



# SHI PRODUCT PASSPORT

Find products. Certify buildings.

SHI Product Passport No.:

**15309-10-1002**

## Laminat 7 - 12 mm

Product group: Laminate



Unilin Flooring Deutschland GmbH  
Reisholzer Werftstraße 33  
40589 Düsseldorf



### Product qualities:



*Köttner*

Helmut Köttner  
Scientific Director

Freiburg, 02 February 2026



# Contents

 SHI Product Assessment 2024	1
 QNG - Qualitätssiegel Nachhaltiges Gebäude	2
 DGNB New Construction 2023	3
 DGNB New Construction 2018	4
 BNB-BN Neubau V2015	5
 EU taxonomy	6
 BREEAM DE Neubau 2018	7
Product labels	8
Legal notices	9
Technical data sheet/attachments	10

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	Wood-based floor coverings	TVOC $\leq 300 \mu\text{g}/\text{m}^3$ Formaldehyd $\leq 36 \mu\text{g}/\text{m}^3$	Indoor Air Quality Certified
Valid until: 26 October 2027			



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**15309-10-1002**



## 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	2.3 Multi-layer wood parquet, bamboo coverings, and floor coverings on wood-based panels	VOC / Emissions / hazardous substances	QNG ready
<b>Verification:</b> Blauer Engel Zertifizierung vom 17. Januar 2024			

Criteria	Assessment
ANF2-WG1 Nachhaltige Materialgewinnung	May positively contribute to the overall building score
<b>Verification:</b> PEFC Konformitätsnachweis	



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SHI Product Passport no.:

**15309-10-1002**



## 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)	47 Coated and uncoated wood-based materials: particle board, blockboard, veneer panels, fibreboard	Formaldehyde emissions	Quality level 4
<b>Verification:</b> Blauer Engel Zertifizierung vom 17. Januar 2024			

Criteria	Quality level
ENV1.3 Responsible resource extraction	May positively contribute to the overall building score
<b>Verification:</b> PEFC Konformitätsnachweis	

Criteria	Assessment
SOC1.2 Indoor air quality (*)	May positively contribute to the overall building score

Criteria	No. / Relevant building components / construction materials / surfaces	Considered substances / aspects	Quality level
ENV 1.2 Local environmental impact, 29.05.2025 (4th edition)	Coated and uncoated wood-based materials	VVOC, VOC, SVOC emissions	Quality level 4
<b>Verification:</b> Blauer Engel Zertifizierung vom 17. Januar 2024			



Product:

**Laminat 7 - 12 mm**

SHI Product Passport no.:

**15309-10-1002**



## 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	47a Industrially manufactured products	Formaldehyde	Quality level 4
<b>Verification:</b> Blauer Engel Zertifizierung vom 17. Januar 2024			



Product:

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SHI Product Passport no.:

**15309-10-1002**



## **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	zB Wood-based floor coverings – also systems	VOC / hazardous substances	Quality level 5

**Verification:** Blauer Engel Zertifizierung vom 17. Januar 2024

Criteria	Assessment
1.1.7 Nachhaltige Materialgewinnung	May positively contribute to the overall building score

**Verification:** PEFC Konformitätsnachweis



Product:

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SHI Product Passport no.:

**15309-10-1002**



## 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
<b>Verification:</b> Blauer Engel Zertifizierung vom 17. Januar 2024			



Product:

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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, carcinogens	Normal quality
<b>Verification:</b> Blauer Engel Zertifizierung vom 17. Januar 2024			



Product:

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SHI Product Passport no.:

15309-10-1002



# 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.



The *Blue Angel* ("Blauer Engel") ecolabel, awarded by the German Federal Environment Agency, is one of the oldest and most widely used ecolabels in Germany. It exists in several variants for many different product groups. Since the test criteria, such as threshold values, differ between these variants, it is important to consider each one individually when assessing indoor air quality.



The IBU ("Institut Bauen und Umwelt e.V.") is an initiative of building product manufacturers committed to sustainability in construction. It serves as the programme operator for Environmental Product Declarations (EPDs) in accordance with the EN 15804 standard. The IBU EPD programme provides comprehensive life cycle assessments and environmental impact data for construction products, supported by independent third-party verification.



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.



## ABMESSUNGEN

### FORMAT

Länge	1257 mm
Breite	192 mm
Anzahl der Paneele pro Packung	9
m <sup>2</sup> pro Packung	2.179
Fasen	4V
Stärke	8 mm
Nut und Feder	FXP Fold Down
Wasserdichtigkeit	No

## WERKSGARANTIE

	METHODE	PARAMETER	WERTE	
Beanspruchungsklasse	EN 13329		Klasse	21-22-23/31-32
CE	EN 14041:2004 / AC:2006	@afX MWFfWW	NB 0766 - EPH Dresden	DOP: Auf Packung
UKCA	EN 14041:2004 / AC:2006	Zugelassene EFWW	AB 0321 - Satra UK	DOP: Auf Packung
	Wohnzwecke	siehe Garnatiebedingungen		
Garantie	Gewerbliche Nutzung	siehe Garnatiebedingungen		
	Wasserdichtigkeit	siehe Garnatiebedingungen		

## GENERELLE DATEN (IM BEZUG ZUR EN 13329)

	METHODE	PARAMETER	NORMANFORDERUNGEN	WERTE
Abriebbeständigkeit	EN 13329		≥ 4000 Zyklen	≥ 4000 Zyklen
Abriebklasse	EN 13329		AC4	AC4
Schlagfestigkeit	EN 17368d	Kleine Kugel	≥ 35mm	≥ 35mm
	EN 13329	Große Kugel	≥ 750mm	≥ 750mm
Kratzbeständigkeit	EN 438-2, 25		Belastung ≥ 3N	Belastung ≥ 3N
Stuhlrolleneignung	ISO 4918 (mit Unterlage)	Type W (EN 12529)	25000 Zyklen	Keine Änderung
Quellverhalten	ISO 24336	Nach 24 Stunden Eintauchen bei 20°C	≤ 18%	≤ 18%
Schließkraft	ISO 24334	F10,2 Längsseite	≥ 1 kN/m	≥ 1 kN/m
		Fmax Längsseite		≥ 1 kN/m
		Fs0,2 kurzen Seite	≥ 2 kN/m	≥ 2 kN/m
		Fmax kurzen Seite		≥ 2 kN/m
Eindruckverhalten	EN 424		es sollten keine Beschädigungen erkennbar sein, wenn mit "Fuß Typ O" getestet wird	keine sichtbaren Schäden
Fleckenunempfindlichkeit	EN 438	Gruppe 1,2	Klasse 5	Klasse 5
Lichtechtheit	EN ISO 4892 2:2006/A1:2009 Procedure B - Cycle 5	Gruppe 3	Klasse 4	Klasse 4
		Grau Referenz	Klasse ≥ 4	Klasse 4

## UMWELT, SICHERHEIT UND GESUNDHEIT

	METHODE	PARAMETER	NORMANFORDERUNGEN	WERTE
Formaldehydemission	EN 717-1	ppm	E1 < 0,1	< 0,01
Anti-Statik	EN 1815		≤ 2,0 kV	≤ 2,0 kV
Brandverhalten	EN 13501-1	Klasse		Cfl-s1
Wärmewiderstand	EN 12996:2001	m <sup>2</sup> K/W		0,055 m <sup>2</sup> K/W
Rutschfestigkeit	EN 13893	μ	μ ≥ 0,30	DS: μ ≥ 0,30



## ABMESSUNGEN

### FORMAT

Länge	1261 mm
Breite	192 mm
Anzahl der Paneele pro Packung	10
m <sup>2</sup> pro Packung	2.421
Fasen	-
Stärke	7 mm
Nut und Feder	Uniclic
Wasserdichtigkeit	No

## WERKSGARANTIE

	METHODE	PARAMETER	WERTE
Beanspruchungsklasse	EN 13329		Klasse 21-22-23/31-32
CE	EN 14041:2004 / AC:2006	@afX   WfWfWfWf	NB 0766 - EPH Dresden
UKCA	EN 14041:2004 / AC:2006	Zugelassene EfWfWf	AB 0321 - Satra UK
	Wohnzwecke	siehe Garnatiebedingungen	DOP: Auf Packung
Garantie	Gewerbliche Nutzung	siehe Garnatiebedingungen	DOP: Auf Packung
	Wasserdichtigkeit	siehe Garnatiebedingungen	

## GENERELLE DATEN (IM BEZUG ZUR EN 13329)

	METHODE	PARAMETER	NORMANFORDERUNGEN	WERTE
Abriebbeständigkeit	EN 13329		≥ 4000 Zyklen	≥ 4000 Zyklen
Abriebklasse	EN 13329		AC4	AC4
Schlagfestigkeit	EN 17368d	Kleine Kugel	≥ 35mm	≥ 35mm
	EN 13329	Große Kugel	≥ 750mm	≥ 750mm
Kratzbeständigkeit	EN 438-2, 25		Belastung ≥ 3N	Belastung ≥ 3N
Stuhlrolleneignung	ISO 4918 (mit Unterlage)	Type W (EN 12529)	25000 Zyklen	Keine Änderung
Quellverhalten	ISO 24336	Nach 24 Stunden Eintauchen bei 20°C	≤ 18%	≤ 18%
Schließkraft	ISO 24334	F10,2 Längsseite	≥ 1 kN/m	≥ 1 kN/m
		Fmax Längsseite		≥ 1 kN/m
		Fs0,2 kurzen Seite	≥ 2 kN/m	≥ 2 kN/m
		Fmax kurzen Seite		≥ 2 kN/m
Eindruckverhalten	EN 424		es sollten keine Beschädigungen erkennbar sein, wenn mit "Fuß Typ O" getestet wird	keine sichtbaren Schäden
Fleckenunempfindlichkeit	EN 438	Gruppe 1,2	Klasse 5	Klasse 5
Lichtechtheit	EN ISO 4892 2:2006/A1:2009	Gruppe 3	Klasse 4	Klasse 4
		Procedure B - Cycle 5	Grau Referenz	Klasse ≥ 4

## UMWELT, SICHERHEIT UND GESUNDHEIT

	METHODE	PARAMETER	NORMANFORDERUNGEN	WERTE
8ad_S'WZkWW [edja`	EN 717-1	ppm	E1 < 0,1	< 0,01
3` r[ZESf]	EN 1815		≤ 2,0 kV	≤ 2,0 kV
4dS` VhVZS'W	EN 13501-1	=SedW		Cfl-s1
I 3d_W [WdS' V	EN 12996:2001	m <sup>2</sup> K/W		0,051 m <sup>2</sup> K/W
DgfeLZ'Wf] Vif	EN 13893	μ	μ ≥ 0,30	DS: μ ≥ 0,30



EN 14041:2004 / AC:2006  
Laminated floorcoverings  
EN 13329:2016

EN 14041:2004 / AC:2006  
Laminated floorcoverings  
EN 13329:2016

### Product merkmale

#### FORMAT

Breite	212	mm
Länge	1380	mm
Anzahl der Paneele pro Packung	7	
m <sup>2</sup> pro Packung	2,048	m <sup>2</sup>
Fasen	mit eingepresste V-Nut rundum	
Stärke	9,0	mm
Nut und Feder	Uniclic	
Garantie Wasserbeständigkeit	15	Jahre



### Paneelaufbau



1. Schicht mit höchster Abrieb- und Kratzfestigkeit
2. Kristallklares Dekor
3. Feuchtigkeitsbeständiges HDF-Trägermaterial
4. Abschließende Stabilisierung

### WERKSGARANTIE

	METHODE	PARAMETER		
Beanspruchungsklasse	EN 13329		Klasse	21-22-23/31-32
CE	EN 14041:2004 / AC:2006	Notifizierte Stelle	NB 0766 - EPH Dresden	DOP: Auf Packung
UKCA	EN 14041:2004 / AC:2006	Zugelassene Stelle	AB 0321 - Satra UK	DOP: Auf Packung
Garantie	Wohnzwecke		Siehe Garantiebedingungen	Lebenslang
			Wasserdichtigkeit	15 Jahre
		Gewerbliche Nutzung	Siehe Garantiebedingungen	5 Jahre
		Wasserdichtigkeit		5 Jahre

### GENERELLE DATEN (IM BEZUG ZUR EN 13329)

	METHODE	PARAMETER	NORMANFORDERUNGEN	
Abriebbeständigkeit	EN 13329		≥ 4000	Zyklen
Abriebklasse	EN 13329		AC4	
Schlagfestigkeit	EN 17368	Kleine Kugel	≥35 mm	
	EN 13329	Große Kugel	≥750 mm	
Kratzbeständigkeit	EN 438-2, 25		Belastung	≥ 3N
Stuhlrolleneignung	ISO 4918 (mit Unterlage)	Type W (EN 12529)	25000	Zyklen
Quellverhalten	ISO 24336	Nach 24 Stunden Eintauchen bei 20°C	≤ 18%	
Schließkraft	ISO 24334	F10,2 Längsseite	≥ 1 kN/m	
		Fmax Längsseite		
		Fs0,2 kurzen Seite	≥ 2 kN/m	
		Fmax kurzen Seite		
Eindruckverhalten	EN 424		es sollten keine Beschädigungen erkennbar sein, wenn mit "Fuß Typ 0"	
Abhebefestigkeit	EN 13329	N/mm <sup>2</sup>	≥ 1,25	
Statik	EN ISO 24343-1		Eindruck	≤ 0,05 mm
Fleckenunempfindlichkeit	EN 438	Gruppe 1, 2	Klasse	5
		Gruppe 3	Klasse	4
Allgemeines Aussehen	EN 13329	Höhenunterschiede	≤ 0,15 mm	
		Öffnung zwischen Verbindungen	≤ 0,20 mm	
		Längenschüsselung	konkav ≤ 0,50%	
			konvex ≤ 1,00%	
		Breitenschüsselung	konkav ≤ 0,15%	
			konvex ≤ 0,20%	
Maßabweichungen nach Änderungen der relativen Luftfeuchtigkeit	EN 13329	δl	δl average ≤ 0,9 mm	
		δw	δw average ≤ 0,9 mm	
Lichtechtheit	EN ISO 4892-2:2006/A1:2009 procedure B - cycle 5	Grau Referenz	Klasse	≥ 4

### GENERELLE DATEN (IM BEZUG ZUR EN 13329)

	METHODE	PARAMETER	NORMANFORDERUNGEN	QUICK-STEP WERTE
Wasserbeständigkeit	ISO 4760	Qualitative Bewertung für die Quellung nach der Erholung	< 3	1
		Quantitative Bewertung für Quellung nach der Erholung	≤0,3mm	≤0,03mm
		wasserdurchlässige mechanische Verbindung	Keine Anforderungen	Beständigkeit mechanischer Verbindungen gegen Wassereintritt

