

Deutsche Akkreditierungsstelle

Annex to the Partial Accreditation Certificate D-PL-14170-01-02 according to DIN EN ISO/IEC 17025:2018

Valid from: 13.01.2023

Date of issue: 25.07.2023

This annex is a part of the accreditation certificate D-PL-14170-01-00.

Holder of partial accreditation certificate:

GBA Gesellschaft für Bioanalytik mbH
Goldtschmidtstraße 5
21073 Hamburg, Germany

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 confirm generally with the principles of DIN EN ISO 9001.

Tests in the fields:

Physical, physico-chemical and chemical analysis of water (waste water, groundwater, surface water, running water, leachate, bottled water, mineral water, swimming pool and bathing pool water)

Selected sensory analysis of water, waste water, groundwater, surface water, leachate, drinking water

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

Page 1 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

Microbiological analysis of water (waste water, groundwater, surface water, flowing water, running water, bottled water, raw and drinking water, water from re cooler systems, swimming pool and bathing pool water, water from dental units)

Ecotoxicological analysis of water, (waste water, groundwater, surface water, running water, leachate)

Sampling of raw and drinking water, waste water, swimming pool and bathing pool water, surface water, water from aquifers, water from mineral springs and spas

Analysis in accordance with the German Drinking Water Ordinance with the exception of radioactive substances

Sampling and microbiological analysis of industrial water in accordance with Section 3 (8)

42nd BImSchV (Federal Immission Control Ordinance)

Specialist module for water

Valid for the locations:

Goldtschmidtstraße 5, 21073 Hamburg

Harburger Ring 17, 21073 Hamburg¹⁾

Stätzlinger Str. 70, 86165 Augsburg¹⁾

Magnusstraße 11, 12489 Berlin

Meißner Ring 3, 09599 Freiberg

Bruchstraße 5c, 45883 Gelsenkirchen

Glückaufstraße 56, 45896 Gelsenkirchen (Scholven)

Im Emscherbruch 11, 45699 Herten

Daimlerring 37, 31135 Hildesheim

Schelsenweg 24 a, 41238 Mönchengladbach

Mülforter Str. 59, 41238 Mönchengladbach¹⁾

Flensburger Straße 15, 25421 Pinneberg

Julius-Hölder-Str. 20, 70597 Stuttgart

Hamburger Straße 31, 21224 Rosengarten¹⁾

¹⁾No conformity assessment activities are carried out at these locations. These locations are used to store equipment for sampling or as office space.

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 2 of 36

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

Table of contents

Table of contents	3
1 Water (waste water, surface water, groundwater, raw water, leachate, swimming pool and bathing pool water, water from dental units, drinking water, mineral and bottled water and water from recoler systems)	4
2 Specialist module for water Status: LAWA of 18.10.2018.....	21
Section 1: Sampling and general parameters	21
Section 2: Photometry, ion chromatography, titrimetry	22
Section 3: Elemental analysis.....	25
Section 4/5: Group and sum parameters	27
Section 6: Gas chromatographic methods.....	28
Section 7: HPLC methods.....	30
Section 8: Microbiological methods (not used).....	30
Section 9.1: Biological methods, bio-assays (part 1).....	30
Section 9.2: Biological methods, bio-assays (part 2).....	30
3 Test methods in accordance with the German Drinking Water Regulation – TrinkwV	31
4 Sampling and microbiological analysis of industrial water in accordance with Section 3 (8) 42nd BImSchV.....	35
Abbreviations used.....	36

The test methods are marked with the following symbols for the locations at which they are carried out:

B	=	Berlin
FG	=	Freiberg
GE	=	Gelsenkirchen
HE	=	Herten
HHGS	=	Hamburg: Goldtschmidtstraße 5
HI	=	Hildesheim
MG	=	Mönchengladbach: Schelsenweg 24a
PI	=	Pinneberg
SV	=	Scholven
S	=	Stuttgart

The testing laboratory is permitted to apply the listed standardised or equivalent test methods with different versions of the standards, with the exception of the specialist module for water, without obtaining prior notification and consent from DAkKS.

Within the specified test fields, the testing laboratory is permitted to do the following without obtaining prior notification and consent from DAkKS GmbH

*) Freely select standard test methods or equivalent test methods.

***) Modify test methods and develop new test methods.

The test methods listed are given by way of example.

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

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 3 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

1 Water (waste water, surface water, groundwater, raw water, leachate, swimming pool and bathing pool water, water from dental units, drinking water, mineral and bottled water and water from re cooler systems)

1.1 Sampling

DIN EN ISO 5667–1 (A 4) 2007–04	Water quality – Sampling – Part 1: Guidance on the design of sampling programmes and sampling techniques	B, GE, PI, S
DIN 38402–A 11 2009–02	Sampling of waste water (Modification: <i>Matrix also leachate</i>)	B, FG, GE, HI, PI, SV
DIN 38402–A 12 1985–06	Sampling from barrages and lakes	B, FG, GE, HI, PI
DIN 38402–A 13 1985–12	Sampling from aquifers	B, FG, GE, HI, PI
DIN 38402–A 13 2021–12	Design and performance of the sampling of groundwater	B, FG, GE, HI, PI
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	B, FG, GE, HI, PI, S
DIN 38402–A 15 2010–04	Sampling from running waters	B, FG, GE, HI, PI
DIN EN ISO 5667–6 (A 15) 2016–12	Water quality – Sampling – Part 6: Guidance on sampling of rivers and streams	GE, HI, PI
DIN 38402–A 18 1991–05	Sampling of water from mineral springs and spas	GE, HI, PI
DIN EN ISO 5667–3 (A 21) 2019–07	Water quality – Sampling – Part 3: Preservation and handling of water samples	B, FG, GE, MG, HI, PI, S
DIN 38402–A 30 1998–07	Pretreatment, homogenisation and aliquotation of non-homogeneous water samples	B, FG, GE, HI, PI
DIN EN ISO 19458 (K 19) 2006–12	Water quality – Sampling for microbiological analysis	B, FG, GE, HI, PI, SV, S

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 4 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

ISO 5667–11 2009–04	Water quality – Sampling – Part 11: Guidance on sampling of groundwaters	B, GE, HI, PI
DIN 19643–1 2012–11	Treatment of water of swimming pools and baths – Part 1: General requirements (Restriction: <i>Here only sampling</i>)	FG, PI, S
VDI 2047 Blatt 2 2019–01	Open recoler systems – Securing hygienically sound operation of evaporative cooling systems (VDI Cooling Tower Code of Practice)	FG, HI, PI, S
DVGW W 112 2011–10	Principles of groundwater sampling from groundwater monitoring wells	B, GE, PI
DVGW W 115 2008–07	Drilling for the investigation, observation and extraction of groundwater	PI
DVWK Rule 128 1992	Scope of sampling and examination of groundwater samples	GE, PI
DVWK Data Sheet 245 1997	Depth-oriented sampling from groundwater monitoring wells	GE, PI
DVGW twin Nr.10 2015–03	Guidance for sampling from water meters for the purpose of microbiological analysis for <i>Pseudomonas aeruginosa</i>	HHGS
DWA–A 909 2011–12	Principles of groundwater sampling from groundwater monitoring wells	B, GE, PI
LAWA Gauge Regulation Annex D 1991	Guideline on the measurement and determination of drainage and flow rates	PI
Data Sheet 4 on quality assurance of FHH–UB 1999–10	Sampling of groundwater	HI, PI
UBA Recommendation 2018–12	Systemic analysis of drinking water installations for legionella in accordance with the German Drinking Water Ordinance – Sampling, examination and indication of the result	HHGS, S

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 5 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

UBA Recommendation Sections E and F with Annexes 1 and 2) 2020–03	Recommendation of the Federal Environmental Agency for the sampling and detection of Legionella in evaporative cooling plants, cooling towers and wet separators (Restriction: <i>Here sampling</i>)	FG, GE, HI, PI, SV, S
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1.2 Sample pretreatment

