DAkkS
Deutsche
Akkreditierungsstelle

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Annex to the accreditation certificate D-PL-14481-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: **16.10.2024**

Date of issue: 16.10.2024

Holder of accreditation certificate:

KWALIS Qualitätsforschung Fulda GmbH
Fuldaer Straße 21, 36160 Dipperz

with the location

KWALIS Qualitätsforschung Fulda GmbH
Fuldaer Straße 21, 36160 Dipperz

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.

Abbreviations used: see last page

Tests in the fields:

**Physical, physico-chemical, chemical analysis of foodstuffs and feedstuffs;
Sensory analysis of foodstuffs**

Within the given testing field marked with */, the testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, the following:**

***) the free choice of standard or equivalent testing methods.
) the modification, development and refinement of testing methods.

The test methods listed are given by way of example.

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.

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

1 Physical, physico-chemical and chemical analysis of foodstuffs and straight feedingstuffs

1.1 Gravimetric determination of ingredients and additives in foodstuffs and straight feedingstuffs **

ASU L 00.00-18 1997-01 Corrigendum 2017-10	Analysis of foodstuffs – Determination of fibre in food
ASU L 06.00-3 2014-08	Analysis of foodstuffs – Determination of water content in meat and meat products – Gravimetric method – Reference method
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
PAW 002 2023-11	Gravimetric determination of fat content in foodstuffs and straight feedingstuffs
PAW 003 2023-11	Determination of water content or dry matter in foodstuffs and straight feedingstuffs (gravimetric)

PAW 005 2024-02	Gravimetric determination of ash in foodstuffs and straight feedingstuffs

1.2 Titrimetric determination of characteristics, ingredients and additives in foodstuffs and straight feedingstuffs **

ASU L 06.00-7 2014-08 Supplement 2018-06	Analysis of foodstuffs – Determination of raw protein content in meat and meat products –Kjeldahl titrimetric method – Reference method
ASU L 13.00-10 2014-08	Analysis of foodstuffs – Determination of iodine number in animal and vegetable fats and oils
ASU L 13.00-18 2024-04	Analysis of foodstuffs – Determination of saponification number in animal and vegetable fats and oils
ASU L 13.00-37 2018-06	Analysis of foodstuffs – Animal and vegetable fats and oils – Determination of peroxide number, iodometric (visual) endpoint determination
ASU L 13.00-5 2021-03	Analysis of foodstuffs – Determination of acid number and acidity of animal and vegetable fats and oils (Modification: *Also applies to fatty foodstuffs)*
ASU L 15.00-3 2007-12	Analysis of foodstuffs – Determination of nitrogen content and calculation of crude protein content of cereals and pulses – Kjeldahl method
ASU L 31.00-3 1997-09	Analysis of foodstuffs – Determination of titratable acid (total acidity) in fruit and vegetable juices
PAW 001 2023-11	Volumetric determination of nitrogen content and calculation of crude protein content (Kjeldahl) in foodstuffs and straight feedingstuffs

1.3 Volumetric determinations of ingredients in spices, seasoning ingredients and herbs *

ASU L 53.00-10 2019-12	Analysis of foodstuffs– Determination of essential oil content in spices, seasoning ingredients and herbs, steam distillation
ASU L 53.00-8 2004-07	Analysis of foodstuffs – Analysis of spices and seasoning ingredients – Determination of water content (distillation method)

1.4 Determination of pH value by electrode measurement in foodstuffs **

ASU L 31.00-2 1997-01	Analysis of foodstuffs – Determination of the pH value of fruit and vegetable juices
PAW 026 2024-02	Potentiometric determination of pH of foodstuffs

1.5 Determination of density of foodstuffs by oscillating U-tube

ASU L 30.00-2 (EG) 1993-08	Analysis of foodstuffs – Refractometer method for determination of the soluble solids content of processed fruit and vegetable products (Modification: *Determination by oscillating U-tube*)
ASU L-36.00-3a 1989-12	Analysis of foodstuffs – Determination of the relative density d 20/20 of wort and beer – Oscillating U-tube method (Modification: *Also applies to fruit, vegetables and their products*)

