

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-13107-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: 26.11.2020

Date of issue: 26.11.2020

Holder of certificate:

**LADR GmbH Medizinisches Versorgungszentrum Dr. Kramer und Kollegen
Lauenburger Straße 67, 21502 Geesthacht**

Tests in the fields:

Sampling and physical, physical-chemical, chemical und microbiological analysis of water (ground water, surface water, waste water, stagnant water, watercourse, swimming and bathing pool water);

analysis according to German Drinking Water Ordinance except for radioactive substance, sampling of raw- and drinking water;

sampling and microbiological analysis of industrial water in accordance with the German ordinance on evaporative cooling systems, cooling towers and wet separators – Section 3 (8) 42nd BImSchV 2017;

microbiological, molecularbiological und immunological analysis of food and animal feeding stuffs; sampling and microbiological tests for hygiene monitoring in the food sector; microbiological analysis of mineral- and table water;

specialist module for water;

Forensic, health care (hospital hygiene and infection prevention, Occupational and environmental medicine), pharmaceutical products and active agents

fields of testing: Hygiene and infection prevention, Forensic alcoholology, forensic toxicology as part of the fitness to drive diagnostics, clinical chemistry, pharmaceutical products, active agents and excipient analytic

Sampling: a part of the fitness of drive diagnostics

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

*The certificate together with its annex reflects the status at the time of the date of issue. The current status of the scope of accreditation can be found in the database of accredited bodies of Deutsche Akkreditierungsstelle GmbH.
<https://www.dakks.de/en/content/accredited-bodies-dakks>*

For the test methods marked with *, the testing laboratory is permitted to freely select standard test methods or equivalent methods without obtaining prior notification and consent from Deutsche Akkreditierungsstelle GmbH (DAkKS GmbH). The test methods listed are given by way of an example.

For the test methods marked with **, the testing laboratory is permitted to modify and develop new test methods without obtaining prior notification and consent from Deutsche Akkreditierungsstelle GmbH. The test methods listed are given by way of an example.

For the test methods marked with ***, the testing laboratory is permitted to use standards or equivalent testing methods listed here with different issue dates without obtaining prior notification and consent from Deutsche Akkreditierungsstelle GmbH (DAkKS GmbH).

The laboratory has an up-to-date list of all test methods within the flexible scope of accreditation

Field: Forensic

Field of testing: Forensic alcoholology

Type of testing: Photometry

Analyte (measured value)	Test material (matrix)	Test method
Determination of blood alcohol concentration	serum, plasma	ADH-method

Type of testing: Gas chromatography (GC)

Analyte (measured value)	Test material (matrix)	Test method
Determination of blood alcohol concentration	serum, plasma	GC-FID

Field of testing: Forensic toxicology as part of the fitness to drive diagnostics

Type of testing: Photometry

Analyte (measured value)	Test material (matrix)	Test method
creatinine	Urine	EIA

Type of testing: Liquid chromatography-mass spectrometry (LC-MS/MS)**

Analyte (measured value)	Test material (matrix)	Test method
ethyl glucuronide	urine, hair	LC-MS/MS

Annex to the accreditation certificate D-PL-13107-01-00

Analyte (measured value)	Test material (matrix)	Test method
amphetamines (amphetamine, methamphetamine, MDA, MDE(A), MDMA)	urine, hair	LC-MS/MS
methadonw, EDDP	urine, hair	LC-MS/MS
benzoylecgonine	urine, hair	LC-MS/MS
cocaine	hair	LC-MS/MS
opiatew (morphine, codeine, dehydrocodeine, 6-monoacetylmorphine)	urine, hair	LC-MS/MS
cannabinoides (THC-COOH)	urine	LC-MS/MS
cannabinoides (THC)	hair	LC-MS/MS
benzodiazepines (hydroxy-alprazolam, 7-aminoflunitrazepam, bromazepam, hydroxy-bromazepam, diazepam, lorazepam, nordiazepam, oxazepam, temazepam)	urine	LC-MS/MS
benzodiazepine (alprazolam, 7-aminoflunitrazepam, flunitrazepam, bromazepam, diazepam, lorazepam, nordiazepam, oxazepam)	hair	LC-MS/MS
opioides (buprenorphine, norbuprenorphine, tilidine, nortilidine, oxycodone, tramadol, O-desmethyltramadol, fentanyl, norfentanyl)	urine	LC-MS/MS
opioides (buprenorphin, norbuprenorphine, tilidin, nortilidine, oxycodon, tramadol, O-desmethyltramadol, fentanyl)	hair	LC-MS/MS