### Andere technische Daten

	METHODE	PARAMETER		
Trittschallverringering	ISO 712/2	Auf einer Quick-Step Unterlage		ΔLw ≈ 18 dB (abhängig von Unterlagsbahn)
Zigaretteglut-Beständigkeit	EN 438-2,30			Klasse 5
Fußbodenheizung		Auf einer Quick-Step Unterlage	Siehe besondere Hinweise	Geeignet

### UMWELT, SICHERHEIT UND GESUNDHEIT

	METHODE	PARAMETER		
Formaldehydemission	EN 717-1	ppm		<E1
Anti-Statik	EN 1815			≤ 2,0 kV
Brandverhalten	EN 13501-1	Klasse		Cfl-s1
Wärmewiderstand	EN12667	m²K/W		0,059 m²K/W
Rutschfestigkeit	EN 13893	μ		DS: μ ≥ 0,30

### ZERTIFIKATE

EU Ecolabel	SE/035/001
AFFSET	A+
PEFC	PEFC/07-32-37
M1	
Nordic Ecolabel	30290001
EPD	



EN 14081-2:2004 / AC:2006  
Laminato Floorcoverings  
EN 13329:2016



EN 14081-2:2004 / AC:2006  
Laminato Floorcoverings  
EN 13329:2016



### Product merkmale

#### FORMAT

Breite	190	mm
Länge	1200	mm
Anzahl der Paneele pro Packung	7	
m <sup>2</sup> pro Packung	1,596	m <sup>2</sup>
Fasen	-	
Stärke	8,0	mm
Nut und Feder	Uniclic	
Garantie Wasserbeständigkeit	10	Jahre



### Paneelaufbau



1. Schicht mit höchster Abrieb- und Kratzfestigkeit
2. Kristallklares Dekor
3. Feuchtigkeitsbeständiges HDF-Trägermaterial
4. Abschließende Stabilisierung

### WERKSGARANTIE

	METHODE	PARAMETER		
Beanspruchungsklasse	EN 13329		Klasse	21-22-23/31-32
CE	EN 14041:2004 / AC:2006	Notifizierte Stelle	NB 0766 - EPH Dresden	DOP: Auf Packung
UKCA	EN 14041:2004 / AC:2006	Zugelassene Stelle	AB 0321 - Satra UK	DOP: Auf Packung
Garantie	Wohnzwecke		Siehe Garantiebedingungen	Lebenslang
			Wasserdichtigkeit	10 Jahre
		Gewerbliche Nutzung	Siehe Garantiebedingungen	5 Jahre
		Wasserdichtigkeit		5 Jahre

### GENERELLE DATEN (IM BEZUG ZUR EN 13329)

	METHODE	PARAMETER	NORMANFORDERUNGEN	
Abriebbeständigkeit	EN 13329		≥ 4000	Zyklen
Abriebklasse	EN 13329		AC4	
Schlagfestigkeit	EN 17368	Kleine Kugel	≥35 mm	
	EN 13329	Große Kugel	≥750 mm	
Kratzbeständigkeit	EN 438-2, 25		Belastung	≥ 3N
Stuhlrolleneignung	ISO 4918 (mit Unterlage)	Type W (EN 12529)	25000	Zyklen
Quellverhalten	ISO 24336	Nach 24 Stunden Eintauchen bei 20°C	≤ 18%	
Schließkraft	ISO 24334	F10,2 Längsseite	≥ 1 kN/m	
		Fmax Längsseite		
		Fs0,2 kurzen Seite	≥ 2 kN/m	
		Fmax kurzen Seite		
Eindruckverhalten	EN 424		es sollten keine Beschädigungen erkennbar sein, wenn	
Abhebefestigkeit	EN 13329	N/mm <sup>2</sup>	≥ 1,25	
Statik	EN ISO 24343-1		Eindruck	≤ 0,05 mm
Fleckenunempfindlichkeit	EN 438	Gruppe 1, 2	Klasse	5
		Gruppe 3	Klasse	4
Allgemeines Aussehen	EN 13329	Höhenunterschiede	≤ 0,15 mm	
		Öffnung zwischen Verbindungen	≤ 0,20 mm	
		Längenschüsselung	konkav ≤ 0,50%	
			konvex ≤ 1,00%	
		Breitenschüsselung	konkav ≤ 0,15%	
		konvex ≤ 0,20%		
Maßabweichungen nach Änderungen der relativen Luftfeuchtigkeit	EN 13329	δl	δl average ≤ 0,9 mm	
		δw	δw average ≤ 0,9 mm	
Lichteinheit	EN ISO 4892-2:2006/A1:2009 procedure B - cycle 5	Grau Referenz	Klasse	≥ 4

**GENERELLE DATEN (IM BEZUG ZUR EN 13329)**

	METHODE	PARAMETER	NORMANFORDERUNGEN	QUICK-STEP WERTE
Wasserbeständigkeit	ISO 4760	Qualitative Bewertung für die Quellung nach der Erholung	< 3	2
		Quantitative Bewertung für Quellung nach der Erholung	≤0,3mm	≤0,3mm
		wasserdurchlässige mechanische Verbindung	Keine Anforderungen	Beständigkeit mechanischer Verbindungen gegen Wassereintritt

**Andere technische Daten**

	METHODE	PARAMETER		
Trittschallverringering	ISO 712/2	Auf einer Quick-Step Unterlage		ΔLw ≈ 18 dB (abhängig von Unterlagsbahn)
Zigarettenglut-Beständigkeit	EN 438-2,30			Klasse 5
Fußbodenheizung		Auf einer Quick-Step Unterlage	Siehe besondere Hinweise	Geeignet

**UMWELT, SICHERHEIT UND GESUNDHEIT**

	METHODE	PARAMETER		
Formaldehydemission	EN 717-1	ppm		<E1
Anti-Statik	EN 1815			≤ 2,0 kV
Brandverhalten	EN 13501-1	Klasse		Cfl-s1
Wärmewiderstand	EN12667	m²K/W		0,055 m²K/W
Rutschfestigkeit	EN 13893	μ		DS: μ ≥ 0,30

**ZERTIFIKATE**

EU Ecolabel	SE/035/001
AFFSET	A+
PEFC	PEFC/07-32-37
M1	
Nordic Ecolabel	30290001
EPD	



**Product merkmale**
**FORMAT**

Breite	156	mm
Länge	1380	mm
Anzahl der Paneele pro Packung	8	
m <sup>2</sup> pro Packung	1,722	m <sup>2</sup>
Fasen	-	
Stärke	8,0	mm
Nut und Feder	Uniclic	
Garantie Wasserbeständigkeit	10	Jahre


**Paneelaufbau**


1. Schicht mit höchster Abrieb- und Kratzfestigkeit
2. Kristallklares Dekor
3. Feuchtigkeitsbeständiges HDF-Trägermaterial
4. Abschließende Stabilisierung

**WERKSGARANTIE**

	METHODE	PARAMETER		
Beanspruchungsklasse	EN 13329		Klasse	21-22-23/31-32
CE	EN 14041:2004 / AC:2006	Notifizierte Stelle	NB 0766 - EPH Dresden	DOP: Auf Packung
UKCA	EN 14041:2004 / AC:2006	Zugelassene Stelle	AB 0321 - Satra UK	DOP: Auf Packung
Garantie	Wohnzwecke		Siehe Garantiebedingungen	Lebenslang
			Wasserdichtigkeit	10 Jahre
		Gewerbliche Nutzung	Siehe Garantiebedingungen	5 Jahre
		Wasserdichtigkeit		5 Jahre

**GENERELLE DATEN (IM BEZUG ZUR EN 13329)**

	METHODE	PARAMETER	NORMANFORDERUNGEN	
Abriebbeständigkeit	EN 13329		≥ 4000	Zyklen
Abriebklasse	EN 13329		AC4	
Schlagfestigkeit	EN 17368	Kleine Kugel	≥35 mm	
	EN 13329	Große Kugel	≥750 mm	
Kratzbeständigkeit	EN 438-2, 25		Belastung	≥ 3N
Stuhllolleneignung	ISO 4918 (mit Unterlage)	Type W (EN 12529)	25000	Zyklen
Quellverhalten	ISO 24336	Nach 24 Stunden Eintauchen bei 20°C	≤ 18%	
Schließkraft	ISO 24334	F10,2 Längsseite	≥ 1 kN/m	
		Fmax Längsseite		
		Fs0,2 kurzen Seite	≥ 2 kN/m	
		Fmax kurzen Seite		
Eindruckverhalten	EN 424		es sollten keine Beschädigungen erkennbar sein, wenn	
Abhebefestigkeit	EN 13329	N/mm <sup>2</sup>	≥ 1,25	
Statik	EN ISO 24343-1		Eindruck	≤ 0,05 mm
Fleckenunempfindlichkeit	EN 438	Gruppe 1, 2	Klasse	5
		Gruppe 3	Klasse	4
Allgemeines Aussehen	EN 13329	Höhenunterschiede	≤ 0,15 mm	
		Öffnung zwischen Verbindungen	≤ 0,20 mm	
		Längenschüsselung	konkav ≤ 0,50%	
			konvex ≤ 1,00%	
		Breitenschüsselung	konkav ≤ 0,15%	
			konvex ≤ 0,20%	
Maßabweichungen nach Änderungen der relativen Luftfeuchtigkeit	EN 13329	δl	δl average ≤ 0,9 mm	
		δw	δw average ≤ 0,9 mm	
Lichteinheit	EN ISO 4892-2:2006/A1:2009 procedure B - cycle 5	Grau Referenz	Klasse	≥ 4

# LAMINATE

## GENERELLE DATEN (IM BEZUG ZUR EN 13329)

	METHODE	PARAMETER	NORMANFORDERUNGEN	QUICK-STEP WERTE
Wasserbeständigkeit	ISO 4760	Qualitative Bewertung für die Quellung nach der Erholung	< 3	2
		Quantitative Bewertung für Quellung nach der Erholung	≤0,3mm	≤0,3mm
		wasserdurchlässige mechanische Verbindung	Keine Anforderungen	Beständigkeit mechanischer Verbindungen gegen Wassereintritt

## Andere technische Daten

	METHODE	PARAMETER		
Trittschallverringering	ISO 712/2	Auf einer Quick-Step Unterlage		ΔLw ≈ 18 dB (abhängig von Unterlagsbahn)
Zigarettenglut-Beständigkeit	EN 438-2,30			Klasse 5
Fußbodenheizung		Auf einer Quick-Step Unterlage	Siehe besondere Hinweise	Geeignet

## UMWELT, SICHERHEIT UND GESUNDHEIT

	METHODE	PARAMETER		
Formaldehydemission	EN 717-1	ppm		<E1
Anti-Statik	EN 1815			≤ 2,0 kV
Brandverhalten	EN 13501-1	Klasse		Cfl-s1
Wärmewiderstand	EN12667	m²K/W		0,055 m²K/W
Rutschfestigkeit	EN 13893	μ		DS: μ ≥ 0,30

## ZERTIFIKATE

EU Ecolabel	SE/035/001
AFFSET	A+
PEFC	PEFC/07-32-37
M1	
Nordic Ecolabel	30290001
EPD	



**Product merkmale**
**FORMAT**

Breite	190	mm
Länge	1380	mm
Anzahl der Paneele pro Packung	5	
m <sup>2</sup> pro Packung	1,311	m <sup>2</sup>
Fasen	mit eingepresste V-Nut rundum	
Stärke	12,0	mm
Nut und Feder	Uniclic	
Garantie Wasserbeständigkeit	15	Jahre


**Paneelaufbau**


1. Schicht mit höchster Abrieb- und Kratzfestigkeit
2. Kristallklares Dekor
3. Feuchtigkeitsbeständiges HDF-Trägermaterial
4. Abschließende Stabilisierung

**WERKSGARANTIE**

	METHODE	PARAMETER		
Beanspruchungsklasse	EN 13329		Klasse	21-22-23/31-32-33
CE	EN 14041:2004 / AC:2006	Notifizierte Stelle	NB 0766 - EPH Dresden	DOP: Auf Packung
UKCA	EN 14041:2004 / AC:2006	Zugelassene Stelle	AB 0321 - Satra UK	DOP: Auf Packung
Garantie	Wohnzwecke		Siehe Garantiebedingungen	Lebenslang
			Wasserdichtigkeit	15 Jahre
		Gewerbliche Nutzung	Siehe Garantiebedingungen	10 Jahre
		Wasserdichtigkeit		10 Jahre

**GENERELLE DATEN (IM BEZUG ZUR EN 13329)**

	METHODE	PARAMETER	NORMANFORDERUNGEN	
Abriebbeständigkeit	EN 13329		≥ 6000	Zyklen
Abriebklasse	EN 13329		AC5	
Schlagfestigkeit	EN 17368	Kleine Kugel	≥ 70 mm	
	EN 13329	Große Kugel	≥ 1000 mm	
Kratzbeständigkeit	EN 438-2, 25		Belastung ≥ 3N	
Stuhlrolleneignung	ISO 4918 (mit Unterlage)	Type W (EN 12529)	25000	Zyklen
Quellverhalten	ISO 24336	Nach 24 Stunden Eintauchen bei 20°C	≤ 15%	
Schließkraft	ISO 24334	F10,2 Längsseite	≥ 1 kN/m	
		Fmax Längsseite		
		Fs0,2 kurzen Seite	≥ 2 kN/m	
		Fmax kurzen Seite		
Eindruckverhalten	EN 424		es sollten keine Beschädigungen erkennbar sein, wenn mit "Fuß Typ 0"	
Abhebefestigkeit	EN 13329	N/mm <sup>2</sup>	≥ 1,25	
Statik	EN ISO 24343-1		Eindruck	≤ 0,05 mm
Fleckenunempfindlichkeit	EN 438	Gruppe 1, 2	Klasse	5
		Gruppe 3	Klasse	4
Allgemeines Aussehen	EN 13329	Höhenunterschiede	≤ 0,15 mm	
		Öffnung zwischen Verbindungen	≤ 0,20 mm	
		Längenschüsselung	konkav ≤ 0,50%	
			konvex ≤ 1,00%	
		Breitenschüsselung	konkav ≤ 0,15%	
			konvex ≤ 0,20%	
Maßabweichungen nach Änderungen der relativen Luftfeuchtigkeit	EN 13329	δl	δl average ≤ 0,9 mm	
		δw	δw average ≤ 0,9 mm	
Lichtechtheit	EN ISO 4892-2:2006/A1:2009 procedure B - cycle 5	Grau Referenz	Klasse	≥ 4

# LAMINATE

## GENERELLE DATEN (IM BEZUG ZUR EN 13329)

	METHODE	PARAMETER	NORMANFORDERUNGEN	QUICK-STEP WERTE
Wasserbeständigkeit	ISO 4760	Qualitative Bewertung für die Quellung nach der Erholung	< 3	1
		Quantitative Bewertung für Quellung nach der Erholung	≤0,3mm	≤0,03mm
		wasserdurchlässige mechanische Verbindung	Keine Anforderungen	Beständigkeit mechanischer Verbindungen gegen Wassereintritt

