2017-01	Determination of antioxidants in bone meal, fats and oils by HPLC (Restriction: *Here only for feedstuffs*)
PM DE01.358 2023-09	Determination of propyl gallate (gallic acid propyl ester) in feedstuffs by HPLC-DAD

2.1.5.2 Determination of additives, plant protection product residues and organic contaminants in feedstuffs by liquid chromatography (LC) with mass selective detectors (MS/MS) [Flex C]

ASU L 00.00-115 2018-10	Analysis of foodstuffs – Multiple analytical method for the determination of pesticide residues using GC and LC after acetonitrile extraction/partitioning and clean-up by dispersive SPE in plant-based foodstuffs – Modular QuEChERS method (Modification: *Matrix also feedstuffs and pet food*)
EURL-SRM QuPPe Method 1.3 Version 11 2020-02	Quick Method for the Analysis of Numerous Highly Polar Pesticides in Food Involving Extraction with Acidified Methanol and LC-MS/MS Measurement – 1. Food of Plant Origin (QuPPe-PO-Method) – Glyphosate & Co. Hypercarb (Modification: *Matrix feedstuffs; modified chromatographic conditions*)
EURL-SRM QuPPe Method 1.4 Version 11 2020-02	Quick Method for the Analysis of Numerous Highly Polar Pesticides in Food Involving Extraction with Acidified Methanol and LC-MS/MS Measurement – 1. Food of Plant Origin (QuPPe-PO-Method) – PerChloPhos (Modification: *Matrix feedstuffs; modified chromatographic conditions*)
EURL-SRM QuPPe Method 2 Version 11 2020-02	Quick Method for the Analysis of Numerous Highly Polar Pesticides in Food Involving Extraction with Acidified Methanol and LC-MS/MS Measurement – 1. Food of Plant Origin (QuPPe-PO-Method) – Fosetyl and Maleic Hydrazide (Modification: *Matrix feedstuffs; modified chromatographic conditions*)
EURL-SRM QuPPe Method 4.1 Version 11 2020-02	Quick Method for the Analysis of Numerous Highly Polar Pesticides in Food Involving Extraction with Acidified Methanol and LC-MS/MS Measurement – 1. Food of Plant Origin (QuPPe-PO-Method) – Quats & Co Obelisc R (Modification: *Matrix feedstuffs; modified chromatographic conditions*)

EURL-SRM QuPPe Method 7 Version 11 2020-02	Quick Method for the Analysis of Numerous Highly Polar Pesticides in Food Involving Extraction with Acidified Methanol and LC-MS/MS Measurement – 1. Food of Plant Origin (QuPPe-PO-Method) – Morpholine, Diethanolamine and Triethanolamine (Modification: *Matrix feedstuffs; modified chromatographic conditions*)
PM DE01.189 2018-12	Analysis of foodstuffs and feedstuffs – Determination of the content of acrylamide by LC-MS/MS (Restriction: *Here only for feedstuffs*)
PM DE01.219 2012-10	Animal feeding stuffs – Determination of the content of pyrrolizidine alkaloids by LC-MS/MS
PM DE01.229 2020-02	Analysis of plant-based foodstuffs and feedstuffs for nicotine by LC-MS/MS (Restriction: *Here only for feedstuffs*)
PM DE01.282 2015-09	Analysis of foodstuffs and feedstuffs – Determination of tropane alkaloid content by LC-MS/MS (Restriction: *Here only for feedstuffs*)
PM DE01.337 2019-03	Analysis of pet food – Determination of the content of synthetic colourants by LC-MS/MS

2.1.6 Gas chromatography (GC)

2.1.6.1 Determination of fatty acids in feedstuffs by gas chromatography (GC) with conventional detectors (FID)

PM DE01.077 2022-09	Fatty acid spectrum in animal and vegetable fats and oils by GC-FID (Restriction: *Here only for feedstuffs*)

2.1.6.2 Determination of plant protection product residues and polycyclic aromatic hydrocarbons and polychlorinated biphenyls in feedstuffs by gas chromatography (GC) with mass-selective detectors (MS, MS/MS) [Flex C]

ASU L 00.00-115 2018-10	Analysis of foodstuffs – Multiple analytical method for the determination of pesticide residues using GC and LC after acetonitrile extraction/partitioning and clean-up by dispersive SPE in plant-based foodstuffs – Modular QuEChERS method (Modification: *Matrix also feedstuffs and pet food*)
PM DE01.206 2022-04	Analysis of foodstuffs and feedstuffs – Determination of selected polycyclic aromatic hydrocarbons (PAHs) by GPC and GC-MS/MS (Restriction: *Here only for feedstuffs*)
PM DE01.328 2018-08	Analysis of plant-based foodstuffs and feedstuffs – Determination of the content of dithiocarbamates as CS2 by GC-MS (Restriction: *Here only for feedstuffs*)

2.1.7 Determination of elements in feedstuffs using inductively coupled plasma mass spectrometry (ICP-MS) [Flex B]

DIN EN 15763 2010-04	Foodstuffs – Determination of trace elements – Determination of arsenic, cadmium, mercury and lead in foodstuffs by inductively coupled plasma mass spectrometry (ICP-MS) after pressure digestion (Modification: *Matrix feedstuffs; determination of iron, copper, zinc, tin, aluminium and other elements*)
VDLUFA Methodenbuch Volume III, 11.7.1 6. Supp. 2006	Trace elements, essentials – Determination of extractable iodine content in feedstuffs by ICP-MS

2.2 Microbiological analysis of feedstuffs

2.2.1 Detection and determination of bacteria, yeasts and moulds in feedstuffs by cultural microbiological analysis [Flex B]

ISO 15213 2003-05	Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of sulphite-reducing bacteria growing under anaerobic conditions (Restriction: *Here only for feedstuffs*)

ISO 21527-1 2008-07	Horizontal method for enumeration of yeasts and moulds – Part 1: Colony count technique in products with water activity greater than 0.95 (Modification: *Matrix feedstuffs*)
ISO 21527-2 2008-07	Horizontal method for enumeration of yeasts and moulds – Part 2: Colony count technique in products with water activity equal to or less than 0.95 (Modification: *Matrix feedstuffs*)
DIN ISO 16649-2 2020-12	Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of β-glucuronidase-positive Escherichia coli – Part 2: Colony count technique at 44 °C using 5-bromo-4-chloro-3-indolyl β-D-glucuronide (Restriction: *Here only for feedstuffs*)
DIN EN ISO 21528-2 2019-05	Microbiology of the food chain – Horizontal method for the detection and enumeration of Enterobacteriaceae – Part 2: Colony-count technique (Modification: *Matrix feedstuffs*)
DIN EN ISO 4833-2 2022-05	Microbiology of the food chain – Horizontal method for the enumeration of microorganisms – Part 2: Colony count at 30 °C by the surface plating technique (Modification: *Matrix feedstuffs*)
DIN EN ISO 6888-1 2022-06	Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species) – Part 1: Technique using Baird-Parker agar medium (Restriction: *Here only for feedstuffs*)
bioMérieux BACARA® 2 423849 2022-04	Determination of the bacterial count of the group *Bacillus cereus* (Restriction: *Here only for feedstuffs*)

