SENTINEL HOLDING
INSTITUT

SHI PRODUCT PASSPORT

Find products. Certify buildings.

SHI Product Passport No.:

15309-10-1010

LVT Flex Click 4,5 mm

UNILIN

Unilin Flooring Deutschland GmbH
Reisholzer Werftstraße 33
40589 Düsseldorf

Product qualities:

- SHI Product Assessment 2024
- QNG Qualitätssiegel Nachhaltiges Gebäude
- DGNB NEW CONSTRUCTION 2023
- DGNB NEW CONSTRUCTION 2018
- BNB-BN NEUBAU V2015
- EU taxonomy
- BREEAM DE NEUBAU 2018

CERTIFIED SUSTAINABLE PRODUCT
SHI PRODUCT PASSPORT
SENTINEL HOLDING INSTITUT
www.sentinel-holding.eu

Köttner

Helmut Köttner
Scientific Director
Freiburg, 02 February 2026

SENTINEL HOLDING
INSTITUT

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Contents

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

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 floor coverings	TVOC ≤ 160 µg/m^3 Formaldehyd ≤ 10 µg/m^3	Indoor Air Quality Certified
Valid untill: 09 May 2027			

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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	2.2 Resilient floor coverings – including multilayer systems	VOC / Emissions / hazardous substances / polycyclic aromatic hydrocarbons (PAH) / SVHC / heavy metals	QNG ready
Verification: Emissionsprüfbericht Eurofins Nr. 392-2025-00145303_A_EN vom 09.05.2025. Herstellererklärung vom 14.03.2025.			

Product:
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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)	7 Floor coverings (Resilient floor coverings)	VVOCs, VOC, SVOC emissions and content of hazardous substances	Quality level 3
Verification: Emissionsprüfbericht Eurofins Nr. 392-2025-00145303_A_EN vom 09.05.2025. Herstellererklärung vom 14.03.2025.			

Criteria	Assessment
SOC1.2 Indoor air quality (*)	May positively contribute to the overall building score
Verification: SHI-Schadstoffgeprüft	

Criteria	No. / Relevant building components / construction materials / surfaces	Considered substances / aspects	Quality level
ENV 1.2 Local environmental impact, 29.05.2025 (4th edition)	7 Floor coverings for indoor use (elastic floor coverings)	VVOCs, VOC, SVOC emissions and content of hazardous substances	Quality level 3
Verification: Emissionsprüfbericht Eurofins Nr. 392-2025-00145303_A_EN vom 09.05.2025. Herstellererklärung vom 14.03.2025.			

Product:
LVT Flex Click 4,5 mm

SHI Product Passport no.:
15309-10-1010

UNILIN

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	7 Floor coverings (Resilient floor coverings)	VOC / SVOC / hazardous substances	Quality level 4
Verification: Emissionsprüfbericht Eurofins Nr. 392-2025-00145303_A_EN vom 09.05.2025. Herstellererklärung vom 14.03.2025.			

Product:
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SHI Product Passport no.:
15309-10-1010

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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	2a Elastic floor coverings – with and without bonded underlay or insulation layer	VOC / hazardous substances / heavy metals	Quality level 3
Verification: Emissionsprüfbericht Eurofins Nr. 392-2025-00145303_A_EN vom 09.05.2025. Herstellererklärung vom 14.03.2025.			

Product:
LVT Flex Click 4,5 mm

SHI Product Passport no.:
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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	Floor coverings (including associated adhesives and sealants)	Substances according to Annex C, formaldehyde, carcinogenic VOCs category 1A/1B	EU taxonomy compliant
Verification: Emissionsprüfbericht Eurofins Nr. 392-2025-00145303_A_EN vom 09.05.2025. Herstellererklärung vom 14.03.2025.			

Product:
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SHI Product Passport no.:
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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	Flooring materials (including floor levelling compounds and resin flooring)	Emissions: Formaldehyde, TVOC, TSVOC, carcinogens	Exemplary quality
Verification: Emissionsprüfbericht Eurofins Nr. 392-2025-00145303_A_EN vom 09.05.2025. Herstellererklärung vom 14.03.2025.			

Product:
LVT Flex Click 4,5 mm

SHI Product Passport no.:
15309-10-1010

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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.

This product is SHI Indoor Air Quality certified and recommended by Sentinel Holding Institut. Indoor-air-focused construction, renovation, and operation of buildings is made possible by transparent and verifiable criteria thanks to the Sentinel Holding concept.

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.

The European Resilient Flooring Manufacturers’ Institute (ERFMI) is the European association of manufacturers and suppliers of resilient floor coverings. ERFMI represents its members vis-à-vis standardisation bodies, legislators and public authorities, and advocates for industry-specific issues related to standards, product safety, emissions and sustainability. With regard to Environmental Product Declarations (EPDs), ERFMI promotes transparency by encouraging manufacturers of resilient floor coverings to disclose their environmental performance.

Product:
LVT Flex Click 4,5 mm

SHI Product Passport no.:
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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%BCfkriterien%20f%C3%BCr%20Produkte

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

SGS

SGS TÜV SAAR

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UNIDROP PATENTED TECHNOLOGY ®

TECHNISCHES DATENBLATT

Ausgabe **05/2024**

ABMESSUNGEN

FORMAT		**Planken**
Breite	ISO 24342:2018-11	191 mm
Länge	ISO 24342:2018-11	1316 mm
Anzahl der Paneele pro Packung		7
m² pro Packung		1,759 m²
Gewicht pro Packung		14,06 kg

Gesamtgewicht per Verpackungseinheit	EN ISO 23997:2012-02	7703 g/m² [-10%; +13%]
Gesamtstärke	ISO 24346:2006-10	4,5 mm
Deckschicht	EN ISO 24340:2012-02	0,55 mm
Veredelung		Superguard Pride®
Nut und Feder		Uniclic-Unidrop

WERKSGARANTIE

	METHODE	**PARAMETER**	**WERTE**	
Beanspruchungsklasse	EN ISO 10874		Klasse	23 - 33
Produktnorm	EN ISO 10582:2018-01 (EN 16511)			
CE	EN 14041:2004 / AC:2006	Notifizierte Stelle	NB 2401 - CRET	DOP: siehe Endetikett auf Packung
UKCA	EN 14041:2004 / AC:2006	Approved body	AB 0321 - Satra UK	DOP: siehe Endetikett auf Packung
Garantie	Wohnzwecke	Siehe Garantiebedingungen	20	Jahre
	Gewerbliche Nutzung	Siehe Garantiebedingungen	7	Jahre

