

Deutsche Akkreditierungsstelle GmbH

Entrusted according to Section 8 subsection 1 AkkStelleG in connection with Section 1 subsection 1 AkkStelleGBV

Signatory to the Multilateral Agreements of EA, ILAC and IAF for Mutual Recognition

Accreditation



The Deutsche Akkreditierungsstelle GmbH attests that the testing laboratory

Dr. Brill + Partner GmbH Institut für Hygiene und Mikrobiologie

Stiegstück 34, 22339 Hamburg Norderoog 2, 28259 Bremen Am Hafen 10, 26548 Norderney (Institut für Antifouling und Biokorrosion)

is competent under the terms of DIN EN ISO/IEC 17025:2018 to carry out tests in the following fields:

health care (hospital hygiene and infection prevention), pharmaceutical products and active agents, efficacy testing of disinfectants in the fields of pharmaceutical products and active agents, health care (hospital hygiene and infection prevention), veterinary medicine, food, industry and consumer goods by means of cultural microbiological tests, microbiological testing of cosmetics, packaging, gases and air, Efficacy testing of marine or limnic exposed materials (antifouling coatings) for ships, boats, port structures and other offshore structures on antifouling panels using biological test systems.

fields of testing: hygiene and infection prevention, biological pharmaceutical products, active agents and excipient analytic

The accreditation certificate shall only apply in connection with the notice of accreditation of 03.01.2022 with the accreditation number D-PL-13412-01. It comprises the cover sheet, the reverse side of the cover sheet and the following annex with a total of 11 pages.

Registration number of the certificate: D-PL-13412-01-01

Frankfurt am Main, 03.01.2022

Dipl.-Biol. Uwe Zimmermann Translation issued:

Head of Division

02.05.2022

The certificate together with the annex reflects the status as indicated by the date of issue.

The current status of any given scope of accreditation can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle GmbH at https://www.dakks.de/en/accredited-bodies-search.html.

This document is a translation. The definitive version is the original German accreditation certificate. See notes overleaf.



Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-13412-01-01 according to DIN EN ISO/IEC 17025:2018

Valid from:

03.01.2022

Date of issue: 03.01.2022

Holder of certificate:

Dr. Brill + Partner GmbH Institut für Hygiene und Mikrobiologie

Sites:

Stiegstück 34, 22339 Hamburg Norderoog 2, 28259 Bremen Am Hafen 10, 26548 Norderney (Institut für Antifouling und Biokorrosion)

Tests in the fields:

health care (hospital hygiene and infection prevention), pharmaceutical products and active agents, efficacy testing of disinfectants in the fields of pharmaceutical products and active agents, health care (hospital hygiene and infection prevention), veterinary medicine, food, industry and consumer goods by means of cultural microbiological tests,

microbiological testing of cosmetics, packaging, gases and air,

Efficacy testing of marine or limnic exposed materials (antifouling coatings) for ships, boats, port structures and other offshore structures on antifouling panels using biological test systems.

fields of testing: hygiene and infection prevention, biological pharmaceutical products, active agents and excipient analytic

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

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

The certificate together with the annex reflects the status as indicated by the date of issue. The current status of any given scope of accreditation can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle GmbH at https://www.dakks.de/en/content/accredited-bodies-dakks.

Abbreviations used: see last page

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Site Stiegstück 34, 22339 Hamburg

- 1. Field: Health care (Hospital hygiene and infection prevention)
- 1.1 Field of testing: Hygiene and infection prevention
- 1.1.1 Type of testing: microbiogical-hygienic testing**

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
ASTM E2149-20 (2010)	Standard Test Method for Determining the Antimicrobial Activity of Immobilized Antimicrobial Agents Under Dynamic Contact Conditions	Plastics, metals
ASTM E2180-18 (2018)	Standard Test Method for Determining the Activity of Incorporated Antimicrobial Agent(s) In Polymeric or Hydrophobic Materials	Plastics
DIN EN 15457:2014-11	Paints and varnishes - Laboratory method for testing the efficacy of film preservatives in a coating against fungi	Coatings, varnishes
DIN EN ISO 20743:2013-12	Textiles - Determination of the antibacterial efficacy of textile products	Textiles
In-house method AA-00134 14.11.2020	Microbial challenge test (preservation test according to Brill)	Coatings, varnishes, cooling lubricants
In-house method AA-00140 04.11.2020	Service life of cloth systems - Determination of preservation	Disinfectants
In-house method AA-00144 14.11.2020	Agar diffusion test for water soluble substances and (based on DIN 58940:1989)	Disinfectants, cooling lubricants
In-house method AA-00143 14.11.2020	Agar diffusion test for water soluble substances and wound dressings (based on DIN 58940:2007)	Disinfectants, cooling lubricants
ISO 22196:2011-08	Measurement of antibacterial activity on plastics and other non-porous surfaces	Plastics, metals
JIS Z 2801/AMENDMENT 1: 2012-05-21	Antimicrobial products – Test for antimicrobial activity and efficacy	Plastics, metals
Ph. Eur. 10 (2020) 5.1.3	Testing on sufficient preservation	Disinfectants
USP 30 NF 32 <51> 2019	Antimicrobial effectiveness testing	Disinfectants
DIN EN 13060:2019-02	Small steam sterilizers	Bioindicators
In-house method AA-00124, 20.05.2021	Testing the sterilization performance of sterilizers with bioindicators DIN EN ISO 11138, DIN EN 13060, DIN EN ISO 18472	Bioindicators