## Andere technische Daten

	METHODE	PARAMETER		
Trittschallverringering	ISO 712/2	Auf einer Quick-Step Unterlage		ΔLw ≈ 16 dB (abhängig von Unterlagsbahn)
Zigaretteglut-Beständigkeit	EN 438-2,30			Klasse 5
Fußbodenheizung		Auf einer Quick-Step Unterlage	Siehe besondere Hinweise	Geeignet

## UMWELT, SICHERHEIT UND GESUNDHEIT

	METHODE	PARAMETER		
Formaldehydemission	EN 717-1	ppm		<E1
Anti-Statik	EN 1815			≤ 2,0 kV
Brandverhalten	EN 13501-1	Klasse		Cfl-s1
Wärmewiderstand	EN12667	m²K/W		0,0717 m²K/W
Rutschfestigkeit	EN 13893	μ		DS: μ ≥ 0,30

## ZERTIFIKATE

EU Ecolabel	SE/035/001
AFFSET	A+
PEFC	PEFC/07-32-37
M1	
Nordic Ecolabel	30290001
EPD	



### Product merkmale

#### FORMAT

Breite	190	mm
Länge	1380	mm
Anzahl der Paneele pro Packung	7	
m <sup>2</sup> pro Packung	1,835	m <sup>2</sup>
Fasen	mit eingepresste V-Nut rundum	
Stärke	8,0	mm
Nut und Feder	Uniclic	
Garantie Wasserbeständigkeit	15	Jahre



### Paneelaufbau



1. Schicht mit höchster Abrieb- und Kratzfestigkeit
2. Kristallklares Dekor
3. Feuchtigkeitsbeständiges HDF-Trägermaterial
4. Abschließende Stabilisierung

### WERKSGARANTIE

	METHODE	PARAMETER		
Beanspruchungsklasse	EN 13329		Klasse	21-22-23/31-32
CE	EN 14041:2004 / AC:2006	Notifizierte Stelle	NB 0766 - EPH Dresden	DOP: Auf Packung
UKCA	EN 14041:2004 / AC:2006	Zugelassene Stelle	AB 0321 - Satra UK	DOP: Auf Packung
Garantie	Wohnzwecke		Siehe Garantiebedingungen	Lebenslang
		Wasserdichtigkeit		15 Jahre
		Gewerbliche Nutzung	Siehe Garantiebedingungen	5 Jahre
		Wasserdichtigkeit		5 Jahre

### GENERELLE DATEN (IM BEZUG ZUR EN 13329)

	METHODE	PARAMETER	NORMANFORDERUNGEN	
Abriebbeständigkeit	EN 13329		≥ 4000	Zyklen
Abriebklasse	EN 13329		AC4	
Schlagfestigkeit	EN 17368	Kleine Kugel	≥35 mm	
	EN 13329	Große Kugel	≥750 mm	
Kratzbeständigkeit	EN 438-2, 25		Belastung	≥ 3N
Stuhlrolleneignung	ISO 4918 (mit Unterlage)	Type W (EN 12529)	25000	Zyklen
Quellverhalten	ISO 24336	Nach 24 Stunden Eintauchen bei 20°C	≤ 18%	
Schließkraft	ISO 24334	F10,2 Längsseite	≥ 1 kN/m	
		Fmax Längsseite		
		Fs0,2 kurzen Seite	≥ 2 kN/m	
		Fmax kurzen Seite		
Eindruckverhalten	EN 424		es sollten keine Beschädigungen erkennbar sein, wenn mit "Fuß Typ 0"	
Abhebefestigkeit	EN 13329	N/mm <sup>2</sup>	≥ 1,25	
Statik	EN ISO 24343-1		Eindruck	≤ 0,05 mm
Fleckenunempfindlichkeit	EN 438	Gruppe 1, 2	Klasse	5
		Gruppe 3	Klasse	4
Allgemeines Aussehen	EN 13329	Höhenunterschiede	≤ 0,15 mm	
		Öffnung zwischen Verbindungen	≤ 0,20 mm	
		Längenschüsselung	konkav ≤ 0,50%	
			konvex ≤ 1,00%	
		Breitenschüsselung	konkav ≤ 0,15%	
			konvex ≤ 0,20%	
Maßabweichungen nach Änderungen der relativen Luftfeuchtigkeit	EN 13329	δl	δl average ≤ 0,9 mm	
		δw	δw average ≤ 0,9 mm	
Lichtechtheit	EN ISO 4892-2:2006/A1:2009 procedure B - cycle 5	Grau Referenz	Klasse	≥ 4

GENERELLE DATEN (IM BEZUG ZUR EN 13329)

	METHODE	PARAMETER	NORMANFORDERUNGEN	QUICK-STEP WERTE
Wasserbeständigkeit	ISO 4760	Qualitative Bewertung für die Quellung nach der Erholung	< 3	1
		Quantitative Bewertung für Quellung nach der Erholung	≤0,3mm	≤0,03mm
		wasserdurchlässige mechanische Verbindung	Keine Anforderungen	Beständigkeit mechanischer Verbindungen gegen Wassereintritt

Andere technische Daten

	METHODE	PARAMETER		
Trittschallverringering	ISO 712/2	Auf einer Quick-Step Unterlage		ΔLw ≈ 18 dB (abhängig von Unterlagsbahn)
Zigarettenglut-Beständigkeit	EN 438-2,30			Klasse 5
Fußbodenheizung		Auf einer Quick-Step Unterlage	Siehe besondere Hinweise	Geeignet

UMWELT, SICHERHEIT UND GESUNDHEIT

	METHODE	PARAMETER		
Formaldehydemission	EN 717-1	ppm		<E1
Anti-Statik	EN 1815			≤ 2,0 kV
Brandverhalten	EN 13501-1	Klasse		Cfl-s1
Wärmewiderstand	EN12667	m²K/W		0,055 m²K/W
Rutschfestigkeit	EN 13893	μ		DS: μ ≥ 0,30

ZERTIFIKATE

EU Ecolabel	SE/035/001
AFFSET	A+
PEFC	PEFC/07-32-37
M1	
Nordic Ecolabel	30290001
EPD	



**Product merkmale**
**FORMAT**

Breite	240	mm
Länge	2050	mm
Anzahl der Paneele pro Packung	6	
m <sup>2</sup> pro Packung	2,952	m <sup>2</sup>
Fasen	mit eingepresste V-Nut rundum	
Stärke	9,5	mm
Nut und Feder	Uniclic	
Garantie Wasserbeständigkeit	15	Jahre


**Paneelaufbau**


1. Schicht mit höchster Abrieb- und Kratzfestigkeit
2. Kristallklares Dekor
3. Feuchtigkeitsbeständiges HDF-Trägermaterial
4. Abschließende Stabilisierung

**WERKSGARANTIE**

	METHODE	PARAMETER		
Beanspruchungsklasse	EN 13329		Klasse	21-22-23/31-32
CE	EN 14041:2004 / AC:2006	Notifizierte Stelle	NB 0766 - EPH Dresden	DOP: Auf Packung
UKCA	EN 14041:2004 / AC:2006	Zugelassene Stelle	AB 0321 - Satra UK	DOP: Auf Packung
Garantie	Wohnzwecke		Siehe Garantiebedingungen	Lebenslang
			Wasserdichtigkeit	15 Jahre
		Gewerbliche Nutzung	Siehe Garantiebedingungen	5 Jahre
		Wasserdichtigkeit		5 Jahre

**GENERELLE DATEN (IM BEZUG ZUR EN 13329)**

	METHODE	PARAMETER	NORMANFORDERUNGEN	
Abriebbeständigkeit	EN 13329		≥ 4000	Zyklen
Abriebklasse	EN 13329		AC4	
Schlagfestigkeit	EN 17368	Kleine Kugel	≥35 mm	
	EN 13329	Große Kugel	≥750 mm	
Kratzbeständigkeit	EN 438-2, 25		Belastung	≥ 3N
Stuhlrolleneignung	ISO 4918 (mit Unterlage)	Type W (EN 12529)	25000	Zyklen
Quellverhalten	ISO 24336	Nach 24 Stunden Eintauchen bei 20°C	≤ 18%	
Schließkraft	ISO 24334	F10,2 Längsseite	≥ 1 kN/m	
		Fmax Längsseite		
		Fs0,2 kurzen Seite	≥ 2 kN/m	
		Fmax kurzen Seite		
Eindruckverhalten	EN 424		es sollten keine Beschädigungen erkennbar sein, wenn mit "Fuß Typ 0"	
Abhebefestigkeit	EN 13329	N/mm <sup>2</sup>	≥ 1,25	
Statik	EN ISO 24343-1		Eindruck	≤ 0,05 mm
Fleckenunempfindlichkeit	EN 438	Gruppe 1, 2	Klasse	5
		Gruppe 3	Klasse	4
Allgemeines Aussehen	EN 13329	Höhenunterschiede	≤ 0,15 mm	
		Öffnung zwischen Verbindungen	≤ 0,20 mm	
		Längenschüsselung	konkav ≤ 0,50%	
			konvex ≤ 1,00%	
		Breitenschüsselung	konkav ≤ 0,15%	
			konvex ≤ 0,20%	
Maßabweichungen nach Änderungen der relativen Luftfeuchtigkeit	EN 13329	δl	δl average ≤ 0,9 mm	
		δw	δw average ≤ 0,9 mm	
Lichtechtheit	EN ISO 4892-2:2006/A1:2009 procedure B - cycle 5	Grau Referenz	Klasse	≥ 4

# LAMINATE

## GENERELLE DATEN (IM BEZUG ZUR EN 13329)

	METHODE	PARAMETER	NORMANFORDERUNGEN	QUICK-STEP WERTE
Wasserbeständigkeit	ISO 4760	Qualitative Bewertung für die Quellung nach der Erholung	< 3	1
		Quantitative Bewertung für Quellung nach der Erholung	≤0,3mm	≤0,03mm
		wasserdurchlässige mechanische Verbindung	Keine Anforderungen	Beständigkeit mechanischer Verbindungen gegen Wassereintritt

## Andere technische Daten

	METHODE	PARAMETER		
Trittschallverringering	ISO 712/2	Auf einer Quick-Step Unterlage		ΔLw ≈ 18 dB (abhängig von Unterlagsbahn)
Zigarettenglut-Beständigkeit	EN 438-2,30			Klasse 5
Fußbodenheizung		Auf einer Quick-Step Unterlage	Siehe besondere Hinweise	Geeignet

## UMWELT, SICHERHEIT UND GESUNDHEIT

	METHODE	PARAMETER		
Formaldehydemission	EN 717-1	ppm		<E1
Anti-Statik	EN 1815			≤ 2,0 kV
Brandverhalten	EN 13501-1	Klasse		Cfl-s1
Wärmewiderstand	EN12667	m²K/W		0,061 m²K/W
Rutschfestigkeit	EN 13893	μ		DS: μ ≥ 0,30

## ZERTIFIKATE

EU Ecolabel	SE/035/001
AFFSET	A+
PEFC	PEFC/07-32-37
M1	
Nordic Ecolabel	30290001
EPD	



### Product merkmale

#### FORMAT

Breite	396	mm
Länge	1200	mm
Anzahl der Paneele pro Packung	4	
m <sup>2</sup> pro Packung	1,901	m <sup>2</sup>
Fasen	mit eingepresste V-Nut rundum	
Stärke	8,0	mm
Nut und Feder	Uniclic	
Garantie Wasserbeständigkeit	15	Jahre



### Paneelaufbau



1. Schicht mit höchster Abrieb- und Kratzfestigkeit
2. Kristallklares Dekor
3. Feuchtigkeitsbeständiges HDF-Trägermaterial
4. Abschließende Stabilisierung

### WERKSGARANTIE

	METHODE	PARAMETER		
Beanspruchungsklasse	EN 13329		Klasse	21-22-23/31-32
CE	EN 14041:2004 / AC:2006	Notifizierte Stelle	NB 0766 - EPH Dresden	DOP: Auf Packung
UKCA	EN 14041:2004 / AC:2006	Zugelassene Stelle	AB 0321 - Satra UK	DOP: Auf Packung
Garantie	Wohnzwecke		Siehe Garantiebedingungen	Lebenslang
		Wasserdichtigkeit		15 Jahre
		Gewerbliche Nutzung	Siehe Garantiebedingungen	5 Jahre
		Wasserdichtigkeit		5 Jahre

### GENERELLE DATEN (IM BEZUG ZUR EN 13329)

	METHODE	PARAMETER	NORMANFORDERUNGEN	
Abriebbeständigkeit	EN 13329		≥ 4000	Zyklen
Abriebklasse	EN 13329		AC4	
Schlagfestigkeit	EN 17368	Kleine Kugel	≥35 mm	
	EN 13329	Große Kugel	≥750 mm	
Kratzbeständigkeit	EN 438-2, 25		Belastung	≥ 3N
Stuhlrolleneignung	ISO 4918 (mit Unterlage)	Type W (EN 12529)	25000	Zyklen
Quellverhalten	ISO 24336	Nach 24 Stunden Eintauchen bei 20°C	≤ 18%	
Schließkraft	ISO 24334	F10,2 Längsseite	≥ 1 kN/m	
		Fmax Längsseite		
		Fs0,2 kurzen Seite	≥ 2 kN/m	
		Fmax kurzen Seite		
Eindruckverhalten	EN 424		es sollten keine Beschädigungen erkennbar sein, wenn mit "Fuß Typ 0"	
Abhebefestigkeit	EN 13329	N/mm <sup>2</sup>	≥ 1,25	
Statik	EN ISO 24343-1		Eindruck	≤ 0,05 mm
Fleckenunempfindlichkeit	EN 438	Gruppe 1, 2	Klasse	5
		Gruppe 3	Klasse	4
Allgemeines Aussehen	EN 13329	Höhenunterschiede	≤ 0,15 mm	
		Öffnung zwischen Verbindungen	≤ 0,20 mm	
		Längenschüsselung	konkav ≤ 0,50%	
			konvex ≤ 1,00%	
		Breitenschüsselung	konkav ≤ 0,15%	
			konvex ≤ 0,20%	
Maßabweichungen nach Änderungen der relativen Luftfeuchtigkeit	EN 13329	δl	δl average ≤ 0,9 mm	
		δw	δw average ≤ 0,9 mm	
Lichtechtheit	EN ISO 4892-2:2006/A1:2009 procedure B - cycle 5	Grau Referenz	Klasse	≥ 4

# LAMINATE

## GENERELLE DATEN (IM BEZUG ZUR EN 13329)

	METHODE	PARAMETER	NORMANFORDERUNGEN	QUICK-STEP WERTE
Wasserbeständigkeit	ISO 4760	Qualitative Bewertung für die Quellung nach der Erholung	< 3	1
		Quantitative Bewertung für Quellung nach der Erholung	≤0,3mm	≤0,03mm
		wasserdurchlässige mechanische Verbindung	Keine Anforderungen	Beständigkeit mechanischer Verbindungen gegen Wassereintritt

