

Deutsche Akkreditierungsstelle

Annex to the Accreditation Certificate D-PL-20227-01-01 according to DIN EN ISO/IEC 17025:2018

Valid from: 14.01.2026

Date of issue: 14.01.2026

This annex is part of the Accreditation Certificate D-PL-20227-01-00.

Holder of the Accreditation Certificate:

**Polymer Service GmbH Merseburg
Geusaer Straße 81f, 06217 Merseburg**

with the location

**Polymer Service GmbH Merseburg
Mechanische Prüfung von Kunststoffen - MPK -
Geusaer Straße 81f, 06217 Merseburg**

The testing laboratory meets the requirements of DIN EN ISO/IEC 17025:2018 to carry out the conformity assessment activities listed in this annex. The testing laboratory meets additional legal and normative requirements, if applicable, including those in relevant sectoral schemes, provided that these are explicitly confirmed below.

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

*This annex to the certificate was issued by the Deutsche Akkreditierungsstelle GmbH (DAkkS) and is digitally sealed.
This annex to the certificate 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 valid and surveyed accreditation can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle GmbH (www.dakks.de).*

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Tests in the fields:

Mechanical, fracture mechanical, physical and colorimetric testing of plastics and elastomers

Flexible Scope of Accreditation:

The testing laboratory is permitted to use standardised or equivalent test methods listed here with different issue dates without being required to prior inform and obtain approval from DAkkS (flexibilization according to category A).

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

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1 Mechanical-technological tests

1.1 Hardness test

DIN ISO 48-2 2021-02	Rubber, vulcanized or thermoplastic – Determination of hardness – Part 2: Hardness between 10 IRHD and 100 IRHD
DIN ISO 48-4 2021-02	Rubber, vulcanized or thermoplastic – Determination of hardness – Part 4: Indentation hardness by durometer method (Shore hardness)
DIN EN ISO 2039-1 2003-06	Plastics – Determination of hardness – Part 1: Ball indentation method
DIN EN ISO 2039-2 2000-01	Plastics – Determination of hardness – Part 2: Rockwell hardness

1.2 Tensile test

DIN 53504 2017-03	Testing of rubber – Determination of tensile strength at break, tensile stress at yield, elongation at break and stress values in a tensile test
DIN EN ISO 527-2 2012-06	Plastics – Determination of tensile properties – Part 2: Test conditions for moulding and extrusion plastics
DIN EN ISO 527-3 2019-02	Plastics – Determination of tensile properties – Part 3: Test conditions for films and sheets
DIN EN ISO 527-4 2023-07	Plastics - Determination of tensile properties – Part 4: Test conditions for isotropic and orthotropic fibre-reinforced plastic composites
DIN EN ISO 527-5 2022-05	Plastics – Determination of tensile properties – Part 5: Test conditions for unidirectional fibre-reinforced plastic composites
DIN EN ISO 899-1 2018-03	Plastics – Determination of creep behaviour – Part 1: Tensile creep
ISO 37 2024-05	Rubber, vulcanized or thermoplastic – Determination of tensile stress-strain properties

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1.3 Bend test

DIN EN ISO 178 2019-08	Plastics – Determination of flexural properties
DIN EN ISO 14125 2011-05	Fibre-reinforced plastic composites – Determination of flexural properties

1.4 Compression test

ASTM D695 2023	Standard Test Method for Compressive Properties of Rigid Plastics
DIN EN 514 2018-04	Plastics – Poly(vinyl chloride) (PVC) based profiles – Determination of the strength of welded corners and T-joints
DIN EN ISO 604 2003-12	Plastics – Determination of compressive properties

1.5 Impact test

DIN 53435 2024-10	Testing of plastics – Bending test and impact test on dynstat test specimens
DIN EN ISO 179-1 2023-10	Plastics – Determination of Charpy impact properties – Part 1: Non-instrumented impact test
DIN EN ISO 179-2 2020-09	Plastics – Determination of Charpy impact properties – Part 2: Instrumented impact test
DIN EN ISO 180 2023-09	Plastics – Determination of Izod impact strength
DIN EN ISO 8256 2024-03	Plastics – Determination of tensile-impact strength

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1.6 Drop test (puncture test)

DIN EN 477 2018-04	Plastics – Poly(vinyl chloride) (PVC) based profiles – Determination of the resistance to impact of profiles by falling mass
DIN EN ISO 6603-2 2023-11	Plastics – Determination of puncture impact behaviour of rigid plastics – Part 2: Instrumented impact testing
DIN EN ISO 7765-1 2004-10	Plastics film and sheeting – Determination of impact resistance by the free-falling dart method – Part 1: Staircase methods
DIN ISO 7765-2 2009-02	Plastics film and sheeting – Determination of impact resistance by the free-falling dart method – Part 2: Instrumented puncture test