DIN EN ISO 15587–2 (A 32) 2002–07	Water quality – Digestion for the determination of elements in water – Part 2: Nitric acid digestion	HI, PI
DIN EN ISO 6468 (F 1) 1997–02	Water quality – Determination of certain organochlorine insecticides, polychlorinated biphenyls and chlorobenzenes – Gas chromatographic method after liquid–liquid extraction (<i>FG: Extraction only</i>)	FG
DIN 38407–F 3 1998–07	Gas chromatographic determination of polychlorinated biphenyls (Restriction: <i>FG: Extraction only</i>)	FG
DIN 38407–F 39 2011–09	Water quality – Determination of selected polycyclic aromatic hydrocarbons (PAH) – Method using gas chromatography with mass spectrometric detection (GC–MS) (Restriction: <i>FG: Extraction only</i>)	FG
DIN ISO 28540 (F 40) 2014–05	Water quality – Determination of 16 polycyclic aromatic hydrocarbons (PAH) in water – Method using gas chromatography with mass spectrometric detection (Restriction: <i>FG: Extraction only</i>)	FG

1.3 Simple descriptive tests of sensory parameters (turbidity, odour, taste and putrefactiveness)

DIN EN 1622 (B 3) 2006–10	Water quality – Determination of the threshold odour number (TON) and threshold flavour number (TFN) (Restriction: <i>Odour threshold only</i>)	PI
DIN EN 1622 (B 3) Annex C 2006–10	Water quality – Determination of the threshold odour number (TON) and threshold flavour number (TFN), Annex C (Qualitative, simplified method) (Restriction B, S: <i>Here only drinking water matrix</i>)	B, FG, GE, HI, S
DIN EN ISO 7027 (C 2) 2000–04	Water quality – Determination of turbidity (Restriction: <i>Only on–site measurements</i>)	FG, GE, PI

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 6 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

DIN EN ISO 7027–2 (C 22) 2019–06	Water quality – Determination of turbidity – Part 2: Semi–quantitative methods for the assessment of transparency of waters (Restriction: <i>Only field methods as per 5.1</i>)	B, FG, GE, HI, PI
DEV H 22 1960	Determination of putrefactiveness	GE, PI
DVGW W 273 Data Sheet 2019–05	Guidance on carrying out sensory tests in water laboratories	S

1.4 Atomic and mass spectrometry of elements

1.4.1 Determination of mercury by atomic absorption spectroscopy (K–AAS) (*: PI)

DIN EN ISO 12846 (E 12) 2012–08	Water quality – Determination of mercury – Method using atomic absorption spectrometry (AAS) with and without enrichment (Restriction: <i>PI: Without enrichment</i>)	PI, SV
ASTM D6722 2011	Standard Test Method for Total Mercury in Coal and Coal Combustion Residues by Direct Combustion Analysis (Modification: <i>Only halogenated water samples</i>)	HE

1.4.2 Determination by optical emission spectrometry with inductively coupled plasma (ICP–OES) *

DIN EN ISO 11885 (E 22) 2009–09	Water quality – Determination of selected elements by inductively coupled plasma atomic emission spectroscopy (ICP–OES)	PI
ASU L 00.00–144 2019–07	Analysis of foodstuffs – Determination of calcium, copper, iron, magnesium, manganese, phosphorus, potassium, sodium, sulphur and zinc in foodstuffs with ICP–OES (adoption of standard of the same name DIN EN 16943, July 2017 edition) (Restriction: <i>Measurement only</i> ; Modification: <i>Here in bottled and mineral water</i>)	PI

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 7 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

1.4.3 Determination by inductively coupled plasma mass spectrometry (ICP–MS) *

DIN EN ISO 17294–2 (E 29) 2017–01	Water quality – Application of inductively coupled plasma mass spectrometry (ICP–MS) – Part 2: Determination of selected elements including uranium isotopes	PI
ASU L 00.00–135 2011–01	Analysis of foodstuffs – Determination of arsenic, cadmium, mercury and lead in foodstuffs by ICP–MS after pressure digestion (adoption of standard of the same name, DIN EN 15763, April 2010 edition) (Restriction: <i>Measurement only</i> ; Modification: <i>Here in bottled and mineral water</i>)	PI

1.5 Determination of parameters using calculation methods

DIN 38404–C 10 2012–12	Calcit saturation of water	GE, PI
DEV–D 8 1971	Carbonic acid chemistry: Calculation of dissolved carbon dioxide (of free carbonic acid), carbonate and hydrogen carbonate ion	FG, GE, PI
DIN 38409–H 6 1986–01	Water hardness (Modification: <i>Measurement of Ca and Mg by ICP</i>)	PI
DEV H 12 1981	Nitrogen (total), calculation	GE

1.6 Determination of summary indices of actions and substances, anions and dissolved gases by electrode measurement (*: PI)

DIN 38404–C 4 1976–12	Determination of temperature	B, FG, GE, HI, PI, S
DIN EN ISO 10523 (C 5) 2012–04	Water quality – Determination of pH	B, FG, GE, HI, PI, SV, S
DIN 38404–C 6 1984–05 Corrigendum 1 2018–12	Determination of the oxidation reduction (redox) potential	B, FG, GE, HI, PI

Valid from: 13.01.2023

Date of issue: 25.07.2023

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

DIN EN 27888 (C 8) 1993–11	Water quality; Determination of electrical conductivity	B, FG, GE, HI, PI, SV, S
DIN 38405–D 4–1 1985–07	Determination of fluoride (Restriction: <i>Here only section 2 (DIN 38405–D 4–1): Direct determination of fluoride by fluoride ion–selective electrode</i>)	FG, HE
DIN EN ISO 5814 (G 22) 2013–02	Water quality – Determination of dissolved oxygen – Electrochemical probe method	B, FG, GE, HI, PI, S
DIN 38408–G 23 1987–11	Oxygen saturation index	FG, PI
DIN EN ISO 5815–1 (H 50) 2020–11	Water quality – Determination of biochemical oxygen demand after n days (BOD ₅) – Part 1: Dilution and seeding method with allylthiourea acid addition	GE
DIN EN 1899–1 (H 51) 1998–05	Water quality – Determination of biochemical oxygen demand after n days (BOD _n) – Part 1: Dilution and seeding method with allylthiourea acid addition	GE
DIN EN 1899–2 (H 52) 1998–05	Water quality – Determination of biochemical oxygen demand after n days (BOD _n) – Part 2: Methods for undiluted samples	GE

1.7 Determination of summary indices of actions and substances by elemental analysis

DIN EN 1484 (H 3) 2019–04	Water analysis – Guidelines for the determination of total organic carbon (TOC) and dissolved organic carbon (DOC)	GE, PI, SV
DIN 38409–H 8 1984–09	Determination of extractable organically bonded halogens (Modification: <i>Combustion in an oxygen stream</i>)	GE
DIN EN ISO 9562 (H 14) 2005–02	Water quality – Determination of adsorbable organically bound halogens (AOX)	GE
DIN EN 1485 (H 14) 1996–11	Water quality – Determination of adsorbable organically bound halogens (AOX)	GE
DIN 38409–H 22 2001–02	Determination of dissolved adsorbable and organically bound halogens in salt loaded water after solid–phase enrichment (SPE–AOX)	GE
DIN EN 12260 (H 34) 2003–12	Water quality – Determination of nitrogen – Determination of bound nitrogen (TN _b), following oxidation to nitrogen oxides	GE

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 9 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

1.8 Determination of organic compounds by liquid chromatography

1.8.1 Determination by liquid chromatography with conventional detectors (HPLC–DAD, HPLC–UV)

In-house method PI–MA–M 02–002 2022–03	Determination of aldehydes in water, solids and on air cartridges / silica gel / passive collectors enriched samples by HPLC–DAD	PI
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1.8.2 Determination by liquid chromatography with mass–selective detectors (LC–MS/MS) **