## Andere technische Daten

	METHODE	PARAMETER		
Trittschallverringering	ISO 712/2	Auf einer Quick-Step Unterlage		ΔLw ≈ 18 dB (abhängig von Unterlagsbahn)
Zigaretteglut-Beständigkeit	EN 438-2,30			Klasse 5
Fußbodenheizung		Auf einer Quick-Step Unterlage	Siehe besondere Hinweise	Geeignet

## UMWELT, SICHERHEIT UND GESUNDHEIT

	METHODE	PARAMETER		
Formaldehydemission	EN 717-1	ppm		<E1
Anti-Statik	EN 1815			≤ 2,0 kV
Brandverhalten	EN 13501-1	Klasse		Cfl-s1
Wärmewiderstand	EN12667	m²K/W		0,055 m²K/W
Rutschfestigkeit	EN 13893	μ		DS: μ ≥ 0,30

## ZERTIFIKATE

EU Ecolabel	SE/035/001
AFFSET	A+
PEFC	PEFC/07-32-37
M1	
Nordic Ecolabel	30290001
EPD	



## ABMESSUNGEN

### FORMAT

Länge	1261 mm
Breite	192 mm
Anzahl der Paneele pro Packung	10
m <sup>2</sup> pro Packung	2.4211
Fasen	flat
Stärke	7 mm
Nut und Feder	Uniclic
Wasserdichtigkeit	No

## WERKSGARANTIE

	METHODE	PARAMETER	WERTE	
Beanspruchungsklasse	EN 13329		Klasse	21-22-23/31-32
CE	EN 14041:2004 / AC:2006	@afX [W]W	NB 0766 - EPH Dresden	DOP: Auf Packung
UKCA	EN 14041:2004 / AC:2006	Zugelassene Ste W	AB 0321 - Satra UK	DOP: Auf Packung
	Wohnzwecke	siehe Garnatiebedingungen		
Garantie	Gewerbliche Nutzung	siehe Garnatiebedingungen		
	Wasserdichtigkeit	siehe Garnatiebedingungen		

## GENERELLE DATEN (IM BEZUG ZUR EN 13329)

	METHODE	PARAMETER	NORMANFORDERUNGEN	WERTE
Abriebbeständigkeit	EN 13329		≥ 4000 Zyklen	≥ 4000 Zyklen
Abriebklasse	EN 13329		AC4	AC4
Schlagfestigkeit	EN 17368d	Kleine Kugel	≥ 35mm	≥ 35mm
	EN 13329	Große Kugel	≥ 750mm	≥ 750mm
Kratzbeständigkeit	EN 438-2, 25		Belastung ≥ 3N	Belastung ≥ 3N
Stuhlrolleneignung	ISO 4918 (mit Unterlage)	Type W (EN 12529)	25000 Zyklen	Keine Änderung
Quellverhalten	ISO 24336	Nach 24 Stunden Eintauchen bei 20°C	≤ 18%	≤ 18%
Schließkraft	ISO 24334	F10,2 Längsseite	≥ 1 kN/m	≥ 1 kN/m
		Fmax Längsseite		≥ 1 kN/m
		Fs0,2 kurzen Seite	≥ 2 kN/m	≥ 2 kN/m
		Fmax kurzen Seite		≥ 2 kN/m
Eindruckverhalten	EN 424		es sollten keine Beschädigungen erkennbar sein, wenn mit "Fuß Typ O" getestet wird	keine sichtbaren Schäden
Fleckenunempfindlichkeit	EN 438	Gruppe 1,2	Klasse 5	Klasse 5
Lichtechtheit	EN ISO 4892	Gruppe 3	Klasse 4	Klasse 4
	2:2006/A1:2009 Procedure B - Cycle 5	Grau Referenz	Klasse ≥ 4	Klasse 4

## UMWELT, SICHERHEIT UND GESUNDHEIT

	METHODE	PARAMETER	NORMANFORDERUNGEN	WERTE
8ad_S'WZkVW [ed]a`	EN 717-1	ppm	E1 < 0,1	< 0,01
3` r[Z]Sf[]	EN 1815		≤ 2,0 kV	≤ 2,0 kV
4dS` VhVZS'W	EN 13501-1	=SedW		Cfl-s1
I 3d_W [W]S' V	EN 12996:2001	m <sup>2</sup> K/W		0,051 m <sup>2</sup> K/W
DgfeLZ'Wf[]Vf	EN 13893	μ	μ ≥ 0,30	DS: μ ≥ 0,30



EN 14041:2004 / AC:2006  
Laminated floorcoverings  
EN 13329:2016

EN 14041:2004 / AC:2006  
Laminated floorcoverings  
EN 13329:2016

## Laminate: Unilin, Quick-Step, Pergo, IVC Commercial

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

#### 1.1. Product identifier

**Product name** : Laminate: 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

Laminate flooring

##### 1.2.2 Uses advised against

No uses advised against known

#### 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

When processed: risk of dust explosion  
During processing dust may be released for which exposure limits are set out in the community  
During use vapours 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

# Laminate: Unilin, Quick-Step, Pergo, IVC Commercial

## 4.2.1 Acute symptoms

Dust from cutting process may cause mechanical irritation

### After inhalation:

Irritation of the respiratory tract. Irritation of the nasal mucous membranes. Coughing.

### After skin contact:

No effects known.

### After eye contact:

Mechanical irritation.

### 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

Upon combustion: CO and CO2 are formed.

### 5.3. Advice for firefighters

#### 5.3.1 Instructions:

No specific fire-fighting instructions required.

#### 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

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:

Meet the legal requirements.

#### 7.2.2 Keep away from:

Heat sources, oxidizing agents, (strong) acids.

#### 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

Publication date: 2022-09-28

# Laminate: Unilin, Quick-Step, Pergo, IVC Commercial

## 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.

#### EU

Formaldehyde	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	0.3 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	0.37 mg/m <sup>3</sup> (13)
	Short time value (Indicative occupational exposure limit value)	0.6 ppm
	Short time value (Indicative occupational exposure limit value)	0.74 mg/m <sup>3</sup>
Hardwood dusts	Time-weighted average exposure limit 8 h (Limit value for occupational exposure)	2 mg/m <sup>3</sup> (9)

(13): Limit value of 0,62 mg/m<sup>3</sup> or 0,5 ppm (3) for the health care, funeral and embalming sectors until 11 July 2024

(9): Inhalable fraction.

Limit value 3 mg/m<sup>3</sup> until 17 January 2023

#### Belgium

Aldéhyde formique	Short time value	0.3 ppm (M)
	Short time value	0.38 mg/m <sup>3</sup> (M)
Bois (poussières de): tous les types sauf Thuja plicata	Time-weighted average exposure limit 8 h	1 mg/m <sup>3</sup>
Particules non classifiées autrement (fraction alvéolaire)	Time-weighted average exposure limit 8 h	3 mg/m <sup>3</sup>
Particules non classifiées autrement (fraction inhalable)	Time-weighted average exposure limit 8 h	10 mg/m <sup>3</sup>

La mention "M" indique que lors d'une exposition supérieure à la valeur limite, des irritations apparaissent ou un danger d'intoxication aiguë existe. Le procédé de travail doit être conçu de telle façon que l'exposition ne dépasse jamais la valeur limite. Lors des mesurages, la période d'échantillonnage doit être aussi courte que possible afin de pouvoir effectuer des mesurages fiables. Le résultat des mesurages est calculé en fonction de la période d'échantillonnage.

#### The Netherlands

Formaldehyde	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	0.12 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	0.15 mg/m <sup>3</sup>
	Short time value (Public occupational exposure limit value)	0.4 ppm
	Short time value (Public occupational exposure limit value)	0.5 mg/m <sup>3</sup>
Hardhoutstof	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	2 mg/m <sup>3</sup>

#### France

Bois (poussières de)	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	1.00 mg/m <sup>3</sup>
Formaldéhyde	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	0.3 ppm
Formaldéhyde <i>shall apply until 2024-11-07</i>	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	0.5 ppm
Formaldéhyde	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	0.37 mg/m <sup>3</sup>
Formaldéhyde <i>shall apply until 2024-11-07</i>	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	0.62 mg/m <sup>3</sup>
Formaldéhyde	Short time value (VRC: Valeur réglementaire contraignante)	0.6 ppm
	Short time value (VRC: Valeur réglementaire contraignante)	0.74 mg/m <sup>3</sup>
Poussières réputées sans effet spécifique, fraction alvéolaire	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	5 mg/m <sup>3</sup>
Poussières réputées sans effet spécifique	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	10 mg/m <sup>3</sup>

#### Germany

Allgemeiner Staubgrenzwert: Alveolengängige Fraktion	Time-weighted average exposure limit 8 h (TRGS 900)	1.25 mg/m <sup>3</sup>
Allgemeiner Staubgrenzwert: Einatembare Fraktion	Time-weighted average exposure limit 8 h (TRGS 900)	10 mg/m <sup>3</sup>
Formaldehyd	Time-weighted average exposure limit 8 h (TRGS 900)	0.3 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	0.37 mg/m <sup>3</sup>
Hartholzstaub	Time-weighted average exposure limit 8 h (TRGS 900)	2 mg/m <sup>3</sup>

#### Austria

Formaldehyd	Tagesmittelwert (MAK)	0.3 ppm
	Tagesmittelwert (MAK)	0.37 mg/m <sup>3</sup>
	Kurzzeitwert Mow (MAK)	0.6 ppm

Publication date: 2022-09-28

## Laminate: Unilin, Quick-Step, Pergo, IVC Commercial

Formaldehyd	Kurzzeitwert Mow (MAK)	0.74 mg/m <sup>3</sup>
Holzstaub	Tagesmittelwert (TRK)	2 mg/m <sup>3</sup>

### UK

Formaldehyde	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))	2.5 mg/m <sup>3</sup>
	Short time value (Workplace exposure limit (EH40/2005))	2 ppm
	Short time value (Workplace exposure limit (EH40/2005))	2.5 mg/m <sup>3</sup>
Hardwood dust (inhalable fraction)	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	3 mg/m <sup>3</sup>
Inhalable dust	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	10 mg/m <sup>3</sup>
Respirable dust	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	4 mg/m <sup>3</sup>
Softwood dust	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	5 mg/m <sup>3</sup>

### USA (TLV-ACGIH)

Formaldehyde	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	0.1 ppm
	Short time value (TLV - Adopted Value)	0.3 ppm
Particulates (insoluble or poorly soluble) not otherwise specified	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	10 mg/m <sup>3</sup> (I)
	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	3 mg/m <sup>3</sup> (R)
Wood dusts: All other species	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	1 mg/m <sup>3</sup> (I)

(I): Inhalable fraction

(R): Respirable fraction

#### 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

Keep away from naked flames/heat. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

#### 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:

Respiratory protection not required in normal conditions. Insufficient ventilation: wear respiratory protection. Dust production: dust mask with filter type P1.

##### b) Hand protection:

Protective gloves against chemicals (EN 374).

##### c) Eye protection:

Not required for normal conditions of use. In case of dust production: protective goggles (EN 166).

##### d) Skin protection:

Protective clothing (EN 14605 or EN 13034).

#### 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	Hard solid material
Odour	No data available on odour
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	No data available in the literature
Dynamic viscosity	Not applicable (solid)

Publication date: 2022-09-28

## Laminate: Unilin, Quick-Step, Pergo, IVC Commercial

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	Not applicable (solid)
Solubility	Water ; insoluble
Relative density	$\geq 0.8$
Absolute density	$\geq 800 \text{ kg/m}^3$
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

Evaporation rate	Not applicable (solid)
Fire classification of construction products and building elements	Class Cfl-s1 or Dfl-s1 (depending on product build up) according to EN 9239-1

## 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

Keep away from naked flames/heat.

### 10.5. Incompatible materials

Oxidizing agents, (strong) acids.

### 10.6. Hazardous decomposition products

Upon combustion: CO and CO<sub>2</sub> are formed.

## 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

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

No (test)data available

#### Corrosion/irritation

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

No (test)data available

#### Respiratory or skin sensitisation

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

No (test)data available

#### Specific target organ toxicity

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

No (test)data available

#### Mutagenicity (in vitro)

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

No (test)data available

#### Mutagenicity (in vivo)

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

No (test)data available

#### Carcinogenicity

Publication date: 2022-09-28

## Laminate: Unilin, Quick-Step, Pergo, IVC Commercial

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

No (test)data available

### Reproductive toxicity

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

No (test)data available

### Toxicity other effects

Laminate: 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

Laminate: 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

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

#### Log Kow

Method	Remark	Value	Temperature	Value determination
	No data available in the literature			

#### 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

Laminate: 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

Publication date: 2022-09-28

# Laminate: Unilin, Quick-Step, Pergo, IVC Commercial

## 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
	Class E1, according to EN 717

Indicative occupational exposure limit values (Directive 98/24/EC, 2000/39/EC, 2004/37/EC and amendments)

Product name	Skin sensitisation
Formaldehyde	The substance can cause sensitisation of the skin

#### National legislation Belgium

Additional classification	Aldéhyde formique; C; La mention "C" signifie que l'agent en question relève du champ d'application de l'arrêté royal du 2 décembre 1993 concernant la protection des travailleurs contre les risques liés à l'exposition à des agents cancérigènes et mutagènes et reprotoxiques au travail. Bois (poussières de); tous les types sauf Thuja plicata; C; La mention "C" signifie que l'agent en question relève du champ d'application de l'arrêté royal du 2 décembre 1993 concernant la protection des travailleurs contre les risques liés à l'exposition à des agents cancérigènes et mutagènes et reprotoxiques au travail.
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#### National legislation The Netherlands

Waterbezwaarlijkheid	Not applicable (article)
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#### National legislation France

Catégorie cancérigène	Bois (poussières de); (7); Procédé cancérigène cité à l'arrêté du 5 janvier 1993 modifié. Formaldéhyde
Catégorie mutagène	Formaldéhyde; M2

#### National legislation Germany

WGK	Not applicable (article)
TRGS900 - Risiko der Fruchtschädigung	Formaldehyd; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden
Sensibilisierende Stoffe	Formaldehyd; Sh; Hautsensibilisierende Stoffe
TRGS900 - Kanzerogener Stoff	Formaldehyd

#### National legislation Austria

Krebserzeugend	Formaldehyd; III A2 Holzstaub; III C
Gefahr der Sensibilisierung der Haut	Formaldehyd; Sh Holzstaub; S
Gefahr der Sensibilisierung der Atemwege	Holzstaub; S

#### National legislation United Kingdom

Carcinogen	Hardwood dust (inhalable fraction); Carc
Respiratory sensitisation	Softwood dust; Sen Hardwood dust (inhalable fraction); Sen

#### Other relevant data

Publication date: 2022-09-28

## Laminate: Unilin, Quick-Step, Pergo, IVC Commercial

TLV - Carcinogen	Formaldehyde; A1
	Wood dusts: carcinogenicity - Oak and beech; A1
	Wood dusts: carcinogenicity - All other woods; A4
TLV - Skin Sensitisation	Formaldehyde; SEN; Sensitization
TLV - Respiratory Sensitisation	Formaldehyde; SEN; Sensitization

### 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.

Publication date: 2022-09-28

# URKUNDE

Unilin BV

8710 Wielsbeke, Belgien

wird aufgrund des Zeichenbenutzungsvertrages Nr. 40844 zur DE-UZ 176  
Ausgabe 2013 das Recht verliehen, für das Produkt

**Quick-Step Hydroseal Naturboden; Dicke 7 mm  
bis 12 mm; Modelle gemäß Anhang zum Vertrag.**

das nachstehend abgebildete Umweltzeichen als Ausweis für die besondere  
Umweltfreundlichkeit zu führen.