ALLGEMEINE ANGABEN

	METHODE	**PARAMETER**	**NORMANFORDERUNGEN**	**WERTE**
Geradlinigkeit und Rechtwinkligkeit	EN ISO 24342:2018-11		≤400mm: ≤0,25 mm | >400mm: ≤0,35mm	OK
Nutzschicht	EN ISO 10582:2018-01		Type 1	OK
Abriebbeständigkeit	EN 13329 - Annex E			≥ 2000 Zyklen
Schlagfestigkeit	EN 13329 - Annex F			≥ 1600 mm
Kratzbeständigkeit	EN 16094:2021-06			MSR-A1
				MSR-B1
Bürostühle	ISO 4918:2016-03	25000 Zyklen		Keine Delamination, keine Störung
Möbelfußverschiebung	EN ISO 16581:2019-06	Fuß 0,1 mm / 32 kg		Keine sichtbaren Schäden
Eindruck	EN ISO 24343-1:2012-01		≤ 0,1 mm	Durschschnittswert: 0,05 mm
Fleckenunempfindlichkeit	EN 438-2:2016+A1:2018-12	Aceton - Kaffee -NaOH -H2O2 - Schuhcreme		OK
Schließkraft	ISO 10582:2018 - Annex D	Fmax kurzen Seite	≥ 1,5 kN/m	OK
Maßänderung	EN ISO 23999:2021-11	6 Stunden bei 80°C	≤ |0,15|%	Durschschnittswert: ≤|0,05|%
Schüsselung	EN ISO 23999:2021-11		≤ |1| mm	OK
Lichtechtheit	ISO 105-B02:2014-09	Blau Referenz	Klasse ≥ 6	OK
Fußbodenheizung		Geeignet für alle standardisierten Warmwasser-Fußbodenheizungen in zementären Untergründen. Nur bedingt geeignet für elektrische oder alternative Fußbodenheizungen. Maximale Temperatur ≤ 27°C in den Belagrücken einwirkend. Bitte beachten Sie die Verlegeempfehlung.		

UMWELT, SICHERHEIT UND GESUNDHEIT

	METHODE	**PARAMETER**	**NORMANFORDERUNGEN**	**WERTE**
AFFSET				A+
Floorscore				SCS-FS-02828
Formaldehydemission	EN 717-1:2004-10	Kein Formaldehyd während der Produktion zugefü	E1 (≤ 0,124 mg/m³)	< Nachweisgrenze
TVOC 28 Tage	ISO 16000 part 9-6	AgBB-Anforderung nach 28 Tagen <1000 µg / m³		OK
Brandklasse	EN 13501-1:2018			Bfl-s1
Wärmewiderstand	EN 12667:2001-01	Ohne Unterlag		0,016 m² K/W
Anti-Statik	EN 1815:2016-09		≤ 2 kV	OK
Rutschfestigkeit	EN 13893:2002-11		µ ≥ 0,30	DS
	EN 16165:2021-10 Annex B			R9 - R10
Inhalt	Schwermetalle+ Blei / Cadmium			NICHT vorhanden
Gefahrliche Stoffe	Karzinogene, mutagene oder reprotoxische Stoffe Klasse 1A und 1B (Kandidatenliste)			NICHT vorhanden
REACH	Regulation (EC)			Konform
Recycling-Inhalt	Nur INTERNAL Recycling-Material verwendet			≥ 20%

100% DESIGNED AND PRODUCED IN BELGIUM

ÉMISSIONS DANS L'AIR INTÉRIEUR A+ A+ A B C

floor score CERTIFIED BY SCS Global Services

CE EN 14041:2004 / AC:2006 Heterogeneous PVC Floorcoverings ISO 10582:2018

UKCA EN 14041:2004 / AC:2006 Heterogeneous PVC Floorcoverings ISO 10582:2018

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UNIDROP PATENTED TECHNOLOGY ®

TECHNISCHES DATENBLATT

Ausgabe **10/2024**

ABMESSUNGEN

FORMAT		Planken	Fliesen
Breite	ISO 24342:2018-11	191 mm	324 mm
Länge	ISO 24342:2018-11	1316 mm	655 mm
Anzahl der Paneele pro Packung		7	7
m² pro Packung		1,759 m²	1,486 m²
Gewicht pro Packung		14,00 kg	11,80 kg

Gesamtgewicht per Verpackungseinheit	EN ISO 23997:2012-02	7764 g/m² [-10%; +13%]
Gesamtstärke	ISO 24346:2006-10	4,5 mm
Deckschicht	EN ISO 24340:2012-02	0,4 mm
Veredelung		Superguard Pro®
Nut und Feder		Uniclic-Unidrop

WERKSGARANTIE

	METHODE	PARAMETER	WERTE	
Beanspruchungsklasse	EN ISO 10874		Klasse	23 - 32
Produktnorm	EN ISO 10582:2018-01 (EN 16511)			
CE	EN 14041:2004 / AC:2006	Notifizierte Stelle	NB 2401 - CRET	DOP: siehe Endetikett auf Packung
UKCA	EN 14041:2004 / AC:2006	Approved body	AB 0321 - Satra UK	DOP: siehe Endetikett auf Packung
Garantie	Wohnzwecke	Siehe Garantiebedingungen	15	Jahre
	Gewerbliche Nutzung	Siehe Garantiebedingungen	5	Jahre

ALLGEMEINE ANGABEN

	METHODE	PARAMETER	NORMANFORDERUNGEN	WERTE
Geradlinigkeit und Rechtwinkligkeit	EN ISO 24342:2018-11		≤400mm: ≤0,25 mm | >400mm: ≤0,35mm	OK
Nutzschicht	EN ISO 10582:2018-01		Type 1	OK
Abriebbeständigkeit	EN 13329 - Annex E			≥ 1200 Zyklen
Schlagfestigkeit	EN 13329 - Annex F			≥ 1200 mm
Bürostühle	ISO 4918:2016-03	25000 Zyklen		Keine Delamination, keine Störung
Möbelfußverschiebung	EN ISO 16581:2019-06	Fuß 0,1 mm / 32 kg		Keine sichtbaren Schäden
Eindruck	EN ISO 24343-1:2012-01		≤ 0,1 mm	Durschschnittswert: 0,05 mm
Fleckenunempfindlichkeit	EN 438-2:2016+A1:2018-12	Aceton - Kaffee -NaOH -H2O2 - Schuhcreme		OK
Schließkraft	ISO 10582:2018 - Annex D		≥ 1,5 kN/m	OK
Maßänderung	EN ISO 23999:2021-11	6 Stunden bei 80°C	≤ |0,15|%	Durschschnittswert: ≤ |0,05|%
Schüsselung	EN ISO 23999:2021-11		≤ |1| mm	OK
Lichtechtheit	ISO 105-B02:2014-09	Blau Referenz	Klasse ≥ 6	OK
Fußbodenheizung		Geeignet für alle standardisierten Warmwasser-Fußbodenheizungen in zementären Untergründen. Nur bedingt geeignet für elektrische oder alternative Fußbodenheizungen. Maximale Temperatur ≤ 27°C in den Belagrücken einwirkend. Bitte beachten Sie die Verlegeempfehlung.		