DIN EN ISO 22478 (F 21) 2006–07	Water quality – Determination of certain explosives and related compounds – Method using HPLC with UV detection (Modification: <i>MS/MS detection and processing by SPE or analysis by direct injection</i>)	PI
DIN 38407–F 36 2014–09	Determination of selected active substances of plant protection products and other organic substances in water – Method using high performance liquid chromatography and mass spectrometric detection (HPLC–MS/MS or –HRMS) after direct injection	PI
DIN 38407–F 42 2011–03	Determination of selected polyfluorinated compounds (PFC) in water – Method using high performance liquid chromatography and mass spectrometric detection (HPLC–MS/MS) after solid–liquid extraction	PI
DIN ISO 16308 (F 45) 2017–09	Water quality – Determination of glyphosate and AMPA – Method using high performance liquid chromatography (HPLC) with tandem mass spectrometric detection (Modification: <i>Additionally glufosinate</i>)	PI
DIN 38407–F 47 2017–07	Determination of selected active pharmaceutical ingredients and other organic substances in water and waste water – Method using high performance liquid chromatography and mass spectrometric detection (HPLC–MS/MS or HRMS) after direct injection – GBA: Measurement using HPLC–MS/MS	PI

Valid from: 13.01.2023

Date of issue: 25.07.2023

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

DIN EN ISO 21676 2022-01	Water quality – Determination of the dissolved fraction of selected active pharmaceutical ingredients, transformation products and other organic substances in water and treated waste water – Method using high performance liquid chromatography and mass spectrometric detection (HPLC–MS/MS or –HRMS) after direct injection	PI
DIN 38413–P 6 2007–02	Determination of acrylamide – Method using high performance liquid chromatography with mass spectrometric detection (HPLC–MS/MS)	PI
In–house method PI–MA–M 02–007 2022–03	Determination of active pharmaceutical ingredients and other organic compounds in water and soil by LC–MS/MS	PI
In–house method PI–MA–M 02–008 2019–09	Determination of benzotriazoles in water by LC–MS/MS	PI
In–house method PI–MA–M 02–019 2022–03	Determination of selected heterocycles by HPLC–MS/MS in water and soil	PI
In–house method PI–MA–M 02–024 2022–03	Determination of selected active substances of plant protection products by LC–MS/MS in water and soil	PI
In–house method PI–MA–M 02–027 2022–03	Determination of polar nitrogen compounds in soil and water by LC–MS/MS	PI
In–house method PI–MA–M 02–031 2022–03	Determination of X–ray contrast media in water by HPLC–MS/MS	PI
In–house method PI–MA–M 02–032 2022–03	Determination of sweeteners in water by LC–MS/MS	PI
In–house method PI–MA–M 02–036 2022–03	Determination of tetracyclines in water by LC–MS/MS	PI
In–house method PI–MA–M 02–038 2022–03	Determination of trifluoroacetic acid and sulphamic acid in water by LC–MS/MS	PI

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 11 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

1.9 Determination of organic compounds by gas chromatography

1.9.1 Determination by gas chromatography with conventional detectors (GC-FID, GC-ECD) (*: PI)

DIN 38407-F 3 1998-07	Gas chromatographic determination of polychlorinated biphenyls	GE
DIN EN ISO 9377-2 (H 53) 2001-07	Water quality – Determination of hydrocarbon oil index – Part 2: Method using solvent extraction and gas chromatography (Modification: <i>PI: Additional analysis after Petrol Pack</i>)	GE, HI, PI
In-house method HI-MA-M 03-019 # U 2021-10	Volatile alkanes C1 to C4 in water with HS-FID	HI

1.9.2 Determination by gas chromatography with mass selective detectors (GC-MS, GC-MS/MS) (*: PI)

DIN EN ISO 6468 (F 1) 1997-02	Water quality – Determination of certain organochlorine insecticides, polychlorinated biphenyls and chlorobenzenes – Gas chromatographic method after liquid-liquid extraction (Modification: <i>Additionally PCB 118, measurement with GC-MSD or GC-MS/MS</i>)	PI
DIN 38407-F 2 1993-02	Determination of low volatile halogenated hydrocarbons by gas chromatography (Modification: <i>GE: In combination with DIN 51527 T1 (only PCBs)</i>)	GE, PI
DIN 38407-F 3 1998-07	Gas chromatographic determination of polychlorinated biphenyls	GE, PI
DIN EN ISO 10301 (F 4) 1997-08	Water quality – Determination of highly volatile halogenated hydrocarbons – Gas chromatographic methods or GC-MSD	GE, HI, PI
DIN 38407-F 9-1 1991-05	Determination of benzene and some of its derivatives (Modification: <i>Additionally aliphatics C₅-C₁₀, diethylbenzenes; evaluation also using GC-MSD</i>)	GE, HI, PI
DIN EN ISO 17353 (F 13) 2005-11	Water quality – Determination of selected organotin compounds – Gas chromatographic method	PI

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 12 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

DIN EN 12673 (F 15) 1999-05	Water quality – Gas chromatographic determination of some selected chlorophenols in water (Modification: <i>Additionally phenol, cresols and xylenols and also triclosan and bisphenol A</i>)	PI
DIN 38407-F 17 1999-02	Determination of selected nitroaromatic compounds by gas chromatography (GC-MSD)	PI
DIN EN ISO 18856 (F 26) 2005-11	Water quality – Determination of selected phthalates using gas chromatography/mass spectrometry	PI
DIN 38407-F 27 2012-10	Determination of selected phenols in groundwater and leachate, aqueous eluates and percolates	PI
DIN EN ISO 22032 (F 28) 2009-07	Water quality – Determination of selected polybrominated diphenyl ethers in sediment and sewage sludge – Method using extraction and gas chromatography/mass spectrometry (Modification: <i>Other analytes polybrominated biphenyls (PBB), tetrabromobisphenol A (TBBP-A), hexabromocyclododecane (HBCD), tribromanisole (TBA); liquid/liquid extraction from water samples, other internal standards</i>)	PI
DIN 38407-F 30 2007-12	Determination of trihalogenmethanes in bathing water and pool water with headspace-gas chromatography	PI
DIN EN ISO 18857-1 (F 31) 2007-02	Water quality – Determination of selected alkylphenols – Part 1: Method for non-filtered samples using liquid-liquid extraction and gas chromatography with mass selective detection (Modification: <i>Additional determination of octylphenols and ethoxylates; extraction with hexane and different clean-up</i>)	PI

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 13 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

DIN EN ISO 18857-2 (F 32) 2012-01	Water quality – Determination of selected alkylphenols – Part 2: Gas chromatographic–mass spectrometric determination of alkylphenols, their ethoxylates and bisphenol A in non–filtered samples following solid–phase extraction and derivatisation	PI
DEV-F 33 2002	Determination of polychlorinated dibenzodioxins (PCDD) and polychlorinated dibenzofurans (PCDF)	PI
DIN 38407-F 37 2013-11	Determination of organochlorine pesticides, polychlorinated biphenyls and chlorobenzene in water – Method using gas chromatography and mass spectrometric detection (GC–MS) after liquid–liquid extraction <i>(Modification: Measurement also with GC–MS/MS; additional analysis of cypermethrin, permethrin, cyhalothrin and deltamethrin)</i>	PI
DIN 38407-F 39 2011-09	Water quality – Determination of selected polycyclic aromatic hydrocarbons (PAH) – Method using gas chromatography with mass spectrometric detection (GC–MS)	GE, PI
DIN ISO 28540 (F 40) 2014-05	Water quality – Determination of 16 polycyclic aromatic hydrocarbons (PAH) in water – Method using gas chromatography with mass spectrometric detection	GE, PI
DIN 38407-F 43 2014-10	Determination of selected easily volatile organic compounds in water – Method using gas chromatography and mass spectrometry by static headspace technique (HS–GC–MS)	GE, HI, PI
DIN EN ISO 12010 (H 47) 2019-09	Water quality – Determination of short–chain polychlorinated alkanes (SCCPs) in water – Method using gas chromatography–mass spectrometry (GC–MS) and negative–ion chemical ionisation (NCI) <i>(Modification: Additional determination of the MCCPS, modular clean–up, modified quantification, detector GC–MSD)</i>	PI
DIN 38413-P 2 1988-05	Determination of vinyl chloride (chloroethene) by headspace gas chromatography	HI
DIN EN ISO 16588 (P 10) 2004-02	Water quality – Determination of six complexing agents – Gas chromatographic method	PI

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 14 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