Bonn, den 17. Januar 2024

*R. Wollmann*

Geschäftsführer  
RAL gGmbH



Bundesministerium  
für Umwelt, Naturschutz, nukleare Sicherheit  
und Verbraucherschutz



# CERTIFICATE

Unilin BV

8710 Wielsbeke, Belgium

is granted the right, on the basis of the contract on the use of the environmental label no. 40844 based on DE-UZ 176 Edition 2013, for the product

**Quick-Step Hydroseal Naturboden; thickness 7 mm to 12 mm; models according to the appendix.**

to use the Blue Angel Ecolabel shown below as a sign of special environmental friendliness.



Bonn, 17 January 2024

*R. Wollmann*

Managing Director  
RAL gGmbH



Bundesministerium  
für Umwelt, Naturschutz, nukleare Sicherheit  
und Verbraucherschutz

Umwelt  
Bundesamt



# ENVIRONMENTAL PRODUCT DECLARATION

as per ISO 14025 and EN 15804+A2

Owner of the Declaration	Unilin BV, division flooring
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-UNI-20230480-IBC1-EN
Issue date	15/01/2024
Valid to	14/01/2029

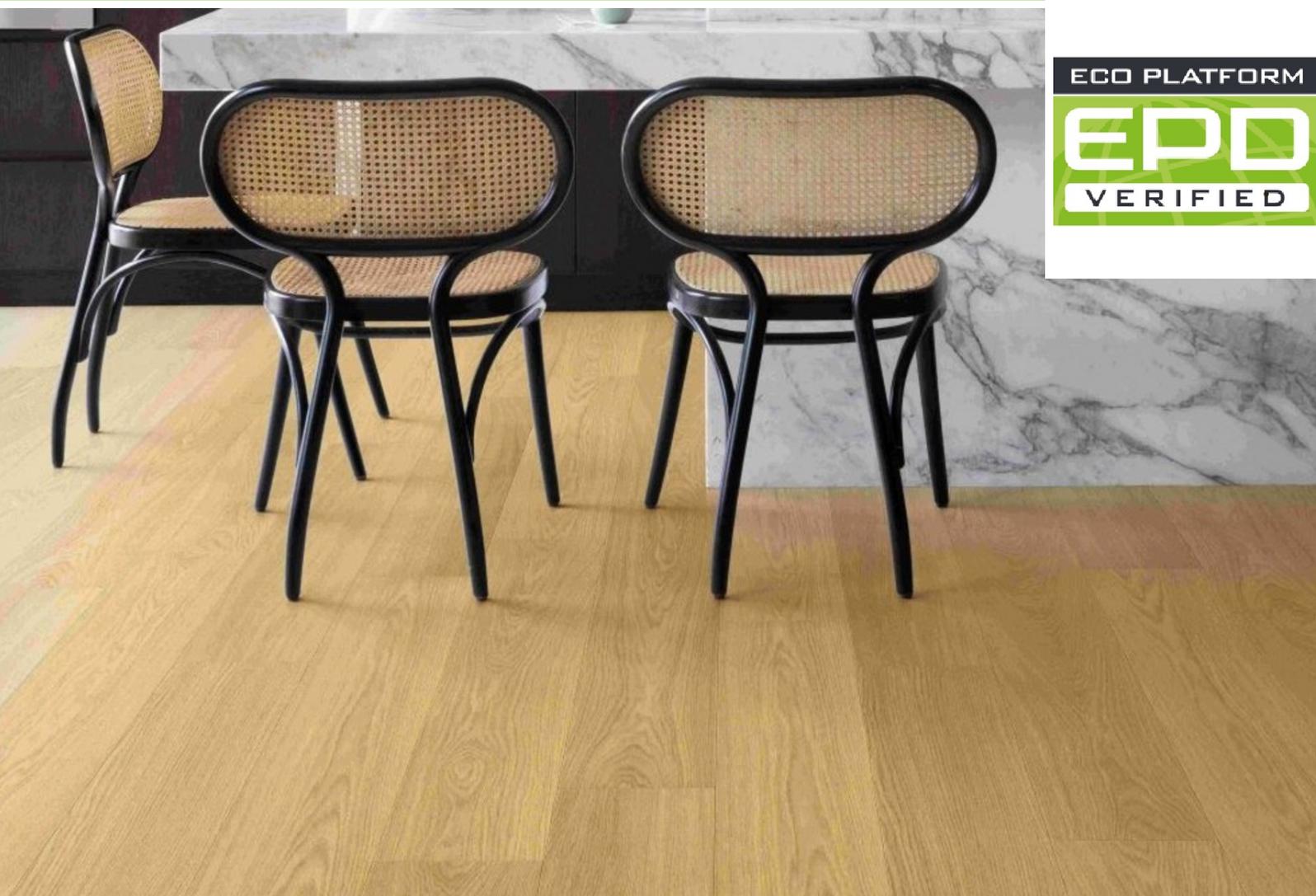
## Direct Pressure Laminate floor coverings Unilin BV, division flooring

[www.ibu-epd.com](http://www.ibu-epd.com) | <https://epd-online.com>



ECO PLATFORM

**EPD**  
VERIFIED



## 1. General Information

### Unilin BV, division flooring

#### Programme holder

IBU – Institut Bauen und Umwelt e.V.  
Hegelplatz 1  
10117 Berlin  
Germany

#### Declaration number

EPD-UNI-20230480-IBC1-EN

#### This declaration is based on the product category rules:

Floor coverings, 01/08/2021  
(PCR checked and approved by the SVR)

#### Issue date

15/01/2024

#### Valid to

14/01/2029



Dipl.-Ing. Hans Peters  
(Chairman of Institut Bauen und Umwelt e.V.)



Florian Pronold  
(Managing Director Institut Bauen und Umwelt e.V.)

### Direct Pressure Laminate floor coverings

#### Owner of the declaration

Unilin BV, division flooring  
Ooigemstraat 3  
8710 Wielsbeke  
Belgium

#### Declared product / declared unit

1 m<sup>2</sup> of direct pressure laminate (DPL) floor covering of 7 mm thickness .

#### Scope:

The laminate floor covering described in this EPD has a thickness between 7 mm and 12 mm and meets the requirements of the *EN14041:2006* and the use classes between 31 and 34 according to *EN 13329* and *EN ISO 10874*.

The results are representative of production in UNILIN B.V. Division Flooring, Wielsbeke and Vielsalm sites (Belgium).

The products are available under following brandnames: Unilin, Quick-Step, Pergo, IVC Commercial, Sens by Quick-Step, Vitality, LocFloor, Clixfloor, PergoPro, Xpert Pro, Next, EasyLife by Unilin, Lamidecor by Unilin, Topfloor by Unilin, Expert click by Unilin, Artens by Unilin, Goodhome, Piubell'arte, Les indispensables.

The owner of the declaration shall be liable for the underlying information and evidence; the IBU shall not be liable with respect to manufacturer information, life cycle assessment data and evidences.

The EPD was created according to the specifications of EN 15804+A2. In the following, the standard will be simplified as *EN 15804*.

#### Verification

The standard EN 15804 serves as the core PCR	
Independent verification of the declaration and data according to ISO 14025:2011	
<input type="checkbox"/>	internally
<input checked="" type="checkbox"/>	externally



Dr. Frank Werner,  
(Independent verifier)

## 2. Product

### 2.1 Product description/Product definition

DPL (Direct Pressure Laminate) floor coverings described in this EPD are produced by UNILIN BV, division Flooring. The floor coverings meet the requirements of EN 13329. DPL laminate floorings are made up of a number of layers. On the top side, there is a decor with a transparent, wear-resistant contact surface; in the middle, there is a core layer made of high density wood fibre and on the back side, there is a stabilizing layer to guarantee floor stability. The decorative paper of DPL floor covering can be printed with any design and gives the floor its individual appearance. The planks have a mechanical and patented connection (Uniclic, PerfectFold, Aquafit, Unifit, Unidrop or Multifit).

For the placing on the market of the product in the European Union/European Free Trade Association (EU/EFTA) (with the exception of Switzerland) Regulation (EU) No. 305/2011 (CPR) applies. The product needs a declaration of performance taking into consideration EN14041:2004 AC 2006 Resilient, textile and laminate floor coverings - Essential characteristics and the CE-marking.

### 2.2 Application

The laminate floor covering as described in this EPD is used as a floating modular flooring system for indoor use and meets the requirements of the use classes: between 31 and 34 according to EN 13329 and EN ISO 10874.

### 2.3 Technical Data

The technical specifications of the products within the scope of the EPD shall be listed, including the reference to the test methods/test standards for each specification.

For products with CE marking, the technical specifications must be specified in accordance with information in the declaration of performance. The properties relevant to the product should be specified in the table below. If no information is given for properties, an explanation must be given in the background report to the EPD as to why the property is not relevant to the product.

#### Constructional data

Name	Value	Unit
Product minimum thickness	7	mm
Product maximum thickness	12	mm
Product minimum mass (7 mm thickness)	6.4	kg/m <sup>2</sup>
Product maximum mass (12 mm thickness)	11.0	kg/m <sup>2</sup>
Abrasion Class	AC4-AC6	-
Product Form	panel	-
Density	910	kg/m <sup>3</sup>

- Performance data of the product in accordance with the declaration of performance with respect to its essential characteristics according to EN 14041:2004 AC 2006 Resilient, textile and laminate floor coverings - Essential characteristics.

### 2.4 Delivery status

Typical standard dimensions are as follows (length - width - thickness):

- 1200mm x 190mm x 7mm
- 1200mm x 190mm x 8mm
- 1200mm x 396mm x 8mm
- 1224mm x 408mm x 8mm

- 1380mm x 156mm x 8mm
- 1380mm x 190mm x 8mm
- 1380mm x 190mm x 8mm
- 1380mm x 190mm x 12 mm
- 1380mm x 212mm x 9mm
- 1380mm x 278,5mm x 8mm
- 2050mm x 205mm x 9,5mm
- 2050mm x 240mm x 9,5mm
- 1380mm x 190mm x 9mm

### 2.5 Base materials/Ancillary materials

The composition of a DPL floor covering in mass % is:

- 90-96 % High Density Wood Fibre board (HDF)
- 2-4 % paper
- 4-6 % resin
- <1 % corundum

#### HDF (high density wood fibreboard)

The core board is an HDF board >850kg/m<sup>3</sup> composed of wood fibers and a thermosetting resin, mainly MUF (melamine-urea-formaldehyde) resin.

#### Paper

The renewable resource wood is the main raw material for paper production.

#### Resins

The used amino resins are melamine-formaldehyde (95%) and urea formaldehyde (5%) resins. Amino resins are thermosetting resins that are cured using heat and pressure.

#### Corundum

Bauxite is the mineral resource of corundum. By using aluminium oxide (Al<sub>2</sub>O<sub>3</sub>) the surface layer of a laminate flooring obtains abrasion and scratch resistance.

This product contains substances listed in the Candidate List of Substances of Very High Concern for Authorisation REACH (date: 16.11.2023) exceeding 0.1 percentage by mass: **NO**

This product contains other CMR substances in categories 1A or 1B which are not on the candidate list, exceeding 0.1 percentage by mass: **NO**

Biocide products were added to this construction product or it has been treated with biocide products (this then concerns a treated product as defined by the (EU) Ordinance on Biocide Products No. 528/2012): **NO**

### 2.6 Manufacture

#### Impregnation & Resin production:

The resin production is included in the LCA; it is produced by UNILIN bvba, division Flooring. The different components are mixed together and used to impregnate the different paper layers (overlay, décor and backing).

#### Pressing:

The resin impregnated papers (overlay, décor and backing) are pressed under heat with the HDF core board in a single stage process. In this process the resin cures and the different layers are laminated together. The surface structure, the final gloss and the bevelled edges for some products are applied during the pressing phase.

#### Cutting and milling:

The pressed boards are cut to size and equipped with a tongue and-groove assembly system. Eventually the boards are provided with a bevelled edge.

Packaging:

The laminate floorings are unit-packed and edge-protected using cardboard boxes (5 sided) and shrink-wrapped in foil.

Laminate floor coverings are intended for use as floor covering within a building. According to the area of application floor coverings are classified in use classes.

**2.7 Environment and health during manufacturing**

The production conditions do not demand any special health protection measures over and beyond the legal requirements.

Water

Production related waste water from the HDF production process is purified in a wastewater treatment plant. The use of water in the DPL flooring production process is negligible. Where water is needed, it either evaporates or is re-used in the internal water loop.

Air

The constitutional valid regulations are observed. The emissions to air are far below the legally required thresholds.

Soil

There is no impact on soil.

**2.8 Product processing/Installation**

UNILIN Laminate floor coverings are generally installed floating. This means that the floor covering is not fixed to the sub-floor using glue, nails etc. The floor covering panels are mainly mechanically assembled glue-less by means of tongue and groove. Underlay material is needed when installing laminate floor coverings in order to achieve a levelling effect, thermal or acoustical insulation and/or protection against rising dampness.

**2.9 Packaging**

Packaging requirements according to *EN 13329: Laminate floor coverings* are delivered in packages designed to protect the corners, edges and surfaces of the product, under normal conditions of transport and handling. Laminate flooring is accordingly unit-packed and edge-protected using ribbed cardboard and shrinkwrapped in foil. Pallets are finally used for the delivery. The pallets can also be reused.

**2.10 Condition of use**

A thermosetting binding agent and saturating resin are used for the production of the flooring panels. When heat and pressure are applied during the pressing phase, this is 3D crosslinked by an irreversible polycondensation reaction. Under normal conditions, the binding agent and saturating resin are both chemically stable and mechanically firmly bonded to the wood parts.

**2.11 Environment and health during use**

Environmental protection

When the products are used as designated and according to the current state of knowledge, there are no hazards for water, air and soil.

