

Annex to the Partial Accreditation Certificate D-PL-14316-01-01

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.

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1 Physical, physico-chemical and chemical analysis of food, feeding stuff, plant materials, food contact materials and articles for daily use

1.1 Sample preparation

ISO 12966-2
2017-03 Animal and vegetable fats and oils - Gas chromatography of fatty acid methyl esters - Part 2: Preparation of methyl esters of fatty acids

EN 645
1993-10 Paper and board intended to come into contact with foodstuffs - Preparation of a cold water extract

EN 647
1993-10 Paper and board intended to come into contact with foodstuffs - Preparation of a hot water extract

1.2 Determination of ingredients of food, feeding stuff, plant materials, food contact materials and articles for daily use by gravimetric methods *

EN 1186-2
2022-07 Materials and articles in contact with foodstuffs - Plastics - Part 2: Test methods for overall migration in vegetable oils

EN 1186-3
2022-08 Materials and articles in contact with foodstuffs - Plastics - Part 3: Test methods for overall migration in evaporable simulants

AOAC 920.100
2005 Ash in tea
(Modification: *here also applicable for other food and feeding stuff*)

AOAC 920.102
2005 Fiber (Crude) in tea

AOAC 920.153
2005 Ash of meat
(Modification: *here also applicable for other food and feeding stuff*)

AOAC 920.169
2005 Fiber (crude) in spices

AOAC 923.03
2005 Ash of flour - Direct method
(Modification: *here also applicable for other food and feeding stuffs*)

AOAC 941.12
2006 Ash of Spices - Gravimetric Methods - Gravimetric Methods
(Modification: *here also applicable for other food and feeding stuffs*)

AOAC 950.46
2008 Loss on Drying (Moisture) in meat
(Modification: *here also applicable for other food and feeding stuffs*)

AOAC 962.09
2010 Fiber (crude) in animal feed and pet food.

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AOAC 975.12 2005	Ash (acid-insoluble) of cacao products (Modification: <i>here also applicable for other food and feeding stuffs</i>)
AOAC 991.36 2006	Fat (crude) in meat and meat products
ES 51-6 2022-11	Methods for testing edible hydrogenated oils and margarine. Part 6: Animal and vegetable fats and oils. Determination of unsaponifiable matter. Method using hexane extraction.

1.3 Determination of ingredients of food, feeding stuff, plant materials, food contact materials and articles for daily use by titrimetry.*

ES 51-4 2021-08	Methods for testing edible hydrogenated oils and margarine. Part 4: Determination of iodine value
ES 51-5 2021-08	Methods for testing edible hydrogenated oils and margarine. Part 5: Determination of saponification value
ES 63-10 2006-05	Methods of analysis and testing for meat and meat products - Part 10: Determination of Thiobarbituric acid (TBA)
ES 2760-1 2017-05(AMD2018)	Physical and chemical methods for testing fish and fishery Products - Part 1: Frozen fish. 5.2 Determination of total volatile basic nitrogen
AOAC 920.160 2005	Determination of saponifiable value in edible oils and margarine
AOAC 991.20 2005	Nitrogen (Total) in milk - Kjeldahl methods (Modification: <i>here also applicable for other food and feeding stuffs</i>)
AOAC 947.05 2005	Lactic acid in milk and milk products
AOAC 965.33 2005	Peroxide value in animal and vegetable fats & oil

1.4 Determination of ingredients and contaminants in food, feeding stuff, food contact materials and articles for daily use using photometry *

EN 13130-23 2005-02	Material and articles in contacts with foodstuffs - Plastics substances subject to limitation - Part 23: Determination of formaldehyde (Restriction: <i>no determination of HMTA</i>)
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ES 2760-1
2017-(AMD 2018)

Physical and chemical methods for testing fish and fishery Products
- Part 1: Frozen fish.
5.4 Determination of Thiobarbituric acid (TBA)

1.5 Determination of ingredients using refractometry

AOAC 921.08
2005

Index of refraction of oils and fats

AOAC 932.14
2005

Solids in syrups

1.6 Determination of methyl esters of fatty acids in fats and oils using gas chromatography with standard detectors (GC-FID)