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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
In-house method AA-00125 19.02.2019	Testing of washing machines with bioindicators (Höller et al 1999).	Bioindicators

- 2. Field: Pharmaceutical products and active agents
- 2.1 Field of testing: biological pharmaceutical products, active agents and excipient analytic

2.1.1 Type of testing:

Testing for sufficient microbial preservation**

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
Ph. Eur. 10 (2020) 5.1.3	Testing for sufficient preservation	pharmaceutical products
USP 30 NF 32 <51> 2019	Antimicrobial Effectiveness Testing	pharmaceutical products

3. Efficacy testing of disinfectants in the fields of pharmaceutical products and active agents, health care (hospital hygiene and infection prevention), veterinary medicine, food, industry and consumer goods by means of cultural microbiological tests**

AOAC 955.14 2013	Testing Disinfectants against Salmonella enterica (Use dilution method)
AOAC 955.15 2013	Testing Disinfectants against Staphylococcus aureus (Use dilution method)
AOAC 955.17 2005	Fungicidal Activity of Disinfectants Using Trichophyton mentagrophytes
AOAC 964.02 2013	Testing Disinfectants against <i>Pseudomonas aeruginosa</i> (Use dilution method)
AOAC 991.47 2005	Testing Disinfectants against Salmonella choleraesuis (Hard Surface Carrier Test Method)
AOAC 991.48 2005	Testing Disinfectants against <i>Staphylococcus aureus</i> (Hard Surface Carrier Test Method)
AOAC 991.49 2005	Testing Disinfectants against <i>Pseudomonas aeruginosa</i> (Hard Surface Carrier Test Method)
ASTM E1153-14 (2014)	Standard Test Method for Efficacy of Sanitizers Recommended for Inanimate, Hard, Nonporous Non-Food Contact Surfaces

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ASTM E1174-13 (2013)	Standard Test Method for Evaluation of the Effectiveness of Health Care Personnel Handwash Formulations
ASTM E1839-13 (2013)	Standard Test Method for Efficacy of Slimicides for the Paper Industry – Bacterial and Fungal Slime
ASTM E2197-17 (2017)	Standard Quantitative Disk Carrier Test Method for Determining Bactericidal, Virucidal, Fungicidal Mycobactericidal, and Sporicidal Activities of Chemicals
ASTM E2755-15 (2015)	Standard Test Method for Determining the Bacteria-Eliminating Effectiveness of Hand Sanitizer Formulations Using Hands of Adults
ASTM E2783-16 (2016)	Standard Test Method for Assessment of Antimicrobial Activity for Water Miscible Compounds Using a Time-Kill Procedure
ASTM E2799-12 (2012)	Standard Test Method for Testing Disinfectant Efficacy against <i>Pseudomonas aeruginosa</i> Biofilm using the MBEC Assay
ASTM E645-13 (2013)	Standard Practice for Evaluation of Microbiocides Used in Cooling Water Systems
DIN EN 1040: 2006-03	Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of basic bactericidal activity (basic test) of chemical disinfectants and antiseptics - Test method and requirements (phase 1)
DIN EN 1275: 2006-03	Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of fungicidal or levurocidal activity (basic test) of chemical disinfectants and antiseptics - Test method and requirements (phase 1) (no conformity assessment of medical devices)
DIN EN 1276: 2019-11	Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of bactericidal, fungicidal and sporicidal activity of chemical disinfectants and antiseptics used in food, industrial, domestic and institutional areas - Test method and requirements (phase 2, step 1)
	(no conformity assessment of medical devices)
DIN EN 12791: 2018-01	Chemical Disinfectants and antiseptics: Surgical hand disinfectants
DIN EN 13610: 2003-06	Chemical disinfectants - Quantitative suspension test for the evaluation of virucidal activity against bacteriophages of chemical disinfectants used in food and industrial areas - Test method and requirements (phase 2, step 1)
	(no conformity assessment of medical devices)
DIN EN 13623: 2020-12	Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of bactericidal activity against Legionella pneumophila of chemical disinfectants for aqueous systems - Test method and requirements
	(no conformity assessment of medical devices)
DIN EN 13624: 2013-12	Quantitative suspension test for the evaluation of fungicidal or yeasticidal activity in the medical area - Test method and requirements (phase2, step 1).
	(no conformity assessment of medical devices)