UMWELT, SICHERHEIT UND GESUNDHEIT

	METHODE	PARAMETER	NORMANFORDERUNGEN	WERTE
AFFSET				A+
Floorscore				SCS-FS-02828
Formaldehydemission	EN 717-1:2004-10	Kein Formaldehyd während der Produktion zugef E1 (≤ 0,124 mg/m³)		< Nachweisgrenze
TVOC 28 Tage	ISO 16000 part 9-6	AgBB-Anforderung nach 28 Tagen <1000 µg / m³		OK
Brandklasse	EN 13501-1:2018			Bfl-s1
Wärmewiderstand	EN 12667:2001-01	Ohne Unterlag		0,015 m² K/W
Anti-Statik	EN 1815:2016-09		≤ 2 kV	OK
Rutschfestigkeit	EN 13893:2002-11		µ ≥ 0,30	DS
	EN 16165:2021-10 Annex B			R9
Inhalt	Schwermetalle+ Blei / Cadmium			NICHT vorhanden
Gefahrliche Stoffe	Karzinogene, mutagene oder reprotoxische Stoffe Klasse 1A und 1B (Kandidatenliste)			NICHT vorhanden
REACH	Regulation (EC)			Konform
Recycling-Inhalt	Nur INTERNAL Recycling-Material verwendet			≥ 20%

100% DESIGNED AND PRODUCED IN BELGIUM

ÉMISSIONS DANS L'AIR INTÉRIEUR A+ A+ A B C

floor score CERTIFIED BY SCS Global Services

CE EN 14041:2004 / AC:2006 Heterogeneous PVC Floorcoverings ISO 10582:2018

UKCA EN 14041:2004 / AC:2006 Heterogeneous PVC Floorcoverings ISO 10582:2018

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TECHNISCHES DATENBLATT

Ausgabe **05/2024**

ABMESSUNGEN

FORMAT		Planken	Fliesen
Breite	ISO 24342:2018-11	191 mm	324 mm
Länge	ISO 24342:2018-11	1316 mm	655 mm
Anzahl der Paneele pro Packung		7	7
m² pro Packung		1,759 m²	1,486 m²
Gewicht pro Packung		14,47 kg	12,08 kg

Gesamtgewicht per Verpackungseinheit	EN ISO 23997:2012-02	7843 g/m² [-10%; +13%]
Gesamtstärke	ISO 24346:2006-10	4,5 mm
Deckschicht	EN ISO 24340:2012-02	0,3 mm
Veredelung		Superguard Pro®
Nut und Feder		Uniclic-Unidrop

WERKSGARANTIE

	METHODE	PARAMETER	WERTE	
Beanspruchungsklasse	EN ISO 10874		Klasse	23 - 31
Produktnorm	EN ISO 10582:2018-01 (EN 16511)			
CE	EN 14041:2004 / AC:2006	Notifizierte Stelle	NB 2401 - CRET	DOP: siehe Endetikett auf Packung
UKCA	EN 14041:2004 / AC:2006	Approved body	AB 0321 - Satra UK	DOP: siehe Endetikett auf Packung
Garantie	Wohnzwecke	Siehe Garantiebedingungen	15	Jahre
	Gewerbliche Nutzung	Siehe Garantiebedingungen	5	Jahre

ALLGEMEINE ANGABEN

	METHODE	PARAMETER	NORMANFORDERUNGEN	WERTE
Geradlinigkeit und Rechtwinkligkeit	EN ISO 24342:2018-11		≤400mm: ≤0,25 mm | >400mm: ≤0,35mm	OK
Nutzschicht	EN ISO 10582:2018-01		Type 1	OK
Abriebbeständigkeit	EN 13329 - Annex E			≥ 600 Zyklen
Schlagfestigkeit	EN 13329 - Annex F			≥ 800 mm
Bürostühle	ISO 4918:2016-03	25000 Zyklen		Keine Delamination, keine Störung
Möbelfußverschiebung	EN ISO 16581:2019-06	Fuß 0,1 mm / 32 kg		Keine sichtbaren Schäden
Eindruck	EN ISO 24343-1:2012-01		≤ 0,1 mm	Durschschnittswert: 0,05 mm
Fleckenunempfindlichkeit	EN 438-2:2016+A1:2018-12	Aceton - Kaffee -NaOH -H2O2 - Schuhcreme		OK
Schließkraft	ISO 10582:2018 - Annex D	Fmax kurzen Seite	≥ 1,5 kN/m	OK
Maßänderung	EN ISO 23999:2021-11	6 Stunden bei 80°C	≤ |0,15|%	Durschschnittswert: ≤|0,05|%
Schüsselung	EN ISO 23999:2021-11		≤ |1| mm	OK
Lichtechtheit	ISO 105-B02:2014-09	Blau Referenz	Klasse ≥ 6	OK
Fußbodenheizung		Geeignet für alle standardisierten Warmwasser-Fußbodenheizungen in zementären Untergründen. Nur bedingt geeignet für elektrische oder alternative Fußbodenheizungen. Maximale Temperatur ≤ 27°C in den Belagrücken einwirkend. Bitte beachten Sie die Verlegeempfehlung.		

UMWELT, SICHERHEIT UND GESUNDHEIT

	METHODE	PARAMETER	NORMANFORDERUNGEN	WERTE
AFFSET				A+
Floorscore				SCS-FS-02828
Formaldehydemission	EN 717-1:2004-10	Kein Formaldehyd während der Produktion zugef E1 (≤ 0,124 mg/m³)		< Nachweisgrenze
TVOC 28 Tage	ISO 16000 part 9-6	AgBB-Anforderung nach 28 Tagen <1000 µg / m³		OK
Brandklasse	EN 13501-1:2018			Bfl-s1
Wärmewiderstand	EN 12667:2001-01	Ohne Unterlag		0,015 m² K/W
Anti-Statik	EN 1815:2016-09		≤ 2 kV	OK
Rutschfestigkeit	EN 13893:2002-11		µ ≥ 0,30	DS
	EN 16165:2021-10 Annex B			R9 - R10
Inhalt	Schwermetalle+ Blei / Cadmium			NICHT vorhanden
Gefahrliche Stoffe	Karzinogene, mutagene oder reprotoxische Stoffe Klasse 1A und 1B (Kandidatenliste)			NICHT vorhanden
REACH	Regulation (EC)			Konform
Recycling-Inhalt	Nur INTERNAL Recycling-Material verwendet			≥ 20%

100% DESIGNED AND PRODUCED IN BELGIUM

ÉMISSIONS DANS L'AIR INTÉRIEUR A+ A+ A B C

floor score CERTIFIED BY SCS Global Services

CE EN 14041:2004 / AC:2006 Heterogeneous PVC Floorcoverings ISO 10582:2018

UKCA EN 14041:2004 / AC:2006 Heterogeneous PVC Floorcoverings ISO 10582:2018

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TECHNISCHES DATENBLATT

Ausgabe **05/2024**

ABMESSUNGEN

FORMAT		Planken	Fliesen
Breite	ISO 24342:2018-11	191 mm	324 mm
Länge	ISO 24342:2018-11	1316 mm	655 mm
Anzahl der Paneele pro Packung		7	7
m² pro Packung		1,759 m²	1,486 m²
Gewicht pro Packung		14,06 kg	11,71 kg

Gesamtgewicht per Verpackungseinheit	EN ISO 23997:2012-02	7703 g/m² [-10%; +13%]
Gesamtstärke	ISO 24346:2006-10	4,5 mm
Deckschicht	EN ISO 24340:2012-02	0,55 mm
Veredelung		Superguard Pro®
Nut und Feder		Uniclic-Unidrop