Valid from: 26.11.2020

Date of issue: 26.11.2020

Page 3 of 38

Sampling

Sampling as part of the fitness to drive diagnostics

Standard / date of issue In-house method /version	Sampling method	Test item
SOP (Doc.-No. 63996) version 4	Sampling to controll of astinence as part of the fitness to drive diagnostics	urine, hair

Field: health care (hospital hygiene and infection prevention)

Field of testing: Hygiene and infektion prevention

Type of testing: Mikrobiolocal-hygienical tests**

Standard / date of issue In-house method /version	Title of the Standard or the in-house method (specify any deviations / modifications of standard method)	Test item
SOP (Doc.-No.: 122984) Version 1	Hygienical analysis of environment – bacteriological populating of surfaces	Squeeze samples of surfaces
SOP (Doc.-No.: 122986) Version 2	testing of biological indicators from steam-sterilizer, dry heat sterilizer	biological indicators
SOP (Doc.-No.: 122987) Version 2	testing of biological indicators from cleaning and desinfection equipment	biological indicators
SOP (Doc.-No.: 122989) Version 4	Hygienical analysis of swab and washing solution of endoscops	Washing solution, swab of endoscops and testing spicemens
SOP (Doc.-No.: 122992) Version 1	Testing of biological indicators from dishwashers	biological indicators
SOP (Doc.-No.: 122993) Version 5	Testing of biological indicators from dishwashers for bedpans	biological indicators
SOP (Doc.-No.: 122994) Version 3	Mikrobiological analysis of disinfectant solution	Disinfectant solution in concentration to use
SOP (Doc.-No.: 123697) Version 1	Testing of biological indicators from washing machine	biological indicators

Field: pharmaceutical products and active agents

Valid from: 26.11.2020

Date of issue: 26.11.2020

Field of testing: pharmaceutical products, active agents and excipient analytic

Type of testing: Microbiological testing of nonsterile products***

Standard / date of issue In-house method /version	Title of the Standard or the in-house method (specify any deviations / modifications of standard method)	Test item
DIN EN ISO 13959:2016-03	Water for haemodialysis and related therapies (here: <i>Microbiology of dialysis water</i>)	Water for therapeutic purpose

Field: health care (Occupational and environmental)

Field of testing: Clinical Chemistry

Type of testing: Elektrochemical methods

Analyte (Measured value)	Test material (Matrix)	Test method
Fluoride	serum, urine	Potentiometry

Type of testing: Spectrometry (Atomabsorptionsspectrometry (AAS))

Analyte (Measured value)	Test material (Matrix)	Test method
Aluminium	plasma, serum, urine	Graphite furnace-AAS
Lead	EDTA-blood, urine	Graphite furnace-AAS
Cadmium	EDTA-blood, urine	Graphite furnace-AAS
Chromium	EDTA-blood, urine	Graphite furnace-AAS
Nickel	plasma, serum, urine	Graphite furnace-AAS
Selenium	plasma, serum	Graphite furnace-AAS
Zinc	plasma, serum, urine	Flame-AAS

Type of testing: Spectrometry (ICP with optical emission spectroscopy (ICP-OES))

Analyte (Measured value)	Test material (Matrix)	Test method
Copper	urine	ICP-OES

Type of testing: Spectrometry (ICP with mass spektrometry detection (ICP-MS))