DIN EN 13697: 2019-10	Chemical disinfectants and antiseptics - Quantitative non-porous surface test for the evaluation of bactericidal and/or fungicidal activity of chemical disinfectants used in food, industrial, domestic and institutional areas - Test method and requirements without mechanical action
	(no conformity assessment of medical devices)
DIN EN 13704: 2018-09	Chemical disinfectants - Quantitative suspension test for the evaluation of sporicidal activity of chemical disinfectants used in food, industrial, domestic and institutional areas - Test method and requirements (phase 2, step 1)
	(no conformity assessment of medical devices)
DIN EN 13727: 2015-12	Quantitative suspension test for the evaluation of bactericidal activity of chemical disinfectants in the medical area (phase2, step 1)
	(no conformity assessment of medical devices)
DIN EN 14204: 2013-02	Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of mycobactericidal activity of chemical disinfectants and antiseptics used in the veterinary area - Test method and requirements (phase 2, step 1)
DIN EN 14347: 2005-08	Chemical disinfectants and antiseptics - Basic sporicidal activity (basic test) - Test method and requirements (phase 1)
	(no conformity assessment of medical devices)
DIN EN 14348: 2005-04	Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of mycobactericidal activity of chemical disinfectants in the medical area including instrument disinfectants - Test methods and requirements (phase 2, step 1)
	(no conformity assessment of medical devices)
DIN EN 14349: 2013-02	Chemical disinfectants and antiseptics - Quantitative surface test for the evaluation of bactericidal activity of chemical disinfectants and antiseptics used in the veterinary area on non-porous surfaces without mechanical action
DIN EN 1499: 2017-10	Chemical Disinfectants and antiseptics: Disinfecting hand wash
DIN EN 1500: 2017-10	Chemical Disinfectants and antiseptics: Hygienic hand disinfection
DIN EN 16437: 2019-12	Chemical disinfectants and antiseptics - Quantitative surface test for the evaluation of bactericidal activity of chemical disinfectants and antiseptics used in veterinary area on porous surfaces without mechanical action - Test method and requirements (phase 2, step 2)
DIN EN 16438: 2014-07	Chemical disinfectants and antiseptics - Quantitative surface test for the evaluation of fungicidal or yeasticidal activity of chemical disinfectants and antiseptics used in the veterinary area on non-porous surfaces without mechanical action - Test method and requirements (phase 2, step 2)
DIN EN 1650: 2019-10	Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of fungicidal or yeasticidal activity of chemical disinfectants and antiseptics used in food, industrial, domestic and institutional areas - Test method and requirements (phase 2, step 1)



DIN EN 1656: 2019-12	Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of bactericidal activity of chemical disinfectants and antiseptics used in veterinary area
DIN EN 1657: 2016-11	Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of fungicidal or yeasticidal activity of chemical disinfectants and antiseptics used in the veterinary area - Test method and requirements (phase 2, step 1)
DIN EN 16615: 2015-06	Chemical disinfectants and antiseptics - Quantitative test method for the evaluation of bactericidal and yeasticidal activity on non-porous surfaces with mechanical action employing wipes in the medical area (4-field test) - Test method and requirements (phase 2, step 1)
	(no conformity assessment of medical devices)
DIN EN 16616: 2015-10	Chemical disinfectants and antiseptics - Chemical-thermal textile disinfection - Test method and requirements (phase 2, step 2)
	(no conformity assessment of medical devices)
DIN EN 17126: 2019-02	Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of sporicidal activity of chemical disinfectants in the medical area - Test method and requirements (phase 2, step 1)
	(no conformity assessment of medical devices)
DIN EN 17272: 2020-06	Chemical disinfectants and antiseptics - Methods of airborne room disinfection by automated process - Determination of bactericidal, mycobactericidal, sporicidal, fungicidal, yeasticidal, virucidal and phagocidal activities
DVG 2000: IV.2, as of 2000	Dilution test for determination of bacteriostatic and fungiostatic efficacy as well as sufficient inactivation
DVG 2000: IV.3, as of 2015	Determination of the bactericidal, tuberculocidal and fungicidal activity within the suspension test
DVG 2000: IV.4, as of 2015	Determination of bactericidal, tuberculocidal and fungicidal activity within carrier test
DVG 2000: V.2.7, as of 202	Suspension test: Qualitative suspension test (end point method), quantitative suspension test
DVG 2007: IV.2.1, 2.2, 2.3, 2.5, as of 2015	Methods for determining the minimal inibition concentration (MIC) and optimal neutralizer
DVG 2007: IX, as of 2015	Methods for testing chemical disinfectants for the area of commercial kitchens
DVG 2007: VII, as of 2015	Methods for testing chemical disinfectants for the area of meat production and of food of animal origin
DVG 2007: VIII, as of 2015	Methods for testing chemical disinfectants for milk production (except CIP)
House method AA-00049 24.07.2017	In-use stability wipe systems – Determiniation of disinfection power