2.2.2 Identification of bacteria, yeasts and fungi by MALDI-TOF-MS

PM DE01.241 2024-03	Identification of microorganisms (bacteria, yeasts, fungi) using the MALDI Biotyper (BDAL database revision 12, 01.09.2023, Filamentous Fungi database revision 3, 26.03.2020) (Restriction: *Here only for feedstuffs*)

2.3 Molecular biological analysis of feedstuffs

2.3.1 Qualitative detection of bacteria in feedstuffs by real-time PCR [Flex C]

DIN 10135 2013-05	Microbiology of food and animal feeding stuffs – Polymerase chain reaction (PCR) for the detection of food-borne pathogens – Method for the detection of salmonella (Restriction: *Here only for feedstuffs*)
ASU L 00.00-95(V) 2006-12	Analysis of foodstuffs – Qualitative detection of Listeria monocytogenes in foodstuffs – PCR method (Modification: *Matrix feedstuffs*)
ASU L 00.00-98 2007-04	Analysis of foodstuffs – Qualitative detection of salmonella in foodstuffs – PCR method (Modification: *Matrix feedstuffs*)
PM DE01.151 2017-10	Detection of Clostridium perfringens in foodstuffs and feedstuffs with real-time PCR (Restriction: *Here only for feedstuffs*)
CONGEN Biotechnologie GmbH SureFast® Campylobacter PLUS F5112 2019-07	Detection of specific DNA sequences of Campylobacter coli, Campylobacter lari and Campylobacter jejuni (Restriction: *Here only for feedstuffs*)
CONGEN Biotechnologie GmbH SureFast® STEC Screening PLUS F5105 2019-07	Detection of the Escherichia coli virulence factors stx1 (subtype a-d) and stx2 (subtype a-g) (Restriction: *Here only for feedstuffs*)

2.3.2 Detection of plant species and genetically modified organisms (GMOs) in feedstuffs by real-time PCR [Flex B]

GEN-IAL GmbH GEN-IAL® First Rice PCR Kit 5207097 2014-01	Real-time PCR kit for the detection of rice DNA (Restriction: *Here only for feedstuffs*)

GEN-IAL GmbH GEN-IAL® gencontrol RT Bt11 Maize Kit 5207152 2014-01	Real-time PCR kit for the detection of Bt11 maize (Restriction: *Here only for feedstuffs*)
PM DE01.181 2024-03	Detection of genetically modified organisms (GMOs) in pollen, foodstuffs and feedstuffs by real-time PCR (Restriction: *Here only for feedstuffs*)

2.3.3 Detection of bacteria, plant species and genetically modified organisms (GMOs) in feedstuffs by multiplex real-time PCR [Flex B]

GEN-IAL GmbH GEN-IAL® gencontrol RT-Triplex Soy 1 5207200 2015-03	Real-time PCR kit for the detection of A2704-12 / A5547-127 / DP356043-5 soya (Restriction: *Here only for feedstuffs*)
CONGEN Biotechnologie GmbH SureFast® STEC 4plex F5165 2019-07	Detection and differentiation of DNA sequences of Escherichia coli virulence factors stx1 (subtype a-d), stx2 (subtype a-g) and eae as well as Escherichia coli serotype O157 (Restriction: *Here only for feedstuffs*)
r-biopharm SureFood® GMO Plant 4plex Corn/Soya/Canola/Cotton S2156 2018-03	Multiplex test for the detection of maize, soybean, rapeseed and cotton DNA (Restriction: *Here only for feedstuffs*)
r-biopharm SureFood® GMO SCREEN 4plex BAR/NPTII/PAT/CTP2:CP4 EPSPS S2127 2016-12	Screening for genetically modified organisms (GMOs) in food, feed and seeds (Restriction: *Here only for feedstuffs*)

2.3.4 Detection of animal species in feedstuffs by real-time PCR [Flex B]

GEN-IAL GmbH GEN-IAL® First-Pig PCR Kit 5207081 2014-01	Real-time PCR kit for the detection of porcine DNA in raw materials, foodstuffs and feedstuffs (Restriction: *Here only for feedstuffs*)
GEN-IAL GmbH GEN-IAL® First-Goat PCR Kit 5207085 2014-01	Real-time PCR kit for the detection of goat DNA in raw materials, foodstuffs and feedstuffs (Restriction: *Here only for feedstuffs*)
GEN-IAL GmbH GEN-IAL® First-Chicken PCR Kit 5207083 2014-01	Real-time PCR kit for the detection of chicken DNA in raw materials, foodstuffs and feedstuffs (Restriction: *Here only for feedstuffs*)
GEN-IAL GmbH GEN-IAL® First-Turkey PCR Kit 5207087 2014-01	Real-time PCR kit for the detection of turkey DNA in raw materials, foodstuffs and feedstuffs (Restriction: *Here only for feedstuffs*)
GEN-IAL GmbH GEN-IAL® First-Sheep PCR Kit 5207086 2014-01	Real-time PCR kit for the detection of ovine DNA in raw materials, foodstuffs and feedstuffs (Restriction: *Here only for feedstuffs*)
GEN-IAL GmbH GEN-IAL® First-Ruminant PCR Kit 5207207 2015-05	Real-time PCR kit for the detection of ruminant DNA in feedstuffs and foodstuffs (Restriction: *Here only for feedstuffs*)

2.4 Determination of ingredients in feedstuffs by enzyme immunoassay (ELISA) [Flex A]

R-Biopharm AG RIDASCREEN® FAST Soya R7102 2016-07	Sandwich enzyme immunoassay for quantitative determination of native and processed soya protein in foodstuffs (Modification: *Application also to feedstuffs*)

3 Microbiological analysis of fitment and utensils in food areas [Flex A]

DIN 10113-1 2023-02	Horizontal method for the determination of surface colony count and detection of specific microorganisms on fitment and utensils along the food chain – Part 1: Swab method (Restriction: *Without sampling*)
DIN 10113-2 2023-02	Horizontal method for the determination of surface colony count and detection of specific microorganisms on fitment and utensils along the food chain – Part 2: Method with culture media laminated taking up equipment (squeeze method) (Restriction: *Without sampling*)

