

Deutsche Akkreditierungsstelle

Annex to the accreditation certificate D-PL-14251-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: 18.12.2024

Date of issue: 18.12.2024

Holder of accreditation certificate:

EUROFINS Analytik GmbH
Neuländer Kamp 1, 21079 Hamburg

with the location

EUROFINS Analytik GmbH
Neuländer Kamp 1, 21079 Hamburg

The testing laboratory meets the requirements according to DIN EN ISO/IEC 17025:2018 to perform the conformity assessment activities listed in this annex. The testing laboratory complies with additional legal and normative requirements, including those in relevant sectoral programs, where applicable, provided these are explicitly 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.

This certificate annex is only valid together with the written accreditation certificate and reflects the status as indicated by the date of issue. The current status of any given scope of accreditation can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle GmbH at <https://www.dakks.de>.

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

Abbreviations used: see last page

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Tests in the fields:

Physical, physico-chemical, chemical, sensory, molecular biological, immunological and visual analysis of foodstuffs

Physical, physico-chemical and chemical analysis of feedstuffs

Selected physical, physico-chemical, chemical, molecular biological and immunological analysis of fitment and utensils in food areas

Sensory and visual analysis of commodity goods

Flexible scope of accreditation:

The testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, to use standards or equivalent testing methods listed here with different issue dates. (Flexible scope of accreditation according to Category A).

Within the marked testing fields, the testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS

[Flex B] the free choice of standard or equivalent testing methods.

[Flex C] the modification, development and refinement of testing methods.

The test methods listed are given by way of example. The testing laboratory maintains a current list of all testing methods within the flexible scope of accreditation. The list is publicly available on the website of the testing laboratory.

- 1 Physical, physico-chemical and chemical analysis of foodstuffs and feedstuffs**
- 1.1 Sample pretreatment, preparation and processing of foodstuffs and feedstuffs**
- 1.1.1 Mechanical sample preparation for physical, physico-chemical and chemical analyses of foodstuffs and feedstuffs [Flex C]**
- ASU L 53.00-7 Analysis of foodstuffs – Spices and condiments – Preparation of a
2019-07 ground sample for analysis
- ANA-MA 3.2.2-02/01 Central sample grinding
2019-11
- 1.1.2 Transesterification of fats for gas chromatographic analysis of foodstuffs and feedstuffs [Flex B]**
- DGF C-VI 11a Fatty acid methyl ester (boron trifluoride method)
2016
- DGF C-VI 11d Fatty acid methyl ester (alkaline transesterification)

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2019

1.1.3 Extraction for chemical, chemico-physical and physical analysis of foodstuffs and feedstuffs [Flex C]

DGF K-III 1
2011 Isolation of the fat phase from foodstuffs
(Modification: *Also for feedstuffs*)

PV 1659
2023-10 Isolation of free fat from foodstuffs using automated solvent
extraction (CEM EDGE)

1.2 Determination of ingredients and additives in foodstuffs and feedstuffs using high-performance liquid chromatography (HPLC) with conventional detectors (RI, ELSD, UV/VIS, FLD) [Flex C]

ISO 29841
2009-03 Vegetable fats and oils – Determination of the degradation
products of chlorophyll a and a' (pheophytin a, a' and
pyropheophytin)

DIN 10767
2015-08 Analysis of coffee and coffee products – Determination of
chlorogenic acids content in roasted coffee and soluble coffee
(Modification: *Adjustment of chromatographic conditions*)

ASU L 45.00-1
1999-11 Analysis of foodstuffs – Determination of theobromine and
caffeine in cocoa
(Modification: *Adjustment of chromatographic conditions*)

ASU L 46.00-3
2013-08 Analysis of foodstuffs – Analysis of coffee and coffee products –
Determination of caffeine content using HPLC reference method
(Modification: *Application also to alcoholic beverages, adjustment
of chromatographic conditions*)

AOAC 983.15
1994 Phenolic antioxidants in oils, fats and butter
(Modification: *Detection by DAD using other wavelengths,
calculation using internal standard as well as recovery rate*)

PV 1572
2020-10 Determination of BHA in feedstuff premixes with a fat content
< 10% by HPLC-DAD

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1.3 Determination of ingredients and additives in foodstuffs using high-performance liquid chromatography (HPLC) with mass-selective detectors (MS/MS) [Flex C]

