

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-20881-01-00 according to DIN EN ISO/IEC 17025:2018

 Valid from:
 18.03.2022

 Date of issue:
 18.03.2022

Holder of certificate:

Eurofins Dr. Specht International GmbH Am Neuländer Gewerbepark 2, 21079 Hamburg

Tests in the fields:

physico-chemical and chemical analysis of food, selected feed and consumer articles, tobacco and tobacco products, soil, plant materials from the agricultural and horticultural sector; selected physical analysis of soil and plant based food and feed; physico-chemical and chemical analysis for content determination of pesticides including their metabolites as well as synergists, plant growth regulators and selected PCB compounds in solution;

drugs and active ingredients Test areas: physical and physico-chemical drug-, active ingredient- and excipient analysis

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 listed testing methods are exemplary.

The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories. Laboratories that conform to the requirements of this standard, operate generally in accordance with the principles of DIN EN ISO 9001.

The certificate together with the annex 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/en/content/accredited-bodies-dakks.

Abbreviations used: see last page

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



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 Analysis of food, selected feed, tobacco and tobacco products
- 1.1 Determination of residues using gas chromatography with standard detectors (ECD-, FPD-detectors) **

DIN EN 12396-2 1998-12	Non-fatty foods - Determination of dithiocarbamate and thiuram disulfide residues - Part 2: Gas chromatographic method
DIN EN 15662 2018-07	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 (Deviation: where necessary: adjustment of the d-SPE-ratio; additional clean-up where appropriate)
ASU L 00.00-34 2010-09	Modular multiple analytical method for the determination of pesticide residues in foodstuffs (extended and revised version of the DFG S 19)
SPG-14.131.4 2021-01	Gas chromatographic (Screening)-Method for the determination of dithiocarbamates and Thiuramdisulfid-residues in non-fatty foods, pharmaceutical raw products and tobacco
SPG-14.150.1 2019-05	Determination of 1,2-Dibromoethane (EDB) und 1,2-Dibromo-3- chloropropane (DBCP) in tobacco (screening) by Headspace-GC-ECD
SPG-14.162.1 2019-05	Determination of 1,2-Dibromoethane (EDB) und 1,2-Dibromo-3- chloropropane (DBCP) in tobacco by GC-ECD
SPG-34.043.1 2019-01	Determination of selected pesticide residues in essential oils by gas chromatography



1.2 Determination of residues using gas chromatography with mass selective detectors (MS- and MS/MS-detectors) **

DIN EN 15662 2018-07	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 (Deviation: where necessary: adjustment of the d-SPE-ratio; additional clean-up where appropriate)
ASU L 00.00-34 2010-09	Modular multiple analytical method for the determination of pesticide residues in foodstuffs (extended and revised version of the DFG S 19)
SPG-14.179.1 2020-08	Determination of selected pesticide residues in essential oils with LC-MS/MS and GC-MS/MS
SPG-34.043.1 2019-01	Determination of selected pesticide residues in essential oils by gas chromatography

1.3 Determination of residues and contaminants using liquid chromatography with mass selective detector (LC-MS/MS) **

DIN EN 15662 2018-07	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 (Deviation: where necessary: adjustment of the d-SPE -ratio; additional clean-up where appropriate)
ASU L 00.00-34 2010-09	Modular multiple analytical method for the determination of pesticide residues in foodstuffs (extended and revised version of the DFG S 19)
SPG-14.110.3 2021-04	Determination of maleic hydrazide in selected food of plant and animal origin by LC-MS/MS
SPG-14.151.3 2021-04	Determination of maleic hydrazide in tobacco with LC-MS/MS (Screening)
SPG-14.155.2 2021-03	Determination of tobacco specific nitrosamines (TSNA) with LC- MS/MS



SPG-14.158.3 2020-04	Determination of glyphosate, glufosinate and AMPA in plant material and selected animal material as well as soil with LC-MS/MS after automatic derivatization and online-SPE
SPG-14.169.4 2021-04	Determination of perchlorate and chlorate in plant and selected animal material and soil by LC-MS/MS
SPG-14.179.1 2020-08	Determination of selected pesticide residues in essential oils with LC-MS/MS and GC-MS/MS
SPG-14.180.3 2019-09	Determination of specific phenoxy alkanoic acids after hydrolysis in selected plant materials with LC-MS/MS (DIN EN 15662, QuEChERS modular; modified)
SPG-14.182.4 2021-03	Determination of von pyrrolizidine- and tropane alkaloids in selected material of plant origin by LC-MS/MS
SPG-14.187.2 2020-10	Determination of tropane alkaloids in selected material of plant origin by LC-MS/MS
SPG-14.188.5 2021-03	Determination of selected polar pesticides in selected plant-based food stuff by LC-MS/MS

