ZERTIFIKAT / CERTIFICATE / CERTIFICAT

Zertifizierte Produkte Certified products Produits certifiés	**ter Hürne Laminatboden** **ter Hürne dureco**
Produktart Product type Type de produit	**Laminatboden**
Hersteller / Vertrieb Manufacturer / Distributor Fabricant / Service commercial	**ter Hürne GmbH & Co. KG** **Ramsdorfer Str. 5** **46354 Südlohn**
Zertifizierungsnummer Certification number Numéro de certification	**0309-11806-003**
Prüfberichtsnummer Number of test report Numéo du rapport d'essaie	**59666-A001-A004-L II** **59666-A002-A003-L II** **58636-A001-A002-L IV** **59666-A001-A004-eIL-G II**
Prüfumfang Test program Programme du contrôle	Laborprüfung auf gesundheitlich bedenkliche Emissionen und Inhaltsstoffe. Tested on hazardous emissions and components. Contrôle en laboratoire des émissions et composants critiques pour la santé.
Prüfergebnis Test result Résultat du contrôle	Die untersuchten Produkte erfüllen die Anforderungen des eco-INSTITUT-Label-Programms sowie der Prüfkriterien eIL 02.01 (03/2024). Einzelheiten siehe zugehöriges Gutachten. The products tested meet the requirements of the eco-INSTITUT-Label programme and the test criteria eIL 02.01 (03/2024). For further details see the respective report. Les produits examinés répondent aux exigences du programme du eco-INSTITUT-Label ainsi qu'aux critères de contrôle eIL 02.01 (03/2024). Pour plus de détails, voir expertise correspondante.
Gültigkeit / Überwachung bis Validity / Monitoring until Validité / Surveillance jusqu'au	**11/2026**

Köln, 20.03.2025

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Schanzenstr. 6-20
Carlswerk 1.19
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Dr. Frank Kuebart

Marc-Anton Dobaj
M.Sc. Crystalline Materials

eco INSTITUT
TESTED PRODUCT
ID 0309 - 11806 - 003

eco-institut.de
eco-institut-label.de

INFORMATION ZUM ZERTIFIKAT

Die wichtigsten Fakten zum eco-INSTITUT-Label

- **Anerkanntes Qualitätssiegel** für Bau- und Einrichtungsprodukte, Möbel, Reinigungsmittel, Matratzen und Bettwaren
- **Empfohlen** von führenden unabhängigen Verbrauchermedien (z. B. WDR Haushalts-Check, Magazin ÖKO-TEST, label-online.de)
- Kennzeichnet Produkte, die **besonders schadstoff- und emissionsarm** sind
- Prüfumfang: **1. Dokumentenprüfung** (Volldeklaration), **2. Laborprüfung** (umfangreiche Untersuchungen auf Emissionen, Inhaltsstoffe und Geruch)
- **Gültigkeit: 2 Jahre**; jährliche Konformitätsprüfung; zur Verlängerung nach 2 Jahren komplette Neuprüfung erforderlich
- **Transparenz** beim Prüfablauf, bei den Prüfkriterien und den Kosten (weiterführende Informationen unter **www.eco-institut-label.de**)

Was deckt das Label ab bzw. wo wird es anerkannt?

Das Hauptmerkmal der eco-INSTITUT-Label-Kriterien ist die **ausführliche Liste von VOC-Emissionsanforderungen** für kritische Substanzgruppen und Einzelsubstanzen. Diese basiert unter anderem auf der jeweils aktuellen NIK-Wert-Liste des AgBB, umfasst aber auch die deutschen Innenraumrichtwerte RW I.

Die Emissionsprüfungen erfolgen gemäß EN 16516 i. d. R. nach 3 und 28 Tagen. Durch die strengen eco-INSTITUT-Label-Kriterien werden die Emissionsanforderungen an Produkte bei anderen **nationalen und internationalen Bewertungsprogrammen** abgedeckt bzw. anerkannt, wie z. B. …

- ✓ **AgBB Schema Deutschland** (Ausschuss für die gesundheitliche Bewertung von Bauprodukten)
- ✓ **Landesbauordnungen/MVV TB Deutschland:** Anforderungen an bauliche Anlagen bezüglich des Gesundheitsschutzes (ABG)
- ✓ **Belgische VOC-Verordnung**
- ✓ **Französische VOC-Verordnung** Klasse A sowie **französische KMR-Verordnung**
- ✓ **Breeam** und **HQM International** (außer „paints & varnishes"): Hea 02 Indoor air quality
- ✓ **BVB Schweden** (Byggvarube dömningen): VOC emissions
- ✓ **Danish Indoor Climate Labelling**
- ✓ **DGNB International** (ENV1.2 – Risiken für die lokale Umwelt; 2018): Emissionsnachweis der Zeilen 6, 7, 8, 9, 11, 13, 20, 23, 47a, 48 – Neubau Gebäude und Innenraum Kriterienmatrix (Anlage 1) und der Zeilen 1 und 2 – Innenraum Kriterienmatrix (Anlage 2)
- ✓ **eco-bau Schweiz** (Kriterium Lösemittel)
- ✓ **EGGbi Europäische Gesellschaft für gesundes Bauen und Innenraumhygiene** (Zitat: „[…] umfangreichsten und völlig transparenten Kriterienkatalog aller Gütezeichen […]"
- ✓ **EU Taxonomieverordnung (EU) 2023/2486** 7.1 Neubau, 7.2 Gebäuderenovierung, 5) Vermeidung und Verminderung der Umweltverschmutzung, Formaldehyd und krebserzeugende VOC
- ✓ **GOLS Global Organic Latex Standard**
- ✓ **Italienisches Green Public Procurement** (I Criteri ambientali minimi – CAM)
- ✓ **LEED v4.1** Option 2 und **LEED v4** for projects outside the U.S.; EQ credit low-emitting materials: VOC emissions requirements (bei Formaldehyd-emissionen nach 28 Tagen < 10 µg/m³)
- ✓ **QNG Qualitätssiegel Nachhaltiges Gebäude** (3.1.3 Schadstoffvermeidung in Baumaterialien): Teil- oder Komplettanforderungen an SVHC, VOC-Emissionen und Inhaltsstoffe Pos. 1, 2, 3.1, 3.2, 4.1, 4.2, 4.3, 4.5, 5.7, 5.8, 5.9, 6, 7.5, 9, 12.4
- ✓ **WELL International** (International WELL Building Institute)

Die Liste ist nicht abschließend.
Stand: November 2024

INFORMATION ON THE CERTIFICATE

The most important facts about the eco-INSTITUT label

- Recognised quality seal for construction and furnishing products, furniture, cleaning products, mattresses and bedding
- Recommended by leading independent consumer media (e.g. WDR Haushalts-Check, ÖKO-TEST Magazine, label-online.de)
- Identifies products that are particularly low in pollutants and emissions
- Test scope: 1. Document inspection (full declaration), 2. Laboratory testing (extensive tests for emissions, substances and odour)
- Validity: 2 years; annual conformity test; complete reassessment required for renewal after 2 years
- Transparency in the test sequence, the test criteria and the costs (further information at www.eco-institut-label.de)

What does the label cover and where is it recognised?

The main feature of the eco-INSTITUT label criteria is the detailed list of VOC emission requirements for critical substance groups and individual substances. This is based, among other things, on the current list of NIK values from the AgBB, but also includes the German Indoor Guide Values RW I.