Linden location

1 Foodstuffs

1.1 Selected physical, physico-chemical and chemical analysis of foodstuffs

1.1.1 Sample preparation [Flex A]

ASU L 00.00-19/1 2015-06	Analysis of foodstuffs – Determination of trace elements in foodstuffs – Pressure digestion
ASU L 13.00-27 2020-02	Analysis of foodstuffs – Production of fatty acid methyl esters in animal and vegetable fats and oils
PV DE02.180 2021-02	Sample preparation for chemical/physical analysis of foodstuffs

1.1.2 Physical, physico-chemical and chemical analysis [Flex A]

Regulation (EU) No 974/2014 Annex 2014-09	Commission implementing regulation (EU) No 974/2014 of 11 September 2014 laying down the refractometry method of measuring dry soluble residue in products processed from fruit and vegetables for the purposes of their classification in the Combined Nomenclature
ASU L 06.00-15 1982-11 Corrigendum 2002-12	Detection of condensed phosphates in meat and meat products
ASU L 31.00-16 1997-09	Analysis of foodstuffs – Determination of content of soluble solid matter in fruit and vegetable juices – Refractometric method
IFU Analysis IFUMA08 2005	Detection of soluble solids (indirect refractometer method)
PV DE02.413 2023-12	Determination of the a_W-value in foodstuffs and feedstuffs (Restriction: *Here only for feedstuffs*)

1.1.3 Determination of ingredients by gravimetry in foodstuffs [Flex A]

DIN EN ISO 659 2009-11	Oilseeds – Determination of oil content (reference method)
DIN EN ISO 665 2001-02	Oilseeds – Determination of moisture and volatile matter content
ASU L 00.00-18 1997-01 Corrigendum 2017-10	Analysis of foodstuffs – Determination of fibre in food
ASU L 01.00-20 2013-08	Analysis of foodstuffs – Determination of fat content of milk and milk products by the Weibull-Berntrop gravimetric method
ASU L 01.00-27 1988-12	Analysis of foodstuffs; determination of the dry matter content of milk and cream; reference method
ASU L 01.00-77 2002-05	Analysis of foodstuffs – Determination of total ash in milk and milk products
ASU L 01.02-3 (EG) to 10 (EG) 1993-08	Analysis of foodstuffs; analysis and test method for heat-treated milk (*Restriction: Method 5: Determination of dry matter content, method 7: Determination of total fat-free dry matter, method 8: Determination of total nitrogen content of milk, method 9: Determination of protein content*)
ASU L 03.00-9 2007-04	Analysis of foodstuffs – Determination of total dry matter of cheese and processed cheese – Reference method
ASU L 03.00-10 2013-08	Analysis of foodstuffs – Determination of fat content of cheese by the Weibull-Berntrop gravimetric method
ASU L 05.00-12 2012-01	Analysis of foodstuffs; determination of dry matter in eggs and egg products
ASU L 05.00-13 1991-06	Analysis of foodstuffs; determination of ash in eggs and egg products
ASU L 06.00-3 2014-08	Analysis of foodstuffs – determination of dry matter in meat and meat products
ASU L 06.00-4 2017-10	Analysis of foodstuffs – Determination of ash in meat, meat products and sausages – Gravimetric method (reference method)

ASU L 06.00-6 2014-08	Analysis of foodstuffs – Determination of total fat content in meat and meat products – Weibull-Stoldt gravimetric method – Reference method
ASU L 13.05-1 1984-05	Analysis of foodstuffs; determination of water content in margarine
ASU L 13.05-3 2002-05	Analysis of foodstuffs – Determination of fat content in margarine and other fat spreads – Modified method based on method K-I 2 a from the German standard methods for analysis of fats, fat products and related substances (Wissensch. Verlagsges. m.b.H. Stuttgart) (Modification: *Weibull-Stoldt acid digestion*)
ASU L 16.01-1 1987-06	Analysis of foodstuffs; determination of moisture content in cereal flour
ASU L 16.01-2 2008-12	Analysis of foodstuffs; determination of ash in cereal flour
ASU L 17.00-1 1982-05	Determination of loss on drying in bread including small baked products made of bread dough
ASU L 17.00-3 1982-05	Determination of ash in bread including small baked products made of bread dough
ASU L 17.00-4 2017-10	Analysis of foodstuffs – Determination of total fat content in bread including small baked products made of bread dough after acid digestion by extraction and gravimetry
ASU L 20.01/02-3 1980-05	Determination of dry matter in mayonnaises and emulsified sauces
ASU L 20.01/02-5 1980-05	Determination of total fat content in mayonnaises and emulsified sauces
ASU L 26.11.03-1a 1983-05	Determination of dry matter content in tomato purée (gravimetric method)
ASU L 26.11.03-6 1983-05	Determination of hydrochloric acid insoluble (sand content) in tomato purée
ASU L 31.00-4 1997-01	Analysis of foodstuffs – Determination of ash in fruit and vegetable juices
ASU L 31.00-18 1997-09	Analysis of foodstuffs – Determination of total dry matter in fruit and vegetable juices – Gravimetric method with loss in mass during drying

ASU L 44.00-3 1985-12	Analysis of foodstuffs – Determination of dry matter content in solid chocolate
ASU L 44.00-4 1985-12	Analysis of foodstuffs – Determination of total fat content in chocolate
ASU L 46.02-2 2017-10	Analysis of foodstuffs; Determination of water-soluble extract; Method for roasted coffee
ASU L 47.00-1 2017-10	Analysis of foodstuffs; determination of loss in mass of unground tea at 103 °C
ASU L 47.00-3 2017-10	Analysis of foodstuffs; analysis of tea; determination of total ash
ASU L 47.00-5 1985-12	Analysis of foodstuffs; analysis of tea; determination of acid-insoluble ash
ASU L 53.00-4 1996-02	Analysis of foodstuffs – Analysis of spices and seasoning ingredients – Determination of total ash and acid-insoluble ash
PV DE02.079 2023-03	Gravimetric determination of fat in feedstuffs and processed foodstuffs (Restriction: *Here only foodstuffs*)
PV DE02.123 2020-01	Gravimetric determination of dry matter and ash in feedstuffs and processed foodstuffs (Restriction: *Here only foodstuffs*)
PV DE02.141 2022-02	Determination of the fill quantity in prepackages of food and feed products (Restriction: *Here only foodstuffs*)
PV DE02.438 2020-02	Gravimetric determination and biological contamination