1.4 Photometric determination of residues and contaminants **

DIN ISO 4876 1998-10	Tobacco and tobacco products - Determination of maleic hydrazide residues
DIN EN 12396-1 1998-12	Non-fatty foods - Determination of dithiocarbamate and thiuram disulfide residues - Part 1: Spectrometric method
DIN EN 12396-3 2000-10	Non-fatty foods - Determination of dithiocarbamate and thiuram disulfide residues - Part 3: UV-spectrometric xanthogenate method
SPG-14.008.2 2020-09	Determination of dithiocarbamate and thiuram disulfide



1.5	Photometric determin flow analysis **	nation of residues and contaminants in tobacco by continuous
SPG- 2019	74.018.1 -01	Determination of nitrate in tobacco by continuous flow analyzer (CFA)
SPG- 2019	74.019.1 -01	Determination of chloride in tobacco with the continuous flow analyzer (CFA)
1.6	Gravimetric determin	ation of dry matter **
ASU 2010	F 0001 (EG) 0-09	Testing of feed - Determination of dry matter in feed - Annex III of Commission Regulation (EC) No. 152/2009 of 27. January 2009 laying down the methods of sampling and analysis for the official control of feed
SPG- 2021	04.001.3 -04	Determination of dry matter in soil, feed and plant materials
2	Analysis of soil	
2.1	Determination of resi	dues and contaminants using gas chromatography with mass

2.1 Determination of residues and contaminants using gas chromatography with mass selective detector (LC-MS/MS) **

SPG-14.158.3 2020-04	Determination of glyphosate, glufosinate and AMPA in plant material and selected animal material as well as soil with LC-MS/MS after automatic derivatization and online-SPE
SPG-14.169.4	Determination of perchlorate and chlorate in plant and selected
2021-04	animal material and soil by LC-MS/MS

2.2 Gravimetric determination of dry matter **

DIN EN 15934 2012-11	Sludge, treated bio waste, soil and waste - Calculation of dry matter fraction after determination of dry residue or water content
SDC 04 001 2	Determination of dry matter in soil, feed and plant materials
2021-04	Determination of dry matter in son, reed and plant materials



- **3** Drugs and active ingredients
- 3.1 Physical and physical-chemical drug-, active ingredient- and excipient analysis
- 3.1.1 Gas chromatography (selected drugs and preparations of plant origin, homeopathic drugs, as well as selected drugs of animal origin, pharmaceutical raw material I GC-ECD, GC-FPD, GC-MSD, GC-MS/MS) **

DIN EN 12396-2 1998-12	Non-fatty foods - Determination of dithiocarbamate and thiuram disulfide residues - Part 2: Gas chromatographic method (Deviation: <i>application to pharmaceutical raw material, drugs</i>)
DIN EN 15662 2018-07	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 (Deviation: application on pharmaceutical raw material, drugs, where necessary adjustment of the d-SPE-ratio; additional clean-up where appropriate)
ASU L 00.00-34 2010-09	Modular multiple analytical method for the determination of pesticide residues in foodstuffs (extended and revised version of the DFG S 19) (Deviation: <i>application to pharmaceutical raw material, drugs</i>)
SPG-14.179.1 2020-08	Determination of selected pesticide residues in essential oils with LC-MS/MS and GC-MS/MS (Application to pharmaceutical raw material, drugs)
SPG-34.025.1 2019-01	Analytical method for the determination of p,p'-DDE, o,p'-DDT, p,p'-DDT, o,p'-TDE and p,p'-TDE, HCB and Lindane in Omega-3 Ethyl esters (<i>Application to pharmaceutical raw material, drugs using GC-</i> <i>MS/MS</i>)
SPG-34.040.1 2019-01	Analytical method for the determination of p,p ⁻ -DDE, o,p ⁻ -DDT, p,p ⁻ -DDT, o,p ⁻ -TDE and p,p ⁻ -TDE, HCB and lindane in fish Oil (<i>Application to pharmaceutical raw material, drugs using GC-</i> <i>MS/MS</i>)
SPG-34.043.1 2019-01	Determination of selected pesticide residues in essential oils by gas chromatography (Application to pharmaceutical raw material, drugs using GC-ECD, GC-FPD, GC-MSD)



3.1.2	Liquid chromatography (selected drugs and preparations of plant origin, homeopathic drugs,
	as well as selected drugs of animal origin, pharmaceutical raw material I LC-MS/MS) **