Emission tests are usually carried out after 3 and 28 days in accordance with EN 16516. Due to the strict eco-INSTITUT label criteria, emission requirements for products are covered or recognised in other national and international evaluation programmes, such as …

- ✓ AgBB scheme Germany (Committee for Health-related Evaluation of Building Products)
- ✓ State Building Codes/MVV TB Germany: Requirements for structural installations regarding health protection (ABG)
- ✓ Belgian VOC regulation
- ✓ French VOC regulation Class A and French CMR regulation
- ✓ Breeam and HQM International (except „paints & varnishes“): Hea 02 Indoor air quality
- ✓ BVB Sweden (Byggvarube dömningen): VOC emissions
- ✓ Danish Indoor Climate Labelling
- ✓ DGNB International (ENV1.2 – Local environmental impact; 2018): Emission evidence from rows 6, 7, 8, 9, 11, 13, 20, 23, 47a, 48 – New buildings and interior criteria matrix (Appendix 1) and rows 1 and 2 – Interior criteria matrix (Appendix 2)
- ✓ eco-bau Switzerland (solvent criterion)
- ✓ EGGbi European Society for Healthy Building and Indoor Hygiene (quote: „[...] most comprehensive and completely transparent catalogue of criteria of all quality labels [...]“)
- ✓ EU Taxonomy Regulation (EU) Standard 2023/2486 7.1 New construction, 7.2 Building renovation, 5) Pollution prevention and control, formaldehyde and carcinogenic VOCs
- ✓ GOLS Global Organic Latex Standard
- ✓ Italian Green Public Procurement (I Criteri ambientali minimi – CAM)
- ✓ LEED v4.1 Option 2 and LEED v4 for projects outside the U.S.; EQ credit low-emitting materials: VOC emissions requirements (formaldehyde emissions after 28 days < 10 µg/m³)
- ✓ QNG German Quality label Sustainable Building (3.1.3 Prevention of pollutants in building materials): Partial or complete requirements for SVHC, VOC emissions and contents Pos. 1, 2, 3.1, 3.2, 4.1, 4.2, 4.3, 4.5, 5.7, 5.8, 5.9, 6, 7.5, 9, 12.4
- ✓ WELL International (International WELL Building Institute)

The list is not exhaustive.
Last updated: November 2024

INFORMATIONS SUR LE CERTIFICAT

Les principales caractéristiques du label eco-INSTITUT

- **Label de qualité reconnu** pour les produits de construction et d'agencement, les meubles, les produits d'entretien, les matelas et la literie
- **Recommandé** par les principaux médias de consommation indépendants (par ex. WDR Haushalts-Check, magazine ÖKO-TEST, label-online.de)
- Identification des produits particulièrement **faibles en polluants et en émissions**
- Étendue du contrôle : **1. examen des documents** (composition complète), **2. essai en laboratoire** (analyses approfondies des émissions, composants et odeurs)
- **Validité : 2 ans** ; contrôle annuel de conformité ; pour le renouvellement, un nouvel essai complet doit être effectué après 2 ans
- **Transparence** dans la procédure de test, les critères de test et les coûts (plus d'informations sur **www.eco-institut-label.de**)

Que couvre le label et où est-il reconnu ?

L'élément caractéristique des critères du label eco-INSTITUT est **la liste détaillée des exigences d'émissions de COV** pour les groupes de substances et substances individuelles critiques. Celle-ci repose notamment sur la liste actuelle des valeurs limites CLI de l'AgBB, mais inclut aussi les valeurs indicative RW I allemande pour l'agencement intérieur.

Les tests d'émission sont effectués selon la norme EN 16516, généralement après 3 et 28 jours. Les critères stricts du label eco-INSTITUT couvrent ou reconnaissent les exigences d'émissions d'autres **programmes d'évaluation nationaux et internationaux**, comme par ex. ...

- ✓ **Programme AgBB Allemagne** (comité d'évaluation de l'impact sur la santé des produits du bâtiment)
- ✓ **Clauses techniques de construction/MVV TB Allemagne** : exigences en matière de protection de la santé (ABG) pour la construction
- ✓ **Réglementation belge sur les COV**
- ✓ **Réglementation française sur les COV** de classe A et **réglementations française sur les émissions de CMR**
- ✓ **Breeam** et **HQM International** (sauf « paints & varnishes ») : Hea 02 Indoor air quality
- ✓ **BVB Suède** (Byggvarube dömningen): VOC emissions
- ✓ **Danish Indoor Climate Labelling**
- ✓ **DGNB International** (ENV1.2 – risques pour l'environnement local ; 2018) : certificat d'émission pour les lignes 6, 7, 8, 9, 11, 13, 20, 23, 47a, 48 – Matrice des critères pour le bâtiment, les constructions nouvelles et l'aménagement intérieur (Annexe 1) et les lignes 1 et 2 – Matrice des critères pour l'aménagement intérieur (Annexe 2)
- ✓ **eco-bau Suisse** (critères solvants)
- ✓ **EGGbi Société européenne pour la construction saine et hygiène intérieure** (citation : « [...] le catalogue de critères le plus complet et totalement transparent de tous les labels de qualité [...] »
- ✓ **Règlement de taxonomie de l'UE (UE) 2023/2486** 7.1 Nouvelle construction, 7.2 Rénovation des bâtiments, 5) Prévention et réduction de la pollution, formaldéhyde et COV cancérigènes
- ✓ **GOLS Global Organic Latex Standard**
- ✓ **Italian Green Public Procurement** (I Criteri ambientali minimi – CAM)
- ✓ **LEED v4.1** option 2 et **LEED v4** pour les projets en dehors des États-Unis ; Crédit EQ pour les matériaux à faible émission : exigences en matière d'émissions de COV (pour les émissions de formaldéhyde après 28 jours < 10 µg/m³)
- ✓ **QNG Label allemand de qualité pour les bâtiments durables** (3.1.3 Prévention des polluants dans les matériaux de construction): Exigences partielles ou totales concernant les SVHC, les émissions de COV et les composants Pos. 1, 2, 3.1, 3.2, 4.1, 4.2, 4.3, 4.5, 5.7, 5.8, 5.9, 6, 7.5, 9, 12.4
- ✓ **WELL International** (International WELL Building Institute)

La liste n'est pas exhaustive.
Version : Novembre 2024

ENVIRONMENTAL PRODUCT DECLARATION

as per *ISO 14025* and *EN 15804+A2*

Owner of the Declaration	European Producers of Laminate Flooring e.V.
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-EPL-20210138-CBE1-EN
Issue date	09/07/2021
Valid to	08/07/2026

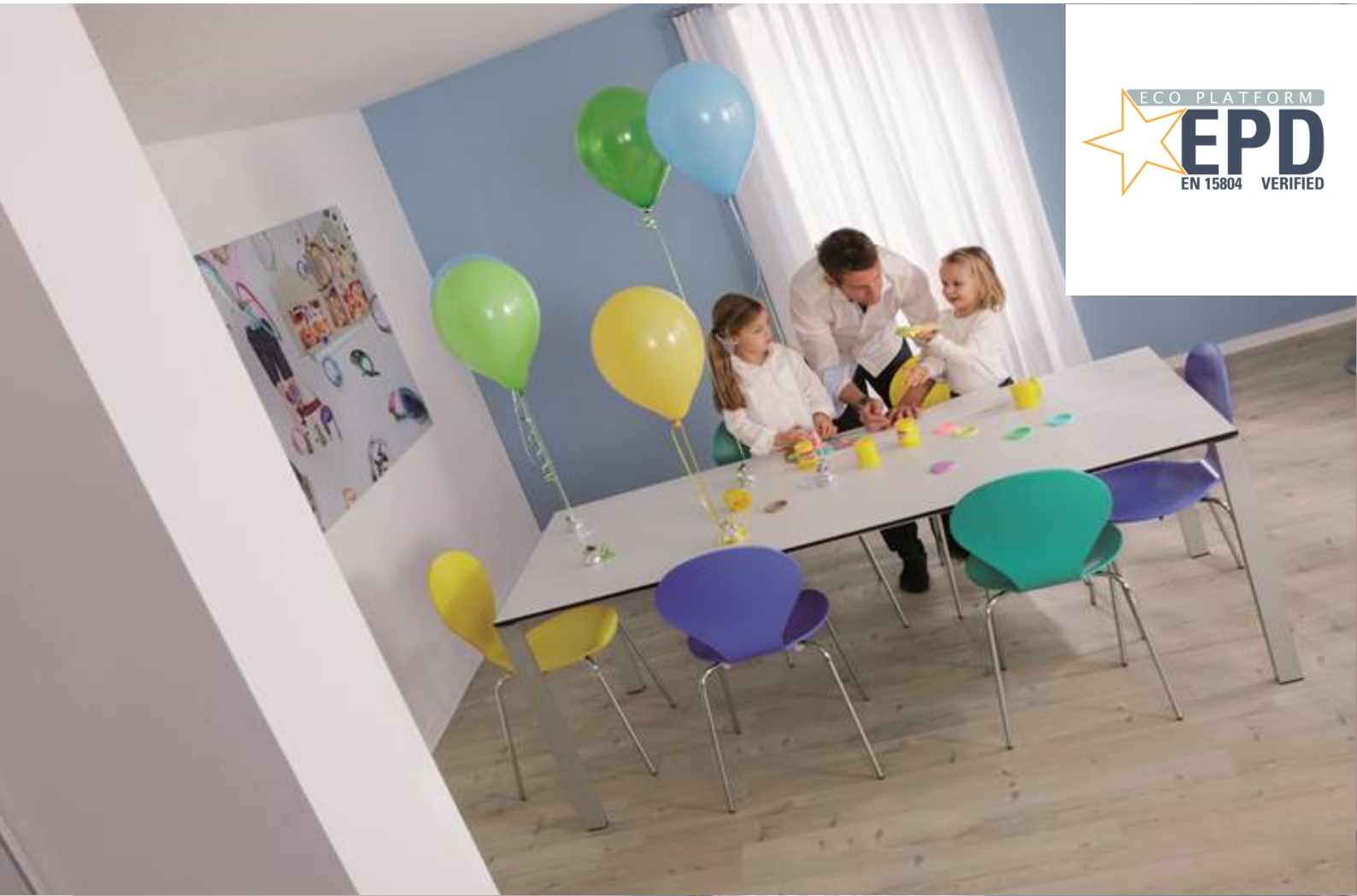
Direct Pressure Laminate Floor Covering (DPL Floor Covering)