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: <i>Here by HPLC-MS/MS</i>)
PV 1300 2017-03	Determination of acesulfame K, aspartame, cyclamate, saccharin and sucralose in foodstuffs using HPLC-MS/MS
PV 1364 2015-02	Determination of steviol glycosides as steviol equivalents in sugary foodstuffs by LC-MS/MS

1.4 Determination of ingredients and additives in foodstuffs and feedstuffs using gas chromatography (GC) with conventional detectors (FID) [Flex B]

ASU L 13.3.06-1 2010-01	Analysis of foodstuffs – Detection of cocoa butter equivalents in cocoa butter by high-resolution capillary gas chromatography (HR-GC) (Modification: <i>Automated sample preparation, adjustment of chromatographic conditions</i>)
ASU L 13.3.06-2 2010-01	Analysis of foodstuffs – Quantification of cocoa butter equivalents in cocoa butter by high-resolution capillary gas chromatography (HR-GC) (Modification: <i>Automated sample preparation, adjustment of chromatographic conditions</i>)
DGF C-VI 14 2008	Gas chromatography of triacylglycerols (Modification: <i>Technical adaptation of devices for online derivatisation, adjustment of chromatographic conditions</i>)
COI/T.20/Doc.No.32 2013-11	Determination of composition of triacylglycerols and composition and content of di-acylglycerols by capillary gas chromatography, in vegetable oils

1.5 Determination of ingredients in foodstuffs and feedstuffs using coupled liquid and gas chromatography with conventional detector (FID) [Flex C]

PV 1376 2023-07	Determination of individual and total sterols in fats and oils by LC-GC-FID
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PV 1416
2017-03
Determination of fatty acid ethyl esters and fatty acid methyl esters and of waxes in vegetable fats and oils by LC-GC-FID

1.6 Determination of ingredients and additives in foodstuffs and feedstuffs by gravimetry [Flex B]

DIN EN ISO 663
2017-05
Animal and vegetable fats and oils – Determination of insoluble impurities content

DGF C-III 3b
2013
Polar fractions – Determination in fats and oils

UNECE DDP-27
2013
Brazil nut kernels

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

ASU L 00.00-46/1
1999-11
Analysis of foodstuffs – Determination of sulphite in foodstuffs – Part 1: Optimised Monier-Williams method (Modification: *Potentiometric identification*)

ASU L 13.00-40
2012-01
Analysis of foodstuffs – Determination of peroxide number in animal and vegetable fats and oils – Potentiometric endpoint determination

ASU L 26.11.03-4
1983-05
Determination of total acidity of tomato purée (potentiometric method) (Modification: *Application also to other low-fat and sugary foodstuffs*)

1.8 Determination of water activity in foodstuffs and feedstuffs by hygrometry

Nordic Committee on Food
Analysis No. 168
2001
Water activity – Instrumental determination with the Novasina electronic hygrometer and the Aqua Lab dew point meter

PV 1632
2022-02
Hygrometric determination of water activity in feedstuffs

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1.9 Determination of pH value and conductivity in foodstuffs and feedstuffs by electrode measurement [Flex C]

ASU L 26.04-3 1987-06	Analysis of foodstuffs – Measurement of pH value in the liquid medium or the brine of sauerkraut
ASU L 31.00-2 1997-01	Analysis of foodstuffs – Determination of the pH value of fruit and vegetable juices (Modification: <i>Application to beverages and syrups</i>)
ICUMSA GS1-13 1994-04	Determination of the conductivity of ash in raw sugar, brown sugar, juice, syrup and molasses – Official
PV 1631 2021-06	Potentiometric determination of pH value in feedstuffs

1.10 Determination of ingredients and additives in foodstuffs by photometry [Flex B]

ICUMSA GS 2-10 2011	Determination of colour in white sugar solutions (Modification: <i>Indication of ICUMSA points</i>)
ICUMSA GS 2-18 2013	Determination of the turbidity of white sugar solutions
ICUMSA GS 9-8 2011	Determination of the colouration of a sugar solution at pH 7.0 using MOPS Buffer
R-Biopharm AG Citric acid 10 139 076 035 2017-07	UV method for the determination of citric acid in foodstuffs
R-Biopharm AG Lactose/D-galactose 10 176 303 035 2017-08	UV method for determination of lactose and D-galactose in foodstuffs and other sample materials (Restriction: <i>Here only foodstuffs</i>)