1.1.4 Determination of ingredients, additives and characteristics in foodstuffs by titrimetry [Flex A]

DIN EN ISO 660 2009-10	Animal and vegetable fats and oils – Determination of acid value and acidity
DIN EN ISO 5983-1 2005-10 Corrigendum 2009-07	Animal feeding stuffs – Determination of nitrogen content and calculation of crude protein content – Part 1: Kjeldahl method (Modification: *Use of MERCK Kjeldahl tablets, for oils and oilseeds, here for foodstuffs*)
ASU L 01.00-10/1 2016-03	Analysis of foodstuffs – Determination of nitrogen content in milk – Part 1: Kjeldahl method
ASU L 03.00-11 2007-12	Analysis of foodstuffs; determination of the chloride content of cheese and processed cheese; potentiometric method
ASU L 05.00-15 2007-12	Analysis of foodstuffs; determination of crude protein content in eggs and egg products
ASU L 06.00-7 2014-08	Analysis of foodstuffs; determination of crude protein content in meat and meat products
ASU L 07.00-21 2010-09	Reductometric determination of total carbohydrates (starch) in meat products
ASU L 10.00-3 1988-12	Analysis of foodstuffs; determination of content of volatile nitrogenous bases (TVB-N) in fish and fish products; reference method
ASU L 13.00-5 2021-03	Analysis of foodstuffs – Animal and vegetable fats and oils – Determination of acid value and acidity
ASU L 13.05-6 1985-05	Analysis of foodstuffs; determination of total protein content in margarine (Modification: *Use of MERCK Kjeldahl tablets*)
ASU L 17.00-6 1988-12	Analysis of foodstuffs – Determination of chloride for the calculation of salt in bread, including small baked products made of bread dough
ASU L 17.00-15 2013-08	Analysis of foodstuffs – Determination of raw protein content in bread including small baked products made of bread dough
ASU L 26.04-4 1987-06	Analysis of foodstuffs; determination of titratable acids (total acidity) in the cover brine and press liquor for sauerkraut

ASU L 26.11.03-2 1983-05 Corrigendum 2002-12	Determination of chloride content of tomato purée (potentiometric method)
ASU L 26.11.03-11 1983-11 Corrigendum 2002-12	Determination of total nitrogen in tomato purée
ASU L 31.00-3 1997-09	Analysis of foodstuffs – Determination of the titratable acidity of fruit and vegetable juices
ASU L 31.00-11 1984-11	Analysis of foodstuffs; determination of the sugar content before and after inversion in fruit juices (Luff-Schoorl method)
DGF C-VI 6a 1984	German standard methods for the analysis of fats, fat products, surfactants and related substances – Fats – Special methods – Determination of the peroxide value – Wheeler method, Sully method
PV DE02.222 2023-04	Titrimetric determination of protein in feedstuffs and processed foodstuffs using the Vapodest (Restriction: *Here only foodstuffs*)
PV DE02.468 2020-02	Determination of sulphite in foodstuffs – Monier Williams method

1.1.5 Determination of ingredients and additives using photometric tests in foodstuffs [Flex A]

ASU L 00.00-46/2 1999-11	Analysis of foodstuffs – Determination of sulphite in foodstuffs – Part 2: Enzymatic method
ASU L 06.00-8 2017-10	Determination of hydroxyproline content in meat, meat products and sausages – Gravimetric method (reference method)
ASU L 08.00-14 2008-06	Analysis of foodstuffs; determination of nitrite and nitrate content in sausages after enzymatic reduction
VDLUFA Methodenbuch Volume III, 5.4.1 1983	Fat – Determination of anisidine value (Modification: *Matrix foodstuffs)*
VDLUFA Methodenbuch Volume III, 16.3.3 1983	Unwanted substances – Determination of hydrogen cyanide: Photometric method (Modification: *Matrix foodstuffs*)

R-Biopharm AG Ethanol 10176290035 2019-11	UV test for determination of ethanol in foodstuffs and other sample materials (Restriction: *Here only foodstuffs*)
R-Biopharm AG Enzytec™ Generic Lactose/D-Galactose E1213 2016-05	UV test for determination of lactose and D-galactose in foodstuffs and other sample materials (Restriction: *Here only foodstuffs*)
R-Biopharm AG Enzytec™ Generic Saccharose/D-Glucose/ D-Fructose E1247 2011-05	UV test for determination of sucrose, D-glucose and D-fructose in foodstuffs and other sample materials (Restriction: *Here only foodstuffs*)
R-Biopharm AG Enzytec™ Liquid Maltose/Saccharose/D-Glucose E8170 2023-02	UV test for determination of maltose, sucrose and D-glucose in foodstuffs and other sample materials (Restriction: *Here only foodstuffs*)
R-Biopharm AG Enzytec™ Liquid D-Glucose E8140 2017-03	Enzymatic UV determination of D-glucose in foodstuffs and other sample materials (Restriction: *Here only foodstuffs*)
R-Biopharm AG Enzytec™ Liquid Sucrose/D-Glucose E8180 2023-04	UV test for determination of sucrose/D-glucose in foodstuffs and other sample materials (Restriction: *Here only foodstuffs*)

1.1.6 Determination of pH value and titratable acids by electrode measurement in foodstuffs [Flex A]

ASU L 06.00-2 1980-09	Measurement of pH in meat and meat products
ASU L 20.01/02-1 1980-05	Measurement of pH in mayonnaise and emulsified sauces
ASU L 26.04-3 1987-06	Analysis of foodstuffs; measurement of pH in the cover brine and press liquor for sauerkraut
ASU L 31.00-2 1997-01	Analysis of foodstuffs – Determination of the pH value of fruit and vegetable juices
ASU L 46.02-3 2017-10	Analysis of foodstuffs; Determination of pH and acid content; Method for roasted coffee
ASU L 46.03-4 2017-10	Analysis of foodstuffs – Determination of pH and acid content; Method for soluble coffee
ASU L 49.00-7 2000-07	Analysis of foodstuffs – Determination of fluoride in dietary foods with the ion-sensitive electrode (Modification: *Matrix foodstuffs, extraction by shaking*)
PV DE02.233 2020-01	Determination of nitrate by ion-selective electrode in foodstuffs
PV DE02.245 2023-09	Determination of pH in feedstuffs by electrode measurement and processed foodstuffs (Restriction: *Here only foodstuffs*)

1.1.7 Determination of elements with inductively coupled plasma atomic emission spectrometry (ICP-OES) in foodstuffs [Flex A]

DIN EN 16943 2017-07	Foodstuffs – Determination of calcium, copper, iron, magnesium, manganese, phosphorus, potassium, sodium, sulfur and zinc in foodstuffs by ICP-OES (Modification: *Additional elements Al, Co, Cr, Mo, Ni, Sn, Ti, V*)

1.1.8 Determination of elements by inductively coupled plasma mass spectrometry (ICP-MS) in foodstuffs [Flex A]

DIN EN 15763 2010-04	Foodstuffs – Determination of trace elements – Determination of arsenic, cadmium, mercury and lead in foodstuffs by inductively coupled plasma mass spectrometry (ICP-MS) after pressure digestion (Modification: *Additional elements: Ca, Co, Cr, Cu, Fe, K, Na, Mg, Mn, Mo, Ni, P, Se, Sn, V, Zn*)