ISO 8165–2 1999–07	Water quality – Determination of selected phenols – Part 2: Method by derivatisation and gas chromatography	PI
ISO 17858 2007–02	Water quality – Determination of dioxin–like polychlorinated biphenyls – Method using gas chromatography / mass spectrometry (Modification: <i>Measurement with Triple Quad</i>)	PI
DIN EN 12766–3 2005–02 Corrigendum 1 2007–06	Petroleum products and used oils – Determination of PCBs and related products – Part 3: Determination and quantification of polychlorinated terphenyls (PCT) and polychlorinated benzyl toluenes (PCBT) content by gas chromatography (GC) using an electron capture detector (ECD) (Modification: <i>Matrix water, measurement by GC–MS, liquid/liquid extraction</i>)	PI
EPA Method 522 Version 1.0 2008–09	Determination of 1,4–Dioxane in Drinking Water by Solid Phase Extraction (SPE) and Gas Chromatography Mass Spectrometry (GC/MS) with Selected Ion Monitoring (SIM) (Modification: <i>Waters matrix</i>)	GE
In–house method HI–MA–M 03–022 # U 2021–10	Hausverfahren: Organic acids (C ₁ –C ₅) in water, eluates and sludge after derivatisation by HS–GC–MS	HI
In–house method HI–MA–M 03–024 # U 2021–10	Heterocycles in water with GC–MS	HI
In–house method PI–MA–M 03–006 2022–03	Screening of water and soil	PI
In–house method PI–MA–M 03–077 2022–03	Glycols in water by GC–MSD	PI
In–house method PI–MA–M 03–079 2022–03	Organophosphates in various matrices by GC–MS	PI
In–house method PI–MA–M 03–081 2022–03	Musk compounds in water and solids (e.g. detergents) using GC–MSD	PI

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 15 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

In-house method PI-MA-M 03-086 2022-03	Terpenes in water using GC-MSD	PI
In-house method PI-MA-M 03-098 2022-03	Selected heterocyclic compounds by Kora list in waters and eluates using GC-MSD	PI
In-house method PI-MA-M 03-112 2022-03	Estrogens, estrogen metabolites and sitosterol in water and soil samples	PI

1.10 Gravimetric determination of summary indices of actions and substances (*: PI)

DEV C 9 1974	Determination of density	HE, PI, SV
DIN 38409-H 1 1987-01	Determination of total dry residue, filtrate dry residue and residue on ignition	B, FG, GE, HI, PI
DIN 38409-H 2-2/3 1987-03	Determination of filterable matter and the residue on ignition	GE, HI, PI
DIN EN 872 (H 33) 2005-04	Water quality – Determination of suspended solids – Method by filtration through glass fibre filters	GE, HI, PI
DIN ISO 11349 (H 56) 2015-12	Water quality – Determination of low-volatility lipophilic substances – Gravimetric method	GE, HI, PI
DIN EN 15216 2008-01	Characterisation of waste – Determination of total dissolved solids (TDS) in water and eluates (Modification: Matrix here water)	B, FG, GE, HI, PI

1.11 Determination of anions and cations by ion chromatography (*:PI)

DIN EN ISO 10304-1 (D 20) 2009-07	Water quality – Determination of dissolved anions by liquid chromatography of ions – Part 1: Determination of bromide, chloride, fluoride, nitrate, nitrite, phosphate and sulphate (Restriction: <i>PI and SV: No determination of nitrite and phosphate</i>)	HE, PI, SV
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Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 16 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

DIN EN ISO 10304-3 (D 22) 1997-11	Water quality – Determination of dissolved anions by liquid chromatography of ions – Part 3: Determination of chromate, iodide, sulphite, thiocyanate and thiosulphate HE: Only iodide, sulphite, thiosulphate	HE
DIN EN ISO 10304-4 (D 25) 1999-07	Water quality – Determination of dissolved anions by liquid chromatography of ions – Part 4: Determination of chlorate, chloride and chlorite in water with low contamination	PI
DIN EN ISO 14911 (E 34) 1999-12	Water quality – Determination of dissolved Li^+ , Na^+ , NH_4^+ , K^+ , Mn^{2+} , Ca^{2+} , Mg^{2+} , Sr^{2+} and Ba^{2+} using ion chromatography – Method for water and waste water (Restriction: <i>Only NH_4^+</i>)	SV
DIN EN ISO 10304-2 1996-11	Water quality – Determination of dissolved anions by liquid chromatography of ions – Part 2: Determination of bromide, chloride, nitrate, nitrite, orthophosphate and sulphate in waste water (Restriction: <i>No determination of nitrite and phosphate</i>)	PI

1.12 Determination of bacteria using cultural microbiological methods *

DIN EN ISO 6222 (K 5) 1999-07	Water quality – Enumeration of culturable microorganisms – Colony count by inoculation in a nutrient agar culture medium	HHGS, S
DIN EN ISO 9308-2 (K 6-1) 2014-06	Water quality – Enumeration of Escherichia coli and coliform bacteria – Part 2: Most probable number method	HHGS, S
DIN EN ISO 16266 (K 11) 2008-05	Water quality – Detection and enumeration of Pseudomonas aeruginosa – Membrane filtration method	HHGS, S
DIN EN ISO 9308-1 (K 12) 2017-09	Water quality – Enumeration of Escherichia coli and coliform bacteria – Part 1: Membrane filtration method for waters with low bacterial background flora	HHGS, S
DIN EN ISO 7899-2 (K 15) 2000-11	Water quality – Detection and enumeration of intestinal enterococci – Part 2: Membrane filtration method	HHGS, S
DIN EN ISO 11731 (K 23) 2019-03	Water quality – Enumeration of legionella	HHGS, S

Valid from: 13.01.2023

Date of issue: 25.07.2023

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

DIN EN ISO 14189 (K 24) 2016–11	Water quality – Enumeration of <i>Clostridium perfringens</i> – Method using membrane filtration	HHGS, S
ISO 11731 2017–05	Water quality – Enumeration of legionella	HHGS, S
TrinkwV Section 15 Paragraph (1c) 2018–01	Enumeration of culturable microorganisms – Colony count by inoculation in a nutrient agar culture medium (colony count at 22 °C and 36 °C)	HHGS, S
UBA Recommendation 2018–12	Systemic analysis of drinking water installations for legionella in accordance with the German Drinking Water Ordinance – Sampling, examination and indication of the result	HHGS, S
UBA Recommendation 2020–03	Recommendation of the Federal Environmental Agency for the sampling and detection of Legionella in evaporative cooling plants, cooling towers and wet separators	HHGS, S

1.13 Determination of summary indices of actions and substances, anions, cations, dissolved gases, hydrazine and surfactants by photometry (*: PI)

DIN EN ISO 7887 (C 1) 2012–04	Water quality – Examination and determination of colour (Restriction: <i>GE: Method A only</i>)	GE, PI
DIN 38404–C 3 2005–07	Determination of absorption in the range of UV radiation, spectral absorption coefficient	PI
DIN EN ISO 7027–1 (C 21) 2016–11	Water quality – Determination of turbidity – Part 1: Quantitative method	FG, PI
DIN EN ISO 14403–2 (D 3) 2012–10	Water quality – Determination of total cyanide and free cyanide using flow analysis (FIA and CFA) – Part 2: Method using continuous flow analysis (CFA)	GE, PI
DIN EN ISO 6878 (D 11) 2004–09	Water quality – Determination of phosphorus – Ammonium molybdate photometric method	PI, SV
DIN 38405–D 24 1987–05	Photometric determination of chromium(VI) using 1,5– diphenylcarbonohydrazide	GE, PI
DIN 38405–D 26 1989–04	Photometric determination of dissolved sulphide	PI

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 18 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