1.6 Refractometric determination of ingredients in foodstuffs *

ASU L 30.00-2 (EG) 1993-08	Analysis of foodstuffs – Refractometer method for determination of the soluble solids content of processed fruit and vegetable products
ASU L 40.00-2/1 2019-07	Analysis of foodstuffs – Analysis of honey – Determination of water content – Part 1: Analogue refractrometric method

1.7 Photometric determinations of ingredients and additives in foodstuffs *

ASU L 07.00-60 2007-04	Analysis of foodstuffs – Determination of nitrate and/or nitrite content in meat products after enzymatic reduction of nitrate to nitrite – Spectrophotometric method (Modification: *Also applies to fruit, vegetables and their products*)
ASU L 13.00-15 2018-06	Analysis of foodstuffs – Animal and vegetable fats and oils: Determination of anisidine value
ASU L 13.00-25 2012-01	Analysis of foodstuffs – Determination of ultraviolet absorption, expressed as specific UV extinction, of animal and vegetable fats and oils
ASU L 40.00-10/1 2012-01	Analysis of foodstuffs – Analysis of honey – Determination of hydroxymethylfurfural – Part 1: Winkler photometric method (in accordance with DIN 10751 Part 1) (Modification: *Also applies to other high-sugar, heated foodstuffs*)

1.8 Determination of ingredients by high performance liquid chromatography (HPLC) with conventional detector (DAD, UV) in foodstuffs **

ASU L 26.00-1 2018-10	Analysis of foodstuffs – Determination of nitrate content in vegetable products – HPLC/IC method (Modification: *Detection with HPLC-DAD*)
PAW 030 2020-06	Determination of caffeine and theobromine in foodstuffs by HPLC-UV

1.9 Determination of additives, plant protection product residues, mycotoxins and organic contaminants by liquid chromatography (LC/IC) with mass selective detectors (MS/MS, ITD) in foodstuffs and straight feedingstuffs **

ASU L 00.00-115 2018-10	Analysis of foodstuffs – Multiple analytical method for 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
EURL-FV 2013-M8	Pesticide analysis in teas and chamomile by liquid chromatography and gas chromatography tandem mass spectrometry

EURL – SRM QuPPe-PO 2019-05	Determination of highly polar pesticides in foodstuffs after extraction with acidified methanol by LC-MS/MS Food of plant origin (QuPPe-PO method) (Modification: *Also applies to straight feedingstuffs of plant origin*)
PAW 028 2021-10	Determination of sulphurous acid in foodstuffs by LC-MS/MS
PAW 044 2023-11	Determination of pyrrolizidine alkaloids in foodstuffs by LC-MS/MS
PAW 050 2024-02	Determination of Fusarium toxins in foodstuffs and straight feedingstuffs by LC-MS/MS
PAW 052 2022-11	Determination of Alternaria toxins in foodstuffs by LC-MS/MS
PAW 053 2023-03	Determination of histamine in foodstuffs by LC-MS/MS
PAW 055 2019-01	Determination of patulin in foodstuffs by LC-MS/MS
PAW 056 2024-02	Determination of ochratoxin A in foodstuffs and straight feedingstuffs by LC-MS/MS
PAW 057 2016-09	Determination of acrylamid in foodstuffs by LC-MS/MS
PAW 058 2024-02	Determination of chlormequat chloride and mepiquat chloride in foodstuffs and straight feedingstuffs by LC-MS/MS
PAW 059 2019-05	Determination of aflatoxin M_1 in foodstuffs by LC-MS/MS
PAW 062 2024-02	Determination of aflatoxins B_1, B_2, G_1 and G_2 in foodstuffs and straight feedingstuffs by LC-MS/MS
PAW 070 2019-01	Determination of ethephon in foodstuffs by LC-MS/MS
PAW 073 2022-11	Determination of acidic herbicides and their esters and conjugates in plant-based foodstuffs and straight feedingstuffs by LC-MS/MS