1.1.9 Liquid chromatography (LC)

1.1.9.1 Determination of ingredients and additives and of polycyclic aromatic hydrocarbons by liquid chromatography (LC) with conventional detectors (UV, FL, DAD, ELSD) in foodstuffs [Flex A]

ASU L 00.00-9 1984-11	Analysis of foodstuffs; determination of preservatives in low-fat foodstuffs
ASU L 00.00-28 2001-07	Analysis of foodstuffs – Determination of acesulfame-K, aspartame and saccharin sodium in foodstuffs – HPLC method
ASU L 00.00-61 2010-01	Determination of cholecalciferol vitamin D_3 or ergocalciferol vitamin D_2 in foodstuffs (HPLC method)
ASU L 00.00-62 2015-06	Analysis of foodstuffs – Determination of vitamin E (α β, γ and δ-tocopherol) in foodstuffs by HPLC
ASU L 00.00-63/1 2015-06	Analysis of foodstuffs – Determination of vitamin A in foodstuffs by HPLC – Part 1: Measurement of all-E-retinol and 13-Z-retinol
ASU L 00.00-84 2015-06	Analysis of foodstuffs – Determination of vitamin B2 by HPLC
ASU L 00.00-97 2006-12	Analysis of foodstuffs – Determination of vitamin B6 (including glucosidic bound compounds) in foodstuffs – HPLC method
ASU L 18.00-16 1999-11	Analysis of foodstuffs – Determination of theobromine and caffeine in pastries
ASU L 45.00-1 1999-11	Analysis of foodstuffs – Determination of theobromine and caffeine in cocoa
ASU L 46.00-3 2000-07	Analysis of foodstuffs – Analysis of coffee and coffee products – Determination of caffeine content Part 2: HPLC rapid method

ASU L 47.00-6 1996-02	Analysis of foodstuffs – Analysis of tea – Determination of caffeine content; HPLC method
PV DE02.314 2020-01	Determination of PAHs from edible fats and oils (Matrix separation with GPC and detection with HPLC fluorescence)
PV DE02.324 2020-01	Determination of coumarin in foodstuffs
PV DE02.365 2020-01	Determination of the content of fructose, glucose, sucrose, maltose and lactose in foodstuffs by HPLC-ELSD
PV DE02.449 2023-08	Determination of vitamin C in foodstuffs and feedstuffs and stabilised vitamin C in feedstuffs by HPLC (Restriction: *Here only foodstuffs*)
PV DE02.462 2023-12	Determination of antioxidants in foodstuffs and feedstuffs by HPLC (Restriction: *Here only foodstuffs*)

1.1.9.2 Determination of ingredients and additives and of plant protection product residues, mycotoxins, acrylamide and disinfectants by liquid chromatography with mass-selective detectors (LC-MS/MS) in foodstuffs [Flex A]

ASU L 00.00-76 2008-12	Analysis of foodstuffs – Determination of chlormequat and mepiquat in foodstuffs by HPLC-MS/MS
ASU L 00.00-83 2015-06	Analysis of foodstuffs – Determination of vitamin B_1 by HPLC (Modification: *Measurement with LC-MS/MS*)
PV DE02.323 2020-01	Determination of acrylamid in foodstuffs by LC-MS/MS
PV DE02.322 2020-01	Determination of mycotoxins in foodstuffs and feedstuffs by LC-MS/MS (Restriction: *Here only foodstuffs*)
PV DE02.403 2020-01	Determination of choline in foodstuffs and feedstuffs by LC-MS/MS (Restriction: *Here only foodstuffs*)
PV DE02.477 2022-08	Determination of disinfectants in foodstuffs and feedstuffs by LC-MS/MS (Restriction: *Here only foodstuffs*)

1.1.10 Determination of ingredients and additives by gas chromatography (GC) with conventional detectors (FID) in foodstuffs [Flex A]

ASU L 13.00-1(EG) 1981-04	Determination of erucic acid content in edible oils and edible fats and in foodstuffs with oil and fat additives (Modification: *Transesterification with Na-methylate and GC analysis*)
ASU L 17.00-12 1999-11	Analysis of foodstuffs – Determination of butyric acid as methyl ester in fat from bread including small baked products made of bread dough
DGF C-VI 10a 2000	Gas chromatography – Analysis of fatty acids and fatty acid distribution

1.1.11 Determination of petroleum hydrocarbons by coupled liquid gas chromatography (LC-GC) with conventional detectors (FID) in foodstuffs

PV DE02.453 2023-12	Determination of MOSH/MOAH in selected foodstuffs and feedstuffs by LC/GC-FID (Restriction: *Here only foodstuffs*)

1.2 Sensory analysis of foodstuffs

PV DE02.469 2023-12	Sensory testing of foodstuffs

1.3 Microbiological analysis of foodstuffs

1.3.1 Detection and determination of bacteria, yeasts and moulds by cultural microbiological analysis in foodstuffs [Flex A]

ISO 21527-1 2008-07	Horizontal method for enumeration of yeasts and moulds – Part 1: Colony count technique in products with water activity greater than 0.95 (Restriction: *Here only foodstuffs*)
ISO 21527-2 2008-07	Horizontal method for enumeration of yeasts and moulds – Part 2: Colony count technique in products with water activity equal to or less than 0.95 (Restriction: *Here only foodstuffs*)
DIN EN ISO 21528-2 2019-05	Microbiology of the food chain – Horizontal method for the detection and enumeration of Enterobacteriaceae – Part 2: Colony-count technique *(Restriction: Here only foodstuffs*)

DIN ISO 16649-2 2009-12	Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of β-glucuronidase-positive Escherichia coli – Part 2: Colony-count technique at 44 °C using 5-bromo-4-chloro-3-indolyl β-D-glucuronide (Restriction: *Here only foodstuffs*)
ASU L 00.00-20 2021-07	Analysis of foodstuffs – Horizontal method for the detection, enumeration and serotyping of salmonella – Part 1: Detection of Salmonella spp.
ASU L 00.00-22 2018-03	Analysis of foodstuffs – Horizontal method for the detection and enumeration of Listeria monocytogenes and of Listeria spp. – Part 2: Enumeration method
ASU L 00.00-32/1 2018-03	Analysis of foodstuffs – Horizontal method for the detection and enumeration of Listeria monocytogenes and of Listeria spp. – Part 1: Detection method
ASU L 00.00-33 2021-03	Analysis of foodstuffs – Horizontal method for the enumeration of presumptive Bacillus cereus – Colony-count technique at 30 °C
ASU L 00.00-55 2019-12	Analysis of foodstuffs – Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species) in foodstuffs – Part 1: Technique using Baird-Parker agar medium
ASU L 00.00-57 2006-12	Analysis of foodstuffs – Method for the enumeration of Clostridium perfringens in foodstuffs – Colony-count technique
ASU L 00.00-88/2 2015-06	Analysis of foodstuffs – Horizontal method for the enumeration of microorganisms – Part 2: Colony-count technique at 30 ° C by the surface plating technique
ASU L 01.00-3 1987-03	Analysis of foodstuffs; determination of coliform bacteria in milk, milk products, butter, cheese and ice cream; method with solid culture medium
ASU L 06.00-24 2019-12	Analysis of foodstuffs; determination of Enterobacteriaceae in meat; spatula method (reference method)
ASU L 06.00-35 1992-12	Analysis of foodstuffs; determination of lactic acid bacteria growing under aerobic conditions in meat and meat products; spatula method (reference method)