European Producers of Laminate Flooring e.V.

Institut Bauen und Umwelt e.V.

www.ibu-epd.com | https://epd-online.com

ECO PLATFORM EPD EN 15804 VERIFIED



General Information

European Producers of Laminate Flooring e.V.

Programme holder
IBU – Institut Bauen und Umwelt e.V.
Panoramastr. 1
10178 Berlin
Germany

Declaration number
EPD-EPL-20210138-CBE1-EN

This declaration is based on the product category rules:
Floor coverings, 02/2018
(PCR checked and approved by the SVR)

Issue date
09/07/2021

Valid to
08/07/2026

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

Dr. Alexander Röder
(Managing Director Institut Bauen und Umwelt e.V.))

Direct Pressure Laminate Floor Covering (DPL Floor Covering)

Owner of the declaration
EPLF®
European Producers of Laminate Flooring e.V.
Mittelstr. 50
33602 Bielefeld
Germany

Declared product / declared unit
1m² of DPL floor covering

Scope:
This Environmental Product Declaration refers to a representative European DPL floor covering produced by manufacturers that are members of EPLF®. Data are based upon production during 2019 in Europe.

The laminate floor covering described in this EPD has a thickness of 8 mm and meets the requirements of the use classes: 21-23, 31-34 according to *EN 13329, EN ISO 10874*. In order to enable the user of the EPD to calculate the LCA results for different thicknesses and use classes, the EPD contains the respective calculation rules.

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 14025:2010*
☐ internally ☒ externally

Matthias Klingler
(Independent verifier)

Product

Information about the enterprise
The European network of the EPLF – the Association of European Producers of Laminate Flooring – is made up of laminate flooring producers, supplier companies and supporting members. This is the world's largest regional association for the laminate industry and it celebrates its 25th anniversary in 2019.

Product description/Product definition
DPL floor coverings described in this EPD are produced by member companies of EPLF®. The floor coverings meet the requirements of *EN 13329*.
DPL floorings consist 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 fibres and on the back side there is a stabilizing layer to guarantee floor stability. The decorative paper of a DPL floor covering can be printed with any design and gives the floor its individual appearance.
According to EPLF the participating companies are representative for the declaration of the product, the weighting was done according to production volumes.
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 *EN 13329* and the CE-marking. For the

application and use the respective national provisions apply.

Application
The laminate floor covering described in this EPD is intended to be used within a building and meets the requirements of the use classes: 21-23, 31-34 according to *EN 13329, EN ISO 10874*.
For the application and use the respective national provisions apply.

Technical Data

Constructional data

Name	Value	Unit
Grammage	7090	g/m²
Abrasion Class EN 13329	AC1-AC6	-
Product Form	panel	-
Thickness of the element	8	mm
Length of the surface layer	300 - 2500	mm
Width of the surface layer	70 - 400	mm
Length and width of squared elements	250 - 700	mm
Density	800 - 1200	kg/m³

Performance data of the product in accordance with the declaration of performance with respect to its essential characteristics according to *EN 13329*.

Base materials/Ancillary materials
The composition of a DPL floor covering in mass % is:

- 90-95 % High Density Fibre board (HDF)
- 1-3 % paper
- 4-7 % resin
- <1 % corundum

HDF (high-density fibreboard)
The core board is an HDF board composed of wood fibres 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-urea-formaldehyde resins. Amino resins are thermosetting resins that are cured using heat and pressure.
Corundum
Bauxite is the mineral resource of corundum. By using aluminiumoxide (Al_2O_3) the surface layer of a laminate flooring obtains abrasion and wear resistance.

DPL floor coverings do not contain substances that are listed in the "Candidate List of Substances of Very High Concern for Authorisation" *REACH*.

This product contains substances listed in the candidate list (date: 02.03.2021) exceeding 0.1 percentage by mass: **NO**.

Reference service life
The estimated service life of a floor covering depends e.g. on the type of floor covering and the area of application, the user and the maintenance of the product. Comparisons of different floor coverings are only allowed if these parameters are considered in a consistent way. A minimum service life of 20 years can be assumed according to Bundesinstitut für Bau-, Stadt- und Raumforschung *(BBSR*), technical service life can be considerably longer. The use stage is declared in this EPD for a one-year usage.

LCA: Calculation rules

Declared Unit
The declared unit is 1m² laminate flooring (7.09 kg/m², thickness 8 mm)

Declared unit

Name	Value	Unit
Declared unit	1	m²
Conversion factor to 1 kg (mass in kg per declared unit)	7.09	-
Mass in kg per declared unit	7.09	kg/m²

System boundary
Type of EPD: cradle to gate with options, modules C1–C4, and module D (A1–A3 + C + D and additional modules A4, A5 and B2).

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

Module A4 includes the transport to the point of installation.

Module A5 includes packaging waste processing during the construction process. A waste treatment in a waste incineration plant is assumed. Credits from energy substitution are declared in module D.

Module B2 includes the cleaning of the floor covering. Provision of water, cleaning agent and electricity for the cleaning of the floor covering is considered, incl. waste water treatment. The LCA results in this EPD are declared for a one-year usage.

Module C includes dismantling (C1) and transport to waste a treatment site (C2). It is assumed that dismantling is manually done without environmental burdens, The DPL floor coverings reach the end-of-waste state after dismantling and transport to a waste treatment site from the building.

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 DPL floor covering waste reaches the end-of-waste state and is 100% incinerated in a European biomass power plant. Loads from material incineration and resulted potential energy credits (electricity and thermal energy) are declared

within module D.

Module D contains the loads and potential benefits beyond the system boundary. Biogenic CO_2 incorporated in the wood fraction of the DPL flooring is released in module C3.

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.

GaBi ts (CUP 2020.2) is the background database for the calculation..

Factors for different thicknesses
The LCA results for the DPL floor covering declared in this EPD refer to a laminate flooring with a thickness of 8 mm, which meets the requirements of the use classes: 21-23, 31-34 according to *EN 13329, EN ISO 10874*. 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, C2, C3 and D the LCA results of the declared product (thickness 9mm) have to be multiplied with these factors.