WERKSGARANTIE

	METHODE	PARAMETER	WERTE	
Beanspruchungsklasse	EN ISO 10874		Klasse	23 - 33
Produktnorm	EN ISO 10582:2018-01 (EN 16511)			
CE	EN 14041:2004 / AC:2006	Notifizierte Stelle	NB 2401 - CRET	DOP: siehe Endetikett auf Packung
UKCA	EN 14041:2004 / AC:2006	Approved body	AB 0321 - Satra UK	DOP: siehe Endetikett auf Packung
Garantie	Wohnzwecke	Siehe Garantiebedingungen	20	Jahre
	Gewerbliche Nutzung	Siehe Garantiebedingungen	7	Jahre

ALLGEMEINE ANGABEN

	METHODE	PARAMETER	NORMANFORDERUNGEN	WERTE
Geradlinigkeit und Rechtwinkligkeit	EN ISO 24342:2018-11		≤400mm: ≤0,25 mm | >400mm: ≤0,35mm	OK
Nutzschicht	EN ISO 10582:2018-01		Type 1	OK
Abriebbeständigkeit	EN 13329 - Annex E			≥ 2000 Zyklen
Schlagfestigkeit	EN 13329 - Annex F			≥ 1600 mm
Bürostühle	ISO 4918:2016-03	25000 Zyklen		Keine Delamination, keine Störung
Möbelfußverschiebung	EN ISO 16581:2019-06	Fuß 0,1 mm / 32 kg		Keine sichtbaren Schäden
Eindruck	EN ISO 24343-1:2012-01		≤ 0,1 mm	Durschschnittswert: 0,05 mm
Fleckenunempfindlichkeit	EN 438-2:2016+A1:2018-12	Aceton - Kaffee -NaOH -H2O2 - Schuhcreme		OK
Schließkraft	ISO 10582:2018 - Annex D	Fmax kurzen Seite	≥ 1,5 kN/m	OK
Maßänderung	EN ISO 23999:2021-11	6 Stunden bei 80°C	≤ |0,15|%	Durschschnittswert: ≤|0,05|%
Schüsselung	EN ISO 23999:2021-11		≤ |1| mm	OK
Lichtechtheit	ISO 105-B02:2014-09	Blau Referenz	Klasse ≥ 6	OK
Fußbodenheizung		Geeignet für alle standardisierten Warmwasser-Fußbodenheizungen in zementären Untergründen. Nur bedingt geeignet für elektrische oder alternative Fußbodenheizungen. Maximale Temperatur ≤ 27°C in den Belagrücken einwirkend. Bitte beachten Sie die Verlegeempfehlung.		

UMWELT, SICHERHEIT UND GESUNDHEIT

	METHODE	PARAMETER	NORMANFORDERUNGEN	WERTE
AFFSET				A+
Floorscore				SCS-FS-02828
Formaldehydemission	EN 717-1:2004-10	Kein Formaldehyd während der Produktion zugef E1 (≤ 0,124 mg/m³)		< Nachweisgrenze
TVOC 28 Tage	ISO 16000 part 9-6	AgBB-Anforderung nach 28 Tagen <1000 µg / m³		OK
Brandklasse	EN 13501-1:2018			Bfl-s1
Wärmewiderstand	EN 12667:2001-01	Ohne Unterlag		0,016 m² K/W
Anti-Statik	EN 1815:2016-09		≤ 2 kV	OK
Rutschfestigkeit	EN 13893:2002-11		µ ≥ 0,30	DS
	EN 16165:2021-10 Annex B			R9 - R10
Inhalt	Schwermetalle+ Blei / Cadmium			NICHT vorhanden
Gefahrliche Stoffe	Karzinogene, mutagene oder reprotoxische Stoffe Klasse 1A und 1B (Kandidatenliste)			NICHT vorhanden
REACH	Regulation (EC)			Konform
Recycling-Inhalt	Nur INTERNAL Recycling-Material verwendet			≥ 20%

100% DESIGNED AND PRODUCED IN BELGIUM

ÉMISSIONS DANS L'AIR INTÉRIEUR A+ A+ A B C

floor score CERTIFIED BY SCS Global Services

CE EN 14041:2004 / AC:2006 Heterogeneous PVC Floorcoverings ISO 10582:2018

UKCA EN 14041:2004 / AC:2006 Heterogeneous PVC Floorcoverings ISO 10582:2018

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Product Safety Information Sheet

According to the requirements in Article 32 of Regulation (EC) No. 1907/2006

Vinyl: Unilin, Quick-Step, Pergo, IVC Commercial

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Vinyl: Unilin, Quick-Step, Pergo, IVC Commercial
Registration number REACH : Not applicable (article)
Product type REACH : Article

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1 Relevant identified uses

Vinyl flooring

1.2.2 Uses advised against

No uses advised against

1.3. Details of the supplier of the Product Safety Information Sheet:

Supplier of the Product Safety Information Sheet

UNILIN Group
Ooigemstraat 3
B-8710 Wielsbeke-Ooigem
☎ +32 56 67 52 11
Technical.services@unilin.com

all brands produced and distributed by Unilin Group

1.4. Emergency telephone number

During business hours, 9:00-16:00 (CET) :
+32 56 67 52 11

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

2.2. Label elements

Labelling does not apply to articles

2.3. Other hazards

During processing dust may be released for which exposure limits are set out in the community

SECTION 3: Composition/information on ingredients

This article does not contain any notifiable substances
This article does not contain a substance of very high concern (SVHC) in accordance with Article 59(1) of Regulation (EC) No 1907/2006 at a concentration above 0,1 % (w/w)

SECTION 4: First aid measures

4.1. Description of first aid measures

General:

If you feel unwell, consult a doctor/medical service.

After inhalation:

Not applicable. Measures apply only in case of excessive dust production when processing the material. Remove victim into fresh air. In case of respiratory problems, consult a doctor/medical service.

After skin contact:

Not applicable.

After eye contact:

Not applicable. Measures apply only in case of excessive dust production when processing the material. Rinse immediately with (lukewarm) water. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a doctor/medical service.

After ingestion:

Not applicable.

4.2. Most important symptoms and effects, both acute and delayed

4.2.1 Acute symptoms

After inhalation:

No effects known.

After skin contact:

No effects known.

After eye contact:

No effects known.

After ingestion:

No effects known.

4.2.2 Delayed symptoms

No effects known.

4.3. Indication of any immediate medical attention and special treatment needed

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1 Suitable extinguishing media:

Small fire: Quick-acting ABC powder extinguisher, Class A foam extinguisher, Water (quick-acting extinguisher, reel).

Major fire: Water, Class A foam.

5.1.2 Unsuitable extinguishing media:

Small fire: Quick-acting BC powder extinguisher, Quick-acting CO2 extinguisher.

5.2. Special hazards arising from the substance or mixture

On burning: release of toxic and corrosive gases/vapours (hydrogen chloride, carbon monoxide - carbon dioxide).

5.3. Advice for firefighters

5.3.1 Instructions:

Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water.

5.3.2 Special protective equipment for fire-fighters:

Gloves (EN 374). Protective clothing (EN 14605 or EN 13034). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No naked flames.

6.1.1 Protective equipment for non-emergency personnel

See section 8.2

6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Protective clothing (EN 14605 or EN 13034).

Suitable protective clothing

See section 8.2

6.2. Environmental precautions

No data available

6.3. Methods and material for containment and cleaning up

Pick-up the material.