Health protection

When used normally and in accordance with the designated purpose, no health risks or restrictions are to be anticipated by UNILIN DPL floor coverings. This is in line with the current state of knowledge.

**2.12 Reference service life**

The BBSR Table gives a general useful life of **20 years** for floor coverings of component group 352.711. Due to the comparatively high resistance of the laminate floorings, Unilin grants an additional **warranty** (based on the floor owner life according to the manufacturer's warranty conditions) for the declared product. In order to increase the life duration of the

floor covering, the manufacturer's instructions concerning warranty and care must be observed, available for download at [www.unilin.com/en/flooring](http://www.unilin.com/en/flooring). The use stage is declared in this EPD for a one year usage.

Influences on ageing when applied in accordance with the rules of technology.

**2.13 Extraordinary effects**

**Fire**

The reaction to fire is determined according to *EN 13501-1*. The class for laminate floors produced by UNILIN bvba-division Flooring, in combination with all underlays of the sales program is **Cfl-s1**. **The classes 33 and 34 in the range are usually Bfl-s1.**

**Fire protection**

Name	Value
Building material class	Cfl or Bfl
Smoke gas development	s1

**Water**

In case of a leak or a flood where the flooring has been soaked for a longer period of time (days) the flooring will most probably be considered a total loss. In case of short or shorter time of exposure and after drying, no visible damage may be expected. If the water came under the floorcovering (floating installation) it may be necessary to un-click the planks/tiles and let them dry. The subfloor will most probably also be wet and should be given the time to come to equilibrium moisture content before re-installation of the dry panels. Most of the laminate ranges offer a special water resistance and a watertight connection between planks/tiles. During the installation, the periphery needs to be treated with a foam strip and a special sealant to avoid infiltration. In case of water spillage on the surface, it will evaporate before having the chance to penetrate between planks/tiles.

**Mechanical destruction**

Small damages in the flooring surface can be repaired by using colored solvent-free melt waxes. In case of more severe damage the damaged panels can be replaced. Procedures to repair or replace a damaged plank are available on request. The damaged panels go into the normal end-of-life treatment.

**2.14 Re-use phase**

A laminate floor covering which is not at the end-of-life stage may be uninstalled and re-used as a floor covering. Post-consumer laminate floor covering waste can be recycled as wood based products. When appropriate recycling facilities do not exist, laminate floor coverings shall be thermally valorized.

**2.15 Disposal**

Post-installation and post-consumer flooring panels are considered as wood waste. The European Waste Code *EWC* is 030105. It can be disposed in any regulated municipal waste collection point as wood waste. Unilin offers a take-back program named Recover to enable circularity of Laminate flooring. Please contact your local Unilin dealer to check the availability of this Recover program in your country.

**2.16 Further information**

All information about the product composition, technical performance, instructions for installation and maintenance, precautionary instructions for use, CE marking and relevant DOP (declaration of performance) documents, are available either in the packs or can be found on the homepage [www.unilin.com/en/flooring](http://www.unilin.com/en/flooring) or can be requested at Unilin BV division flooring with the following address [info@unilin.com](mailto:info@unilin.com).

### 3. LCA: Calculation rules

#### 3.1 Declared Unit

The declared unit is 1 m<sup>2</sup> laminate flooring with a thickness of 7 mm and a weight of 6.4 kg. It has the use class 32 as this is the most common product.

#### Declared unit and mass reference

Name	Value	Unit
Declared unit	1	m <sup>2</sup>
Grammage	6.46	kg/m <sup>2</sup>
Layer thickness	0.007	m

#### 3.2 System boundary

Type of EPD according to *EN 15804*: cradle to grave.

The production stage (A1-A3) includes all relevant processes from "cradle-to-factory gate" within the cutoff rules. This includes for example the extraction and manufacture of all raw materials and their delivery to the production site. The constructional process stage includes the delivery of the floor covering to the point of installation (A4). A4 data are based on a weighted average distance for worldwide deliveries.

Installation stage (A5) is declared, accounting for electricity consumption, product installation losses, and packaging waste.

The use stage (B2) includes the cleaning of the laminate floor covering for 1 year. The cleaning frequencies are described in chapter 4. Provision of water, cleaning agent and electricity for the cleaning of the floor covering is considered.

Product end-of-life (C1-C3) comprises the product dismantling, transportation, and energy recovery in combined heat and power (CHP) plant. In module C3 the release of biogenic CO<sub>2</sub> is declared according to *EN 16485*.

Module D includes benefits from all net flows in the end-of-life stage that leave the product boundary system after having passed the end-of-waste state. It is assumed that post-consumer flooring waste is incinerated as waste in a combined heat and power (CHP) plant. Loads from material incineration and resulted benefits from recovered energy are declared within module D.

#### 3.3 Estimates and assumptions

No additional estimates or assumptions had to be made beyond the information stated in clauses 3 and 4.

#### 3.4 Cut-off criteria

In the assessment, all available data from the production process are considered, i.e. all raw materials used, utilised thermal energy, and electric power consumption using best available LCI datasets. Thus material and energy flows contributing less than 1% of mass or energy are also considered.

No flows were cut-off that are known to have significant environmental impacts.

#### 3.5 Background data

Used background data comes from ecoinvent database version 3.8 from 2021. It has been selected to be representative of processes geographic location.

#### 3.6 Data quality

Primary data refer to the year 2021. The data of the foreground processes is based on input-output analyses at the Belgian production sites. The primary data collection was done thoroughly, all relevant flows were considered.

#### 3.7 Period under review

The period under review for primary data is 2021.

#### 3.8 Geographic Representativeness

Land or region, in which the declared product system is manufactured, used or handled at the end of the product's lifespan: Global

#### 3.9 Allocation

The overall production of UNILIN comprises further products beside the product considered in this study. Data for thermal and electrical energy as well as auxiliary material refer to the declared product. During data collection the allocation is done via mass (kg). Specific information on allocation within the background data is given in the ecoinvent documentation.

#### 3.10 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.

Background database is as described in chapter 3.5.

### 4. LCA: Scenarios and additional technical information

#### Characteristic product properties of biogenic carbon

#### Information on describing the biogenic carbon content at factory gate

Name	Value	Unit
Biogenic carbon content in product	2.49	kg C
Biogenic carbon content in accompanying packaging	0.109	kg C

Note: 1 kg of biogenic carbon is equivalent to 44/12 kg of CO<sub>2</sub>.

The following technical information is a basis for the declared modules. Scenarios correspond to the worldwide production and consumption.

#### Transport to the construction site (A4)

Product shipping stage A4 represents weighted average based on worldwide sales.

Name	Value	Unit
Transport distance by truck	724	km
Transport distance by boat	3029	km
Capacity utilisation (including empty runs) for truck	67	%

#### Installation in the building (A5)

Name	Value	Unit
Electricity consumption	0.04	kWh
Product installation losses	4.0	%
Product packaging waste	0.23	kg

### Maintenance (B2)

Maintenance scenario is:

- 1 vacuum cleaning per week,
- 1 wet cleaning (water and detergent) per month.

Name	Value	Unit
Water consumption	1.33	kg/m <sup>2</sup> /year
Detergent	0.0133	kg/m <sup>2</sup> /year
Electricity consumption (European mix)	0.54	kWh/m <sup>2</sup> /year

### Reference service life

Name	Value	Unit
Reference service life according to BBSR	20	a

### End of Life (C1-C4)

Name	Value	Unit
Collected separately waste type (wood waste)	6.46	kg
Energy recovery from waste	6.46	kg

100% of floor covering is incinerated in a combined heat and power (CHP) plant.

### Benefits and loads beyond the product system (D)

As per *IBU* PCR Part A, recovered heat is assumed to substitute to heat generation from natural gas furnace for the calculation of benefits and loads beyond the product system (module D). Produced electricity is assumed to substitute to grid mix.

## 5. LCA: Results

The results refer to the thickness of 7 mm (6.46 kg/m<sup>2</sup>) with use class 32. The information on maintenance is declared per year.

DPL laminate floor coverings are available in different thicknesses. In order to enable the user of the EPD to calculate the results for different thicknesses and use classes the factors in the following table can be used for the calculation. For A1-A3, A4, A5, B2, C3 and D the LCA results of the declared product (thickness 7 mm) in following tables have to be multiplied with these factors.

Indicator	A1	A2	A3	A4	A5	B2	C2	C3	D
GWP - total	0,96	1,13	1,19	1,13	1,16	1,00	1,13	1,10	1,14
GWP - fossil	1,22	1,13	1,18	1,13	1,17	1,00	1,13	1,13	1,14
GWP - biogenic	1,09	1,13	1,11	1,13	1,14	1,00	1,13	1,10	1,14
GWP - luluc	1,12	1,13	1,13	1,13	1,12	1,00	1,13	1,13	1,14
ODP	1,00	1,13	1,01	1,13	1,00	1,00	1,13	1,13	1,14
AP	1,22	1,12	1,18	1,13	1,19	1,00	1,13	1,13	1,14
EP - freshwater	1,19	1,13	1,16	1,13	1,13	1,00	1,13	1,13	1,14
EP - marine	1,20	1,12	1,17	1,13	1,17	1,00	1,13	1,13	1,14
EP - terrestrial	1,20	1,12	1,17	1,13	1,18	1,00	1,13	1,13	1,14
POCP	1,20	1,12	1,16	1,13	1,17	1,00	1,13	1,13	1,14
ADPE	1,26	1,13	1,23	1,13	1,23	1,00	1,13	1,13	1,14
ADPF	1,22	1,13	1,16	1,13	1,18	1,00	1,13	1,13	1,14
WDP	1,25	1,13	1,22	1,13	1,24	1,00	1,13	1,13	1,14
PM	1,20	1,13	1,18	1,13	1,19	1,00	1,13	1,13	1,14
IR	1,17	1,13	1,14	1,13	1,15	1,00	1,13	1,13	1,14
ETP - fw	1,29	1,13	1,23	1,13	1,23	1,00	1,13	1,13	1,14
HTP - c	1,15	1,13	1,14	1,13	1,14	1,00	1,13	1,13	1,14
HTP - nc	1,21	1,13	1,17	1,13	1,18	1,00	1,13	1,13	1,14
SQP	1,10	1,13	1,11	1,13	1,10	1,00	1,13	1,13	1,14
PERE	1,13	1,13	1,11	1,13	1,11	1,00	1,13	1,09	1,14
PERM	1,09	1,00	1,13	1,00	1,13	1,00	1,00	1,09	1,00
PERT	1,10	1,13	1,12	1,13	1,10	1,00	1,13	1,13	1,14
PENRE	1,17	1,13	1,16	1,13	1,18	1,00	1,13	1,36	1,14
PENRM	1,39	1,00	1,14	1,00	1,13	1,00	1,00	1,39	1,00
PENRT	1,22	1,13	1,16	1,13	1,18	1,00	1,13	1,13	1,14
SM	1,04	1,00	1,13	1,00	1,13	1,00	1,00	1,00	1,00
RSF	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
NRSF	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
FW	1,24	1,13	1,21	1,13	1,23	1,00	1,13	1,13	1,14
HWD	1,20	1,13	1,16	1,13	1,17	1,00	1,13	1,13	1,14
NHWD	1,24	1,13	1,20	1,13	1,21	1,00	1,13	1,13	1,14
RWD	1,18	1,13	1,14	1,13	1,15	1,00	1,13	1,13	1,14
CRU	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
MFR	1,18	1,00	1,13	1,00	1,14	1,00	1,00	1,00	1,00
MER	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
EEE	1,15	1,00	1,14	1,00	1,14	1,00	1,00	1,14	1,00
EET	1,15	1,00	1,14	1,00	1,14	1,00	1,00	1,14	1,00

Extrapolation table - 8 mm thickness laminate floor covering

Indicator	A1	A2	A3	A4	A5	B2	C2	C3	D
GWP - total	1,13	1,26	1,31	1,27	1,28	1,00	1,27	1,24	1,27
GWP - fossil	1,33	1,26	1,30	1,27	1,29	1,00	1,27	1,27	1,27
GWP - biogenic	1,23	1,26	1,25	1,27	1,27	1,00	1,27	1,23	1,27
GWP - luluc	1,25	1,25	1,26	1,27	1,24	1,00	1,27	1,27	1,27
ODP	1,12	1,26	1,13	1,27	1,13	1,00	1,27	1,27	1,27
AP	1,34	1,23	1,31	1,27	1,31	1,00	1,27	1,27	1,27
EP - freshwater	1,29	1,26	1,28	1,27	1,22	1,00	1,27	1,27	1,27
EP - marine	1,36	1,23	1,31	1,27	1,32	1,00	1,27	1,27	1,27
EP - terrestrial	1,35	1,23	1,31	1,27	1,32	1,00	1,27	1,27	1,27
POCP	1,35	1,24	1,31	1,27	1,31	1,00	1,27	1,27	1,27
ADPE	1,37	1,26	1,34	1,27	1,33	1,00	1,27	1,27	1,27
ADPF	1,34	1,26	1,29	1,27	1,30	1,00	1,27	1,27	1,27
WDP	1,36	1,26	1,33	1,27	1,35	1,00	1,27	1,27	1,27
PM	1,38	1,26	1,34	1,27	1,36	1,00	1,27	1,27	1,27
IR	1,34	1,26	1,28	1,27	1,29	1,00	1,27	1,27	1,27
ETP - fw	1,35	1,26	1,32	1,27	1,31	1,00	1,27	1,27	1,27
HTP - c	1,27	1,25	1,27	1,27	1,27	1,00	1,27	1,27	1,27
HTP - nc	1,35	1,26	1,31	1,27	1,32	1,00	1,27	1,27	1,27
SQP	1,23	1,26	1,25	1,27	1,24	1,00	1,27	1,27	1,27
PERE	1,28	1,26	1,25	1,27	1,25	1,00	1,27	1,23	1,27
PERM	1,23	1,00	1,26	1,00	1,27	1,00	1,00	1,23	1,00
PERT	1,24	1,26	1,25	1,27	1,24	1,00	1,27	1,27	1,27
PENRE	1,29	1,26	1,29	1,27	1,30	1,00	1,27	1,52	1,27
PENRM	1,55	1,00	1,27	1,00	1,27	1,00	1,00	1,55	1,00
PENRT	1,34	1,26	1,29	1,27	1,30	1,00	1,27	1,27	1,27
SM	1,09	1,00	1,27	1,00	1,26	1,00	1,00	1,00	1,00
RSF	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
NRSF	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
FW	1,35	1,26	1,32	1,27	1,34	1,00	1,27	1,27	1,27
HWD	1,30	1,25	1,28	1,27	1,28	1,00	1,27	1,27	1,27
NHWD	1,35	1,26	1,32	1,27	1,32	1,00	1,27	1,27	1,27
RWD	1,35	1,26	1,29	1,27	1,30	1,00	1,27	1,27	1,27
CRU	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
MFR	1,40	1,00	1,27	1,00	1,28	1,00	1,00	1,00	1,00
MER	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
EEE	1,29	1,00	1,27	1,00	1,27	1,00	1,00	1,27	1,00
EET	1,29	1,00	1,27	1,00	1,27	1,00	1,00	1,27	1,00