Factors to calculate the results for module A1-A3 for different DPL floorings

thickness	7mm	10mm	12mm	14mm
Use class	23-33	23-33	23-33	23-33
Parameter				
GWP	0.93	1.44	1.83	1.99
GWP - Fossil	0.86	1.18	1.33	1.82
GWP - biogenic	0.88	1.26	1.48	1.87
GWP - LULUC	0.87	1.20	1.32	1.77
ODP	0.79	1.22	0.90	0.92
AP	0.85	1.23	1.37	1.76
EP Freshwater	0.88	1.15	1.14	1.82
EP Marine	0.85	1.19	1.35	1.91
EP Terrestrial	0.85	1.23	1.39	1.78
POCP	0.85	1.23	1.38	1.78
ADPE	0.87	1.18	1.31	1.75
ADPF	0.86	1.18	1.34	1.84
Water scarcity	0.86	1.21	1.30	1.62

Factors to calculate the results for module A5 for different DPL floorings

thickness	7mm	10mm	12mm	14mm
Use class	23-33	23-33	23-33	23-33
Parameter				
GWP	0.99	1.31	1.38	1.40
GWP - Fossil	0.91	1.28	1.07	1.09
GWP - biogenic	1.00	1.32	1.43	1.45
GWP - LULUC	0.96	1.29	1.24	1.26
ODP	0.97	1.29	1.28	1.30
AP	0.97	1.28	1.27	1.29
EP Freshwater	0.96	1.28	1.24	1.26
EP Marine	0.96	1.28	1.26	1.28
EP Terrestrial	0.97	1.28	1.28	1.30
POCP	0.96	1.28	1.26	1.28
ADPE	0.97	1.29	1.29	1.31
ADPF	0.97	1.29	1.30	1.32
Water scarcity	0.98	1.30	1.35	1.37

Factors to calculate the results for modules A4, C2, C3 and D for different DPL floorings

thickness	7mm	10mm	12mm	14mm
Use class	23-33	23-33	23-33	23-33
Valid for all parameters				
A4	0.87	1.24	1.46	1.85
C2	0.87	1.24	1.46	1.85
C3	0.87	1.25	1.48	1.86
D	0.87	1.24	1.46	1.86

LCA: Scenarios and additional technical information

Characteristic product properties
Information on biogenic Carbon
The biogenic carbon content quantifies the amount of biogenic carbon in a construction product leaving the factory gate, and it shall be separately declared for the product and for any accompanying packaging.
Note: 1 kg biogenic carbon is equivalent to 44/12 kg of CO2

Information on describing the biogenic carbon content at factory gate

Name	Value	Unit
Biogenic Carbon Content in product	3.25	kg C
Biogenic Carbon Content in accompanying packaging	0.09	kg C

The following technical information is a basis for the declared modules or can be used for developing specific scenarios in the context of a building assessment.

Transport to the construction site (A4)

Name	Value	Unit
Litres of fuel (consumption per kg)	0.00159	l/100km
Transport distance	250	km
Capacity utilisation (including empty runs)	85	%
Gross density of products transported	800-1200	kg/m^3

Installation in the building (A5)

Name	Value	Unit
Output substances following waste treatment on-site packaging waste	0.231	kg

The amount of installation waste varies and is not declared in this EPD. For the calculation of the environmental impact of 1m² laminate flooring including a certain amount of installation waste the values for the production stage (A1-A3), delivery (A4) and end of life (C, D) have to be multiplied with the amount of waste (e.g. 3% installation waste, factor 1.03).

Maintenance (B2)

Name	Value	Unit
Maintenance cycle (cleaning frequency per year)	120 times/year	Number/RSL
Water consumption (per year)	0.0068	m^3
Auxiliary (per year)	0.0507	kg
Electricity consumption (per year)	0.074	kWh

The common cleaning method for laminate floor coverings is damp mopping. Loose dirt should be removed by means of a dry mop or a vacuum cleaner. In case of higher requirements on hygiene (e.g. hospitals, care homes) or strongly frequented areas (shops) a need for a higher cleaning frequency is possible.

Reuse, recovery and/or recycling potentials (D), relevant scenario information
100% of post-consumer waste (7.09kg) is incinerated in a biomass power plant.

End of Life (C1-C4)

Name	Value	Unit
Collected separately	7.09	kg

LCA: Results

The results for module B2 refer to a period of one year.

Note: The results declared for EP-freshwater are declared in the unit "P eq." according to the European Platform on Life Cycle Assessment (http://eplca.jrc.ec.europa.eu/LCDN/developerEF.xhtml). This web link is provided in *EN 15804+A2*, clause 6.3.8.2.

DESCRIPTION OF THE SYSTEM BOUNDARY (X = INCLUDED IN LCA; ND = 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	ND	X	MNR	MNR	MNR	ND	ND	X	X	X	ND	X

RESULTS OF THE LCA - ENVIRONMENTAL IMPACT according to EN 15804+A2: 1 m² DPL Floor Covering (8mm)

Core Indicator	Unit	A1-A3	A4	A5	B2	C1	C2	C3	D
GWP-total	[kg CO_2-Eq.]	-2.65E+0	4.37E-2	2.77E-1	1.70E-1	0.00E+0	4.23E-2	1.19E+1	-6.67E+0
GWP-fossil	[kg CO_2-Eq.]	5.93E+0	4.34E-2	3.63E-2	1.58E-1	0.00E+0	4.21E-2	0.00E+0	-6.66E+0
GWP-biogenic	[kg CO_2-Eq.]	-8.58E+0	0.00E+0	2.41E-1	-3.32E-2	0.00E+0	0.00E+0	1.19E+1	0.00E+0
GWP-luluc	[kg CO_2-Eq.]	6.25E-3	3.51E-4	4.13E-6	4.53E-2	0.00E+0	3.40E-4	0.00E+0	-5.28E-3
ODP	[kg CFC11-Eq.]	2.70E-12	5.21E-18	4.47E-17	8.19E-9	0.00E+0	5.05E-18	0.00E+0	-7.91E-14
AP	[mol H^+-Eq.]	1.70E-2	1.43E-4	5.26E-5	4.67E-4	0.00E+0	1.39E-4	0.00E+0	3.99E-3
EP-freshwater	[kg PO_4-Eq.]	1.41E-5	1.32E-7	7.65E-9	6.01E-6	0.00E+0	1.28E-7	0.00E+0	-9.72E-6
EP-marine	[kg N-Eq.]	8.10E-3	6.48E-5	1.79E-5	1.26E-4	0.00E+0	6.28E-5	0.00E+0	9.20E-4
EP-terrestrial	[mol N-Eq.]	6.20E-2	7.25E-4	2.41E-4	1.29E-3	0.00E+0	7.02E-4	0.00E+0	1.11E-2
POCP	[kg NMVOC-Eq.]	1.56E-2	1.27E-4	4.80E-5	4.61E-4	0.00E+0	1.23E-4	0.00E+0	4.02E-3
ADPE	[kg Sb-Eq.]	9.32E-7	3.11E-9	6.99E-10	1.37E-7	0.00E+0	3.01E-9	0.00E+0	-1.20E-6
ADPF	[MJ]	1.19E+2	5.77E-1	7.48E-2	3.41E+0	0.00E+0	5.59E-1	0.00E+0	-1.14E+2
WDP	[m^3 world-Eq deprived]	6.61E-1	3.88E-4	3.06E-2	5.51E-2	0.00E+0	3.75E-4	0.00E+0	-3.85E-1

Caption	GWP = Global warming potential; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential of land and water; EP = Eutrophication potential; POCP = Formation potential of tropospheric ozone photochemical oxidants; ADPE = Abiotic depletion potential for non-fossil resources; ADPF = Abiotic depletion potential for fossil resources; WDP = Water (user) deprivation potential

RESULTS OF THE LCA - INDICATORS TO DESCRIBE RESOURCE USE according to EN 15804+A2: 1 m² DPL Floor Covering (8mm)