DIN EN 15662 2018-07	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 (Deviation: <i>application to pharmaceutical raw material, drugs</i>)
SPG-14.158.3 2020-04	Determination of glyphosate, glufosinate and AMPA in plant material and selected animal material as well as soil with LC-MS/MS after automatic derivatization and online-SPE (<i>Application to pharmaceutical raw material, drugs</i>)
SPG-14.179.1 2020-08	Determination of selected pesticide residues in essential oils with LC-MS/MS and GC-MS/MS (Application to pharmaceutical raw material, drugs)
SPG-14.180.3 2019-09	Determination of specific phenoxy alkanoic acids after hydrolysis in selected plant materials with LC-MS/MS (DIN EN 15662, QuEChERS modular; modified) (Application to pharmaceutical raw material, drugs)
SPG-14.182.4 2021-03	Determination of pyrrolizidine- and tropane alkaloids in selected material of plant origin by LC-MS/MS (Application to pharmaceutical raw material, drugs)
SPG-34.042.1 2019-07	Determination of selected pesticides residues in essential oils by LC- MS/MS (Application to pharmaceutical raw material, drugs)
SPG-34.045.1 2018-08	Determination of pyrrolizidine alkaloids in selected pharmaceutical products and/or raw materials by LC-MS/MS
3.1.3 Photometric (selected o	drugs and preparations of plant origin, homeopathic drugs, as well as

selected drugs of animal origin, pharmaceutical raw material) *

DIN EN 12396-1 1998-12	Non-fatty foods - Determination of dithiocarbamate and thiuram disulfide residues - Part 1: Spectrometric method (Deviation: <i>application to pharmaceutical raw material, drugs</i>)
DIN EN 12396-3 2000-10	Non-fatty foods - Determination of dithiocarbamate and thiuram disulfide residues - Part 3: UV-spectrometric xanthogenate method (Deviation: <i>application to pharmaceutical raw material, drugs</i>)



09	(Application to pharmaceutical raw material, drugs using spectrophotometer)
Analysis of plant flowers, seeds, l	materials, materials from agricultural and horticultural sector (e.g. cut eaves, etc.)
Determination o (MS und MS/MS	f residues using gas chromatography with mass selective detectors -detectors)
N 15662 D7	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 (Deviation: application on plant materials, materials from agricultural and horticultural sector; additional clean-up where appropriate)
	9 Analysis of plant flowers, seeds, k Determination o (MS und MS/MS 15662

4.2 Determination of residues and contaminants using liquid chromatography with mass selective detector (LC-MS/MS) **

DIN EN 15662 2018-07	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 (Deviation: application on plant materials, materials from agricultural and horticultural sector additional clean-up where appropriate)
SPG-14.158.3 2020-04	Determination of glyphosate, glufosinate and AMPA in plant material and selected animal material as well as soil with LC-MS/MS after automatic derivatization and online-SPE

5 Analysis of selected consumer articles (paper based products)

5.1 Determination of residues using gas chromatography with mass selective detectors (MS- und MS/MS-detector)

SPG-64.003.1	Determination of defined pesticides in selected consumer articles
2020-06	(paper based products) by LC/GC



5.2 Deter select	nination of residues and contaminants using liquid chromatography with mass ve detector (LC-MS/MS) **
SPG-64.001.1 2019-07	Determination of glyphosate, glufosinate and AMPA in selected consumer articles (paper based products) with LC-MS/MS after automatic derivatization and online-SPE
SPG-64.002.1 2019-07	Determination of perchlorate and chlorate in selected consumer articles (paper based products) by LC-MS/MS
SPG-64.003.1 2020-06	Determination of defined pesticides in selected consumer articles (paper based products) by LC/GC
6 Deter regula	nination of pesticides including their metabolites as well as synergists, plant growth tors and selected PCB compounds in solution
SPG-84.001.2 2021-09	Validation of organic pesticides incl. their metabolites, as well as synergists, growth inhibitors and selected PCB-compounds in single or multicomponent solutions by GC-MSD, GC-MS/MS, GC-ECD, GC-FPD or LC-MS/MS
SPG-84.002.1 2021-09	Validation of organic pesticides incl. their metabolites, as well as synergists, growth inhibitors and selected PCB-compounds in single or multicomponent solutions by HPLC-DAD

Abbreviations used:

ASU	Collection of Official Methods under Article § 64 German Food and Feed
	Code (LFGB) DFG Deutsche Forschungsgemeinschaft e. V.
DFG	German Research Foundation e. V.
DIN	German Institute for Standardization
EN	European standard
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
SPG-XX.XXX.X	Standard Operating Procedure of Eurofins Dr. Specht International GmbH