1.11 Determination of ingredients and additives in foodstuffs by polarimetry [Flex B]

ICUMSA GS 1-1 2022	Determination of the polarisation of raw sugar by polarimetry
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ICUMSA GS2-1
2022

Determination of the polarisation of white sugar by polarimetry – Braunschweig method

1.12 Determination of ingredients in foodstuffs by refractometry [Flex B]

DIN EN ISO 6320
2017-07

Animal and vegetable fats and oils – Determination of refractive index

ASU L 26.11.03-1
1983-05

Determination of dry matter in tomato purée by refraction measurement

1.13 Determination of ingredients in foodstuffs by volumetry [Flex B]

DIN 10229
2000-08

Analysis of spices and condiments – Determination of moisture content – Distillation method

ASU L 53.00-10
2019-12

Analysis of foodstuffs – Determination of essential oil content in spices, seasoning ingredients and herbs – Steam distillation method
(Modification: *Matrix-dependent sample weigh-in*)

1.14 Determination of the density of liquid foodstuffs by natural frequency measurement

DGF C-IV 2d
2016

Density – Oscillating U-tube method

PV 1633
2021-06

Determination of density in liquid foodstuffs using the oscillating U-tube method
(Restriction: *Here only foodstuffs*)

1.15 Determination of colourants in selected foodstuffs by thin-layer chromatography

PV 0866
2017-09

Identification of water-soluble colourants in foodstuffs containing fat, protein and sugar by high-performance thin-layer chromatography (HPTLC)

1.16 Detection of irradiated foodstuffs using luminescence measurements

DIN EN 1788
2002-01

Foodstuffs – Thermoluminescence detection of irradiated food from which silicate minerals can be isolated

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DIN EN 13751
2009-11 Foodstuffs – Detection of irradiated food using photostimulated luminescence

1.17 Determination of ingredients and additives in foodstuffs by ¹H NMR [Flex C]

PV 1415
2023-08 Determination of 16-OMC, kahweol and cafestol in green and roasted coffee by ¹H NMR

PV 1426
2017-09 Determination of taurine and caffeine in energy drinks and soft drinks by ¹H NMR

PV 1635
2022-05 Determination of water-insoluble, acid-soluble stearate in food supplements using 1H-NMR

PV 1660
2023-03 Determination of hydrocyanic acid in almonds, bitter almonds, apricot kernels and linseed using 1H-NMR

1.18 Determination of ingredients and characteristics for the authenticity and quality of liquid foodstuffs and food extracts by ¹H NMR spectroscopy [Flex C]

PV 1487
2023-08 Eurofins Profiling – Olive oil analysis (olive oil screening) using NMR for ingredients and characteristics for authenticity and quality, as well as ¹H NMR-based quantification, statistics and chemometrics

PV 1538
2019-03 Fingerprint analysis for comparison of two olive oils using ¹H NMR

2 Sensory analysis of foodstuffs and commodities

2.1 Determination of smell, taste, external quality, consistency and texture in foodstuffs using simple descriptive tests [Flex B]

ASU L 00.90-6
2015-06 Analysis of foodstuffs – Sensory test methods – Basic descriptive test

ASU L 00.90-14
2019-03 Analysis of foodstuffs – Sensory test methods – Descriptive test followed by quality assessment

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2.2 Determination of smell, taste, external quality, appearance, consistency and texture in foodstuffs and commodities using special sensory tests [Flex B]

DIN EN 1230-1 2010-02	Paper and board intended to come into contact with foodstuffs – Sensory analysis – Part 1: Odour (Modification: <i>Odour assessment using a simulant foodstuff analogous to DIN EN 1230-2: 2018-10</i>)
DIN EN 1230-2 2018-10	Paper and board intended to come into contact with foodstuffs – Sensory analysis – Part 2: Flavour
DIN 10955 2004-06	Sensory analysis – Testing of packaging materials and packages for foodstuffs
ASU L 00.90-7 2007-12 Corrigendum 2020-05	Analysis of foodstuffs – Sensory test methods – Triangle test
DGF-C-II 1 2020	External quality – Sensory tests (Modification: <i>Application also to seasoning oils, for which no categorisation pursuant to DGF</i>)
International Olive Council COI/T.20/Doc.No15/Rev.10 2018	Sensory analysis of olive oil: Method for the organoleptic preparation of virgin olive oil
PV 1681 2024-07	Sensory evaluation of extra virgin olive oil (EVOO), extended by the quality factor “harmony”