Indicator	Unit	A1-A3	A4	A5	B2	C1	C2	C3	D
PERE	[MJ]	3.10E+1	3.24E-2	3.06E+0	9.13E-1	0.00E+0	3.14E-2	0.00E+0	-2.81E+1
PERM	[MJ]	1.08E+2	0.00E+0	-3.05E+0	0.00E+0	0.00E+0	0.00E+0	-1.05E+2	0.00E+0
PERT	[MJ]	1.39E+2	3.24E-2	1.40E-2	9.13E-1	0.00E+0	3.14E-2	-1.05E+2	-2.81E+1
PENRE	[MJ]	9.54E+1	5.78E-1	5.79E-1	3.41E+0	0.00E+0	5.60E-1	0.00E+0	-1.14E+2
PENRM	[MJ]	2.32E+1	0.00E+0	-5.04E-1	0.00E+0	0.00E+0	0.00E+0	-2.27E+1	0.00E+0
PENRT	[MJ]	1.19E+2	5.78E-1	7.48E-2	3.41E+0	0.00E+0	5.60E-1	-2.27E+1	-1.14E+2
SM	[kg]	7.74E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
RSF	[MJ]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
NRSF	[MJ]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
FW	[m^3]	3.20E-2	3.76E-5	7.21E-4	1.41E-3	0.00E+0	3.64E-5	0.00E+0	-2.33E-2

Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water

RESULTS OF THE LCA – WASTE CATEGORIES AND OUTPUT FLOWS according to EN 15804+A2: 1 m² DPL Floor Covering (8mm)

Indicator	Unit	A1-A3	A4	A5	B2	C1	C2	C3	D
HWD	[kg]	3.71E-7	2.69E-8	1.09E-10	5.52E-5	0.00E+0	2.60E-8	0.00E+0	-4.53E-8
NHWD	[kg]	1.25E-1	8.84E-5	7.15E-3	8.06E-3	0.00E+0	8.56E-5	0.00E+0	5.00E-3
RWD	[kg]	4.01E-3	7.15E-7	3.94E-6	1.04E-4	0.00E+0	6.93E-7	0.00E+0	-9.60E-3
CRU	[kg]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
MFR	[kg]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
MER	[kg]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	7.09E+0	0.00E+0
EEE	[MJ]	0.00E+0	0.00E+0	3.78E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
EET	[MJ]	0.00E+0	0.00E+0	6.82E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0

Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EEE = Exported thermal energy

RESULTS OF THE LCA – additional impact categories according to EN 15804+A2-optional: 1 m² DPL Floor Covering (8mm)

Indicator	Unit	A1-A3	A4	A5	B2	C1	C2	C3	D
PM	[Disease Incidence]	1.88E-7	7.70E-10	3.16E-10	1.88E-8	0.00E+0	7.45E-10	0.00E+0	-2.49E-8
IR	[kBq U235-Eq.]	6.18E-1	1.03E-4	6.02E-4	2.10E-2	0.00E+0	1.00E-4	0.00E+0	-1.58E+0
ETP-fw	[CTUe]	3.50E+1	4.08E-1	3.73E-2	1.88E+0	0.00E+0	3.95E-1	0.00E+0	-2.74E+1
HTP-c	[CTUh]	5.04E-8	8.55E-12	2.17E-12	1.79E-10	0.00E+0	8.28E-12	0.00E+0	-2.67E-10
HTP-nc	[CTUh]	6.56E-8	4.99E-10	1.16E-10	6.85E-9	0.00E+0	4.83E-10	0.00E+0	3.20E-8
SQP	[-]	6.82E+2	2.03E-1	2.00E-2	2.57E+0	0.00E+0	1.96E-1	0.00E+0	-2.02E+1

Caption	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 IRP
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 possiblenuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

Disclaimer 2 – for the indicators ADPE, ADPF, WDP, ETP-fw, HTP-c, HTP-nc, SQP
The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.

References

Standards

EN 14041
EN 14041:2004: Resilient, textile and laminate floor coverings - Essential characteristics.

EN 13329
EN 13329: 2009-01: Laminate floor coverings - Elements with a surface layer based on aminoplastic thermosetting resins - Specifications, requirements and test methods.

EN ISO 10874
ISO 10874:2009: Resilient, textile and laminate floor coverings - Classification.

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

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

IBU
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

Further References

BBSR
Bundesinstitut für Bau-, Stadt- und Raumforschung (BBSR): Nutzungsdauer von Bauteilen für Lebenszyklusanalyse nach Bewertungssystem Nachhaltiges Bauen (BNB), 2011

GaBi Software
GaBi 10.0 dataset documentation for the software-system (CUP 2020.2) and databases, Sphera Solutions GmBH, Leinfelden-Echterdingen, 2020 (http://documentation.gabi-software.com/)

PCR Part A
Part A: Calculation Rules for the Life Cycle Assessment and Requirementson the Project Reportaccording to EN 15804+A2:2019, InstitutBauen und Umwelt e.V. (IBU), https://ibu-epd.com/

PCR Part B
Institut Bauen und Umwelt e.V.: Requirements on the EPD for floor coverings, Version 1.2, 14.02.2018

REACH Evaluation, Authorisation and Restriction of Chemicals

Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration,

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Owner of the Declaration
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Germany

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Fax +49 521 9 65 33 11
Mail info@eplf.com
Web **www.eplf.com, www.mylaminate.eu**

SCS Global Services *does hereby certify that an independent assessment has been conducted on behalf of:*

ter Hürne GmbH & Co. KG

Ramsdorfer Str. 5, Südlohn, Nordrhein-Westfalen 46354, Germany

For the following product(s):

Laminate Flooring:
Dureco, Friends Laminate, Iko Premium Laminate Floor

The product(s) meet(s) all of the necessary qualifications to be certified for the following claim(s):

FloorScore®

Indoor Air Quality Certified to SCS-105 Version 4.2 – 2023

Conforms to the CDPH/EHLB Standard Method v1.2-2017 (California Section 01350), effective April 1, 2017, for the school classroom and private office parameters when modeled as Flooring.

Measured Concentration of Total Volatile Organic Compounds (TVOC): Less than/equal to 0.5 mg/m3 (in compliance with CDPH/EHLB Standard Method v1.2-2017)

Registration # SCS-FS-06255

Valid from: December 01, 2024 to November 30, 2025

SCS Global Services is currently the only certification body approved by the Resilient Floor Covering Institute (RFCI) to provide FloorScore® product certification; certified products are only listed on the SCS Green Products Guide, http://www.scsglobalservices.com/certified-green-products-guide.

Diana Kirsanova Phillips, Chief Assurance Officer,
SCS Global Services

ENVIRONMENTAL PRODUCT DECLARATION

as per *ISO 14025* and *EN 15804+A2*

Owner of the Declaration	European Producers of Laminate Flooring e.V.
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-EPL-20210138-CBE1-EN
Issue date	09/07/2021
Valid to	08/07/2026