ASU L 06.00-43 2011-06	Analysis of foodstuffs – Enumeration of Pseudomonas spp. in meat and meat products
ASU L 20.01-10 1992-12	Analysis of foodstuffs; determination of lactic acid bacteria growing under aerobic conditions in mayonnaises, emulsified sauces and cold ready-made sauces; spatula method (reference method)

1.3.2 Determination of the microbiological activity of vitamins with auxotrophic microorganisms [Flex A]

SLMB Section 1552.1 2000-03	Determination of folic acid in foodstuffs and cosmetics, microbiological (Lactobacillus casei) (Restriction: *Here only foodstuffs*)
SLMB Section 1553.1 2000-03	Determination of niacin and niacinamide in foodstuffs and cosmetics, microbiological (Lactobacillus plantarum) (Restriction: *Here only foodstuffs*)
SLMB Section 1556.1 2000-03	Determination of calcium d-pantothenate in foodstuffs and cosmetics, microbiological (Lactobacillus plantarum) (Restriction: *Here only foodstuffs*)

1.3.3 Microbiological inhibitor tests [Flex A]

SLMB Section 1393.1 1994-01	Inhibitor test (screening in muscle meat and eggs)

1.4 Immunological analysis using ELISA test kits [Flex A]

ASU L 00.00-129 2010-01	Analysis of foodstuffs – Detection of salmonella by immunoassay
R-Biopharm AG RIDASCREEN® Gliadin R7001 2015-10	Sandwich enzyme immunoassay (ELISA) for quantitative determination of contamination by prolamins from wheat (gliadin), rye (secalin) and barley (hordein) in raw materials such as flour (buckwheat, rice, maize, oats, teff) and in processed foods such as pasta, ready meals, bakery products, sausages, beverages and ice cream (Restriction: *Here only foodstuffs*)

R-Biopharm AG RIDASCREEN® FAST ß-Lactoglobulin R4912 2017-11	Sandwich enzyme immunoassay for quantitative determination of ß-lactoglobulin in rice cakes, chocolate and sausage
R-Biopharm AG RIDASCREEN® FAST Casein R4612 2021-06	Sandwich enzyme immunoassay for quantitative determination of casein in foodstuffs such as bakery products, baking mixes, non-hydrolysed milk-based baby food, ice cream, beverages chocolate, wine and sausage
R-Biopharm AG RIDASCREEN® Egg R6411 2019-08	Enzyme immunoassay for quantitative determination of egg
Perkin Elmer® Solus Salmonella ELISA SAL-0096S 2020-10	Immunoassay-based test system for detection of salmonella in foodstuffs and environmental samples (Restriction: *Here only foodstuffs*)
Perkin Elmer® Solus Listeria ELISA LIS-0096S 2020-10	Immunoassay-based test system for detection of listeria in foodstuffs and environmental samples (Restriction: *Here only foodstuffs*)

2 Feedstuffs

2.1 Physical, physico-chemical and chemical analysis of feedstuffs

2.1.1 Determination of ingredients and characteristics by gravimetry in feedstuffs [Flex A]

Regulation (EC) No 152/2009 Annex III, A 2009-01 Last amended 2020-11	Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed – Methods of analysis to control the composition of feed materials and compound feed – Determination of moisture
Regulation (EC) No 152/2009 Annex III, H, 1.1 2009-01 Last amended 2020-11	Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed – Methods of analysis to control the composition of feed materials and compound feed – Determination of crude oils and fats

Regulation (EC) No 152/2009 Annex III, H, 1.2 2009-01 Last amended 2020-11	Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed – Methods of analysis to control the composition of feed materials and compound feed – Determination of crude oils and fats
Regulation (EC) No 152/2009 Annex III, I 2009-01 Last amended 2020-11	Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed – Methods of analysis to control the composition of feed materials and compound feed – Determination of crude fibre
Regulation (EC) No 152/2009 Annex III, M 2009-01 Last amended 2020-11	Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed – Methods of analysis to control the composition of feed materials and compound feed – Determination of crude ash
Regulation (EC) No 152/2009 Annex III, N 2009-01 Last amended 2020-11	Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed – Methods of analysis to control the composition of feed materials and compound feed – Determination of ash which is insoluble in hydrochloric acid
VDLUFA Methodenbuch Volume III, 3.1 1976	Moisture, water – Determination of moisture
VDLUFA Methodenbuch Volume III, 5.1.1 1988	Fat – Determination of crude fat
VDLUFA Methodenbuch Volume III, 8.1 1976	Ash – Determination of crude ash
PV DE02.141 2022-02	Determination of the fill quantity in prepackages of food and feed products (Restriction: *Here only for feedstuffs*)
PV DE02.438 2020-02	Gravimetric determination and biological contamination (Restriction: *Here only for feedstuffs*)
PV DE02.472 2020-02	Determination of fat content after microwave-assisted acid hydrolysis (Restriction: *Here only for feedstuffs*)

2.1.2 Determination of water activity by physical, physico-chemical and chemical analysis in feedstuffs

PV DE02.413 2023-12	Determination of the a_W-value in foodstuffs and feedstuffs (Restriction: *Here only for feedstuffs*)

2.1.3 Determination of ingredients, additives and characteristics in feedstuffs by titrimetry [Flex A]

Regulation (EC) No 152/2009 Annex III, C 2009-01 Last amended 2020-11	Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed – Methods of analysis to control the composition of feed materials and compound feed – Determination of the content of crude protein
Regulation (EC) No 152/2009 Annex III, J 2009-01 Last amended 2020-11	Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed – Methods of analysis to control the composition of feed materials and compound feed – Determination of sugar
Regulation (EC) No 152/2009 Annex III, Q 2009-01 Last amended 2020-11	Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed – Methods of analysis to control the composition of feed materials and compound feed – Determination of chlorine from chlorides
ASU L 49.00-7 2000-07	Analysis of foodstuffs – Determination of fluoride in dietary foods with the ion-sensitive electrode (Modification: *Matrix feedstuffs, extraction by shaking*)
VDLUFA Methodenbuch Volume III, 4.1.1 1993	Nitrogen compounds – Determination of crude protein (Modification: *Use of MERCK Kjeldahl tablets*)
VDLUFA Methodenbuch Volume III, 4.2.1 1976	Nitrogen compounds – Determination of fermentable soluble crude protein
VDLUFA Methodenbuch Volume III, 5.4.3 1983	Fat – Modified determination of WHEELER peroxide value