DIN 38405–D 27 1992–07	Determination of readily liberated sulphide	PI
DIN 38405–D 27 2017–10	Determination of sulphide by gas extraction	PI
DIN EN ISO 13395 (D 28) 1996–12	Water quality – Determination of nitrite nitrogen and nitrate nitrogen and the sum of both by flow analysis (CFA and FIA) and spectrometric detection	PI
DIN EN ISO 18412 (D 40) 2007–02	Water quality – Determination of chromium(VI) – Photometric method for weakly contaminated water	PI
DIN EN ISO 15681–2 (D 46) 2019–05	Water quality – Determination of orthophosphate and total phosphorus contents by flow analysis (FIA and CFA) – Part 2: Method using continuous flow analysis (CFA)	PI
DIN 38406–E 1 1983–05	Determination of iron	PI
DIN EN ISO 11732 (E 23) 2005–05	Water quality – Determination of ammonium nitrogen – Method by flow analysis (CFA and FIA) and spectrometric detection	GE, PI, SV
DIN EN ISO 7393–2 (G 4–2) 2019–03	Water quality – Determination of free chlorine and total chlorine – Part 2: Colorimetric method using N,N–dialkyl–1,4–phenylenediamine, for routine control purposes	FG, PI, S
DIN ISO 17289 (G 25) 2014–12	Water quality – Determination of dissolved oxygen – Optical sensor method (Modification: <i>Also on site</i>)	GE, PI, S
DIN EN 38409–H 23 1980–05	Determination of methylene blues and bismut active substances	GE
DIN EN ISO 11905–1 (H 36) 1998–08	Water quality – Determination of nitrogen – Part 1: Method using oxidative digestion with peroxodisulphate	PI
DIN EN ISO 14402 (H 37) 1999–12	Water quality – Determination of phenol index by flow analysis (FIA and CFA)	GE, PI
DIN ISO 15705 (H 45) 2003–01	Water quality – Determination of the chemical oxygen demand index (ST–COD) – Small–scale sealed tube method	GE, HI, PI

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 19 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

DIN 38409–H 60 2019–12	Spectrometric determination of the chlorophyll–a concentration in water	PI
DIN 38413–P 1 1982–03	Determination of hydrazine	PI
ISO 11083 1994–08	Water quality – Determination of chromium(VI) – Spectrometric method with 1.5–diphenyl carbazide	PI
OENORM ISO 7150–1 1987–12	Water analysis: Determination of ammonium; manual spectrophotometric method	PI
VGB–B 401 Blatt 3.3.1.1 1986–02	Determination of dissolved (molybdate–active) silica	SV
In–house method PI–MA–M 06–101 2016–08	Humic substances in water	PI

1.14 Ecotoxicological analysis of summary degradation parameters

DIN 38412–L 30 1989–03	Determination of the tolerance of Daphnia to the toxicity of waste water by way of a dilution series	GE
DIN EN ISO 11348–2 (L 51) 2009–05	Water quality – Determination of the inhibitory effect of water samples on the light emission of Vibrio fischeri – Part 2: Method using liquid–dried bacteria	GE

1.15 Titrimetric analysis of summary indices of actions and substances (*: PI)

DIN EN ISO 9963–1 (C 23) 1996–02	Water quality – Determination of alkalinity – Part 1: Determination of total and composite alkalinity	FG, PI
DEV D 15 1981	Determination of thiosulfate ion by titrimetry	PI
DIN EN ISO 8467 (H 5) 1995–05	Water quality – Determination of permanganate index	PI

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 20 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

DIN 38409–H 7 2005–12	Determination of acid and base–neutralising capacities	FG, GE, PI, SV
DIN 38409–H 9 1980–07	Determination of the settleable matter by volume in water and waste water (Modification: <i>FG: With a sample volume of 2 litres</i>)	FG, GE, HI, PI, SV
DIN EN 25663 (H 11) 1993–11	Water quality – Determination of Kjeldahl nitrogen – Method after digestion with selenium	PI
DIN 38409–H 28 1992–04	Nitrogen (bound); method after reduction with Devarda’s alloy and catalytic digestion	PI
Swedish standard SS 28101 1992–04	Nitrogen content of water – Determination with Kjeldahl method after reduction with Devarda’s alloy	PI

1.16 Analysis of density and concrete aggressiveness

DIN EN ISO 12185 1997–11	Crude petroleum and petroleum products – Determination of density – Oscillating U–tube method (Modification: <i>Here for water</i>)	HE
DIN 4030–2 2008–6	Assessment of water, soil and gases for their aggressiveness to concrete – Part 2: Sampling and analysis of water and soil samples (Modification: <i>PI: Measurement of elements by ICP–OES, measurement of ammonium by CFA, measurement of sulphate and chloride by IC, measurement of sulphide photometrically; FG: Only odour, pH value, hardness hydrogen carbonate, lime–dissolving capacity as Heyer marble test</i>)	FG, PI

2 Specialist module for water
Status: LAWA of 18.10.2018

Section 1: Sampling and general parameters

Parameter	Method	Was	Sur	Raw	Location
Sampling of waste water	DIN 38402–A 11: 2009–02	<input checked="" type="checkbox"/>			B, FG, GE, HI, PI, SV

Valid from: 13.01.2023
Date of issue: 25.07.2023

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

Parameter	Method	Was	Sur	Raw	Location
Sampling from running waters	DIN EN ISO 5667-6: 2016-12 (A 15)		<input checked="" type="checkbox"/>		FG, GE, HI, PI
Sampling from aquifers	DIN 38402-A 13: 1985-12			<input checked="" type="checkbox"/>	B, FG, GE, HI, PI
Sampling from barrages and lakes	DIN 38402-A 12: 1985-06		<input checked="" type="checkbox"/>		B, FG, GE, HI, PI
Homogenisation of samples	DIN 38402-A 30: 1998-07	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		B, FG, GE, HI, PI, SV
Temperature	DIN 38404-C 4: 1976-12	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	B, FG, GE, HI, PI, SV
pH value	DIN EN ISO 10523: 2012-04 (C 5)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	B, FG, GE, HI, PI, SV
Conductivity (25 °C)	DIN EN 27888: 1993-11 (C 8)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	B, FG, GE, HI, PI, SV
Odour	DIN EN 1622: 2006-10 (B 3) Annex C	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	FG, GE, HI, PI
Colouring	DIN EN ISO 7887: 2012-04 (C 1), Method A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	B, FG, GE, HI, PI
Turbidity	DIN EN ISO 7027: 2000-04 (C 2)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	FG, GE, PI
Oxygen	DIN EN ISO 5814: 2013-03 (G 22)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	B, FG, GE, HI, PI
	DIN ISO 17289: 2014-12 (G 25)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GE, PI
	DIN EN 25813: 1993-01 (G 21)		<input type="checkbox"/>	<input type="checkbox"/>	
Redox potential	DIN 38404-C 6: 1984-05	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	B, FG, GE, HI, PI

Section 2: Photometry, ion chromatography, titrimetry

Parameter	Method	Was	Sur	Raw	Location
Absorption at 254 nm (SAC 254)	DIN 38404-C 3: 2005-07		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
Absorption at 436 nm (SAC 436)	DIN EN ISO 7887: 2012-04 (C 1), Method B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI

Valid from: 13.01.2023

Date of issue: 25.07.2023

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

Parameter	Method	Was	Sur	Raw	Location
Ammonium nitrogen	DIN EN ISO 11732: 2005-05 (E 23)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GE, PI, SV
	DIN 38406-E 5: 1983-10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 14911: 1999-12 (E 34)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SV
	DIN ISO 15923-1: 2014-07 (D 49)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Nitrite nitrogen	DIN EN 26777: 1993-04 (D 10)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 10304-1: 2009-07 (D 20)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HE
	DIN EN ISO 13395: 1996-12 (D 28)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN ISO 15923-1: 2014-07 (D 49)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Nitrate nitrogen	DIN EN ISO 10304-1: 2009-07 (D 20)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HE, PI
	DIN EN ISO 13395: 1996-12 (D 28)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN 38405-D 9: 2011-09	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN 38405-D 29: 1994-11		<input type="checkbox"/>	<input type="checkbox"/>	
	DIN ISO 15923-1: 2014-07 (D 49)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Phosphorus, total (see also section 3)	DIN EN ISO 6878: 2004-09 (D 11)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI, SV
	DIN EN ISO 15681-1: 2005-05 (D 45)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 15681-2: 2005-05 (D 46)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
Orthophosphate	DIN EN ISO 10304-1: 2009-07 (D 20)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HE
	DIN EN ISO 6878: 2004-09 (D 11)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI, SV
	DIN EN ISO 15681-1: 2004-07 (D 45)		<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 15681-2: 2005-05 (D 46)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN ISO 15923-1: 2014-07 (D 49)		<input type="checkbox"/>	<input type="checkbox"/>	
Fluoride (dissolved)	DIN 38405-D 4-1, 1985-07	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	FG, HE
	DIN EN ISO 10304-1: 2009-07 (D 20)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HE, PI, SV