ISO 12966-4
2015-06

Animal and vegetable fats and oils - Gas chromatography of fatty acid methyl esters - Part 4: Determination by capillary gas chromatography

1.7 Determination of ingredients, additives and contaminants in food, feeding stuff, food contact materials and articles for daily use using high performance liquid chromatography with standard detectors (UV, DAD, FLD, RI) *

ISO 19343
2017-06

Microbiology of the food chain - Detection and Quantification of Histamine in fish and fishery products - HPLC method

DIN EN 14123
2008-03

Foodstuffs - Determination of aflatoxin B₁ and the sum of aflatoxin B₁, B₂, G₁ and G₂ in hazelnuts, peanuts, pistachios, figs and paprika powder - High performance liquid chromatographic method with post-column derivatisation and immunoaffinity column cleanup (Restriction: *here only for nuts*)

Yu Y., Jin, Q., Wang X. G.
Chapter 5(10)
Pages 409-414
Journal of Chemical and
Pharmaceutical Research,
2013

Rapid assay of polycyclic aromatic hydrocarbon in edible oil by HPLC with FLD detection without cleanup

CEN/TS 13130-13
2005-09

Materials and articles in contact with foodstuffs - Plastics substances subject to limitation - Part 13: Determination of 2,2bis(4hydroxyphenyl) propane (Bisphenol A) in food simulants (Modification: *here applied to edible oils*)

SOP-AT-02
2018-11

Determination of Ochratoxin A in cereals by HPLC with FLD detection and immunoaffinity column clean-up

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SOP-AT-04 2017-06	Determination of additives (caffeine, benzoic acid, sorbic acid, acesulfame k, saccharin, ascorbic acid) in soft drinks and food by HPLC
SOP-AT-07 2021-04	Detection and determination of artificial food dyes in beverages by using HPLC
SOP-AT-08 2021-09	Detection and determination of para red and sudan dyes in chili powder products by HPLC
SOP-AT-09 2021-08	Determination of tocopherols & tocotrienols in edible oil and fats by HPLC
SOP-AT-10 2020-11	Determination of capsaicin in chili pepper products by HPLC
SOP-AT-11 2020-10	Determination of zearalenone in cereal grains by HPLC
SOP-AT-12 2020-10	Determination of deoxynivalenol (DON) in cereal by HPLC
SOP-AT-13 2021-11	Determination of aflatoxin M ₁ in powdered and liquid milk by HPLC
SOP-FCM-07 2022-12	Determination of isocyanates (2,4-toluene diisocyanate, 2,6-toluene diisocyanate, diphenylmethane-4,4'-diisocyanate, hexamethylene diisocyanate) in plastics using HPLC
SOP-FCM-05 2022-10	Determination of terephthalic acid in food simulants (3% acetic acid) using HPLC
CEN/TS 13130-27 2005-02	Materials and articles in contact with foodstuffs - Plastics substances subject to limitation - Part 27: Determination of 2,4,6-triamino-1,3,5-triazine in food simulants (Restriction: <i>only in 3% acetic acid</i>)
AOAC 977.20 1977	Separation of sugars in honey (Modification: <i>extension for fructose, glucose and sucrose in biscuits</i>)
SOP-AT-16 2022-09	Determination of common antioxidants (PG, TBHQ, BHA and BHT) in edible oil using HPLC
SOP-TFA-17 2023-02	Determination of sodium metabisulfite in food using HPLC

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1.8 Determination of pesticide residues and contaminants using gas chromatography with mass selective detectors (MS/MS) *

EN 15662 2018-05	Foods of plant origin - Multimethod for the determination of pesticide residues using GC- and LC-based analysis following acetonitrile extraction/partitioning and clean-up by dispersive SPE - Modular QuEChERS-method
SOP-FCM-09 2023-10	Determination of phthalates (DBP, DEHP, BBP, DINP, DIDP, DNOP) in food simulants by triple quadrupole GC-MS/MS

1.9 Determination of pesticide residues and contaminants using high performance liquid chromatography with mass selective detectors (MS/MS, HR-MS) *