VDLUFA Methodenbuch Volume III, 5.4.5 1976	Fat – Determination of acid value

2.1.4 Determination of ingredients and additives using photometric tests in feedstuffs [Flex A]

VDLUFA Methodenbuch Volume III, 5.4.1 1983	Fat – Determination of anisidine value
VDLUFA Methodenbuch Volume III, 7.4.1 1976	Nitrogen-free extractives – Determination of inulin
VDLUFA Methodenbuch Volume III, 16.3.3 1983	Unwanted substances – Determination of hydrogen cyanide: Photometric method
R-Biopharm AG Enzytec™ Liquid Starch E8100 2023-04	UV test for determination of native starch in foodstuffs and other sample materials (Restriction: *Here only for feedstuffs*)

2.1.5 Determination of elements with inductively coupled plasma atomic emission spectrometry (ICP-OES) in feedstuffs [Flex A]

DIN EN 15510 2017-10	Animal feeding stuffs – Methods of sampling and analysis – Determination of calcium, sodium, phosphorus, magnesium, potassium, iron, zinc, copper, manganese, cobalt, molybdenum and lead by ICP-AES (Restriction: *Without molybdenum and lead*)

2.1.6 Determination of elements and total iodine by inductively coupled plasma mass spectrometry (ICP-MS) in feedstuffs [Flex A]

DIN EN 15763 2010-04	Foodstuffs – Determination of trace elements – Determination of arsenic, cadmium, mercury and lead in foodstuffs by inductively coupled plasma mass spectrometry (ICP-MS) after pressure digestion (Modification: *Matrix feedstuffs; additional elements: Ca, Co, Cr, Cu, Fe, K, Na, Mg, Mn, Mo, Ni, P, Se, Sn, V, Zn*)
DIN EN 17050 2017-11	Animal feeding stuffs – Methods of sampling and analysis – Determination of iodine in animal feed by ICP-MS

PV DE02.444 2023-12	Determination of total iodine in feedstuffs by ICP-MS

2.1.7 Liquid chromatography (LC)

2.1.7.1 Determination of ingredients and additives and of polycyclic aromatic hydrocarbons by liquid chromatography with conventional detectors (UV, FLD, DAD) in feedstuffs [Flex A]

Regulation (EC) No 121/2008 Annex 2008-02 Last amended 2017-02	Commission Regulation (EC) No 121/2008 of 11 February 2008 laying down the method of analysis for the determination of starch content in preparations of a kind used in animal feeding – Enzymatic method for the determination of the starch content in preparations used in animal feeding using high pressure liquid chromatology (HPLC)
Regulation (EC) No 152/2009 Annex III, F 2009-01 Last amended 2020-11	Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed – Methods of analysis to control the composition of feed materials and compound feed – Determination of amino acids (except tryptophane)
Regulation (EC) No 152/2009 Annex III, G 2009-01 Last amended 2020-11	Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed – Methods of analysis to control the composition of feed materials and compound feed – Determination of tryptophan
Regulation (EC) No 152/2009 Annex IV, A 2009-01 Last amended 2020-11	Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed – Methods of analysis to control the level of authorised additives in feed – Determination of vitamin A
Regulation (EC) No 152/2009 Annex IV, B 2009-01 Last amended 2020-11	Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed – Methods of analysis to control the level of authorised additives in feed – Determination of vitamin E

Regulation (EU) No 118/2010 Annex I 2010-02	Commission Regulation (EC) No 118/2010 of 9 February 2010 amending Regulation (EC) No 900/2008 laying down the methods of analysis and other technical provisions necessary for the application of the arrangements for imports of certain goods resulting from the processing of agricultural products – Enzymatic determination of starch and its degradation products including glucose in food products using high performance liquid chromatography (HPLC) (Modification: *Matrix feedstuffs*)
ASU L 00.00-9 1984-11	Analysis of foodstuffs; determination of preservatives in low-fat foodstuffs (Modification: *Matrix feedstuffs*)
ASU L 00.00-62 2015-06	Analysis of foodstuffs – Determination of vitamin E (α β, γ and δ-tocopherol) in foodstuffs by HPLC (Modification: *Matrix feedstuffs*)
ASU L 00.00-63/1 2015-06	Analysis of foodstuffs – Determination of vitamin A in foodstuffs by HPLC – Part 1: Measurement of all-E-retinol and 13-Z-retinol (Modification: *Matrix feedstuffs*)
ASU L 00.00-84 2015-06	Analysis of foodstuffs – Determination of vitamin B_2 by HPLC (Modification: *Matrix feedstuffs)*
ASU L 00.00-97 2006-12	Analysis of foodstuffs – Determination of vitamin B_6 (including glucosidic bound compounds) in foodstuffs – HPLC method (Modification: *Matrix feedstuffs*)
VDLUFA Methodenbuch Volume III, 13.8.1 1997	Vitamins and similar active ingredients – Determination of vitamin D3, HPLC method
AOAC Method 999.12 2002-03	Taurine in pet food
PV DE02.043 2021-10	Determination of glucosinolate content in rapeseed by HPLC (Restriction: *Here only for feedstuffs*)
PV DE02.314 2023-12	Determination of PAHs from edible fats and oils (Matrix separation with GPC and detection with HPLC-FL) (Restriction: *Here only for feedstuffs*)
PV DE02.449 2023-08	Determination of vitamin C in foodstuffs and feedstuffs and stabilised vitamin C in feedstuffs by HPLC (Restriction: *Here only for feedstuffs*)

PV DE02.462 2023-12	Determination of antioxidants in foodstuffs and feedstuffs by HPLC (Restriction: *Here only for feedstuffs*)

2.1.7.2 Determination of ingredients and additives and of plant protection product residues, mycotoxins and disinfectants by liquid chromatography (LC) with mass selective detectors (MS/MS) in feedstuffs [Flex A]

ASU L 00.00-76 2008-12	Analysis of foodstuffs – Determination of chlormequat and mepiquat in foodstuffs by HPLC-MS/MS (Modification: *Matrix feedstuffs*)
ASU L 00.00-83 2015-06	Analysis of foodstuffs – Determination of vitamin B1 by HPLC (Modification: *Matrix feedstuffs*, *measurement with LC-MS/MS*)
PV DE02.322 2020-01	Determination of mycotoxins in foodstuffs and feedstuffs by LC-MS/MS (Restriction: *Here only for feedstuffs*)
PV DE02.344 2022-01	Determination of vitamin H (biotin) in feedstuffs
PV DE02.354 2023-12	Determination of melamine and cyanuric acid in feedstuffs by LC-MS/MS
PV DE02.403 2020-01	Determination of choline in foodstuffs and feedstuffs by LC-MS/MS (Restriction: *Here only for feedstuffs*)
PV DE02.416 2022-02	Determination of carnitine in feedstuffs by LC-MS/MS
PV DE02.431 2022-08	Determination of vitamin B12 by LC-MS/MS in feedstuffs
PV DE02.477 2022-08	Determination of disinfectants in foodstuffs and feedstuffs by LC-MS/MS (Restriction: *Here only for feedstuffs*)