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 23 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

Parameter	Method	Was	Sur	Raw	Location
Chloride	DIN EN ISO 10304-1: 2009-07 (D 20)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HE, PI, SV
	DIN EN ISO 15682: 2002-01 (D 31)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN ISO 15923-1: 2014-07 (D 49)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 10304-4: 1999-07 (D 25)			<input type="checkbox"/>	
	DIN 38405-D 1-1 and D 1-2: 1985-12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN 38405-D 1-3 and D 1-4: 1985-12		<input type="checkbox"/>	<input type="checkbox"/>	
Sulphate	DIN EN ISO 10304-1: 2009-07 (D 20)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HE, PI, SV
	DIN 38405-D 5-1: 1985-01		<input type="checkbox"/>	<input type="checkbox"/>	
	DIN 38405 D 5-2:1985-01	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN ISO 15923-1: 2014-07 (D 49)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cyanide (readily liberated)	DIN 38405-D 13-2: 1981-02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 14403-1: 2012-10 (D 2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 14403-2: 2012-10 (D 3)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GE, PI
	DIN 38405-D 7: 2002-04		<input type="checkbox"/>	<input type="checkbox"/>	
Cyanide (total)	DIN 38405-D 13-1: 1981-02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 14403-1: 2012-10 (D 2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 14403-2: 2012-10 (D 3)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GE, PI
	DIN 38405-D 7: 2002-04		<input type="checkbox"/>	<input type="checkbox"/>	
Chromium(VI)	DIN 38405-D 24: 1987-05	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GE, PI
	DIN EN ISO 10304-3: 1997-11 (D 22), Section 6 (dissolved chromate)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 23913: 2009-09 (D 41)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 18412: 2007-02 (D 40)			<input checked="" type="checkbox"/>	PI
Sulphide (readily liberated)	DIN 38405-D 27: 1992-07	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 24 of 36

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

Section 3: Elemental analysis

Parameter	Method	Was	Sur	Raw	Location
Aluminium	DIN EN ISO 11885: 2009-09 (E 22)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN ISO 12020: 2000-05 (E 25)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 17294-2: 2017-01 (E 29)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN ISO 15586: 2004-02 (E 4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Arsenic	DIN EN ISO 11969: 1996-11 (D 18)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 11885: 2009-09 (E 22)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PI
	DIN EN ISO 17294-2: 2017-01 (E 29)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN ISO 15586: 2004-02 (E 4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN 38405-D 35: 2004-09	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lead	DIN EN ISO 11885: 2009-09 (E 22)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PI
	DIN 38406-E 6: 1998-07	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 17294-2: 2017-01 (E 29)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN ISO 15586: 2004-02 (E 4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cadmium	DIN EN ISO 11885: 2009-09 (E 22)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PI
	DIN EN ISO 5961: 1995-05 (E 19)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 17294-2: 2017-01 (E 29)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN ISO 15586: 2004-02 (E 4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Calcium	DIN EN ISO 11885: 2009-09 (E 22)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN 38406-E 3: 2002-03	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 7980: 2000-07 (E 3a)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 17294-2: 2017-01 (E 29)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN ISO 14911: 1999-12 (E 34)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

Parameter	Method	Was	Sur	Raw	Location
Chromium	DIN EN ISO 11885: 2009-09 (E 22)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN 1233: 1996-08 (E 10)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 17294-2: 2017-01 (E 29)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN ISO 15586: 2004-02 (E 4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Iron	DIN EN ISO 11885: 2009-09 (E 22)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN 38406-E 32: 2000-05	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 15586: 2004-02 (E 4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 17294-2: 2017-01 (E 29)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
Potassium	DIN 38406-E 13: 1992-07		<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 11885: 2009-09 (E 22)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN ISO 17294-2: 2017-01 (E 29)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN ISO 14911: 1999-12 (E 34)		<input type="checkbox"/>	<input type="checkbox"/>	
Copper	DIN EN ISO 11885: 2009-09 (E 22)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN 38406-E 7: 1991-09	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 17294-2: 2017-01 (E 29)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN ISO 15586: 2004-02 (E 4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Manganese	DIN EN ISO 11885: 2009-09 (E 22)			<input checked="" type="checkbox"/>	PI
	DIN EN ISO 17294-2: 2017-01 (E 29)			<input checked="" type="checkbox"/>	PI
	DIN 38406-E 33: 2000-06			<input type="checkbox"/>	
	DIN EN ISO 15586: 2004-02 (E 4)			<input type="checkbox"/>	
	DIN EN ISO 14911: 1999-12 (E 34)			<input type="checkbox"/>	
Sodium	DIN 38406-E 14: 1992-07		<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 11885: 2009-09 (E 22)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN ISO 17294-2: 2017-01 (E 29)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN ISO 14911: 1999-12 (E 34)		<input type="checkbox"/>	<input type="checkbox"/>	

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 26 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

Parameter	Method	Was	Sur	Raw	Location
Nickel	DIN EN ISO 11885: 2009-09 (E 22)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN 38406-E 11: 1991-09	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 17294-2: 2017-01 (E 29)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN ISO 15586: 2004-02 (E 4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mercury	DIN EN ISO 17852: 2008-04 (E 35)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 12846: 2012-08 (E 12)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI, SV
Zinc	DIN EN ISO 11885: 2009-09 (E 22)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN 38406-E 8: 2004-10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 17294-2: 2017-01 (E 29)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN ISO 15586: 2004-02 (E 4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Boron	DIN EN ISO 11885: 2009-09 (E 22)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN ISO 17294-2: 2017-01 (E 29)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
Magnesium	DIN EN ISO 11885: 2009-09 (E 22)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN 38406-E 3: 2002-03		<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 7980: 2000-07 (E 3a)		<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 17294-2: 2017-01 (E 29)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN ISO 14911: 1999-12 (E 34)		<input type="checkbox"/>	<input type="checkbox"/>	
Phosphorus, total (see also section 2)	DIN EN ISO 11885: 2009-09 (E 22)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN ISO 17294-2: 2017-01 (E 29)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI

Section 4/5: Group and sum parameters

Parameter	Method	Was	Sur	Raw	Location
Biological oxygen demand (BOD ₅)	DIN EN 1899-1: 1998-05 (H 51)	<input checked="" type="checkbox"/>			GE
	DIN EN 1899-2: 1998-05 (H 52)		<input checked="" type="checkbox"/>		GE
Chemical oxygen demand (COD)	DIN 38409-H 41: 1980-12	<input type="checkbox"/>			
	DIN 38409-H 44: 1992-05		<input type="checkbox"/>		
	DIN ISO 15705: 2003-01 (H 45)		<input checked="" type="checkbox"/>		GE, HI, PI

Valid from: 13.01.2023

Date of issue: 25.07.2023

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

Parameter	Method	Was	Sur	Raw	Location
Phenol index	DIN 38409–H 16–2: 1984–06	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN 38409–H 16–1: 1984–06		<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 14402: 1999–12 (H 37) Method as per section 4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GE, PI
Filterable solids	DIN EN 872: 2005–04 (H 33)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		GE, HI, PI
	DIN 38409–H 2–3: 1987–03		<input checked="" type="checkbox"/>		GE, HI, PI
Acid and base capacity	DIN 38409–H 7: 2005–12		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	FG, GE, PI, SV
Total organic carbon (TOC)	DIN EN 1484: 1997–08 (H 3)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GE, PI, SV
Dissolved organic carbon (DOC)	DIN EN 1484: 1997–08 (H 3)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GE, PI, SV
Total bound nitrogen (TN _b)	DIN EN 12260: 2003–12 (H 34)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GE
	DIN EN ISO 11905–1: 1998–08 (H 36)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
Adsorbable organic halogens (AOX)	DIN EN ISO 9562: 2005–02 (H 14)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GE