6.4. Reference to other sections

See section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid raising dust. Keep away from naked flames/heat. Observe normal hygiene standards.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Store in a dry area. Meet the legal requirements.

7.2.2 Keep away from:

Heat sources.

7.2.3 Suitable packaging material:

No data available

7.2.4 Non suitable packaging material:

No data available

7.3. Specific end use(s)

Not applicable

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

Belgium

Chlorure de polyvinyle (fraction alvéolaire)	Time-weighted average exposure limit 8 h	1 mg/m³
Verres (fibres ou poussières de)	Time-weighted average exposure limit 8 h	10 mg/m³

France

Fibres de verre	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	1 fibers/cm³

Austria

Polyvinylchlorid (Alveolarstaub)	Tagesmittelwert (MAK)	5 mg/m³
	Kurzzeitwert 60(Miw) 2x (MAK)	10 mg/m³

UK

MMMF (Machine-made mineral fibre) (except for refraction ceramic fibres and special purpose fibres)	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	2 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	5 mg/m³
Polyvinyl chloride inhalable dust	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	10 mg/m³
Polyvinyl chloride respirable dust	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	4 mg/m³

USA (TLV-ACGIH)

Polyvinyl chloride	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	1 mg/m³ (R)
Synthetic vitreous fibers: Continuous filam glass fibers	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	1 fibers/cm³ (F)
Synthetic vitreous fibers: Glass wool fibers	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	1 fibers/cm³ (F)

(R): Respirable fraction

(F): Respirable fibers: length > 5 µm; aspect ratio ≥ 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination

b) National biological limit values

If limit values are applicable and available these will be listed below.

8.1.2 Sampling methods

If applicable and available it will be listed below.

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 Threshold values

If applicable and available it will be listed below.

8.1.5 Control banding

If applicable and available it will be listed below.

8.2. Exposure controls

8.2.1 Appropriate engineering controls

Avoid raising dust. Keep away from naked flames/heat. Measure the concentration in the air regularly. Work under local exhaust/ventilation.

8.2.2 Individual protection measures, such as personal protective equipment

Observe normal hygiene standards. Do not eat, drink or smoke during work.

a) Respiratory protection:

Dust production: dust mask with filter type P1.

b) Hand protection:

Not required for normal conditions of use.

c) Eye protection:

Not required for normal conditions of use.

d) Skin protection:

Not required for normal conditions of use.

8.2.3 Environmental exposure controls:

See sections 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Flexible solid material
Odour	Almost odourless
Odour threshold	No data available in the literature
Colour	Variable in colour, depending on the composition

Particle size	No data available in the literature
Explosion limits	No data available in the literature
Flammability	Not classified as flammable
Log Kow	Not applicable (article)
Dynamic viscosity	Not applicable (solid)
Kinematic viscosity	Not applicable (solid)
Melting point	No data available in the literature
Boiling point	No data available in the literature
Relative vapour density	Not applicable (solid)
Vapour pressure	No data available in the literature
Solubility	Water ; insoluble
Relative density	1.7 - 2.0
Absolute density	1700 kg/m³ - 2000 kg/m³
Decomposition temperature	No data available in the literature
Auto-ignition temperature	No data available in the literature
Flash point	Not applicable (solid)
pH	No data available in the literature

9.2. Other information

Softening point	80 °C
Evaporation rate	Not applicable (solid)

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Precautionary measures

Avoid raising dust. Keep away from naked flames/heat.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

On burning: release of toxic and corrosive gases/vapours (hydrogen chloride, carbon monoxide - carbon dioxide).

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

11.1.1 Test results

Acute toxicity

Vinyl: Unilin, Quick-Step, Pergo, IVC Commercial

No (test)data available

Corrosion/irritation

Vinyl: Unilin, Quick-Step, Pergo, IVC Commercial

No (test)data available

Respiratory or skin sensitisation

Vinyl: Unilin, Quick-Step, Pergo, IVC Commercial

No (test)data available

Specific target organ toxicity

Vinyl: Unilin, Quick-Step, Pergo, IVC Commercial

No (test)data available

Mutagenicity (in vitro)

Vinyl: Unilin, Quick-Step, Pergo, IVC Commercial

No (test)data available

Mutagenicity (in vivo)

Vinyl: Unilin, Quick-Step, Pergo, IVC Commercial

No (test)data available

Carcinogenicity

Vinyl: Unilin, Quick-Step, Pergo, IVC Commercial

No (test)data available

Reproductive toxicity

Vinyl: Unilin, Quick-Step, Pergo, IVC Commercial

No (test)data available

Toxicity other effects

Vinyl: Unilin, Quick-Step, Pergo, IVC Commercial

No (test)data available

11.2. Information on other hazards

No evidence of endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

Vinyl: Unilin, Quick-Step, Pergo, IVC Commercial

No (test)data available

12.2. Persistence and degradability

Water

Biodegradability in water: no data available

12.3. Bioaccumulative potential

Vinyl: Unilin, Quick-Step, Pergo, IVC Commercial

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (article)			

Conclusion

No bioaccumulation data available

12.4. Mobility in soil

No (test)data on mobility of the component(s) available

12.5. Results of PBT and vPvB assessment

Due to insufficient data no statement can be made whether the component(s) fulfil(s) the criteria of PBT and vPvB according to Annex XIII of Regulation (EC) No 1907/2006.

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties

12.7. Other adverse effects

Vinyl: Unilin, Quick-Step, Pergo, IVC Commercial

Greenhouse gases

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

SECTION 13: Disposal considerations

13.1. Waste treatment methods

13.1.1 Provisions relating to waste

European Union

Can be considered as non hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997. The waste code must be assigned by the user, preferably in consultation with the (environmental) authorities concerned.

13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

13.1.3 Packaging/Container

No data available

SECTION 14: Transport information

Road (ADR), Rail (RID), Inland waterways (ADN), Sea (IMDG/IMSBC), Air (ICAO-TI/IATA-DGR)

14.1. UN number

Transport	Not subject

14.2. UN proper shipping name

14.3. Transport hazard class(es)

Hazard identification number	
Class	
Classification code	

14.4. Packing group

Packing group	
Labels	

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	
Limited quantities	

14.7. Maritime transport in bulk according to IMO instruments

Annex II of MARPOL 73/78	Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark
	No data available in the literature

National legislation Belgium

No data available

National legislation The Netherlands

Waterbezwaarlijkheid	Not applicable (article)

National legislation France

Catégorie cancérogène	Fibres de verre; (2); Certains ou tous ces composées sont classés C1A, C1B ou C2.

National legislation Germany

WGK	Not applicable (article)

National legislation Austria

No data available

National legislation United Kingdom

No data available

Other relevant data

TLV - Carcinogen	Synthetic vitreous fibers: Continuous filam glass fibers; A4
	Synthetic vitreous fibers: Glass wool fibers; A3
	Polyvinyl chloride; A4

15.2. Chemical safety assessment

No chemical safety assessment is required.