EN 15662 2018-05	Foods of plant origin - Multimethod for the determination of pesticide residues using GC- and LC-based analysis following acetonitrile extraction/partitioning and clean-up by dispersive SPE - Modular QuEChERS-method
SOP-AT-14 2022-03	Detection and quantification of histamine in fish and fishery products - LC-MS/MS method
SOP-TFA-18 2023-02	Determination of mycotoxins (aflatoxins B1, B2, G1, G2, M1, OTA, DON, ZON, Fumonisin B1, B2, T2-toxin, patulin) by liquid chromatography tandem mass spectrometry (LC-MS/MS) in food
EURL-SRM QuPPE-PO V12.1 2023-03	Quick Method for the analysis of highly polar Pesticides in Food Involving Extraction with Acidified Methanol and LC-MS/MS Measurement Food of Plant Origin (QuPPE-PO-Method) (Restriction: <i>here only methods M1.3 and M1.5</i>)

1.10 Determination of elements using atomic absorption spectrometry (GF-AAS, F-AAS) *

ES 2060-01 2008-08	Release of lead and cadmium from ware in contact with food and beverages. Part 1: Glass hollow ware
ES 2060-02 2007-06	Release of lead and cadmium from ware in contact with food and beverages. Part 2: Ceramic ware
AOAC 975.03 2005	Metals in plants and pet foods - atomic absorption spectrophotometric method (Modification: <i>here determination of iron, copper, zinc, magnesium, lead and cadmium in food and feed</i>)
AOAC 999.11 2005	Lead, cadmium, copper, iron and zinc in foods - Atomic absorption spectrophotometry after dry ashing

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SM 3111B
2017 Metals by flame atomic absorption spectrometry. Part B: Direct Air-Acetylene Flame Method

1.11 Determination of elements using inductive coupled plasma-optical emission spectroscopy (ICP-OES), inductive coupled plasma-mass spectrometry (ICP-MS) and mercury analyzer

EN 12498
2018-11 Paper and board - Paper and board intended to come into contact with foodstuffs - Determination of cadmium, chromium and lead in an aqueous extract
(Modification: *extension for aluminum*)

EN 15765
2009-12 Foodstuffs - Determination of trace elements - Determination of tin by inductively coupled plasma mass spectrometry (ICP-MS) after pressure digestion

EPA 7473
2007-02 Determination of mercury in solids and solutions by thermal decomposition, amalgamation and atomic absorption spectrophotometry
(Modification: *analysis carried out using a mercury analyzer, here fore food and feedstuff*)

EN 15763
2009-12 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: *here only arsenic, cadmium and lead*)

SOP-TE-07
2023-09 Determination of trace elements in food samples by ICP-MS after microwave digestion

EN 16943
2017-05 Foodstuffs - Determination of calcium, copper, iron, magnesium, manganese, phosphorus, potassium, sodium, sulfur and zinc by ICP-OES
(Modification: *here only copper, iron, zinc; extension for arsenic, cadmium, lead and tin*)

EU Regulation 10/2011
2011-01 Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food

1.12 Determination of the nitrogen content in Food using Combustion Analysis FLASH Smart N/ Protein

SOP-CH-17
2022-03 Determination of protein & nitrogen in food by flash smart elemental analyzer

Valid from: 29.07.2024
Date of issue: 29.07.2024

Valid to: 08.02.2026

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2 Cultural microbiological analysis of microorganisms in food, animal feeding stuffs and on Surfaces in Hygiene Food Surroundings *

ISO 4832 2006-02	Microbiology of food and animal feeding stuffs - Horizontal method for the enumeration of coliforms - Colony-count technique
ISO 4833-1 AMD 1 2022-01	Microbiology of the food chain - Horizontal method for the enumeration of microorganisms - Part 1: Colony count at 30 degrees C by the pour plate technique
ISO 6579-1 AMD 1 2020-03	Microbiology of food chain - Horizontal method for the detection, enumeration and serotyping of Salmonella spp. (Modification: <i>here only detection</i>)
ISO 6888-1 AMD 1 2023-09	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
ISO 6888-1 AMD 1 2003-07	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; Amendment 1: Inclusion of precision date
ISO 6888-1 AMD 2 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; Amendment 2: Inclusion of an alternative confirmation test using RPFA stab method
ISO 7932-Amd 1 2020-08	Microbiology of food and animal feeding stuffs - Horizontal method for the enumeration of presumptive Bacillus cereus - Colony-count technique at 30 °C
ISO 7937 2004-08	Microbiology of food and animal feeding stuffs - Horizontal method for the enumeration of Clostridium perfringens - Colony-count technique
ISO 10272-1 2023-01	Microbiology of the food chain - Horizontal method for the detection and enumeration of Campylobacter spp. - Part 1: Detection method
ISO 11290-1 2017-05	Microbiology of food chain - Horizontal method for detection and enumeration of Listeria monocytogenes and of Listeria spp. - Part 1: Detection method (Modification: <i>Confirmation by Microbact 12L</i>)