Section 6: Gas chromatographic methods

Parameter	Method	Was	Sur	Raw	Location
Volatile halogenated hydrocarbons (VOC)	DIN EN ISO 10301: 1997–08 (F 4)*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GE, HI, PI
	DIN 38407–F 43: 2014–10	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GE, HI, PI
	DIN EN ISO 15680: 2004–04 (F 19)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 17943: 2016–11 (F 41)		<input type="checkbox"/>	<input type="checkbox"/>	
Benzene and derivatives (BTEX)	DIN 38407–F 9: 1991–05*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GE, HI, PI
	DIN 38407–F 43: 2014–10	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GE, HI, PI
	DIN EN ISO 15680: 2004–04 (F 19)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN EN ISO 17943: 2016–11 (F 41)		<input type="checkbox"/>	<input type="checkbox"/>	
Organochlorine insecticides (OCP)	DIN EN ISO 6468: 1997–02 (F 1)*		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN 38407–F 37: 2013–11		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN 16693: 2015–12 (F 51)		<input type="checkbox"/>	<input type="checkbox"/>	

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 28 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

Parameter	Method	Was	Sur	Raw	Location
Polychlorinated biphenyls (PCB)	DIN EN ISO 6468: 1997-02 (F 1)*		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GE, PI
	DIN 38407-F 3: 1998-07		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GE, PI
	DIN 38407-F 37: 2013-11		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
Mono, dichlorobenzenes	DIN EN ISO 15680: 2004-04 (F 19)		<input type="checkbox"/>	<input type="checkbox"/>	
	DIN 38407-F 43: 2014-10		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GE, PI
Tri to hexachlorobenzene	DIN EN ISO 6468: 1997-02 (F 1)*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN 38407-F 2: 1993-02	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN ISO 15680 (F19):2004-04**	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DIN 38407-F 43: 2014-10**	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN 38407-F 37: 2013-11	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
	DIN EN 16693: 2015-12 (F 51)***		<input type="checkbox"/>	<input type="checkbox"/>	
Chlorophenols	DIN EN 12673: 1999-05 (F 15)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI
Organophosphorus and organic nitrogen compounds	DIN EN ISO 10695: 2000-11 (F 6) *		<input type="checkbox"/>	<input type="checkbox"/>	
Polycyclic aromatic hydrocarbons (PAH) (see also section 7)	DIN 38407-F 39: 2011-09	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GE, PI
	DIN ISO 28540: 2014-05 (F 40)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GE, PI
	DIN EN 16691: 2015-12 (F 50)		<input type="checkbox"/>	<input type="checkbox"/>	
Hydrocarbon index	DIN EN ISO 9377-2: 2001-07 (H 53)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GE, HI, PI

* Mass spectrometric detection allowed

** Only applicable to trichlorobenzene

*** Only applicable to hexachlorobenzene

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 29 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

Section 7: HPLC methods

Parameter	Method	Was	Sur	Raw	Location
Polycyclic aromatic hydrocarbons (PAH)* (see also section 6)	DIN EN ISO 17993: 2004–03 (F 18)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Plant protection products and pesticides (PPP) (The methods should be applied according to substance-specific requirements.)	DIN EN ISO 11369: 1997–11 (F 12)*		<input type="checkbox"/>	<input type="checkbox"/>	
	DIN 38407–F 35: 2010–10		<input type="checkbox"/>	<input type="checkbox"/>	
	DIN 38407–F 36: 2014–09		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PI

* Mass spectrometric detection allowed

Section 8: Microbiological methods (not used)

Section 9.1: Biological methods, bio-assays (part 1)

Parameter	Method	Was	Sur	Raw
Fish egg test	DIN EN ISO 15088: 2009–08 (T 6)	<input type="checkbox"/>		
Luminescent bacteria inhibition test	DIN EN ISO 11348–1: 2009–05 (L 51)	<input type="checkbox"/>		
	DIN EN ISO 11348–2: 2009–05 (L 52)	<input checked="" type="checkbox"/>		GE

Section 9.2: Biological methods, bio-assays (part 2)

Parameter	Method	Was	Sur	Raw
Saprobic index	DIN 38410–M 1: 2004–10		<input type="checkbox"/>	
Chlorophyll a	DIN 38412–L 16: 1985–12		<input checked="" type="checkbox"/>	PI
Phaeophytin	DIN 38416–L 16: 1985–12		<input type="checkbox"/>	
Daphnia test	DIN 38412–L 30: 1989–03	<input checked="" type="checkbox"/>		GE
Algae test	DIN 38412–L 33: 1991–03	<input type="checkbox"/>		
Umu test	DIN 38415–T 3: 1996–12	<input type="checkbox"/>		

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 30 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

3 Test methods in accordance with the German Drinking Water Regulation – TrinkwV

Sampling

Method	Title	Location
DIN EN ISO 5667-1 (A 4) 2007-04	Water quality – Sampling – Part 1: Guidance on the design of sampling programmes and sampling techniques	B, FG, GE, HHGS, HI, PI, S
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	B, FG, GE, HHGS, HI, PI, S
DIN EN ISO 5667-3 (A 21) 2019-07	Water quality – Sampling – Part 3: Preservation and handling of water samples	B, FG, GE, HHGS, HI, PI, S
DIN EN ISO 19458 (K 19) 2006-12	Water quality – Sampling for microbiological analysis	B, FG, GE, HHGS, HI, PI, S
Recommendation of the Federal Environment Agency 18 December 2018	Assessment of the quality of drinking water with respect to the parameters lead, copper and nickel	B, FG, GE, HHGS, HI, PI, S

ANNEX 1: MICROBIOLOGICAL PARAMETERS

PART I: General requirements for drinking water

No.	Parameter	Method	Location
1	Escherichia coli (E. coli)	DIN EN ISO 9308-1 (K 12) 2017-09	HHGS, S
		DIN EN ISO 9308-2 (K 6-1) 2014-06	HHGS, S
2	Enterococci	DIN EN ISO 7899-2 (K 15) 2000-11	HHGS, S

PART II: Requirements for drinking water intended for transfer in sealed containers

No.	Parameter	Method	Location
1	Escherichia coli (E. coli)	DIN EN ISO 9308-1 (K 12) 2017-09	HHGS, S
		DIN EN ISO 9308-2 (K 6-1) 2014-06	HHGS, S
2	Enterococci	DIN EN ISO 7899-2 (K 15) 2000-11	HHGS, S
3	Pseudomonas aeruginosa	DIN EN ISO 16266 (K 11) 2008-05	HHGS, S

ANNEX 2: CHEMICAL PARAMETERS

PART I: Chemical parameters whose concentration does not usually increase in the distribution network, including the drinking water installation

No.	Parameter	Method	Location
1	Acrylamide	DIN 38413-P 6 2007-02	PI
2	Benzene	DIN 38407-F 43 2014-10	PI

Valid from: 13.01.2023

Date of issue: 25.07.2023

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

No.	Parameter	Method	Location
3	Boron	DIN EN ISO 11885 (E 22) 2009-09 DIN EN ISO 17294-2 (E 29) 2017-01	PI
4	Bromate	DIN EN ISO 15061 (D 34) 2001-12	PI
5	Chromium	DIN EN ISO 11885 (E 22) 2009-09 DIN EN ISO 17294-2 (E 29) 2017-01	PI
6	Cyanide	DIN EN ISO 14403-2 (D 3) 2012-10	PI
7	1,2-dichloroethane	DIN EN ISO 10301 (F 4) 1997-08 DIN 38407-F 43 2014-10	PI
8	Fluoride	DIN 38405-D 4 1985-07 DIN EN ISO 10304-1 (D 20) 2009-07	FG, PI
9	Nitrate	DIN EN ISO 10304-1 (D 20) 2009-07	PI
10	Plant protection product active ingredients and biocidal product active ingredients	DIN 38407-F 36 2014-09 DIN 38407-F 37 2013-11 DIN ISO 16308 (F 45) 2017-09	PI
11	Plant protection product active ingredients and biocidal product active ingredients total	DIN 38407-F 36 2014-09 DIN 38407-F 37 2013-11 DIN ISO 16308 (F 45) 2017-09	PI
12	Mercury	DIN EN ISO 12846 (E12) 2012-08 DIN EN ISO 17294-2 (E 29) 2017-01	PI
13	Selenium	DIN EN ISO 11885 (E 22) 2009-09 DIN EN ISO 17294-2 (E 29) 2017-01	PI
14	Tetrachloroethene and trichloroethylene	DIN EN ISO 10301 (F 4) 1997-08 DIN 38407-F 43 2014-10	PI
15	Uranium	DIN EN ISO 17294-2 (E 29) 2017-01	PI