Extrapolation table - 9 mm thickness laminate floor covering

Indicator	A1	A2	A3	A4	A5	B2	C2	C3	D
GWP - total	1,28	1,32	1,34	1,33	1,33	1,00	1,33	1,31	1,34
GWP - fossil	1,34	1,32	1,34	1,33	1,32	1,00	1,33	1,33	1,34
GWP - biogenic	1,31	1,32	1,33	1,33	1,33	1,00	1,33	1,31	1,34
GWP - luluc	1,31	1,31	1,32	1,33	1,30	1,00	1,33	1,33	1,34
ODP	1,06	1,32	1,07	1,33	1,07	1,00	1,33	1,33	1,34
AP	1,37	1,29	1,35	1,33	1,35	1,00	1,33	1,33	1,34
EP - freshwater	1,32	1,32	1,33	1,33	1,24	1,00	1,33	1,33	1,34
EP - marine	1,39	1,29	1,36	1,33	1,36	1,00	1,33	1,33	1,34
EP - terrestrial	1,38	1,29	1,36	1,33	1,36	1,00	1,33	1,33	1,34
POCP	1,39	1,30	1,36	1,33	1,36	1,00	1,33	1,33	1,34
ADPE	1,38	1,32	1,37	1,33	1,35	1,00	1,33	1,33	1,34
ADPF	1,37	1,32	1,34	1,33	1,34	1,00	1,33	1,33	1,34
WDP	1,36	1,32	1,36	1,33	1,36	1,00	1,33	1,33	1,34
PM	1,42	1,32	1,39	1,33	1,41	1,00	1,33	1,33	1,34
IR	1,38	1,32	1,34	1,33	1,34	1,00	1,33	1,33	1,34
ETP - fw	1,36	1,32	1,35	1,33	1,34	1,00	1,33	1,33	1,34
HTP - c	1,30	1,32	1,31	1,33	1,30	1,00	1,33	1,33	1,34
HTP - nc	1,38	1,32	1,36	1,33	1,35	1,00	1,33	1,33	1,34
SQP	1,31	1,32	1,32	1,33	1,31	1,00	1,33	1,33	1,34
PERE	1,35	1,32	1,32	1,33	1,32	1,00	1,33	1,31	1,34
PERM	1,31	1,00	1,33	1,00	1,33	1,00	1,00	1,31	1,00
PERT	1,32	1,32	1,32	1,33	1,32	1,00	1,33	1,33	1,34
PENRE	1,32	1,32	1,34	1,33	1,34	1,00	1,33	1,54	1,34
PENRM	1,57	1,00	1,34	1,00	1,33	1,00	1,00	1,57	1,00
PENRT	1,37	1,32	1,34	1,33	1,34	1,00	1,33	1,33	1,34
SM	1,10	1,00	1,33	1,00	1,33	1,00	1,00	1,00	1,00
RSF	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
NRSF	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
FW	1,36	1,32	1,35	1,33	1,35	1,00	1,33	1,33	1,34
HWD	1,31	1,32	1,32	1,33	1,32	1,00	1,33	1,33	1,34
NHWD	1,37	1,32	1,36	1,33	1,35	1,00	1,33	1,33	1,34
RWD	1,40	1,32	1,35	1,33	1,35	1,00	1,33	1,33	1,34
CRU	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
MFR	1,46	1,00	1,33	1,00	1,34	1,00	1,00	1,00	1,00
MER	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
EEE	1,36	1,00	1,34	1,00	1,34	1,00	1,00	1,34	1,00
EET	1,36	1,00	1,34	1,00	1,34	1,00	1,00	1,34	1,00

Extrapolation table - 9.5 mm thickness laminate floor covering

Indicator	A1	A2	A3	A4	A5	B2	C2	C3	D
GWP - total	1,65	1,64	1,64	1,67	1,63	1,00	1,67	1,64	1,67
GWP - fossil	1,63	1,64	1,65	1,67	1,61	1,00	1,67	1,67	1,67
GWP - biogenic	1,64	1,64	1,69	1,67	1,66	1,00	1,67	1,64	1,67
GWP - luluc	1,63	1,63	1,65	1,67	1,60	1,00	1,67	1,67	1,67
ODP	1,10	1,64	1,13	1,67	1,12	1,00	1,67	1,67	1,67
AP	1,68	1,58	1,67	1,67	1,66	1,00	1,67	1,67	1,67
EP - freshwater	1,61	1,64	1,63	1,67	1,46	1,00	1,67	1,67	1,67
EP - marine	1,74	1,58	1,70	1,67	1,70	1,00	1,67	1,67	1,67
EP - terrestrial	1,72	1,58	1,69	1,67	1,69	1,00	1,67	1,67	1,67
POCP	1,73	1,60	1,70	1,67	1,69	1,00	1,67	1,67	1,67
ADPE	1,69	1,64	1,69	1,67	1,65	1,00	1,67	1,67	1,67
ADPF	1,68	1,64	1,67	1,67	1,64	1,00	1,67	1,67	1,67
WDP	1,67	1,64	1,67	1,67	1,66	1,00	1,67	1,67	1,67
PM	1,79	1,65	1,75	1,67	1,77	1,00	1,67	1,67	1,67
IR	1,72	1,64	1,68	1,67	1,67	1,00	1,67	1,67	1,67
ETP - fw	1,67	1,64	1,67	1,67	1,64	1,00	1,67	1,67	1,67
HTP - c	1,57	1,63	1,59	1,67	1,58	1,00	1,67	1,67	1,67
HTP - nc	1,71	1,65	1,69	1,67	1,67	1,00	1,67	1,67	1,67
SQP	1,64	1,65	1,65	1,67	1,64	1,00	1,67	1,67	1,67
PERE	1,68	1,64	1,66	1,67	1,65	1,00	1,67	1,64	1,67
PERM	1,64	1,00	1,66	1,00	1,67	1,00	1,00	1,64	1,00
PERT	1,65	1,64	1,66	1,67	1,64	1,00	1,67	1,67	1,67
PENRE	1,59	1,64	1,67	1,67	1,64	1,00	1,67	2,00	1,67
PENRM	2,04	1,00	1,65	1,00	1,67	1,00	1,00	2,05	1,00
PENRT	1,68	1,64	1,67	1,67	1,64	1,00	1,67	1,67	1,67
SM	1,19	1,00	1,66	1,00	1,65	1,00	1,00	1,00	1,00
RSF	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
NRSF	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
FW	1,66	1,64	1,66	1,67	1,65	1,00	1,67	1,67	1,67
HWD	1,58	1,64	1,63	1,67	1,61	1,00	1,67	1,67	1,67
NHWD	1,69	1,65	1,68	1,67	1,66	1,00	1,67	1,67	1,67
RWD	1,76	1,64	1,69	1,67	1,68	1,00	1,67	1,67	1,67
CRU	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
MFR	1,86	1,00	1,67	1,00	1,68	1,00	1,00	1,00	1,00
MER	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
EEE	1,72	1,00	1,68	1,00	1,67	1,00	1,00	1,67	1,00
EET	1,72	1,00	1,68	1,00	1,67	1,00	1,00	1,67	1,00

Extrapolation table - 12 mm thickness laminate floor covering

**DESCRIPTION OF THE SYSTEM BOUNDARY (X = INCLUDED IN LCA; MND = MODULE OR INDICATOR NOT DECLARED; MNR = MODULE NOT RELEVANT)**

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	MNR	MNR	MNR	MND	MND	X	X	X	X	X

**RESULTS OF THE LCA - ENVIRONMENTAL IMPACT according to EN 15804+A2: 1 m<sup>2</sup> direct pressure laminate floor covering**

Parameter	Unit	A1	A2	A3	A4	A5	B2	C1	C2	C3	C4	D
GWP-total	kg CO <sub>2</sub> eq	-4.42E+00	1.51E-01	9.75E-01	9.74E-01	7.67E-01	2.29E-01	0	4.46E-02	9.26E+00	0	-7.3E+00
GWP-fossil	kg CO <sub>2</sub> eq	4.51E+00	1.51E-01	1.25E+00	9.73E-01	3.71E-01	2.25E-01	0	4.45E-02	1.44E-01	0	-7.29E+00
GWP-biogenic	kg CO <sub>2</sub> eq	-8.94E+00	4.87E-05	-2.82E-01	2.86E-04	3.96E-01	1.19E-03	0	1.45E-05	9.12E+00	0	-5.95E-03
GWP-luluc	kg CO <sub>2</sub> eq	1.01E-02	5.91E-05	2.8E-03	4.59E-04	5.71E-04	2.89E-03	0	1.72E-05	6.89E-05	0	-2.71E-03
ODP	kg CFC11 eq	1.23E-05	3.78E-08	1.73E-06	2.21E-07	5.73E-07	1.63E-08	0	1.12E-08	4.93E-09	0	-1E-06
AP	mol H <sup>+</sup> eq	3.28E-02	5.29E-04	7.74E-03	8.45E-03	2.22E-03	1.29E-03	0	1.43E-04	8.8E-03	0	-1.1E-02
EP-freshwater	kg P eq	1.91E-04	1.08E-06	4.49E-05	6.32E-06	1.33E-05	2.47E-05	0	3.2E-07	1.81E-05	0	-1.19E-04
EP-marine	kg N eq	7.87E-03	1.17E-04	2.23E-03	1.97E-03	5.77E-04	2.08E-04	0	3.15E-05	3.88E-03	0	-2.22E-03
EP-terrestrial	mol N eq	9.87E-02	1.3E-03	2.56E-02	2.19E-02	6.91E-03	1.95E-03	0	3.5E-04	4.57E-02	0	-2.47E-02
POCP	kg NMVOC eq	2.65E-02	4.95E-04	7.15E-03	6.3E-03	1.88E-03	5.35E-04	0	1.38E-04	1.05E-02	0	-7.98E-03
ADPE	kg Sb eq	5.57E-05	3.74E-07	1.02E-05	3.14E-06	3.01E-06	2.24E-06	0	1.11E-07	2.36E-06	0	-3.55E-06
ADPF	MJ	9.34E+01	2.46E+00	3.48E+01	1.44E+01	6.14E+00	4.78E+00	0	7.31E-01	2.31E+00	0	-1.31E+02
WDP	m <sup>3</sup> world eq deprived	5.57E+00	8.44E-03	1.05E+00	4.07E-02	2.74E-01	6.49E-02	0	2.51E-03	3.7E-02	0	-2.88E-01

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; WDP = Water (user) deprivation potential)

**RESULTS OF THE LCA - INDICATORS TO DESCRIBE RESOURCE USE according to EN 15804+A2: 1 m<sup>2</sup> direct pressure laminate floor covering**

Parameter	Unit	A1	A2	A3	A4	A5	B2	C1	C2	C3	C4	D
PERE	MJ	2.8E+01	3.12E-02	2.81E+01	1.88E-01	8.31E+00	9.84E-01	0	9.3E-03	9.56E+01	0	-4.38E+00
PERM	MJ	9.44E+01	0	1.92E+00	0	-2.11E+00	8.77E-04	0	0	-9.39E+01	0	0
PERT	MJ	1.22E+02	3.12E-02	3E+01	1.88E-01	6.21E+00	9.85E-01	0	9.3E-03	1.67E+00	0	-4.38E+00
PENRE	MJ	7.57E+01	2.46E+00	3.4E+01	1.44E+01	6.99E+00	4.42E+00	0	7.31E-01	1.98E+01	0	-1.31E+02
PENRM	MJ	1.77E+01	0	7.87E-01	0	-8.54E-01	3.64E-01	0	0	-1.75E+01	0	0
PENRT	MJ	9.34E+01	2.46E+00	3.48E+01	1.44E+01	6.14E+00	4.78E+00	0	7.31E-01	2.31E+00	0	-1.31E+02
SM	kg	1.77E-03	0	7.86E-02	0	3.21E-03	3.28E-04	0	0	0	0	0
RSF	MJ	0	0	0	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0	0	0	0
FW	m <sup>3</sup>	1.46E-01	2.86E-04	2.79E-02	1.46E-03	7.5E-03	4.2E-03	0	8.51E-05	6.12E-03	0	-2.06E-02

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 - WASTE CATEGORIES AND OUTPUT FLOWS according to EN 15804+A2: 1 m<sup>2</sup> direct pressure laminate floor covering**

Parameter	Unit	A1	A2	A3	A4	A5	B2	C1	C2	C3	C4	D
HWD	kg	1.9E-01	1.72E-03	5.99E-02	1.12E-02	1.73E-02	5.89E-03	0	5.06E-04	4.51E-02	0	-3.32E-02
NHWD	kg	3.35E+00	2.41E-01	6.85E-01	7.13E-01	2.15E-01	8.9E-02	0	7.21E-02	1.12E-01	0	-3.81E-01
RWD	kg	4.1E-04	1.67E-05	2.3E-04	9.79E-05	3.07E-05	3.39E-05	0	4.95E-06	2.44E-05	0	-2.31E-04
CRU	kg	0	0	0	0	0	0	0	0	0	0	0
MFR	kg	1.37E-03	0	1.7E-02	0	7.36E-04	4.25E-04	0	0	0	0	0
MER	kg	0	0	0	0	0	0	0	0	0	0	0
EEE	MJ	3.6E-01	0	1.82E+00	0	1.09E+00	1.48E-03	0	0	9.29E+00	0	0
EET	MJ	6.95E-01	0	3.5E+00	0	2.11E+00	2.86E-03	0	0	8.91E+01	0	0

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; EET = Exported thermal energy

**RESULTS OF THE LCA – additional impact categories according to EN 15804+A2-optional:  
1 m<sup>2</sup> direct pressure laminate floor covering**

