

## Deutsche Akkreditierungsstelle

### Annex to the accreditation certificate D-PL-18482-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: 25.11.2024

Date of issue: 25.11.2024

Holder of accreditation certificate:

**Coffein Compagnie GmbH & Co. KG**  
**Segelsbrück 7, 28309 Bremen**

with the location

**Coffein Compagnie GmbH & Co. KG**  
**Segelsbrück 7, 28309 Bremen**

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.

*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>.*

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.

**Annex to the accreditation certificate D-PL-18482-01-00**

Tests in the fields:

**Sampling of coffee and coffee products**

**Physical, physico-chemical and chemical analysis of coffee, coffee products and caffeine**

**Within the given testing field marked with \*\*, the testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, 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 Analysis of coffee, coffee products and caffeine**

**1.1 Sampling and sample preparation of coffee and coffee products**

ISO 4072 1982-12	Green coffee in bags – Sampling
DIN 10792 2013-06	Analysis of coffee and coffee products – Preparation of coffee beverage for analytical purposes
ASU L 00.00-111/2 2012-07	Analysis of foodstuffs – Sample preparation methods for the provision of the official sample, counter sample and arbitration sample for determination of the mycotoxin content in foodstuffs – Part 2: Method for comminution and homogenisation without the addition of water (Modification: <i>Green coffee matrix</i> )

**1.2 Gravimetric determination of parameters and ingredients in coffee, coffee products and caffeine**

ISO 6669 1995-09	Green and roasted coffee – Determination of free-flow bulk density of whole beans (routine method)
DIN ISO 6673 2007-03	Green coffee – Determination of loss in mass at 105°C

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DIN 10764-4 2007-03	Analysis of coffee and coffee products – Determination of loss in mass of soluble coffee – Part 4: Method for soluble coffee and soluble coffee products by heating under atmospheric pressure (routine method)
DIN 10775 2016-07	Analysis of coffee and coffee products – Determination of water-soluble extract – Method for roasted coffee
DIN 10775-2 1985-11	Analysis of coffee and coffee products – Determination of water-soluble extract – Method for green coffee
DIN 10781 2000-11	Roasted ground coffee – Determination of loss in mass at 103°C (routine method for the determination of moisture content)
DIN 10802 2016-04	Analysis of tea – Determination of total ash (Modification: <i>Coffee matrix</i> )
USP41 Caffeine NF36 Vol.1 2018-05	Determination of loss in mass of caffeine (loss on drying) (Modification: <i>Higher drying temperature, shorter drying time</i> )
<b>1.3 Determination of food ingredients and contaminants in coffee, coffee products and caffeine by liquid chromatography with conventional detectors (UV/VIS, DAD and fluorescence detector) **</b>	
DIN 10767 2015-08	Analysis of coffee and coffee products – Determination of chlorogenic acids content; HPLC method
DIN ISO 20481 2011-01	Coffee and coffee products – Determination of the caffeine content using high performance liquid chromatography (HPLC) – reference method (Modification: <i>Ultrasound-assisted extraction, omission of MgO, 2-point calibration</i> )
DIN EN 14132 2009-09	Foodstuffs – Determination of ochratoxin A in barley and roasted coffee – HPLC method with immunoaffinity column clean-up (Modification: <i>Also for green coffee and roasted coffee</i> )
FCC Caffeine Monograph 2018-01	Determination of caffeine content using HPLC-UV
USP41 Caffeine NF36 Vol.1 2018-05	Determination of caffeine content using HPLC-UV

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**1.4 Determination of contaminants in coffee, coffee products and caffeine by gas chromatography with conventional detectors (FID)**

DIN 10783  
2011-01                      Analysis of coffee and coffee products –  
Determination of dichlormethane in decaffeinated green coffee  
using headspace gaschromatography  
(Modifications: *Additional analyte ethyl acetate; matrix caffeine  
and additional analyte ethyl acetate*)

**1.5 Determination of contaminants in coffee, coffee products and caffeine by gas chromatography with mass selective detectors (MS detector) \*\***

DIN EN ISO 18862  
2019-12                      Coffee and coffee products – Determination of acrylamide –  
Methods using HPLC-MS/MS and GC-MS after derivatisation  
(Restriction: *Here only for GC-MS*)

DIN EN 16620  
2015-06                      Food analysis – Determination of furan, 2-methylfuran and 3-  
methylfuran in coffee and coffee products by headspace gas  
chromatography and mass spectroscopy (Modification: *Additional  
analytes 2-methylfuran and 3-methylfuran*)

CL-02-015-00  
2024-01                      Determination of benzene and toluene in coffee and coffee  
products

**1.6 Determination of water content and pH by electrode measurement in coffee, coffee products and caffeine**

DIN 10772-1  
2009-06                      Analysis of coffee and coffee products –  
Karl Fischer method for the determination of water content – Part  
1: Reference method for roasted coffee  
(Modification: *Matrix also green coffee*)

DIN 10772-2  
2005-05                      Analysis of coffee and coffee products –  
Karl Fischer method for the determination of water content – Part  
2: Reference method for soluble coffee

DIN 10776-1  
2016-07                      Analysis of coffee and coffee products – Determination of pH and  
acid content – Part 1: Method for roasted coffee



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DIN 10776-2  
2016-07                      Analysis of coffee and coffee products –  
Determination of pH and acid content – Part 2: Method for soluble  
coffee

FCC  
Caffeine Monograph,  
Appendix IIB  
2018-12                      Karl Fischer method for determination of water in caffeine

**1.7 Other physical, physico-chemical and chemical analysis of coffee, coffee products and caffeine**

CL-02-023-00  
2022-02                      Capacitive determination of the moisture content of green coffee  
(*Sinar*<sup>TM</sup> moisture analysers)

CL-02-043-00  
2024-07                      Microwave resonance spectroscopic moisture analysis in green  
coffee (*TEWS*<sup>TM</sup> moisture analysers)

CL-02-056-00  
2021-09                      NIR spectroscopic determination of moisture and caffeine in green  
coffee

CL-02-112-00  
2023-09                      Determination of the average flow velocity of green coffee beans  
using a mass flow slide valve

FCC  
Caffeine Monograph,  
Appendix IIB  
2018-12                      Melting point determination of caffeine using a thermal melting  
point determination apparatus

USP41  
NF36 Chapter 741  
2018-05                      Melting point determination of caffeine using a thermal melting  
point determination apparatus

**Abbreviations used:**

ASU	Amtliche Sammlung von Untersuchungsverfahren (Official Collection of Methods of Analysis) on the basis of Section 64 LFGB (German Food and Feed Act)
CL-02-xxx-00	In-house methods of the Coffein Compagnie GmbH & Co. KG chemical laboratory
DIN	Deutsches Institut für Normung e.V. (German Institute for Standardization)
EN	European standard
FCC	Food Chemical Codex
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
LFGB	Lebensmittel- und Futtermittel-Gesetzbuch (German Food and Feed Act)
USP NF	United States Pharmacopeia National Formulary