PART II: Chemical parameters whose concentration may increase in the distribution network, including the drinking water installation

No.	Parameter	Method	Location
1	Antimony	DIN EN ISO 11885 (E 22) 2009-09 DIN EN ISO 17294-2 (E 29) 2017-01	PI
2	Arsenic	DIN EN ISO 11885 (E 22) 2009-09 DIN EN ISO 17294-2 (E 29) 2017-01	PI
3	Benzo[a]pyrene	DIN 38407-F 39 2011-09 DIN ISO 28540 (F 40) 2014-05	PI
4	Lead	DIN EN ISO 11885 (E 22) 2009-09 DIN EN ISO 17294-2 (E 29) 2017-01	PI
5	Cadmium	DIN EN ISO 11885 (E 22) 2009-09 DIN EN ISO 17294-2 (E 29) 2017-01	PI
6	Epichlorohydrin	Not used	
7	Copper	DIN EN ISO 11885 (E 22) 2009-09 DIN EN ISO 17294-2 (E 29) 2017-01	PI

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 32 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

No.	Parameter	Method	Location
8	Nickel	DIN EN ISO 11885 (E 22) 2009-09 DIN EN ISO 17294-2 (E 29) 2017-01	PI
9	Nitrite	DIN EN ISO 13395 (D 28) 1996-12	PI
10	Polycyclic aromatic hydrocarbons (PAH)	DIN 38407-F 39 2011-09 DIN ISO 28540 (F 40) 2014-05	PI
11	Trihalomethanes (THM)	DIN EN ISO 10301 (F4) 1997-08 DIN 38407-F 43 2014-10	PI
12	Vinyl chloride	DIN 38407-F 43 2014-10	PI

ANNEX 3: INDICATOR PARAMETERS

Part I: General indicator parameters

No.	Parameter	Method	Location
1	Aluminium	DIN EN ISO 11885 (E 22) 2009-09 DIN EN ISO 17294-2 (E 29) 2017-01	PI
2	Ammonium	DIN EN ISO 11732 (E 23) 2005-05	PI
3	Chloride	DIN EN ISO 10304-1 (D 20) 2009-07	PI
4	Clostridium perfringens (including spores)	DIN EN ISO 14189 (K 24) 2016-11	HHGS, S
5	Coliform bacteria	DIN EN ISO 9308-1 (K 12) 2017-09 DIN EN ISO 9308-2 (K 6-1) 2014-06	HHGS, S HHGS, S
6	Iron	DIN EN ISO 11885 (E 22) 2009-09 DIN EN ISO 17294-2 (E 29) 2017-01	PI
7	Colouring (spectral absorption coefficient Hg 436 nm)	DIN EN ISO 7887 (C 1) 2012-04	PI
8	Odour (as TON)	DIN EN 1622 (B 3) 2006-10 DIN EN 1622 (B 3) 2006-10 (Annex C)	PI B, FG, HI
9	Taste	DEV-B1/2 Part a 1971	HI, PI, S
10	Colony count at 22 °C	DIN EN ISO 6222 (K 5) 1999-07 TrinkwV Section 15 (1c)	HHGS, S HHGS, S
11	Colony count at 36 °C	DIN EN ISO 6222 (K 5) 1999-07 TrinkwV Section 15 (1c)	HHGS, S HHGS, S
12	Electrical conductivity	DIN EN 27888 (C 8) 1993-11	B, FG, GE, HHGS, HI, PI, S
13	Manganese	DIN EN ISO 11885 (E 22) 2009-09 DIN EN ISO 17294-2 (E 29) 2017-01	PI
14	Sodium	DIN EN ISO 11885 (E 22) 2009-09 DIN EN ISO 17294-2 (E 29) 2017-01	PI
15	Organically bound carbon (TOC)	DIN EN 1484 (H 3) 2019-04	PI
16	Oxidisability	DIN EN ISO 8467 (H 5) 1995-05	PI

Valid from: 13.01.2023

Date of issue: 25.07.2023

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

No.	Parameter	Method	Location
17	Sulphate	DIN EN ISO 10304-1 (D 20) 2009-07	PI
18	Turbidity	DIN EN ISO 7027-1 (C 21) 2016-11	FG, PI
19	Hydrogen ion concentration	DIN EN ISO 10523 (C 5) 2012-04	B, FG, GE, HHGS, HI, PI, S
20	Calcite dissolving capacity	DIN 38404-C 10 2012-10	PI

Part II: Specific requirements for drinking water in systems in the drinking water installation

Parameter	Method	Location
Legionella spec.	ISO 11731 2017-05 UBA recommendation 18 December 2018	HHGS, S

ANNEX 3a: Requirements for drinking water with regard to radioactive substances

Not used

Parameters not included in Annexes 1 to 3 of the German Drinking Water Ordinance

Additional periodic testing

Parameter	Method	Location
Calcium	DIN EN ISO 11885 (E 22) 2009-09 DIN EN ISO 17294-2 (E 29) 2017-01	PI
Potassium	DIN EN ISO 11885 (E 22) 2009-09 DIN EN ISO 17294-2 (E 29) 2017-01	PI
Magnesium	DIN EN ISO 11885 (E 22) 2009-09 DIN EN ISO 17294-2 (E 29) 2017-01	PI
Acid and base capacity	DIN 38409-H 7 2005-12	FG, PI
Phosphate	DIN EN ISO 10304-1 (D 20) 2009-07 DIN EN ISO 15681-2 (D 46) 2019-05 DIN EN ISO 6878 (D 11) 2004-09	PI

The accreditation does not replace the recognition or approval procedure of the competent authority pursuant to Section 15 (4) TrinkwV.

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 34 of 36

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

Annex to the Partial Accreditation Certificate D-PL-14170-01-02

4 Sampling and microbiological analysis of industrial water in accordance with Section 3 (8) 42nd BImSchV

Sampling

Method	Method	Location
DIN EN ISO 19458 (K 19) 2006–12	Water quality – Sampling for microbiological analysis	FG, GE, HI, PI, SV, S
	Recommendation of the Federal Environmental Agency for the sampling and detection of Legionella in evaporative cooling plants, cooling towers and wet separators dated 06.03.2020, Sections C and D	

Microbiological analyses

Parameter	Method	Location
Legionella	DIN EN ISO 11731 (K23) 2019–03	HHGS, S
	Recommendation of the Federal Environmental Agency for the sampling and detection of Legionella in evaporative cooling plants, cooling towers and wet separators dated 06.03.2020, Sections E and F taking into account Annexes 1 and 2	
Colony count at 22 °C and 36 °C	DIN EN ISO 6222 (K 5) 1999–07	HHGS, S

Valid from: 13.01.2023

Date of issue: 25.07.2023

Page 35 of 36

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

Abbreviations used

ASU	Amtliche Sammlung von Untersuchungsverfahren (Official Collection of Test Methods)
DIN	Deutsches Institut für Normung e.V. (German Institute for Standardization)
EN	European standard
FHH	Freie und Hansestadt Hamburg (Free and Hanseatic City of Hamburg)
In-house method ST-MA-M xx-yyy	In-house method of GBA Gesellschaft für Bioanalytik mbH
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
LAWA	Bund/Länder-Arbeitsgemeinschaft Wasser (Federal/Regional Working Group on Water)
LUA	State Environment Agency
TrinkwV	German Drinking Water Ordinance
UB	Umweltbehörde (Environmental Protection Agency)
UBA	Umweltbundesamt (Federal Environment Agency)
VDI	Verein deutscher Ingenieure (Association of German Engineers)