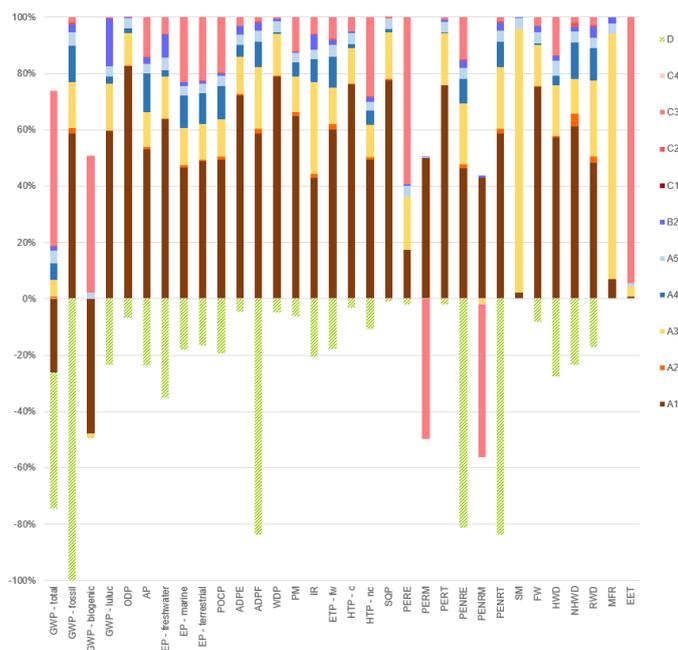
Parameter	Unit	A1	A2	A3	A4	A5	B2	C1	C2	C3	C4	D
PM	Disease incidence	9.26E-07	1.74E-08	1.82E-07	6.94E-08	4.98E-08	4.19E-09	0	5.2E-09	1.72E-07	0	-3.34E-08
IR	kBq U235 eq	3.29E-01	1.07E-02	2.51E-01	6.25E-02	2.66E-02	4.1E-02	0	3.17E-03	4.56E-02	0	-2.43E-01
ETP-fw	CTUe	2.7E+01	8.15E-01	5.83E+00	4.89E+00	1.85E+00	8.04E-01	0	2.42E-01	3.42E+00	0	-4.84E+00
HTP-c	CTUh	2.47E-08	5.32E-11	4.15E-09	4.17E-10	1.32E-09	1.1E-10	0	1.56E-11	1.69E-09	0	-8.6E-10
HTP-nc	CTUh	8.42E-08	1.67E-09	1.95E-08	8.35E-09	5.39E-09	2.98E-09	0	4.98E-10	4.8E-08	0	-1.24E-08
SQP	SQP	5.24E+02	2.8E+00	1.11E+02	8.68E+00	2.6E+01	1.05E+00	0	8.36E-01	6.8E-01	0	-6.02E+00

PM = Potential incidence of disease due to PM emissions; IR = Potential Human exposure efficiency relative to U235; ETP-fw = Potential comparative Toxic Unit for ecosystems; HTP-c = Potential comparative Toxic Unit for humans (cancerogenic); HTP-nc = Potential comparative Toxic Unit for humans (not cancerogenic); SQP = Potential soil quality index

Disclaimer 1 – for the indicator “Potential Human exposure efficiency relative to U235”. This impact category deals mainly with the eventual impact of low-dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure or radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, radon and from some construction materials is also not measured by this indicator.

Disclaimer 2 – for the indicators “abiotic depletion potential for non-fossil resources”, “abiotic depletion potential for fossil resources”, “water (user) deprivation potential, deprivation-weighted water consumption”, “potential comparative toxic unit for ecosystems”, “potential comparative toxic unit for humans – cancerogenic”, “Potential comparative toxic unit for humans - not cancerogenic”, “potential soil quality index”. The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high as there is limited experience with the indicator.

**6. LCA: Interpretation**



Benefits and burdens beyond the system boundary (module D) vary from a few percent to about 100% (GWP - fossil) of the impacts over the product life cycle (modules A-C) and relate basically to the energy recovery from waste processing in a combined heat and power plant that is considered to substitute natural gas (heat) and electricity grid mix.

**Figure : Indicator results of direct pressure laminate floor covering over its life cycle**

The largest part of environmental impacts is caused during production (modules A1-A3) and at waste processing (module C3); comparably small impacts are caused during the transport of the product to the construction site.

Maintenance (module B2) is presented for 1 year of product use, so its impact can be significant over the reference service life depending on the considered indicator.

All the other modules related to the product life cycle are not significant.

## 7. Requisite evidence

### 7.1 PEFC certificate

The product fulfills the requirements according to *PEFC ST 2002: 2010: Chain of Custody of Forest Based Products - Requirements*, second edition. CTIB - TCHN- Hof ter Vleest dreef 3 - 1070 Brussel - Belgium.

### 7.2 CE marking

CE-labelling according to *EN 14041*, type 3 – notified body: 0380-1161.

### 7.3 Formaldehyde emissions

Determination of the formaldehyde emission of a 12mm laminate flooring according to AgBB-Scheme, *ISO 16000* part 3, 6 and 9. by Servaco/Normec Product Testing - Honderweg 13 - 9230 Wetteren - Belgium. Emission test report of Unilin sample 'Unilin group laminate 12mm thickness' nr SPT2021-R190 from November 8th 2021.

Name	Value	Unit
Formaldehyde CAS nr 50-00-0	79	µg/m <sup>3</sup>

### 7.4 VOC emissions

Determination of the VOC emissions of a 12mm laminate flooring according to AgBB-Scheme, *ISO 16000* part 3, 6 and 9.

by Servaco/Normec Product Testing - Honderweg 13 - 9230 Wetteren - Belgium. Emission test report of Unilin sample 'Unilin group laminate 12mm thickness' nr SPT2021-R190 from November 8th 2021.

- Compliant with AgBB-Scheme 2018 and 2021
- Compliant with M1 Emission Classification of Building Materials Testing protocol 15.11.2017)
- Compliant with the French VOC-Regulation: A+

### VOC EMISSION RESULTS (AgBB) AFTER 3 DAYS

Name	Value	Unit
TVOC	550	µg/m <sup>3</sup>
R (dimensionless)	0,104	
TVOC without LCI	< 5	µg/m <sup>3</sup>
Carcinogenous	< 1	µg/m <sup>3</sup>

### VOC EMISSION RESULTS (AgBB) AFTER 28 DAYS

Name	Value	Unit
TVOC	110	µg/m <sup>3</sup>
R (dimensionless)	0.245	
VOC without LCI	6	µg/m <sup>3</sup>
Carcinogens	< 1	µg/m <sup>3</sup>

## 8. References

### IBU 2021

Institut Bauen und Umwelt e.V.: General Instructions for the EPD programme of Institut Bauen und Umwelt e.V., Version 2.0, Berlin: Institut Bauen und Umwelt e.V., 2021 [www.ibu-epd.com](http://www.ibu-epd.com)

### EN 15804

EN 15804:2012+A2:2019+AC:2021, Sustainability of construction works — Environmental Product Declarations — Core rules for the product category of construction products.

### EN ISO 14044

Environmental management - Life cycle assessment - Requirements and guidelines (ISO 14044:2006); German and English version EN ISO 14044

### ISO 14025

EN ISO 14025:2011, Environmental labels and declarations — Type III environmental declarations — Principles and procedures.

### ISO 14040

ISO 14040:2006, Environmental management - Life cycle assessment - Principles and framework (ISO 14040); German and English version EN ISO 14040

### EN/TR 15941

Sustainability of construction works - Environmental product declarations - Methodology for selection and use of generic data; German version CEN/TR 15941  
ISO 16000-3:2011

**ISO 16000-3:2011** – Indoor air – part3: Determination of formaldehyde and other carbonyl compounds in indoor air and test chamber air – Active sampling method.

### ISO 16000-6:2011

ISO 16000-6:2011 – Indoor air – part 6: Determination of

volatile organic compounds in indoor and test chamber air by active sampling on Tenax A sorbent, thermal desorption an gas chromatography using MS of MS-FID

### ISO 16000-9:2006

ISO 16000-9:2006 – Indoor air – part 9: Determination of the emissions of volatile organic compounds from building products and furnishing – Emission test chamber method.

### EN ISO 10874:2012

EN ISO 10874:2012/A1:2021 Resilient, textile and laminate floor coverings - Classification

### EN 14041:2004

EN 14041:2004 AC 2006 – Resilient, textile, laminate and modular multilayer floor coverings - Essential characteristics Resilient, textile and laminate floor coverings

### EN 13329:2016

EN 13329:2016+A2:2021  
Laminate floor coverings - Elements with a surface layer based on aminoplastic thermosetting resins - Specifications, requirements and test methods

### prEN 13329:2023

Laminate floor coverings - Specifications, requirements and test methods  
Bundesinstitut für Bau-, Stadt- und Raumforschung.

### EWC-94/3/EC

Commission Decision of 20 December 1993 establishing a list of wastes pursuant to Article 1a of Council Directive 74/442/EEC on waste, 1993 - European Waste Catalogue and Hazardous Waste List valid from 1 January 2002.

### ecoinvent

ecoinvent, Allocation, cut-off by classification, ecoinvent database version 3.8 (2021)

**PCR Guidance** – Texts for Building-Related Products and

Services – Part B: Requirements on the EPD for floor coverings - IBU Published v6 dated 19.10.2023  
The literature referred to in the Environmental Product Declaration must be listed in full. Standards already fully quoted

in the EPD do not need to be listed here again.  
The current version of PCR Part A and PCR Part B of the PCR document on which they are based must be referenced.

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# CERTIFICATE OF CONFORMITY

**WOODBE-PEFC-COC-000380**

WOOD.BE certifies that the company  
**UNILIN - DIVISION FLOORING bv, Ooigemstraat 3 b 1 ,  
8710 Wielsbeke, Belgium**

in the following location  
**See list in Annex 1**

and for the following activities  
**Laminate floor coverings; Parquet on Hevea, spruce or HDF core; Skirtings and  
profiles with decorative foil ; Skirtings and profiles with veneer decorative foil  
surface**

(product groups listed in Annex « Product Groups »)

fulfills the requirements of

**PEFC ST 2002 : Chain of Custody of Forest and Tree Based 2020  
Products – Requirements :**

**PEFC ST 2001 : PEFC Trademark Rules - Requirements : 2020**

And this for the control system: See list in Annex 1

This certificate was first issued on 23/12/2005 and will, unless suspended or withdrawn by **WOOD.BE**, remain valid  
until 22/12/2030.

Brussels, 12/12/2025



C. De Roock  
General Manager

This certificate is linked to the convention PP05-B045 and remains the property of **WOOD.BE**.

This certificate and all copies of it shall be returned immediately to **WOOD.BE** on request.

The validity of this certificate shall be verified on the website of **WOOD.BE**.

This certificate itself does not constitute evidence that a particular product supplied  
by the certificate holder is PEFC/07-4-01 certified (or PEFC controlled sources).

Products offered, shipped or sold by the certificate holder can only be considered covered by the  
scope of this certificate when the required PEFC claim is clearly stated on invoices and shipping documents.

**WOOD.BE** is the 'Centre technique et scientifique de l'Industrie transformatrice  
du Bois et des Matières Connexes' (formerly known as CTIB-TCHN)

Allée Hof ter Vleestdreef 3, 1070 Brussels  
info@wood.be – www.wood.be tel: +32 (0)2.558.15.50



**WOOD.BE**



# CERTIFICATE OF CONFORMITY

## WOODB-PEFC-COC-000380

Only sites mentioned in Annex 1 are covered by certificate WOODBE-PEFC-COC-000380			
Site	Address	Method	First Emission
UNILIN - DIVISION FLOORING	Ooigemstraat 3 b 1 , 8710 Wielsbeke, Belgium	Physical Separation; Credit	23/12/2005
Unilin Flooring Nederland B.V.	Boterdiep 56 , 3077 AW Rotterdam, Netherlands	Physical Separation	10/12/2020
UNILIN ITALIA SRL	Via Linussio 52 , 33100 Udine, Italy	Physical Separation	28/09/2020
UNILIN - DIVISION FLOORING VIELSALM	Rue de la Forêt 2 , 6690 Vielsalm, Belgium	Credit	23/09/2008
UNILIN MALAYSIA SDN BHD	170-09-01, Livingston Tower, Jalan Argyll , 10050 George Town, Penang, Malaysia	Credit	25/06/2012
UNILIN SWISS	Tannengutweg 10 , 5600 Lenzburg, Switzerland	Physical Separation	28/09/2020
UNILIN DISTRIBUTION LTD	Unit 4 The Furrows, Barton Dock Road, Trafford Park , M32 OSZ Manchester, United Kingdom	Physical Separation	25/06/2012
UNILIN DISTRIBUTION LTD	Unit 5 Rampart Business Park, Rampart Road , IE BT34 2QU Greenbank Industrial Estate, Ireland	Physical Separation	28/09/2020
Unilin Distribution Ukraine LLC	Building 13, Pimonenko Str., Housing 8 office 8E-14 , 04050 Kyiv, Ukraine	Physical Separation	18/12/2015
Unilin Nordic AB	Hyllie Boulevard 10A , 215 32 Malmö, Sweden	Physical Separation	18/12/2015
Premium Floors Australia Pty Ltd	Factories Road 7 , VIC 3220 South Geelong, Australia	Physical Separation	25/06/2012

The product and activities mentioned in the scope are valid for the network of these different sites but not necessary for each separate site.

This certificate was first issued on 23/12/2005 and will, unless suspended or withdrawn by **WOOD.BE**, remain valid until 22/12/2030.

Brussels, 12/12/2025



C. De Roock  
General Manager



**WOOD.BE**



# CERTIFICATE OF CONFORMITY

UNILIN FLOORING DEUTSCHLAND GmbH	Reisholzer Wertstrasse 33 , 40589 Düsseldorf, Germany	Physical Separation	12/12/2025
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The product and activities mentioned in the scope are valid for the network of these different sites but not necessary for each separate site.

This certificate was first issued on 23/12/2005 and will, unless suspended or withdrawn by **WOOD.BE**, remain valid until 22/12/2030.

Brussels, 12/12/2025



C. De Roock  
General Manager



**WOOD.BE**



WOODBE-PEFC-COC-000380\_UNILIN - DIVISION FLOORING  
bv\_PP\_251212\_E  
FO-12-P05-56-E\_08/05/2023



## Annex PEFC Product Groups

WOOD.BE

Site	Product Group Code	Product Group Name	Management System			Wood Essences				On-product Trademark
			Physical Separation	Percentage	Credit	Softwood	Hardwood (Non-tropical)	Hardwood (Tropical)	Not Specified	
UNILIN - DIVISION FLOORING	90304	Flooring	X		X				X	Yes
Unilin Flooring Nederland B.V.	90304	Flooring	X						X	Yes
UNILIN ITALIA SRL	90304	Flooring	X						X	Yes
UNILIN - DIVISION FLOORING VIELSALM	90304	Flooring			X				X	Yes
UNILIN MALAYSIA SDN BHD	90304	Flooring			X	X	X	X		Yes
UNILIN SWISS	90304	Flooring	X						X	Yes
UNILIN DISTRIBUTION LTD	90304	Flooring	X						X	Yes
UNILIN DISTRIBUTION LTD	90304	Flooring	X						X	Yes
Unilin Distribution Ukraine LLC	90304	Flooring	X						X	Yes
Unilin Nordic AB	90304	Flooring	X						X	Yes
Premium Floors Australia Pty Ltd	90304	Flooring	X						X	Yes
UNILIN FLOORING DEUTSCHLAND GmbH	90304	Flooring	X						X	Yes

UNILIN bv  
division flooring

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www.unilin.com

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  $< 0,06 \text{ mg/m}^3$  und an krebserregenden Stoffen  $< 0,001 \text{ mg/m}^3$  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