



SHI PRODUCT PASSPORT

Find products. Certify buildings.

SHI Product Passport No.:

15146-10-1007

KG

Product group: Shell construction / Basement - Drainage - KG pipes



Gebr. Ostendorf Kunststoffe GmbH
Rudolf-Diesel-Straße 6 - 8
49377 Vechta



Product qualities:



Köttner

Helmut Köttner
Scientific Director

Freiburg, 02 February 2026



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The SHI Database is the first and only database for construction products whose comprehensive processes and data accuracy are regularly verified by the independent auditing company SGS-TÜV Saar





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SHI Product Assessment 2024

Since 2008, Sentinel Holding Institut GmbH (SHI) has been establishing a unique standard for products that support healthy indoor air. Experts carry out independent product assessments based on clear and transparent criteria. In addition, the independent testing company SGS regularly audits the processes and data accuracy.

Criteria	Product category	Harmful substance limit	Assessment
SHI Product Assessment	Other products	TVOC $\leq 300 \mu\text{g}/\text{m}^3$ Formaldehyd $\leq 24 \mu\text{g}/\text{m}^3$	Not relevant for assessment



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QNG - Qualitätssiegel Nachhaltiges Gebäude

The Qualitätssiegel Nachhaltiges Gebäude (Quality Seal for Sustainable Buildings), developed by the German Federal Ministry for Housing, Urban Development and Building (BMWSB), defines requirements for the ecological, socio-cultural, and economic quality of buildings. The Sentinel Holding Institut evaluates construction products in accordance with QNG requirements for certification and awards the QNG ready label. Compliance with the QNG standard is a prerequisite for eligibility for the KfW funding programme. For certain product groups, the QNG currently has no specific requirements defined. Although classified as not assessment-relevant, these products remain suitable for QNG-certified projects.

Criteria	Pos. / product group	Considered substances	QNG assessment
3.1.3 Schadstoffvermeidung in Baumaterialien	not applicable	not applicable	QNG ready - Not relevant for assessment



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DGNB New Construction 2023

The DGNB System (German Sustainable Building Council) assesses the sustainability of various types of buildings. It can be applied to both large-scale private and commercial projects as well as smaller residential buildings. The 2023 version sets high standards for ecological, economic, socio-cultural, and functional aspects throughout the entire life cycle of a building.

Criteria	No. / Relevant building components / construction materials / surfaces	Considered substances / aspects	Quality level
ENV 1.2 Local environmental impact, 03.05.2024 (3rd edition)	not applicable		Not relevant for assessment

Criteria	Assessment
ENV1.1 Climate action and energy (*)	May positively contribute to the overall building score
Verification: https://www.ostendorf-kunststoffe.com/unternehmen/nachhaltigkeit	

Criteria	Assessment
ECO1.1 Life cycle cost (*)	May positively contribute to the overall building score
Verification: https://www.ostendorf-kunststoffe.com/unternehmen/nachhaltigkeit	

Criteria	Assessment
ECO2.6 Climate resilience (*)	May positively contribute to the overall building score
Verification: Prüfbericht der Physikalisch-Technische Bundesanstalt Braunschweig und Berlin vom 17.06.2008	



Criteria	No. / Relevant building components / construction materials / surfaces	Considered substances / aspects	Quality level
ENV 1.2 Local environmental impact, 29.05.2025 (4th edition)	not applicable		Not relevant for assessment



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DGNB New Construction 2018

The DGNB System (German Sustainable Building Council) assesses the sustainability of various types of buildings. It can be applied to both large-scale private and commercial projects as well as smaller residential buildings.

Criteria	No. / Relevant building components / construction materials / surfaces	Considered substances / aspects	Quality level
ENV 1.2 Local environmental impact	not applicable	not applicable	Not relevant for assessment



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BNB-BN Neubau V2015

The Bewertungssystem Nachhaltiges Bauen (Assessment System for Sustainable Building) is a tool for evaluating public office and administrative buildings, educational facilities, laboratory buildings, and outdoor areas in Germany. The BNB was developed by the former Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) and is now overseen by the Federal Ministry for Housing, Urban Development and Building (BMWSB).

Criteria	Pos. / product type	Considered substance group	Quality level
1.1.6 Risiken für die lokale Umwelt	29 PVC construction products	Heavy metals (lead, cadmium, tin), individual hazardous substances	Quality level 5

Verification: für keine Cadmium- und Bleistabilisatoren und Deklaration enthaltener SVHC > 0,1 % durch Herstellererklärung vom 25. August 2025.



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EU taxonomy

The EU Taxonomy classifies economic activities and products according to their environmental impact. At the product level, the EU regulation defines clear requirements for harmful substances, formaldehyde and volatile organic compounds (VOCs). The Sentinel Holding Institut GmbH labels qualified products that meet this standard.

Criteria	Product type	Considered substances	Assessment
DNSH - Pollution prevention and control		Substances according to Annex C	EU taxonomy compliant

Verification: für SVHC und Stoffe mit Einstufung CMR 1A / 1B < 0,1% durch Herstellererklärung vom 25. August 2025.



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BREEAM DE Neubau 2018

BREEAM (Building Research Establishment Environmental Assessment Methodology) is a UK-based building assessment system that evaluates the sustainability of new constructions, refurbishments, and conversions. Developed by the Building Research Establishment (BRE), the system aims to assess and improve the environmental, economic, and social performance of buildings.

Criteria	Product category	Considered substances	Quality level
Hea 02 Indoor Air Quality			Not relevant for assessment



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Product labels

In the construction industry, high-quality materials are crucial for a building's indoor air quality and sustainability. Product labels and certificates offer guidance to meet these requirements. However, the evaluation criteria of these labels vary, and it is important to carefully assess them to ensure products align with the specific needs of a construction project.