SECTION 16: Other information

(*)	INTERNAL CLASSIFICATION BY BIG
ADI	Acceptable daily intake
AOEL	Acceptable operator exposure level
ATE	Acute Toxicity Estimate
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC50	Effect Concentration 50 %
ErC50	EC50 in terms of reduction of growth rate
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
NOAEC/NOAEL	No Observed Adverse Effect Concentration/No Observed Adverse Effect Level
NOEC/NOEL	No Observed Effect Concentration/No Observed Effect Level
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative & Toxic
PNEC	Predicted No Effect Concentration

STP	Sludge Treatment Process
vPvB	very Persistent & very Bioaccumulative

The information in this Product Safety Information Sheet informs on the properties of certain substances, preparations or mixtures incorporated in the article. The Product Safety Information Sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this Product Safety Information Sheet does not release the user from the obligation to take all measures dictated by common sense, regulations, the guidelines of the manufacturer and recommendations or which are necessary and/or useful based on the real applicable circumstances. The Product Safety Information Sheet constitutes merely of guidelines and recommendations. The information in this Product Safety Information Sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. New Product Safety Information Sheets are written from time to time. Only the most recent versions may be used. Unless indicated otherwise word for word on the Product Safety Information Sheet, the information does not apply to other, even similar products. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This Product Safety Information Sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this Product Safety Information Sheet is subject to the licence and liability limiting conditions as stated in the agreement between BIG and the manufacturer of this product or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.

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Lenzburg, 14.03.2025

Betreff: Stellungnahme u.a. zur Erfüllung der EU-Taxonomie Verordnung von Unilin-Fußbodenbelägen

Sehr geehrte Damen und Herren,

generell achten wir bei unseren Produkten auf das Emissionsverhalten und halten die strengen Anforderungen des AgBB-Bewertungsschemas (Ausschuss zur gesundheitlichen Bewertung von Bauprodukten) Stand Juni 2021 ein. Die dort zugrunde gelegte NIK-Liste (Niedrigste Interessierende Konzentration), in der jeder Einzelstoff auf Grund seiner toxikologischen Bedeutung berücksichtigt wird, ist die aktuelle Bewertungsgrundlage. Das Unterschreiten des AgBB-Bewertungsschemas ist eine Grundvoraussetzung für die Verwendung in Innenräumen, welche für den dauerhaften Aufenthalt von Personen gedacht sind. Der Urheber für dieses Bewertungsschema ist das deutsche Umweltbundesamt mit Sitz in Dessau-Roßlau.
Darüber hinaus halten wir auch die Anforderung der DGNB (ENV1.2 QS4), sowie die Anforderungen der Schadstoffvermeidung in Baumaterialien nach Anhangdokument 313 ein. Dadurch sind die Anforderungen unserer Bodenbeläge für den Einsatz in DGNB- und QNG-Zertifizierte Gebäude eingehalten.
Um für einen wirksamen Verbraucherschutz zu sorgen hat die Europäische Union mit der Verordnung (EG) Nr. 1907/2006 (REACH-Verordnung) eine in ganz Europa geltende gesetzliche Regelung erlassen. Dieser Verordnung müssen sich zwingend alle Hersteller und Importeure unterwerfen. Es bedeutet, dass die zur Herstellung verwendeten Stoffe und Chemikalien vor dem Importieren und/oder dem Verarbeiten registriert werden müssen. Diese wiederum müssen durch entsprechende Studien oder Tests ihre Unbedenklichkeit nachgewiesen haben. Wir erklären Ihnen hiermit, dass Unilin ausschließlich Rohstoffe verarbeitet, die REACH-Verordnung 1907/2006 unterliegen und entsprechen.
Der Artikel 33 dieser REACH-Verordnung regelt die Informationspflicht innerhalb der Lieferkette und gegenüber dem Verbraucher. Dabei geht es darum ob in einem Produkt eine besorgniserregende Substanz (SVHC) enthalten ist oder nicht. Diese muss auf Anfrage benannt werden. Dazu erklären wir, dass unsere Fußbodenbeläge keine besorgniserregenden Substanzen (SVHC) eingesetzt werden. Die Anforderungen am Gehalt an Formaldehyd sind nach EU-Taxonomie Verordnung < 0,06 mg/m³ und an krebserregenden Stoffen < 0,001 mg/m³ definiert. Ebenfalls halten wir CMR-Stoffe der Kategorien 1A und 1B < 0,1 % ein und Chlorparaffine (SCCPs + MCCPs + LCCPs) sowie Blei und Zinnverbindungen sind kein Bestandteil unserer Formulierungen. Auch die Emissionsanforderungen der DE-UZ120 halten wir deutlich ein.

Benjamin Albus – Technischer Leiter DACH
Unilin Swiss GmbH – Tannengutweg 10 – 5600 Lenzburg – Switzerland

EUROPEAN RESILIENT FLOORING MANUFACTURERS' INSTITUTE

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Environmental Product Declaration for:

Heterogeneous polyvinyl chloride floor coverings according to EN ISO 10582

This EPD was produced on February 3, 2023 and refers to:

Unilin, IVC Commercial, part of the Mohawk Group

Product: Ultimo Click (Divino Click)
Thickness of 4.50 mm (wearlayer of 0.55 mm)

GENERAL INFORMATION

In this EPD heterogeneous polyvinyl chloride floor coverings according to ISO 10582 floor coverings are declared. The application of this EPD is restricted to heterogeneous polyvinyl chloride floor coverings produced by the members of the European Resilient Flooring Manufacturers' Institute (ERFMI). Data are based upon production during 2017 in Europe. Data have been provided by 6 companies of ERFMI which represent 100% of ERFMI members.

The EPD was created according to the specifications as per /EN 16810/ and as per ISO 14025 and EN 15804+A1

PRODUCT

Product description / Product definition
Resilient floor coverings are an entire product family of flexible flooring solutions available in sheet, tiles and planks. It is classified in heterogeneous or homogeneous composition based on plastic, linoleum, cork or rubber. Resilient floor coverings can provide different functionalities (acoustic, static control, slip resistance, easy maintenance etc.) to match a wide range of domestic, commercial and industrial applications. It is available in an enormous range of patterns and colours fitting with inspiration and decorative needs.

Heterogeneous polyvinyl chloride floor coverings consist of a wear layer and other compact layers which differ in composition and/or design and can contain reinforcement.
For the placing on the market of the product in the EU/EFTA (with the exception of Switzerland) Regulation (EU) No. 305/2011 (CPR) applies. The product needs a declaration of performance taking into consideration /EN 14041:2004/AC 2006 Resilient, textile and laminate floor coverings. Essential Characteristics/ and the CE-marking.
For the application and use the respective national provisions apply.

Application
According to /EN ISO 10874/ the area of application for resilient floor coverings is indicated by use classes. The declared product group covers the use classes 23, 34, 43.

Technical Data
The following table contains the construction data of the declared product group:

Constructional data

Name	Value	Unit
Product thickness	2	mm
Surface weight	3.25	kg/m²
Product Form	sheet and tile	-

Base Materials / Ancillary materials
The product group has the following composition:

- Additives 2%
- Filler 26%
- Plasticizer 19%
- Pigments <1%
- Polymers (PVC) 39%
- Auxiliaries 1%
- Lacquer <1%
- Flooring Recyclate (PVC) 12%

Reference service life
The service lifetime of a floor covering for a certain application on a floor is too widespread to give one common number. For this EPD model the reference service lifetime (RSL) is set to one year. This means that all impacts for the use phase are based on the cleaning and maintenance model for one year.
Depending on the area of use based on /EN ISO 10874/, the technical lifetime advised by the manufacturer and the estimated time of the floor by the customer, the service lifetime can be determined. The use phase impacts should be calculated with the foreseen service life to arrive at the total environmental impact /EN 16810/.