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ISO 16649-2 2001-04	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-glucoronide
ISO 18593 2018-06	Microbiology of food chain - Horizontal methods for surface sampling
ISO 21527-1 2008-07	Microbiology of food and animal feeding stuffs - Horizontal method for the enumeration of yeasts and moulds - Part 1: Colony count technique in products with water activity greater than 0,95 (Modification: <i>here only determination of yeasts; 3 days, 30 °C</i>)
ISO 21527-2 2008-07	Microbiology of food and animal feeding stuffs - Horizontal method for the enumeration of yeasts and moulds - Part 2: Colony count technique in products with water activity less than or equal to 0,95
ISO 21528-2 2017-06	Microbiology of food and animal feeding stuffs - Horizontal methods for the detection and enumeration of Enterobacteriaceae - Part 2: Colony-count method
ISO 21567 2004-11	Microbiology of food and animal feeding stuffs - Horizontal method for the detection of Shigella spp. In Food and animal feeding stuffs
ISO 21872-1 2023-02	Microbiology of the food chain - Horizontal method for the determination of Vibrio spp. - Part 1: Detection of potentially enteropathogenic Vibrio parahaemolyticus, Vibrio cholerae and Vibrio vulnificus
ISO/TS 21872-2 2007-04	Microbiology of food and animal feeding stuffs - Horizontal method for the detection of potentially enteropathogenic Vibrio spp. - Part 2: Detection of species other than Vibrio parahaemolyticus and Vibrio cholera (Modification: <i>detection of Vibrio alginolyticus</i>)
NMKL No. 68 2011	Enterococcus. Determination in foods and feeds.
NMKL No. 125 2005	Thermotolerant coliform bacteria and Escherichia coli. Enumeration in food and feed.
SOP-MB-03 2017-07	Enumeration of Escherichia coli in Foods

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3M™ Petrifilm™
Rapid Yeast and
Mold Count Plate
(6475/6477)
2017
Enumeration of Mould by Petrifilm technique

ISO 22964
2017-04
Microbiology of the food chain - Horizontal method for the detection of Cronobacter spp.

3 Determination of pathogenic bacteria and virus in food and feeding stuff using Real-Time-PCR
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Congen
Art. No. F5166
2019-07
SureFast® Salmonella species/enteritidis/typhimurium 4plex

ISO 15216-2
2019-07
Microbiology of the food chain - Horizontal method for determination of hepatitis A virus and norovirus in food using real-time RT-PCR, Part 2: Method for detection

BIOTECON
Diagnostics-Food proof[®] Hepatitis food
A Detection kit
R 302 37
2017-09
Test kit for the qualitative detection of hepatitis A and norovirus in

BIOTECON
Diagnostics-Food proof[®] E.coli
0157 Detection kit
R 302 10
2017-04
Microbiology of food and animal feeding stuffs -Horizontal Method for the detection of E. coli 0157

BIO-RAD
– IQ –Check-Listeria
monocytogenes II Kit
Ref no. 3578124
2021-03
Test kit for the qualitative detection of Listeria monocytogenes in food

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Abbreviations used:

AOAC	Association of Official Analytical Chemists
AMD	Amendment
DIN	German Institute of Standardization
EN	European Standards
ES	Egyptian Standard
HR-MS	High Resolution Mass spectrometry
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
NMKL	Nordic Committee on Food Analysis
SM	Standard Methods For the Examination of Water and Wastewater™
SOP-AT-xy and SOP-lab name-xyz	In-house method of the RIIL laboratories