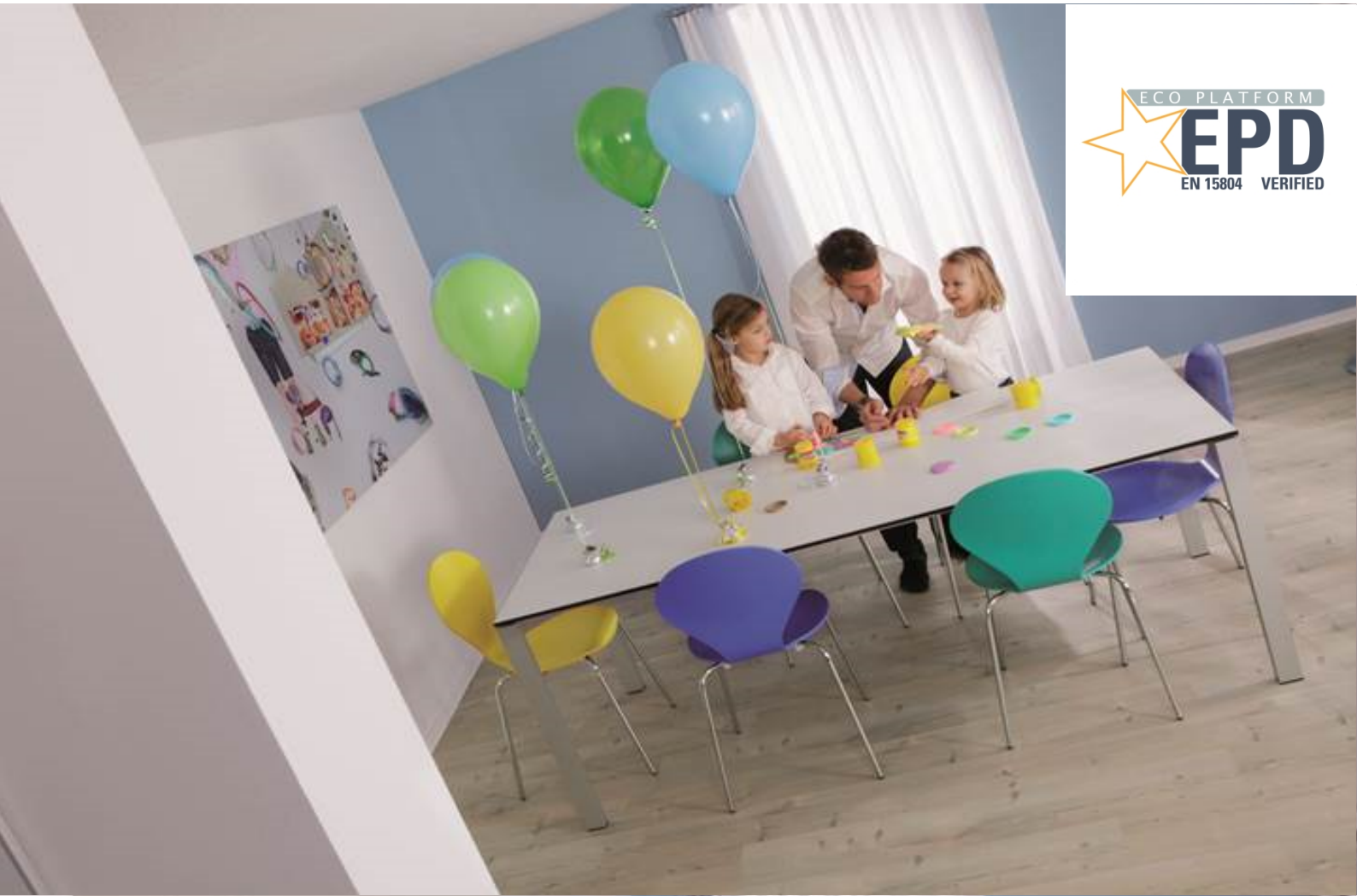
Direct Pressure Laminate Floor Covering (DPL Floor Covering)

European Producers of Laminate Flooring e.V.

Institut Bauen und Umwelt e.V.

www.ibu-epd.com | https://epd-online.com

ECO PLATFORM EPD EN 15804 VERIFIED



General Information

European Producers of Laminate Flooring e.V.

Programme holder
IBU – Institut Bauen und Umwelt e.V.
Panoramastr. 1
10178 Berlin
Germany

Declaration number
EPD-EPL-20210138-CBE1-EN

This declaration is based on the product category rules:
Floor coverings, 02/2018
(PCR checked and approved by the SVR)

Issue date
09/07/2021

Valid to
08/07/2026

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

Dr. Alexander Röder
(Managing Director Institut Bauen und Umwelt e.V.))

Direct Pressure Laminate Floor Covering (DPL Floor Covering)

Owner of the declaration
EPLF®
European Producers of Laminate Flooring e.V.
Mittelstr. 50
33602 Bielefeld
Germany

Declared product / declared unit
1m² of DPL floor covering

Scope:
This Environmental Product Declaration refers to a representative European DPL floor covering produced by manufacturers that are members of EPLF®. Data are based upon production during 2019 in Europe.

The laminate floor covering described in this EPD has a thickness of 8 mm and meets the requirements of the use classes: 21-23, 31-34 according to *EN 13329, EN ISO 10874*. In order to enable the user of the EPD to calculate the LCA results for different thicknesses and use classes, the EPD contains the respective calculation rules.

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 14025:2010*
☐ internally ☒ externally

Matthias Klingler
(Independent verifier)

Product

Information about the enterprise
The European network of the EPLF – the Association of European Producers of Laminate Flooring – is made up of laminate flooring producers, supplier companies and supporting members. This is the world's largest regional association for the laminate industry and it celebrates its 25th anniversary in 2019.

Product description/Product definition
DPL floor coverings described in this EPD are produced by member companies of EPLF®. The floor coverings meet the requirements of *EN 13329*.
DPL floorings consist 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 fibres and on the back side there is a stabilizing layer to guarantee floor stability. The decorative paper of a DPL floor covering can be printed with any design and gives the floor its individual appearance.
According to EPLF the participating companies are representative for the declaration of the product, the weighting was done according to production volumes.
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 *EN 13329* and the CE-marking. For the

application and use the respective national provisions apply.

Application
The laminate floor covering described in this EPD is intended to be used within a building and meets the requirements of the use classes: 21-23, 31-34 according to *EN 13329, EN ISO 10874*.
For the application and use the respective national provisions apply.

Technical Data

Constructional data

Name	Value	Unit
Grammage	7090	g/m²
Abrasion Class EN 13329	AC1-AC6	-
Product Form	panel	-
Thickness of the element	8	mm
Length of the surface layer	300 - 2500	mm
Width of the surface layer	70 - 400	mm
Length and width of squared elements	250 - 700	mm
Density	800 - 1200	kg/m³

Performance data of the product in accordance with the declaration of performance with respect to its essential characteristics according to *EN 13329*.

Base materials/Ancillary materials
The composition of a DPL floor covering in mass % is:

- 90-95 % High Density Fibre board (HDF)
- 1-3 % paper
- 4-7 % resin
- <1 % corundum

HDF (high-density fibreboard)
The core board is an HDF board composed of wood fibres 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-urea-formaldehyde resins. Amino resins are thermosetting resins that are cured using heat and pressure.
Corundum
Bauxite is the mineral resource of corundum. By using aluminiumoxide (Al_2O_3) the surface layer of a laminate flooring obtains abrasion and wear resistance.

DPL floor coverings do not contain substances that are listed in the "Candidate List of Substances of Very High Concern for Authorisation" *REACH*.

This product contains substances listed in the candidate list (date: 02.03.2021) exceeding 0.1 percentage by mass: **NO**.

Reference service life
The estimated service life of a floor covering depends e.g. on the type of floor covering and the area of application, the user and the maintenance of the product. Comparisons of different floor coverings are only allowed if these parameters are considered in a consistent way. A minimum service life of 20 years can be assumed according to Bundesinstitut für Bau-, Stadt- und Raumforschung *(BBSR*), technical service life can be considerably longer. The use stage is declared in this EPD for a one-year usage.

LCA: Calculation rules

Declared Unit
The declared unit is 1m² laminate flooring (7.09 kg/m², thickness 8 mm)

Declared unit

Name	Value	Unit
Declared unit	1	m²
Conversion factor to 1 kg (mass in kg per declared unit)	7.09	-
Mass in kg per declared unit	7.09	kg/m²

System boundary
Type of EPD: cradle to gate with options, modules C1–C4, and module D (A1–A3 + C + D and additional modules A4, A5 and B2).

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

Module A4 includes the transport to the point of installation.

Module A5 includes packaging waste processing during the construction process. A waste treatment in a waste incineration plant is assumed. Credits from energy substitution are declared in module D.

Module B2 includes the cleaning of the floor covering. Provision of water, cleaning agent and electricity for the cleaning of the floor covering is considered, incl. waste water treatment. The LCA results in this EPD are declared for a one-year usage.

Module C includes dismantling (C1) and transport to waste a treatment site (C2). It is assumed that dismantling is manually done without environmental burdens, The DPL floor coverings reach the end-of-waste state after dismantling and transport to a waste treatment site from the building.