1.7 Fracture mechanics

ASTM D6068 2010	Standard Test Method for Determining J-R Curves of Plastic Materials
ESIS TC4 2000	A Testing Protocol for Conducting J-Crack Growth Resistance Curve Test on Plastics
ISO 13586 2018-08	Plastics – Determination of Fracture Toughness (G_{IC} and K_{IC}) – Linear Elastic Fracture Mechanics (LEFM) Approach
ISO/TS 28660 2022-04	Plastics – Determination of J-R curves – Fracture toughness

1.8 Tear test

DIN 53363 2003-10	Testing of plastic films – Tear test using trapezoidal test specimen with incision
DIN ISO 34-1 2016-09	Rubber, vulcanized or thermoplastic – Determination of tear strength – Part 1: Trouser, angle and crescent test pieces

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1.9 Shear strength

DIN EN ISO 14130 1998-02	Fibre reinforced plastic composites – Determination of apparent interlaminar shear strength by short beam-method
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2 Analytical tests

2.1 Vicat softening temperature

DIN EN ISO 306 2022-04	Kunststoffe – Thermoplaste – Bestimmung der Vicat-Erweichungstemperatur (VST)
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2.2 Heat distortion resistance

DIN EN ISO 75-1 2020-06	Plastics – Determination of temperature of deflection under load – Part 1: General test method
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DIN EN ISO 75-2 2013-08	Plastics – Determination of temperature of deflection under load – Part 2: Plastics and ebonite
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DIN EN ISO 75-3 2004-09	Plastics – Determination of temperature of deflection under load – Part 3: High-strength thermosetting laminates and long-fibre-reinforced plastics
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2.3 Determination of density

DIN EN ISO 1183-1 2019-09	Plastics – Methods for determining the density of non-cellular plastics – Part 1: Immersion method, liquid pycnometer method and titration method
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2.4 Shrinkage

DIN EN 479 2018-04	Plastics – Poly(vinyl chloride) (PVC) based profiles – Determination of heat reversion
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2.5 Adhesive behavior

DIN EN ISO 2409 Paints and varnishes – Cross-cut test
2020-12

DIN EN ISO 22631 Adhesives – Test method for adhesives for floor and wall coverings –
2019-11 Peel test

2.6 Determination of compression set

DIN ISO 815-1 Rubber, vulcanized or thermoplastic – Determination of compression
2022-04 set – Part 1: At ambient or elevated temperatures

2.7 Abrasion method

DIN ISO 4649 Rubber, vulcanized or thermoplastic – Determination of abrasion
2021-06 resistance using a rotating cylindrical drum device

2.8 Determination of thermostability

DIN EN ISO 182-3 Plastics – Determination of the tendency of compounds and products
2024-03 based on vinyl chloride homopolymers and copolymers to evolve
hydrogen chloride and any other acidic products at elevated
temperatures – Part 3: Conductometric method

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3 Optical methods

3.1 Determination of colour

DIN EN 20105-A02 1994-10	Textiles – Tests for colour fastness – Part A02: Grey scale for assessing change in colour
DIN EN ISO 105-A03 2020-02	Textiles – Tests for colour fastness – Part A03: Grey scale for assessing staining
DIN EN ISO/CIE 11664-4 2020-03	Colorimetry – Part 4: CIE 1976 L*a*b* colour space
ISO 7724-2 1984-10	Paints and varnishes – Colorimetry – Part 2: Colour measurement

3.2 Determination of gloss

DIN EN ISO 2813 2015-02	Paints and varnishes – Determination of gloss value at 20°, 60° and 85°
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4 Accelerated ageing

4.1 Artificial weathering

DIN EN 513 2019-03	Plastics – Poly(vinyl chloride) (PVC) based profiles – Determination of the resistance to artificial weathering
DIN EN ISO 4892-2 2021-11	Plastics – Methods of exposure to laboratory light sources – Part 2: Xenon-arc lamps
DIN EN ISO 4892-3 2025-04	Plastics – Methods of exposure to laboratory light sources – Part 3: Fluorescent UV lamps

4.2 Accelerated ageing

DIN EN 478 2018-04	Plastics – Poly(vinyl chloride) (PVC) based profiles – Determination of the appearance after exposure at 150 °C
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5 Other standards

RAL-GZ 716 2020-07	PVC Window Profile Systems – PVC Quality and Test Requirements for Components and Procedures
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Abbreviations used:

ASTM	American Society for Testing and Materials
DIN	German institute for standardization
EN	European Standard
ESIS	European Structural Integrity Society
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
RAL-GZ	Quality mark of the German Institute for Quality Assurance and Certification

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