The use phase impacts of this declaration are calculated with the expected service life entered in the ERFMI online EPD calculator (www.erfmi.com).

The data given in the Declaration of performance apply.

LCA: CALCULATION RULES

Declared Unit
1m² of floor covering.

Declared Unit

Name	Value	Unit
Declared unit	1	m2
Declared unit	2.25	kg/m²
Conversion factor to 1 kg	0.364	-

The declaration refers to an average product from 10 production sites of ERFMI members. The data have been weighted according to the annual square meters produced by each site. The life cycle impact assessment is conducted based on the vertical average.

System boundary
Type of EPD: cradle to grave.

Modules A1-A3 include processes that provide materials and energy input for the system, manufacturing and transport processes up to the factory gate, as well as waste processing.

Module A4 includes transport of the floor covering to the place of installation.

Module A5 includes the production of offcuts and adhesive for the installation of the floor covering, and incineration of offcuts and packaging material.

Module B2 is including provision of cleaning agent, energy and water consumption for the cleaning of the floor covering incl. waste water treatment. The LCA results in this EPD are declared for a one-year usage.

Module C1 considers electricity supply for the deconstruction of the flooring.

Module C2 includes transportation of the postconsumer waste to waste processing.

End of life scenarios are declared for:

- 100% incineration in a waste incineration plant (WIP) (Scenario 1, C3/1)
- 100% landfilling (Scenario 2, C4/2)
- 100% recycling according to information from AgPR, (Arbeitsgemeinschaft PVC-Bodenbelag Recycling) (Scenario 3 - for the recycling scenario the end of waste state is reached after removal from the building)

Module D includes potential benefits from all net flows given in module A5 and C3 that leave the product boundary system after having passed the end-of-waste state in the form of recovery and/or recycling potentials. Module D is declared for each scenario separately.

Comparability
Basically, a comparison or an evaluation of EPD data is only possible if all the data sets to be compared were created according to /EN 15804/ and the building context, respectively the product-specific characteristics of performance, are taken into account.

As background database /GaBi ts/ is used.

LCA: SCENARIOS AND ADDITIONAL TECHNICAL INFORMATION

The following technical information is a basis for the declared modules.

Transport to the construction site (A4)

Name	Value	Unit
Transport distance	2000	km
Capacity utilisation (including empty runs)	85	%

Installation in the building (A5)

Name	Value	Unit
Material loss (installation waste)	6	%
Auxiliary (adhesive)	0.3	kg

Biogenic carbon incorporated in the packaging material is released as CO2 emissions in module A5.

Maintenance (B2) per year

Name	Value	Unit
Water consumption	0.003	m3
Electricity consumption	0.55	kWh
Maintenance cycle (vacuum cleaning & wet cleaning)	156	number/a
Auxiliary (detergent)	0.04	kg

End of Life (C1-C4)

Name	Value	Unit
Energy recovery [100%, Scenario 1]	2.25	kg
Landfilling [100%, Scenario 2]	2.25	kg
Recycling [100%, Scenario 3]	2.25	kg

Reuse, recovery and/or recycling potentials (D), relevant scenario information
For module D the potential benefits given in module A5 and C3 are declared. For waste incineration combustion in a WIP (R1 > 0.6) with energy recuperation is considered.

LCA: RESULTS

DESCRIPTION OF THE SYSTEM BOUNDARY (X = INCLUDED IN LCA; MND = MODULE NOT DECLARED)

PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARIES
Raw material supply	Transport	Manufacturing	Transport from the gate to the site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	MND	X	MND	MND	MND	MND	MND	X	X	X	X	X

RESULTS OF THE LCA - ENVIRONMENTAL IMPACT: 1 M² HETEROGENEOUS POLYVINYL CHLORIDE FLOOR COVERING (2.75 KG/M²)

Parameter	Unit	A1-A3	A4	A5	B2	C1	C2	C3/1	C4/2	D/1	D/2	D/3
GWP	[kg CO2-Eq.]	6.02	0.26	0.97	2.8E-1	0.01	0.03	4.23	0.19	-1.10	-0.09	-0.09
ODP	[kg CFC11-Eq.]	7.95E-10	7.11E-15	5.17E-11	1.03E-12	5.53E-14	6.94E-16	1.69E-12	5.22E-14	-2.04E-12	-1.63E-13	-1.63E-13
AP	[kg SO2-Eq.]	9.37E-3	5.69E-4	1.43E-3	7.28E-4	3.53E-5	5.55E-5	3.59E-3	5.28E-4	-1.67E-3	-1.32E-4	-1.32E-4
EP	[kg (PO4)3--Eq.]	1.89E-3	1.44E-4	2.74E-4	9.38E-5	3.31E-6	1.40E-5	1.81E-4	5.39E-4	-1.87E-4	-1.46E-5	-1.46E-5
POCP	[kg ethene-Eq.]	3.21E-3	-1.86E-4	2.84E-4	5.93E-5	2.21E-6	-1.82E-5	9.17E-5	5.77E-5	-1.38E-4	-1.08E-5	-1.08E-5
ADPE	[kg Sb-Eq.]	2.30E-5	2.14E-8	1.66E-6	1.64E-7	6.61E-9	2.09E-9	1.20E-6	4.23E-8	-2.73E-7	-2.17E-8	-2.17E-8
ADPF	[MJ]	132.08	3.54	18.08	3.36	0.13	0.35	5.11	2.80	-15.58	-1.20	-1.20
Caption	GWP = Global warming potential; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential of land and water; EP = Eutrophication potential; POCP = Formation potential of tropospheric ozone photochemical oxidants; ADPE = Abiotic depletion potential for non-fossil resources; ADPF = Abiotic depletion potential for fossil resources											

RESULTS OF THE LCA - RESOURCE USE: 1 M² HETEROGENEOUS POLYVINYL CHLORIDE FLOOR COVERING (2.75 KG/M²)

Parameter	Unit	A1-A3	A4	A5	B2	C1	C2	C3/1	C4/2	D/1	D/2	D/3
PERE	[MJ]	13.74	0.20	4.34	1.59	0.09	0.02	2.75	0.22	-3.17	-0.25	-0.25
PERM	[MJ]	1.80	0.00	-0.87	0	0.00	0.00	-1.80	0.00	0.00	0.00	0.00
PERT	[MJ]	15.54	0.20	3.47	1.59	0.09	0.02	0.95	0.22	-3.17	-0.25	-0.25
PENRE	[MJ]	95.47	3.56	19.17	5.13	0.23	0.35	51.79	2.91	-19.09	-1.48	-1.48
PENRM	[MJ]	46.10	0.00	-0.19	0	0.00	0.00	-46.10	0.00	0.00	0.00	0.00
PENRT	[MJ]	141.57	3.56	18.98	5.13	0.23	0.35	5.69	2.91	-19.09	-1.48	-1.48
SM	[kg]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.75
RSF	[MJ]	IND	IND	IND	IND	IND	IND	IND	IND	IND	IND	IND
NRSF	[MJ]	IND	IND	IND	IND	IND	IND	IND	IND	IND	IND	IND
FW	[m³]	2.66E-2	3.61E-4	4.08E-3	2.47E-3	1.16E-4	3.53E-5	1.17E-2	-7.47E-6	-4.33E-3	-3.45E-4	-3.45E-4
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water											