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 DPL floor covering waste reaches the end-of-waste state and is 100% incinerated in a European biomass power plant. Loads from material incineration and resulted potential energy credits (electricity and thermal energy) are declared

within module D.

Module D contains the loads and potential benefits beyond the system boundary. Biogenic CO_2 incorporated in the wood fraction of the DPL flooring is released in module C3.

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.

GaBi ts (CUP 2020.2) is the background database for the calculation..

Factors for different thicknesses
The LCA results for the DPL floor covering declared in this EPD refer to a laminate flooring with a thickness of 8 mm, which meets the requirements of the use classes: 21-23, 31-34 according to *EN 13329, EN ISO 10874*. 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, C2, C3 and D the LCA results of the declared product (thickness 9mm) have to be multiplied with these factors.

Factors to calculate the results for module A1-A3 for different DPL floorings

thickness	7mm	10mm	12mm	14mm
Use class	23-33	23-33	23-33	23-33
Parameter				
GWP	0.93	1.44	1.83	1.99
GWP - Fossil	0.86	1.18	1.33	1.82
GWP - biogenic	0.88	1.26	1.48	1.87
GWP - LULUC	0.87	1.20	1.32	1.77
ODP	0.79	1.22	0.90	0.92
AP	0.85	1.23	1.37	1.76
EP Freshwater	0.88	1.15	1.14	1.82
EP Marine	0.85	1.19	1.35	1.91
EP Terrestrial	0.85	1.23	1.39	1.78
POCP	0.85	1.23	1.38	1.78
ADPE	0.87	1.18	1.31	1.75
ADPF	0.86	1.18	1.34	1.84
Water scarcity	0.86	1.21	1.30	1.62

Factors to calculate the results for module A5 for different DPL floorings

thickness	7mm	10mm	12mm	14mm
Use class	23-33	23-33	23-33	23-33
Parameter				
GWP	0.99	1.31	1.38	1.40
GWP - Fossil	0.91	1.28	1.07	1.09
GWP - biogenic	1.00	1.32	1.43	1.45
GWP - LULUC	0.96	1.29	1.24	1.26
ODP	0.97	1.29	1.28	1.30
AP	0.97	1.28	1.27	1.29
EP Freshwater	0.96	1.28	1.24	1.26
EP Marine	0.96	1.28	1.26	1.28
EP Terrestrial	0.97	1.28	1.28	1.30
POCP	0.96	1.28	1.26	1.28
ADPE	0.97	1.29	1.29	1.31
ADPF	0.97	1.29	1.30	1.32
Water scarcity	0.98	1.30	1.35	1.37

Factors to calculate the results for modules A4, C2, C3 and D for different DPL floorings

thickness	7mm	10mm	12mm	14mm
Use class	23-33	23-33	23-33	23-33
Valid for all parameters				
A4	0.87	1.24	1.46	1.85
C2	0.87	1.24	1.46	1.85
C3	0.87	1.25	1.48	1.86
D	0.87	1.24	1.46	1.86

LCA: Scenarios and additional technical information

Characteristic product properties
Information on biogenic Carbon
The biogenic carbon content quantifies the amount of biogenic carbon in a construction product leaving the factory gate, and it shall be separately declared for the product and for any accompanying packaging.
Note: 1 kg biogenic carbon is equivalent to 44/12 kg of CO2

Information on describing the biogenic carbon content at factory gate

Name	Value	Unit
Biogenic Carbon Content in product	3.25	kg C
Biogenic Carbon Content in accompanying packaging	0.09	kg C

The following technical information is a basis for the declared modules or can be used for developing specific scenarios in the context of a building assessment.

Transport to the construction site (A4)

Name	Value	Unit
Litres of fuel (consumption per kg)	0.00159	l/100km
Transport distance	250	km
Capacity utilisation (including empty runs)	85	%
Gross density of products transported	800-1200	kg/m^3

Installation in the building (A5)

Name	Value	Unit
Output substances following waste treatment on-site packaging waste	0.231	kg

The amount of installation waste varies and is not declared in this EPD. For the calculation of the environmental impact of 1m² laminate flooring including a certain amount of installation waste the values for the production stage (A1-A3), delivery (A4) and end of life (C, D) have to be multiplied with the amount of waste (e.g. 3% installation waste, factor 1.03).

Maintenance (B2)

Name	Value	Unit
Maintenance cycle (cleaning frequency per year)	120 times/year	Number/RSL
Water consumption (per year)	0.0068	m^3
Auxiliary (per year)	0.0507	kg
Electricity consumption (per year)	0.074	kWh

The common cleaning method for laminate floor coverings is damp mopping. Loose dirt should be removed by means of a dry mop or a vacuum cleaner. In case of higher requirements on hygiene (e.g. hospitals, care homes) or strongly frequented areas (shops) a need for a higher cleaning frequency is possible.

Reuse, recovery and/or recycling potentials (D), relevant scenario information
100% of post-consumer waste (7.09kg) is incinerated in a biomass power plant.

End of Life (C1-C4)

Name	Value	Unit
Collected separately	7.09	kg

LCA: Results

The results for module B2 refer to a period of one year.

Note: The results declared for EP-freshwater are declared in the unit "P eq." according to the European Platform on Life Cycle Assessment (http://eplca.jrc.ec.europa.eu/LCDN/developerEF.xhtml). This web link is provided in *EN 15804+A2*, clause 6.3.8.2.

DESCRIPTION OF THE SYSTEM BOUNDARY (X = INCLUDED IN LCA; ND = 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	ND	X	MNR	MNR	MNR	ND	ND	X	X	X	ND	X

RESULTS OF THE LCA - ENVIRONMENTAL IMPACT according to EN 15804+A2: 1 m² DPL Floor Covering (8mm)

Core Indicator	Unit	A1-A3	A4	A5	B2	C1	C2	C3	D
GWP-total	[kg CO_2-Eq.]	-2.65E+0	4.37E-2	2.77E-1	1.70E-1	0.00E+0	4.23E-2	1.19E+1	-6.67E+0
GWP-fossil	[kg CO_2-Eq.]	5.93E+0	4.34E-2	3.63E-2	1.58E-1	0.00E+0	4.21E-2	0.00E+0	-6.66E+0
GWP-biogenic	[kg CO_2-Eq.]	-8.58E+0	0.00E+0	2.41E-1	-3.32E-2	0.00E+0	0.00E+0	1.19E+1	0.00E+0
GWP-luluc	[kg CO_2-Eq.]	6.25E-3	3.51E-4	4.13E-6	4.53E-2	0.00E+0	3.40E-4	0.00E+0	-5.28E-3
ODP	[kg CFC11-Eq.]	2.70E-12	5.21E-18	4.47E-17	8.19E-9	0.00E+0	5.05E-18	0.00E+0	-7.91E-14
AP	[mol H^+-Eq.]	1.70E-2	1.43E-4	5.26E-5	4.67E-4	0.00E+0	1.39E-4	0.00E+0	3.99E-3
EP-freshwater	[kg PO_4-Eq.]	1.41E-5	1.32E-7	7.65E-9	6.01E-6	0.00E+0	1.28E-7	0.00E+0	-9.72E-6
EP-marine	[kg N-Eq.]	8.10E-3	6.48E-5	1.79E-5	1.26E-4	0.00E+0	6.28E-5	0.00E+0	9.20E-4
EP-terrestrial	[mol N-Eq.]	6.20E-2	7.25E-4	2.41E-4	1.29E-3	0.00E+0	7.02E-4	0.00E+0	1.11E-2
POCP	[kg NMVOC-Eq.]	1.56E-2	1.27E-4	4.80E-5	4.61E-4	0.00E+0	1.23E-4	0.00E+0	4.02E-3
ADPE	[kg Sb-Eq.]	9.32E-7	3.11E-9	6.99E-10	1.37E-7	0.00E+0	3.01E-9	0.00E+0	-1.20E-6
ADPF	[MJ]	1.19E+2	5.77E-1	7.48E-2	3.41E+0	0.00E+0	5.59E-1	0.00E+0	-1.14E+2
WDP	[m^3 world-Eq deprived]	6.61E-1	3.88E-4	3.06E-2	5.51E-2	0.00E+0	3.75E-4	0.00E+0	-3.85E-1