PAS 2424:2014	Quantitative surface test for the evaluation of residual antimicrobial (bactericidal and/or yeasticidal) efficacy of liquid chemical disinfectants on hard non-porous surfaces
VAH - method 7 : 2019-06	Determination of bacteriostatic and levurostatic efficacy and appropriate neutralising agents
VAH - method 8 : 2019-06	Qualitative suspension test for determination of bactericidal and levurocidal activity
VAH - method 9 : 2019-06	Quantitative suspension test for determination of bactericidal, levurocidal, fungicidal, tuberculocidal or mycobactericidal activity
VAH - method 10 : 2019-06	Hygienic hand wash – practice-like test with volunteers
VAH - method 11: 2019-06	Hygienic hand disinfection – practice-like test with volunteers
VAH - method 12 : 2019-06	Surgical hand disinfection - practice-like test with volunteers
VAH - method 13 : 2019-06	Skin disinfection - practice-like test with volunteers
VAH - method 14.1 : 2019-06	Surface disinfection without mechanics - practice-like test
VAH - method 14.2 : 2019-06	Surface disinfection with mechanics - practice-like 4-field test
VAH - method 16 : 2019-06	Chemical-thermal textile disinfection – immersion-bath process (practice-like test)
VAH - method 17 : 2019-06	Chemical-thermal textile disinfection – single-bath process (practice-like test)



4. Microbiological testing of cosmetics and packaging

DIN EN 15457:2014-11 Paints and varnishes - Laboratory method for testing the efficacy of film preservatives in a coating against fungi DIN EN ISO 11930: 2019-04 Cosmetics - Microbiology - Evaluation of the antimicrobial protection of a cosmetic product House method AA-00134 Preservation test (Inoculation cycle test according to Brill) 04.11.2020 In-house method AA-00143 Agar diffusion test for water soluble substances 04.11.2020 In-house method AA-00144 Agar diffusion test for water insoluble substances 04.11.2020 Ph. Eur. 10, (2020), 5.1.3 Testing of sufficient preservation (Modifikation: here for cosmetics with formulations preserved with biocides) Antimicrobial effectiveness testing USP 30 NF 32 <51>, 2019 (Modifikation: here for cosmetics with formulations preserved with biocides)



Site Norderoog 2, 28259 Bremen

- 1. Field: Health care (Hospital hygiene and infection prevention)
- 1.1 Field of testing: Hygiene and infection prevention
- 1.1.1 Type of testing: microbiogical-hygienic testing**

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
ISO 21702:2019-05	Measurement of antiviral activity on plastics and other non-porous surfaces	Plastics, non-porous surfaces
In-house method AA-00032 09.07.2020	Measurement of antiviral activity on plastics and other non-porous surfaces based on JIS Z 2801/ISO 22196	Plastics, non-porous surfaces
ISO 18184:2019-06	Textiles — Determination of antiviral activity of textile products	Textile products
ASTM E 2149:2020	Standard Test Method for Determining the Antimicrobial Activity of Antimicrobial Agents Under Dynamic Contact Conditions	Fibre materials
ASTM E 2180:2018	Standard Test Method for Determining the Activity of Incorporated Antimicrobial Agent(s) In Polymeric or Hydrophobic Materials	Polymer surfaces, hydrophobic surfaces

2. Efficacy testing of disinfectants in the fields of pharmaceutical products and active agents, health care (hospital hygiene and infection prevention), veterinary medicine, food, industry and consumer goods by means of cultural microbiological tests**