RESULTS OF THE LCA – OUTPUT FLOWS AND WASTE CATEGORIES:

1 M² HETEROGENEOUS POLYVINYL CHLORIDE FLOOR COVERING (2.75 KG/M²)

Parameter	Unit	A1-A3	A4	A5	B2	C1	C2	C3/1	C4/2	D/1	D/2	D/3
HWD	[kg]	4.81E-6	2.06E-7	3.46E-7	2.43E-9	1.07E-10	2.01E-8	3.75E-8	1.24E-8	-7.61E-9	-5.92E-10	-5.92E-10
NHWD	[kg]	3.17E-1	2.98E-4	1.51E-1	8.38E-3	1.60E-4	2.91E-5	2.09E+0	2.74E+0	-7.41E-3	-5.86E-4	-5.86E-4
RWD	[kg]	3.75E-3	4.87E-6	3.55E-4	7.02E-4	3.77E-5	4.75E-7	2.28E-4	4.13E-5	-1.39E-3	-1.11E-4	-1.11E-4
CRU	[kg]	IND	IND	IND	IND	IND	IND	IND	IND	IND	IND	IND
MFR	[kg]	IND	IND	IND	IND	IND	IND	IND	IND	IND	IND	2.75
MER	[kg]	IND	IND	IND	IND	IND	IND	IND	IND	2.75	IND	IND
EEE	[MJ]	IND	IND	0.25	IND	IND	IND	4.18	IND	IND	IND	IND
EET	[MJ]	IND	IND	0.61	IND	IND	IND	10.10	IND	IND	IND	IND
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EEE = Exported thermal energy											

TOXICITY

For the calculation the USEtox model (Version 2.1) is used.

USEtox is officially endorsed by the UNEP/SETAC Life Cycle Initiative, and recommended as assessment method by the European Commission (EC) in the Recommendations on the Use of Common Methods to Measure and Communicate the Life Cycle Environmental Performance of Products and Organisations, 2013/179/EU, by the European Commission's Joint Research Centre – Institute for Environment and Sustainability (JRC-IES) in the International Reference Life Cycle Data System (ILCD) Handbook / USEtox® Documentation/. The amendment to EN 15804 will consider USEtox as an additional optional indicator /EN 15804+A2/.

RESULTS OF THE LCA - TOXIC IMPACT: 1M² INSTALLED

		Manu-facturing	Installation		Use stage	End-of-Life				Potential benefits		
Parameter	**Unit**	**A1-3**	**A4**	**A5**	**B2**	**C1**	**C2**	**C3/1**	**C4/2**	**D/1**	**D/2**	**D/3**
ETP-fw	CTUe	1.81E-02	8.34E-04	2.57E-03	6.15E-4	2.12E-05	8.14E-05	6.30E-04	2.67E-04	-8.69E-04	-6.90E-05	-6.90E-05
HTP-c	CTUh	3.68E-09	8.16E-13	2.55E-10	1.19E-11	5.61E-13	7.97E-14	1.25E-11	1.33E-11	-7.29E-11	-5.61E-12	-5.61E-12
HTP-nc	CTUh	1.38E-09	3.96E-13	9.26E-11	6.05E-13	2.94E-14	3.87E-14	5.12E-13	3.28E-12	-1.91E-12	-1.49E-13	-1.49E-13
Caption	ETP-fw = Ecotoxicity; HTP-c = Human toxicity, cancer effects; HTP-nc = Human toxicity, non-cancer effects											

The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator /EN 15804+A2/.

REFERENCES

/IBU 2016/
IBU (2016): General Programme Instructions for the Preparation of EPDs at the Institut Bauen und Umwelt e.V., Version 1.1 Institut Bauen und Umwelt e.V., Berlin.
www.ibu-epd.com

/ISO 14025/
DIN EN /ISO 14025:2011-10/, Environmental labels and declarations - Type III environmental declarations - Principles and procedures

/EN 15804/
/EN 15804:2012-04+A1 2013/,
Sustainability of construction works - Environmental Product Declarations - Core rules for the product category of construction products

/PCR 2017, Part A/
Institut Bauen und Umwelt e.V., Berlin (pub.): Product Category Rules for Construction Products from the range of Environmental Product Declarations of Institut Bauen und Umwelt (IBU), Part A: Calculation Rules for the Life Cycle Assessment and Requirements on the Background Report. 04/2017 www.ibu-epd.com

/PCR 2018, Part B/
Institut Bauen und Umwelt e.V., Berlin (pub.): Product Category Rules for Construction Products from the range of Environmental Product Declarations of Institut Bauen und Umwelt (IBU), Part B: Requirements on the EPD for floorcoverings, Institut Bauen und Umwelt e.V., www.ibu-epd.com, 02/2018

/EN 16810/
EN 16810: Resilient, textile and laminate floor coverings - Environmental product declarations - Product category rules, May 2017

/EN ISO 10582/
EN ISO 10582: Resilient floor coverings - Heterogeneous poly(vinyl chloride) floor coverings – Specification

/EN ISO 10874/
EN ISO 10874 Resilient, textile and laminate floor coverings - Classification (ISO 10874:2009)

/EN ISO 14041/
Health, safety and energy saving requirements; EN 14041: Resilient, textile and laminate floor coverings - Essential characteristics

/GaBi ts/
GaBi ts dataset documentation for the software-system and databases, LBP,University of Stuttgart and thinkstep, Leinfelden-Echterdingen, 2017 (www.gabi-software.com/)

ILCD
International Reference Life Cycle Data System (ILCD) Handbook - Nomenclature and other provisions

USEtox
Rosenbaum, R.K., Bachmann, T.M., Gold, L.S., Huijbregts, M.A.J., Jolliet, O., Juraske, R., Köhler, A., Larsen, H.F., MacLeod, M., Margni, M., McKone, T.E., Payet, J., Schuhmacher, M., van de Meent, D., Hauschild, M.Z. (2008): USEtox -The UNEPSETAC toxicity model: recommended characterisation factors for human toxicity and freshwater ecotoxicity in Life Cycle Impact Assessment. International Journal of Life Cycle Assessment, 13(7): 532-546, 2008

USEtox® Documentation
Fantke, P., Bijster, M.,Guignard, C., Hauschild, M., Huijbregts, M., Jolliet, O., Kounina, A., Magaud, V., Margni, M., McKone, T.E., Posthuma, L., Rosenbaum, R.K., van de Meent, D., van Zelm, R., 2017.USEtox® 2.0 Documentation (Version 1), http://usetox.org

EN 15804+A2
EN 15804:2012+A1:2013/FprA2:2019
Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products

EPD 2019
EPD of Cork floor tiles according to EN 12104, EPD-ERF-20180184-CCI1-EN, Institut Bauen und Umwelt e.V. (IBU)