2.1.8 Gas chromatography (GC)

2.1.8.1 Production of fatty acid methyl esters for gas chromatographic analysis of feedstuffs [Flex A]

ASU L 13.00-27 2020-02	Analysis of foodstuffs – Production of fatty acid methyl esters in animal and vegetable fats and oils (Modification: *Matrix feedstuffs*)

2.1.8.2 Determination of fatty acids by gas chromatography (GC) with conventional detectors (FID) in feedstuffs [Flex A]

DGF C-VI 10a 2000	Gas chromatography: Analysis of fatty acids and fatty acid distribution (Modification: *Matrix feedstuffs*)

2.1.9 Determination of petroleum hydrocarbons by coupled liquid gas chromatography (LC-GC) with conventional detectors (FID) in feedstuffs

PV DE02.453 2023-12	Determination of MOSH/MOAH in selected foodstuffs and feedstuffs by LC/GC-FID (Restriction: *Here only for feedstuffs*)

2.2 Sensory analysis of feedstuffs

PV DE02.304 2020-11	Sensory analysis of feedstuffs

2.3 Microbiological analysis of feedstuffs

2.3.1 Detection and determination of bacteria, yeasts and moulds by cultural microbiological analysis in feedstuffs [Flex A]

ISO 21527-1 2008-07	Horizontal method for enumeration of yeasts and moulds – Part 1: Colony count technique in products with water activity greater than 0.95 (Restriction: *Here only for feedstuffs*)
ISO 21527-2 2008-07	Horizontal method for enumeration of yeasts and moulds – Part 2: Colony count technique in products with water activity equal to or less than 0.95 (Restriction: *Here only for feedstuffs*)

DIN EN ISO 4833-2 2014-05	Microbiology of the food chain – Horizontal method for the enumeration of microorganisms – Part 2: Colony count at 30 °C by the surface plating technique (Modification: *Matrix feedstuffs)*
DIN EN ISO 6579-1 2020-08	Microbiology of the food chain – Horizontal method for the detection, enumeration and serotyping of salmonella – Part 1: Detection of Salmonella spp. (Modification: *Matrix feedstuffs)*
DIN EN ISO 6888-1 2019-06	Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species) – Part 1: Technique using Baird-Parker agar medium (Restriction: *Here only for feedstuffs*)
DIN EN ISO 7937 2004-11	Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of Clostridium perfringens – Colony-count technique (Restriction: *Here only for feedstuffs*)
DIN EN ISO 21528-2 2019-05	Microbiology of the food chain – Horizontal method for the detection and enumeration of Enterobacteriaceae – Part 2: Colony-count technique *(Restriction: Here only for feedstuffs*)
DIN ISO 16649-2 2009-12	Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of β-glucuronidase-positive Escherichia coli – Part 2: Colony count technique at 44 °C using 5-bromo-4-chloro-3-indolyl β-D-glucuronide (Restriction: *Here only for feedstuffs*)

2.3.2 Determination of the microbiological activity of vitamins with auxotrophic microorganisms [Flex A]

SLMB Section 1552.1 2000-03	Determination of folic acid in foodstuffs and cosmetics, microbiological (Lactobacillus casei) (Modification: *Matrix feedstuffs*)
SLMB Section 1553.1 2000-03	Determination of niacin and niacinamide in foodstuffs and cosmetics, microbiological (Lactobacillus plantarum) (Modification: *Matrix feedstuffs*)
SLMB Section 1556.1 2000-03	Determination of calcium d-pantothenate in foodstuffs and cosmetics, microbiological (Lactobacillus plantarum) (Modification: *Matrix feedstuffs*)

2.3.3 Microbiological inhibitor tests [Flex A]

SLMB Section 1393.1 1994-01	Inhibitor test (screening in muscle meat) (Modification: *Matrix feedstuffs*)

2.4 Immunological analysis using ELISA test kits [Flex A]

ASU L 00.00-129 2010-01	Analysis of foodstuffs – Detection of salmonella by immunoassay (Modification: *Matrix feedstuffs*)
R-Biopharm AG RIDASCREEN® Gliadin R7001 2015-10	Sandwich enzyme immunoassay (ELISA) for quantitative determination of contamination by prolamins from wheat (gliadin), rye (secalin) and barley (hordein) in raw materials such as flour (buckwheat, rice, maize, oats, teff) and in processed foods such as pasta, ready meals, bakery products, sausages, beverages and ice cream (Modification: *Matrix feedstuffs*)
Perkin Elmer® Solus Salmonella ELISA SAL-0096S 2020-10	Immunoassay-based test system for detection of salmonella in foodstuffs and environmental samples (Modification: *Matrix feedstuffs*)
Perkin Elmer® Solus Listeria ELISA LIS-0096S 2020-10	Immunoassay-based test system for detection of listeria in foodstuffs and environmental samples (Modification: *Matrix feedstuffs*)

3 Analysis of consumer goods

3.1 Physical, physico-chemical and chemical analysis

PV DE02.434 2023-03	Determination of inert gas in packaging

3.2 Microbiological inhibitor tests [Flex A]

DIN EN 1104 2019-01	Paper and board intended to come into contact with foodstuffs – Determination of the transfer of antimicrobial constituents
AATCC 100 2004	Test Method: Antibacterial Finishes on Textile Materials (Restriction: *Here only for commodities*)
ASTM E-2149-10 2013	Standard test Method for Determining the Antimicrobial Activity of Immobilized Agents under Dynamic Contact Conditions (Restriction: *Here only for commodities*)

Abbreviations used:

AOAC	Association of Analytical Communities
ASU	Official collection of investigation procedures pursuant to Section 64 of the German Food and Feed Code
BAM	Bacteriological Analytical Methods
DIN	German Institute for Standardization
EN	European standard
FDA	Food and Drug Administration, USA
IEC	International Electrotechnical Commission
IFU	International Federation of Fruit Juice Producers
IHC	International Honey Commission
ISO	International Organization for Standardization
LFGB	German Food and Feed Code
PM DE01.xxx	In-house method of Intertek Food Services GmbH, location Bremen
PV DE02.xxx	In-house method of Intertek Food Services GmbH, location Linden
SLMB	Swiss Food Code
VDLUFA	Association of German Agricultural Research and Testing Institutes