ASTM E 1052 – 20 (2020)	Standard Practice to Assess the Activity of Microbicides against Viruses in Suspension
ASTM E 1838 – 17 (2017)	Efficacy testing of chemical disinfectants on fingertips according to ASTM E 1838-17 (phase 2, step 2)
ASTM E 2011-13 (2013)	Efficacy testing of chemical disinfectants on the entire hand according to ASTM E 2011-13 (phase 2, step 2)
ASTM E 2197 – 17 (2017)	Standard Quantitative Disk Carrier Test Method for Determining Bactericidal, Virucidal, Fungicidal, Mycobactericidal, and Sporicidal Activities of Chemicals
ASTM E1053 – 20 (2020)	Standard Practice to Assess Virucidal Activity of Chemicals Intended for Disinfection of Inanimate, Nonporous Environmental Surfaces



DIN EN 14476:2019-10	Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of virucidal activity in the medical area - Test method and requirements (Phase 2/Step 1)
	(no conformity assessment of medical devices)
DIN EN 14675:2015	Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of virucidal activity of chemical disinfectants and antiseptics used in the veterinary area - Test method and requirement (phase 2, step 1)
DIN EN 16777:2019-03	Chemical disinfectants and antiseptics - Quantitative non-porous surface test without mechanical action for the evaluation of virucidal activity of chemical disinfectants used in the medical area - Test method and requirements (phase 2, step 2)
	(no conformity assessment of medical devices)
DIN EN 17122:2020-02	Chemical disinfectants and antiseptics - Quantitative non-porous surface test for the evaluation of virucidal activity of chemical disinfectants and antiseptics used in the veterinary area - Test method and requirements – (phase 2, step 2)
DIN EN 17272:2020-06	Chemical disinfectants and antiseptics - Methods of airborne room disinfection by automated process - Determination of bactericidal, mycobactericidal, sporicidal, fungicidal, yeasticidal, virucidal and phagocidal activities
DVG Methode 5	Methods of testing chemical disinfectants for animal husbandry - DVG Test Guidelines; 4th edition, as of 27.07.2017 - Method description; V Animal husbandry (V.3 Virucidity test).
In-house method AA-00019 15.02.2019	Testing of the virucidal efficacy of chemical disinfectants with practice-like test models, quantitative testing of the virucidal activity of chemical disinfectants on non-porous surfaces (Carrier test according to OECD- 2010) (phase 2, Step 2)
In-house method AA-00020 30.12.2017	Testing of the virucidal efficacy of chemical disinfectants with practice-like test models, carrier test on treated materials (phase 2, stage 2)
In-house method AA-00024 12.07.2021	Virucidal efficacy testing according to a modification of EN 1500 on hands (phase 2, step 2)
In-house method AA-00025 29.06.2017	Testing of surface disinfectants for virus efficacy based on the draft of the CEN/TC216/WG 1 N (WI 00216104) (phase 2, step 2)
In-house method AA-00026 07.09.2018	Virucidal efficacy testing room decontamination (phase 2, step 2)
In-house method AA-00037 19.03.2018	Virucidal carrier test according to AOAC 955.15



In-house method AA-00038

Virucidal carrier test according to AOAC 991.47

28.03.2018

Site Am Hafen 10, 26548 Norderney

Efficacy testing of marine or limnic exposed materials (antifouling coatings) for ships, boats, port structures and other offshore structures on antifouling panels using biological test systems

ASTM 6990-20 (2020) Standard Practice for Evaluating Biofouling Resistance and Physical Performance of

Marine Coating Systems

ASTM 3623-78a (2020) Standard Test Method for Testing Antifouling Panels in Shallow Submergence

In-house method Dynamic field testing of antifouling coatings using RotoMarin®

AA-00308 02.08.2021

In-house method Rapid Test on barnacle settlement

AA-00309 (Rapid test for the settlement of barnacles in the field) 03.08.2021

Abbreviations

AA Standard opertating procedures / In-house method of KBS

ASTM American Society for Testing and Materials
AOAC Association of Official Agricultural Chemists

DIN German Insitute for Standards (Deutsches Institut für Normung)

EN European Standards (Europäische Norm)
ISO International Organization for Standardization

DVG German Society of Veterinary Medicine (Deutsche Veterinärmedizinische Gesellschaft)

DGHM German Society for Hygiene and Microbiology

JIS Japan Industrial Standard
Ph. Eur. Pharmacopoeia Europaea

USP-NF United States Pharmacopeia-National Formulary

VAH Association for Applied Hygiene (Verbund für Angewandte Hygiene)

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