Products bearing the Sentinel Holding Institute QNG-ready seal are suitable for projects aiming to achieve the "Qualitätssiegel Nachhaltiges Gebäude" (Quality Seal for Sustainable Buildings). QNG-ready products meet the requirements of QNG Appendix Document 3.1.3, "Avoidance of Harmful Substances in Building Materials." The KfW loan program Climate-Friendly New Construction with QNG may allow for additional funding.



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Legal notices

(*) These criteria apply to the construction project as a whole. While individual products can positively contribute to the overall building score through proper planning, the evaluation is always conducted at the building level. The information was provided entirely by the manufacturer.

Find our criteria here: <https://www.sentinel-holding.eu/de/Themenwelten/Pr%C3%BCfverfahren%20f%C3%BCr%20Produkte>

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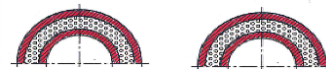
Technisches Datenblatt für KG-PVC-Rohre und -Formstücke

Vollwandrohr

Mehrschichtrohr

Mehrschichtrohr

Vollwand-
Formstücke



	 PVC SN 10 plus	 PVC SN 4 Coex	 PVC SN 8 Coex	 PVC Formteile
Rohrangaben	DIN EN 1401-1  SN - Klasse (Einteilung nach Norm) Belastungsklasse Konstruktion (innen und außen glatt) SDR (Standard Dimension Ratio) (d/e)	DIN EN 13476-2  4 Normallast Coextrudiert 41	DIN EN 13476-2  8 Hochlast Coextrudiert 34	DIN EN 1401-1  4 Hochlast Vollwand 41
Eigenschaften	Ringsteifigkeit nach DIN EN ISO 9969 [kN/m²] Ringsteifigkeit nach DIN 16961 [kN/m²] Werkstoff Anteil mineralischer Additive [%] Mittlere Dichte Farbe Kurzzeit-E-Modul [N/mm²] Langzeit-E-Modul [N/mm²] Längenausdehnungskoeffizient [mm/m x K] Wärmeleitfähigkeit in [W/K x m] Oberflächenwiderstand in Ω chemische Beständigkeit Recycling-Fähigkeit Abrieb pro 100.000 Lastspiele a_m^{100} Schlagzähigkeit bei 0°C Schlagzähigkeit bei -10°C	> 10 ≥ 63 PVC-U ≈ 20 $\approx 1,5$ orangebraun 3000 1500 $\approx 0,08$ $\approx 0,16$ $> 10^{12}$ ph 2-12 100% $\approx 0,17$ ++  ++	> 4 $\geq 31,5$ PVC-U coex ≈ 20 $\approx 1,0$ orangebraun 3000 1500 $\approx 0,08$ $\approx 0,16$ $> 10^{12}$ ph 2-12 100% $\approx 0,17$ +	> 10 ≥ 63 PVC-U 0% ; max. 4 % $\approx 1,4$ orangebraun 3000 1500 $\approx 0,08$ $\approx 0,16$ $> 10^{12}$ ph 2-12 100% ++ +
Empfehlung	Einsatz unter Verkehrsflächen Überdeckungshöhen [m] Wandrauheit k (aus KRV-Handbuch) betriebliche Rauheit (aus ATV 110) Abwassertemperaturen: Abwasser- wassertempe- raturen [°C] Dichtheitsprüfungen	SLW 60 tauglich $\approx 0,5-8,0$ $< 0,1$ mm 0,40 mm DIN EN 476 45 ($\leq$ DN 400) 35 ($>$ DN400) 60 0,5 bar Wasser -0,3 bar Luft	SLW 60 tauglich $\approx 1,0-3,0$ $< 0,1$ mm 0,40 mm DIN EN 476 45 ($\leq$ DN 400) 35 ($>$ DN400) 60 0,5 bar Wasser -0,3 bar Luft	SLW 60 tauglich $\approx 0,5-8,0$ $< 0,1$ mm 0,40 mm DIN EN 476 45 ($\leq$ DN 400) 35 ($>$ DN400) 60 0,5 bar Wasser -0,3 bar Luft
	Eignung für Hochdruckspülen Gefälle Fließgeschwindigkeiten Hydraulische Leistung Verlegung und Prüfung	geeignet ATV A 110 ATV A 110 ATV A 110 DIN EN 1610	geeignet ATV A 110 ATV A 110 ATV A 110 DIN EN 1610	geeignet ATV A 110 ATV A 110 ATV A 110 DIN EN 1610
Anwendungsbereich	als Grundleitung unzugänglich in der Grundplatte als Grundleitung im Erdreich als Leitungen für Kondensate aus Feueranlagen als Falleitung als Sammelleitung im Grundwasserbereich als erdverlegte drucklose Abwasser- und Regenwasserleitung (Schwerkraftentwässerungssystem)	ja ja ja ja ja ja ja	ja ja ja nein nein ja ja	ja ja ja ja ja ja ja
Werkstoffkennwerte	Material Kurzzeit-E-Modul [N/mm²] Langzeit-E-Modul [N/mm²] Kurzzeit-Biegefestigkeit [N/mm²] Langzeit-Biegefestigkeit [N/mm²] Wichte Schwingbreite 2 σ_A	aus ATV A 127 PVC-U 3000 1500 90 50 13,5 9	aus ATV A 127 PVC-U 3000 1500 90 50 10,0 9	aus ATV A 127 PVC-U 3000 1500 90 50 13,5 9
Brandverhalten	schwer- entflammbar Baustoffklasse nach DIN 4102-1 Klassifizierung Brandverhalten - DIN EN 13501-1	schwer- entflammbar B1 E ; kein Abtropfen	schwer- entflammbar B1	schwer- entflammbar B1 E ; kein Abtropfen