Caption	GWP = Global warming potential; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential of land and water; EP = Eutrophication potential; POCP = Formation potential of tropospheric ozone photochemical oxidants; ADPE = Abiotic depletion potential for non-fossil resources; ADPF = Abiotic depletion potential for fossil resources; WDP = Water (user) deprivation potential

RESULTS OF THE LCA - INDICATORS TO DESCRIBE RESOURCE USE according to EN 15804+A2: 1 m² DPL Floor Covering (8mm)

Indicator	Unit	A1-A3	A4	A5	B2	C1	C2	C3	D
PERE	[MJ]	3.10E+1	3.24E-2	3.06E+0	9.13E-1	0.00E+0	3.14E-2	0.00E+0	-2.81E+1
PERM	[MJ]	1.08E+2	0.00E+0	-3.05E+0	0.00E+0	0.00E+0	0.00E+0	-1.05E+2	0.00E+0
PERT	[MJ]	1.39E+2	3.24E-2	1.40E-2	9.13E-1	0.00E+0	3.14E-2	-1.05E+2	-2.81E+1
PENRE	[MJ]	9.54E+1	5.78E-1	5.79E-1	3.41E+0	0.00E+0	5.60E-1	0.00E+0	-1.14E+2
PENRM	[MJ]	2.32E+1	0.00E+0	-5.04E-1	0.00E+0	0.00E+0	0.00E+0	-2.27E+1	0.00E+0
PENRT	[MJ]	1.19E+2	5.78E-1	7.48E-2	3.41E+0	0.00E+0	5.60E-1	-2.27E+1	-1.14E+2
SM	[kg]	7.74E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
RSF	[MJ]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
NRSF	[MJ]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
FW	[m^3]	3.20E-2	3.76E-5	7.21E-4	1.41E-3	0.00E+0	3.64E-5	0.00E+0	-2.33E-2

Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water

RESULTS OF THE LCA – WASTE CATEGORIES AND OUTPUT FLOWS according to EN 15804+A2: 1 m² DPL Floor Covering (8mm)

Indicator	Unit	A1-A3	A4	A5	B2	C1	C2	C3	D
HWD	[kg]	3.71E-7	2.69E-8	1.09E-10	5.52E-5	0.00E+0	2.60E-8	0.00E+0	-4.53E-8
NHWD	[kg]	1.25E-1	8.84E-5	7.15E-3	8.06E-3	0.00E+0	8.56E-5	0.00E+0	5.00E-3
RWD	[kg]	4.01E-3	7.15E-7	3.94E-6	1.04E-4	0.00E+0	6.93E-7	0.00E+0	-9.60E-3
CRU	[kg]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
MFR	[kg]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
MER	[kg]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	7.09E+0	0.00E+0
EEE	[MJ]	0.00E+0	0.00E+0	3.78E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
EET	[MJ]	0.00E+0	0.00E+0	6.82E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0

Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EEE = Exported thermal energy

RESULTS OF THE LCA – additional impact categories according to EN 15804+A2-optional: 1 m² DPL Floor Covering (8mm)

Indicator	Unit	A1-A3	A4	A5	B2	C1	C2	C3	D
PM	[Disease Incidence]	1.88E-7	7.70E-10	3.16E-10	1.88E-8	0.00E+0	7.45E-10	0.00E+0	-2.49E-8
IR	[kBq U235-Eq.]	6.18E-1	1.03E-4	6.02E-4	2.10E-2	0.00E+0	1.00E-4	0.00E+0	-1.58E+0
ETP-fw	[CTUe]	3.50E+1	4.08E-1	3.73E-2	1.88E+0	0.00E+0	3.95E-1	0.00E+0	-2.74E+1
HTP-c	[CTUh]	5.04E-8	8.55E-12	2.17E-12	1.79E-10	0.00E+0	8.28E-12	0.00E+0	-2.67E-10
HTP-nc	[CTUh]	6.56E-8	4.99E-10	1.16E-10	6.85E-9	0.00E+0	4.83E-10	0.00E+0	3.20E-8
SQP	[-]	6.82E+2	2.03E-1	2.00E-2	2.57E+0	0.00E+0	1.96E-1	0.00E+0	-2.02E+1

Caption	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 IRP
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 possiblenuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

Disclaimer 2 – for the indicators ADPE, ADPF, WDP, ETP-fw, HTP-c, HTP-nc, SQP
The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.

References

Standards

EN 14041
EN 14041:2004: Resilient, textile and laminate floor coverings - Essential characteristics.

EN 13329
EN 13329: 2009-01: Laminate floor coverings - Elements with a surface layer based on aminoplastic thermosetting resins - Specifications, requirements and test methods.

EN ISO 10874
ISO 10874:2009: Resilient, textile and laminate floor coverings - Classification.

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

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

IBU
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

Further References

BBSR
Bundesinstitut für Bau-, Stadt- und Raumforschung (BBSR): Nutzungsdauer von Bauteilen für Lebenszyklusanalyse nach Bewertungssystem Nachhaltiges Bauen (BNB), 2011

GaBi Software
GaBi 10.0 dataset documentation for the software-system (CUP 2020.2) and databases, Sphera Solutions GmBH, Leinfelden-Echterdingen, 2020 (http://documentation.gabi-software.com/)

PCR Part A
Part A: Calculation Rules for the Life Cycle Assessment and Requirementson the Project Reportaccording to EN 15804+A2:2019, InstitutBauen und Umwelt e.V. (IBU), https://ibu-epd.com/

PCR Part B
Institut Bauen und Umwelt e.V.: Requirements on the EPD for floor coverings, Version 1.2, 14.02.2018

REACH Evaluation, Authorisation and Restriction of Chemicals

Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration,

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Web **www.eplf.com, www.mylaminate.eu**

DECLARATION OF CONFORMITY

DOC: UKCATHD0923

1. Unique identification code of the product-type:

   dureco floor covering in accordance with EN 14041:2004/AC:2006 DPL 6mm - 14 mm

2. Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4):

   ter Hürne dureco floor covering

3. Intended use or uses of the construction product, in accordance with the applicable harmonised technical specifi- cation, as foreseen by the manufacturer:

   For use as floor covering in buildings (see EN 14041) according to the manufacturer's specifications.

4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5):

   ter Hürne GmbH & Co.KG, Ramsdorfer Straße 5, 46354 Südlohn, Deutschland

5. Where applicable, name and contact address of the authorised representative whose mandate covers the tasks specified in Article 12(2):

   not applicable

6. System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V:

   System 3

7. In case of the declaration of performance concerning a construction product covered by a harmonised standard:
   Name of the notified test laboratory, that has issued the certificate of conformity of the factory production control, inspection reports and calculation reports (if relevant).

   UK AB 0321 SATRA Technology Centre Ltd
   Wyndham Way, Telford Way, Kettering,
   Northhamptonshire, NN16 8SD United Kingdom

   .....
   UK Approved Body

8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:

   not applicable

9. Declared performance

Essential characteristics	Performance	Harmonised technical specification
Reaction to fire	C_{fl}-s1	EN 14041: 2004/AC:2006
Content of Pentachlorophenol	PCP ≤ 5 ppm	EN 14041: 2004/AC:2006
Formaldehyd Emissions	E1	EN 14041: 2004/AC:2006
Slip resistance	DS	EN 14041: 2004/AC:2006
Electrical behavior (antistatic)	≤ 2 kV	EN 14041: 2004/AC:2006
Thermal conductivity	0,052-0,110 m²K/W	EN 14041: 2004/AC:2006

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9.
    This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4
    Signed for and on behalf of the manufacturer by:

15.09.23, Südlohn	Bernhard ter Hürne, CEO	
(place and date of issue)	(name and function)	(signature)