3 Molecular biological analysis of foodstuffs

3.1 Extraction of DNA for molecular biological analysis of foodstuffs [Flex B]

ASU L 00.00-119 2014-02	Analysis of foodstuffs – Method for detection of genetically modified organisms and their products in foodstuffs – Nucleic acid extraction
Eurofins GeneScan DNA Cleaning Columns ID0538 2017-11	Purification of DNA using DNA cleanup columns

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Maxwell
RSC Pure Food GMO
Authentication Kit
AS1600
2020-02
Cleanup from foodstuff and feedstuff samples
(Restriction: *Here only foodstuffs*)

3.2 Separation for molecular biological analysis of foodstuffs

PV 0907
2018-06
Separation of DNA fragments by gel electrophoresis

3.3 Qualitative detection of allergens and animal species in foodstuffs by real-time PCR [Flex C]

ASU L 00.00-169
2019-07
Analysis of foodstuffs – Detection and determination of peanut in foodstuffs by real-time PCR

ASU L 08.00-56
2020-02
Analysis of foodstuffs – Detection of a specific DNA sequence from celery (*Apium graveolens*) in cooked sausages by real-time PCR
(Modification: *Application to extracted genomic DNA from foodstuffs*)

ASU L 08.00-65
2017-10
Analysis of foodstuffs – Simultaneous detection and determination of black mustard (*Brassica nigra* L.) or brown mustard (*Brassica juncea* L.), white mustard (*Sinapis alba*), celery (*Apium graveolens*) and soy (*Glycine max*) in cooked sausages by real-time PCR
(Modification: *Only qualitative detection of black or brown and white mustard; application to extracted genomic DNA from foodstuffs*)

ASU L 18.00-19
2014-08
Analysis of foodstuffs – Detection and determination of sesame (*Sesamum indicum*) in rice and wheat biscuits and in gravy powder by real-time PCR
(Modification: *Only qualitative detection: Application to extracted genomic DNA from foodstuffs*)

ASU L 18.00-20
2014-08
Analysis of foodstuffs – Detection and determination of almond (*Prunus dulcis*) in rice and wheat biscuits and in gravy powder by real-time PCR
(Modification: *Only qualitative detection; Application to extracted genomic DNA from foodstuffs*)

PV 1258
2020-10
Detection of pea DNA by qualitative real-time PCR

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PV 1263 2020-10	Detection of fish DNA by qualitative real-time PCR
PV 1569 2020-09	Simultaneous detection of walnut and pecan DNA by qualitative real-time PCR

4 Determination of allergens in foodstuffs by enzyme immunoassay (ELISA) [Flex B]

Morinaga Institute of Biological Science, Inc. ELISA Kit II Casein M2113 2017-06	Quantitative determination of casein in foodstuffs
Morinaga Institute of Biological Science, Inc. ELISA Kit II Hazelnut M2119 2019-09	Quantitative determination of hazelnut protein in foodstuffs
Morinaga Institute of Biological Science, Inc. ELISA Kit II High Sensitive Peanut M2120 2019-01	Quantitative determination of peanut protein in foodstuffs
R-Biopharm AG RIDASCREEN® Gliadin R7001 2015-10	Enzyme immunoassay for quantitative determination of gliadins and related prolamins
Eurofins Technologies SENSISpec ELISA Almond HU003001/HU0030025 2019-02	Enzyme immunoassay for quantitative determination of almond in foodstuffs
Eurofins Ingenasa SENSISpec INgezim Gluten R5 30.GLU.K2 2018-04	Immunoenzymatic sandwich test with two antibodies for the quantitative analysis of gluten in food samples

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5 Visual inspections of foodstuffs and food packaging

DGF C-IV 9
2002 Smoke point

PV 1084
2008-01 Detection of chlorinated substances in food packaging (Beilstein sample)

6 Analysis of environmental samples, fitment and utensils in food areas

6.1 Photometric determination

R-Biopharm AG
Lactose/D-galactose
10 176 303 035
2017-08 Determination of lactose and D-galactose in foodstuffs and other sample materials
(Restriction: *Only determination of lactose, here for environmental samples, fitment and utensils in food areas*)