PAW 078 2024-02	Determination of glyphosate and AMPA (aminomethylphosphonic acid) in foodstuffs and straight feedingstuffs by LC-MS/MS
PAW 081 2022-11	Determination of quaternary ammonium compounds in foodstuffs by LC-MS/MS
PAW 086 2023-10	Determination of bisphenol A in foodstuffs by LC-MS/MS
PAW 087 2024-02	Determination of tropane alkaloids atropine and scopolamine in foodstuffs and straight feedingstuffs by LC-MS/MS
PAW 088 2024-02	Determination of melamine in foodstuffs by LC-MS/MS
PAW 090 2022-07	Determination of ergot alkaloids in cereals and cereal products by LC-MS/MS
PAW 097 2022-11	Determination of polar anionic pesticides in foodstuffs by IC-MS/MS
PAW 098 2023-05	Determination of nitrate and nitrite in foodstuffs by IC-MS/(MS)

1.10 Determination of ingredients by liquid chromatography (LC) with mass-selective detectors (MS/MS, ITD) in foodstuffs **

PAW 012 2024-07	Determination of sugars in foodstuffs by LC-MS
PAW 092 2024-07	Determination of furocoumarins in plant-based foodstuffs by LC-MS/MS

1.11 Sample preparation

ASU L 13.00-27/2 2019-07	Analysis of foodstuffs – Gas chromatography of fatty acid methyl esters - Part 2: Production of fatty acid methyl esters in animal and vegetable fats and oils (adoption of standard of the same name DIN EN ISO 12966-2, August 2017)

1.12 Determination of plant protection product residues and ingredients by gas chromatography (GC) with conventional detectors (FID, FPD) in foodstuffs and straight feedingstuffs **

ASU L 13.00-46 2018-06	Analysis of foodstuffs – Animal and vegetable fats and oils – Gas chromatography of fatty acid methyl esters – Part 4: Determination by capillary gas chromatography (adoption of standard of the same name DIN EN ISO 12966-4, November 2015)
PAW 065 2024-02	Determination of dithiocarbamates in foodstuffs and straight feedingstuffs by headspace GC-FPD

1.13 Determination of organic contaminants and ingredients by gas chromatography (GC) with mass-selective detectors (MS, MS/MS) in foodstuffs **

PAW 060 2024-05	Determination of plasticisers in foodstuffs by GC-MS/MS
PAW 064 2023-05	Determination of estragole in infusions from tea-like products and liquid foodstuffs by GC-MS/MS
PAW 068 2024-07	Determination of volatile halogenated hydrocarbons (VOC) in foodstuffs by headspace GC-MS
PAW 071 2023-10	Determination of furan and alkylfurans in foodstuffs by headspace GC-MS
PAW 089 2020-03	Determination of benzene in foodstuffs and beverages by headspace GC-MS

1.14 Determination of plant protection product residues by gas chromatography (GC) with mass selective detectors (MS, MS/MS) in foodstuffs and straight feedingstuffs **

ASU L 00.00-115 2018-10	Analysis of foodstuffs – Multiple analytical method for 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: *Also applies to straight feedingstuffs of plant origin*)
EURL-FV 2013-M8	Pesticide analysis in teas and chamomile by liquid chromatography and gas chromatography tandem mass spectrometry
PAW 084 2024-02	Determination of phosphane in foodstuffs and straight feedingstuffs by headspace GC-MS/MS

2 Sensory analysis of foodstuffs

ASU L 00.90-6 2015-06	Analysis of foodstuffs – Sensory analysis – Simple descriptive test (Restriction: *Here only simple descriptive test to determine commercial quality, no sampling, no coding, test area, test equipment and number of test persons not in accordance with DIN 10962 or DIN 10956; no separate test report*)

Abbreviations used:

ASU	Amtliche Sammlung von Untersuchungsverfahren (Official Collection of Test Methods) on the basis of § 64 LFGB (German Food and Feed Act)
DIN	Deutsches Institut für Normung e.V. (German Institute for Standardization)
EN	European standard
EURL – SRM	EU Reference Laboratory for Pesticides Requiring Single Residue Methods
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
LFGB	Lebensmittel- und Futtermittelgesetzbuch (German Food and Feed Act)
PAW	In-house method of KWALIS GmbH