Analyte (Measured value)	Test material (Matrix)	Test method
Aluminium	urine	ICP-MS
Arsenic	urine	ICP-MS
Lead	urine	ICP-MS
Cadmium	urine	ICP-MS
Chromium	urine	ICP-MS
Copper	urine	ICP-MS
Nickel	urine	ICP-MS
Mercury	urine	ICP-MS
Zinc	urine	ICP-MS

Type of testing: Chromatography (Gaschromatography-mass spectrometry (GC-MS))

Analyte (Measured value)	Test material (Matrix)	Test method
BTXE: benzene, toluene, xylene, styrene, ethylbenzene	EDTA-blood	GC-MS
lightly volatile halogenated hydrocarbons: dichloromethane, tetrachloroethylene, tetrachloromethane, 1,2-dichloroethane, 1,1,1-trichloroethane, trichloroethylene	EDTA-blood	GC-MS

Type of testing: Spectrometry (UV-/VIS-Photometry)

Analyte (Measured value)	Test material (Matrix)	Test method
Delta-Aminolaevulinic acid	urine	Photometry

Prüfart: Chromatography (high performance liquid chromatography (HPLC/DAD and HPLAC/FLD))

Analyte (Measured value)	Test material (Matrix)	Test method
Aromatic Carbonic acids: Hippuric acid, Methylhippuric acid, Mandelic acid, Phenylglyoxylic acid	urine	HPLC/DAD
†,†-Muconic acid	urine	HPLC/DAD
Phenol, Cresol	urine	HPLC/FLD

1 Analysis of water (ground water, surface water, waste water, stagnant water, watercourse, swimming and bathing pool water) ***

1.1 Sampling

DIN 38402-11 (A 11) 2009-02	Sampling of waste water
DIN 38402-12 (A 12) 1985-06	sampling from barrages and lakes
DIN 38402-13 (A 13) 1985-12	sampling from aquifers
DIN ISO 5667-5 (A 14) 2011-02	Water quality - Sampling - Part 5: Guidance on sampling of drinking water from treatment works and piped distribution systems
DIN EN ISO 5667-6 (A 15) 2016-12	Water quality - Sampling - Part 6: Guidance on sampling of rivers and streams
DIN 38402-19 (A 19) 1988-04	sampling of swimming pool and bathing pool water

Annex to the accreditation certificate D-PL-13107-01-00

DIN EN ISO 5667-3 (A 21) 2019-07	Water quality - Sampling - Part 3: Preservation and handling of water samples
DIN 38402-30 (A 30) 1998-07	Pretreatment, homogenization and aliquotation of non-homogeneous water samples
DIN EN ISO 19458 (K 19) 2006-12	Water quality - Sampling for microbiological analysis
DIN 19643-1 2012-11	Treatment of water of swimming pools and baths - Part 1: General requirements (<i>only 14.2 Sampling</i>)

1.2 Organoleptic tests

DEV (B 1/2) 1971	Analysis of smell and taste
DIN EN 1622 (B 3) 2006-10	Water quality - Determination of the threshold odour number (TON) and threshold flavour number (TFN) (<i>Annex C qualitative, simplified procedure</i>)

1.3 Physical and physical-chemical parameters

DIN EN ISO 7887 (C 1) 2012-04	Water quality - Examination and determination of colour
DIN 38404-3 (C 3) 2005-07	Determination of absorption in the range of the ultraviolet radiation, Spectral absorptions coefficient
DIN 38404-4 (C 4) 1976-12	Determination of Temperature
DIN EN ISO 10523 (C 5) 2012-04	Water quality - Determination of pH
DIN 38404-6 (C 6) 1984-05	Determination of the oxidation reduction (redox) potential
DIN EN 27888 (C 8) 1993-11	Water quality; determination of electrical conductivity
DIN 38404-10 (C 10) 2012-12	Calculation of the calcit saturation of water

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