6.2 Extraction of DNA for molecular biological analysis of environmental samples, fitment and utensils in food areas

PV 1627
2021-05 Extraction of DNA from swabs and cleaning water

6.3 Qualitative detection of allergens from environmental samples, fitment and utensils in food areas by real-time PCR [Flex C]

ASU L 08.00-65
2017-10 Analysis of foodstuffs – Simultaneous detection and determination of black mustard (*Brassica nigra* L.) or brown mustard (*Brassica juncea* L.), white mustard (*Sinapis alba*), celery (*Apium graveolens*) and soy (*Glycine max*) in cooked sausages by real-time PCR
(Restriction: *Only qualitative detection of black or brown and white mustard*)
(Modification: *Application to extracted genomic DNA from environmental samples, fitment and utensils in food areas*)

ASU L 18.00-19
2014-08 Analysis of foodstuffs – Detection and determination of sesame (*Sesamum indicum*) in rice and wheat biscuits and in gravy powder by real-time PCR
(Restriction: *Only qualitative detection*)
(Modification: *Application to extracted genomic DNA from environmental samples, fitment and utensils in food areas*)

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ASU L 18.00-20
2014-08

Analysis of foodstuffs – Detection and determination of almond (*Prunus dulcis*) in rice and wheat biscuits and in gravy powder by real-time PCR
(Restriction: *Only qualitative detection*)
(Modification: *Application to extracted genomic DNA from environmental samples, fitment and utensils in food areas*)

6.4 Extraction for immunological analysis of environmental samples, fitment and utensils in food areas

Eurofins Technologies
Gluten extraction in surface swab samples
IT-G-157
2012-06

Extraction of gluten in surface samples (swabs) with the SENSISPEC Ingezim Gluten R5 kit

PV 1328
2021-05

Extraction of proteins from cleaning water

6.5 Determination of allergens from environmental samples, fitment and utensils in food areas by enzyme immunoassay (ELISA) [Flex B]

Morinaga Institute of Biological Science, Inc.
ELISA Kit II
Casein M2113
2017-06

Quantitative determination of casein in foodstuffs
(Modification: *Here for environmental samples, fitment and utensils in food areas*)

R-Biopharm AG
Ridascreen® FAST Allergen
R7001
2017-06

Swab method for qualitative analysis of allergens in the production line or for laboratory equipment
(Restriction: *Here only for environmental samples, fitment and utensils in food areas, only for determination of lysozyme*)

R-Biopharm AG
Ridascreen® FAST Lysozym
R6452
2017-06

Enzyme immunoassay for quantitative determination of lysozyme
(Modification: *Here for environmental samples, fitment and utensils in food areas*)

R-Biopharm AG
Ridascreen® FAST Gliadin
R7001
2015-10

Enzyme immunoassay for quantitative determination of gliadins and related prolamins
(Modification: *Here for environmental samples, fitment and utensils in food areas*)

Eurofins Technologies

Enzyme immunoassay for quantitative determination of almond

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SENSISpec ELISA Mandel
HU0030001/HU0030025
2021-11

(Modification: *Here for environmental samples, fitment and utensils in food areas*)

Abbreviations used:

AOAC	Association of Analytical Communities
ASU	Amtliche Sammlung von Untersuchungsverfahren (Official Collection of Test Methods) on the basis of § 64 LFGB (German Food and Feed Act)
COI	Methods of the International Olive Council
DGF	Deutsche Gesellschaft für Fettwissenschaft e.V. (German Society for Fat Research)
DIN	Deutsches Institut für Normung e.V. (German Institute for Standardization)
EN	European Standard
ICUMSA	International Commission for Uniform Methods of Sugar Analysis
IEC	International Electrotechnical Commission
ISO	International Organisation for Standardisation
LFGB	Lebensmittel- und Futtermittelgesetzbuch (German Food and Feed Act)
PV xxxxx	In-house method of Eurofins Analytik GmbH
UM	United Molasses
UNECE	United Nations Economic Commission for Europe
VDLUFA	Verband Deutscher Landwirtschaftlicher Untersuchungs- und Forschungsanstalten (Association of German Agricultural Testing and Research Institutions)
ANA-MA	Work instruction from the quality management system, in-house method of Eurofins Analytik GmbH

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