



SHI PRODUCT PASSPORT

Find products. Certify buildings.

SHI Product Passport No.:

12065-10-1036

ZERO SOUND

Product group: Floor coverings / Wall coverings

Kährs®

Kährs Parkett Deutschland GmbH & Co. KG
Konrad-Adenauer-Str. 15
72072 Tübingen



Product qualities:

SHI
Product
Assessment
2024



QNG
Qualitätssiegel
Nachhaltiges
Gebäude



DGNB
NEW CONSTRUCTION
2023



DGNB
NEW CONSTRUCTION
2018



BNB-BN
NEUBAU
V2015



EU
taxonomy



BREEAM
DE NEUBAU
2018



Köttner

Helmut Köttner
Scientific Director

Freiburg, 02 February 2026



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SGS

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SHI Product Assessment 2024

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

Criteria	Product category	Harmful substance limit	Assessment
SHI Product Assessment	Other floor coverings	TVOC $\leq 160 \mu\text{g}/\text{m}^3$ Formaldehyd $\leq 10 \mu\text{g}/\text{m}^3$	Indoor Air Quality Certified
Valid untill: 24 January 2027			



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QNG - Qualitätssiegel Nachhaltiges Gebäude

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

Criteria	Pos. / product group	Considered substances	QNG assessment
3.1.3 Schadstoffvermeidung in Baumaterialien	2.2 Resilient floor coverings – including multilayer systems	VOC / Emissions / hazardous substances / polycyclic aromatic hydrocarbons (PAH) / SVHC / heavy metals	QNG ready

Verification: Prüfbericht des Instituts Eurofins Product Testing A/S (Prüfbericht Nr. 392-2023-00026802_A_EN) vom 01.03.2023. Konformitätserklärung vom 24.01.2025 bestätigt die weitere materielle Übereinstimmung mit dem geprüften Produkt. Herstellererklärung vom 14.09.2023.



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DGNB New Construction 2023

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

Criteria	No. / Relevant building components / construction materials / surfaces	Considered substances / aspects	Quality level
ENV 1.2 Local environmental impact, 03.05.2024 (3rd edition)	7 Floor coverings (Resilient floor coverings)	VVOCs, VOC, SVOC emissions and content of hazardous substances	Quality level 3
Verification: Prüfbericht des Instituts Eurofins Product Testing A/S (Prüfbericht Nr. 392-2015-00437001_D_EN_01) vom 21.06.2016. Konformitätserklärung vom 26.01.2023 bestätigt die weitere materielle Übereinstimmung mit dem geprüften Produkt. Herstellererklärung vom 14.09.2023.			

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

Criteria	Assessment
ENV1.1 Climate action and energy (*)	May positively contribute to the overall building score
Verification: EPD	

Criteria	Assessment
ECO1.1 Life cycle cost (*)	May positively contribute to the overall building score
Verification: Easy maintenance	



Criteria	Assessment
SOC1.3 Sound insulation and acoustic comfort (*)	May positively contribute to the overall building score
Verification: Impact Sound Insulation Properties	

Criteria	Assessment
SOC2.1 Barrier-free design (*)	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)	7 Floor coverings for indoor use (elastic floor coverings)	VVOCs, VOC, SVOC emissions and content of hazardous substances	Quality level 3
Verification: Prüfbericht des Instituts Eurofins Product Testing A/S (Prüfbericht Nr. 392-2015-00437001_D_EN_01) vom 21.06.2016. Konformitätserklärung vom 26.01.2023 bestätigt die weitere materielle Übereinstimmung mit dem geprüften Produkt. Herstellererklärung vom 14.09.2023.			



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DGNB New Construction 2018

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

Criteria	No. / Relevant building components / construction materials / surfaces	Considered substances / aspects	Quality level
ENV 1.2 Local environmental impact	7 Floor coverings (Resilient floor coverings)	VOC / SVOC / hazardous substances	Quality level 4

Verification: Prüfbericht des Instituts Eurofins Product Testing A/S (Prüfbericht Nr. 392-2015-00437001_D_EN_01) vom 21.06.2016. Konformitätserklärung vom 26.01.2023 bestätigt die weitere materielle Übereinstimmung mit dem geprüften Produkt. Herstellererklärung vom 14.09.2023.



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BNB-BN Neubau V2015

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

Criteria	Pos. / product type	Considered substance group	Quality level
1.1.6 Risiken für die lokale Umwelt	2a Elastic floor coverings – with and without bonded underlay or insulation layer	VOC / hazardous substances / heavy metals	Quality level 3

Verification: Prüfbericht des Instituts Eurofins Product Testing A/S (Prüfbericht Nr. 392-2015-00437001_D_EN_01) vom 21.06.2016. Konformitätserklärung vom 26.01.2023 bestätigt die weitere materielle Übereinstimmung mit dem geprüften Produkt. Herstellererklärung vom 14.09.2023. Kein PVC.



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EU taxonomy

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

Criteria	Product type	Considered substances	Assessment
DNSH - Pollution prevention and control	Floor coverings (including associated adhesives and sealants)	Substances according to Annex C, formaldehyde, carcinogenic VOCs category 1A/1B	EU taxonomy compliant
Verification: Prüfbericht des Instituts Eurofins Product Testing A/S (Prüfbericht Nr. 392-2015-00437001_D_EN_01) vom 21.06.2016. Konformitätserklärung vom 26.01.2023 bestätigt die weitere materielle Übereinstimmung mit dem geprüften Produkt			



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BREEAM DE Neubau 2018

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

Criteria	Product category	Considered substances	Quality level
Hea 02 Indoor Air Quality	Flooring materials (including floor levelling compounds and resin flooring)	Emissions: Formaldehyde, TVOC, TSVOC, carcinogens	Exemplary quality
Verification: Prüfbericht des Instituts Eurofins Product Testing A/S (Prüfbericht Nr. 392-2015-00437001_D_EN_01) vom 21.06.2016. Konformitätserklärung vom 26.01.2023 bestätigt die weitere materielle Übereinstimmung mit dem geprüften Produkt			



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Product labels

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



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



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



The 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.



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Legal notices

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

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

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www.sentinel-holding.eu

TECHNISCHE DATEN

ZERO SOUND

BODENBELAG AUS ENOMER®



PRODUKT

Zero Sound	EN 14565	Aus natürlichen Mineralien und reinen thermoplastischen Polymeren. Frei von Chlor und Weichmachern. Mit Trittschalldämmung.
Klassifizierung	EN ISO 10874	23/33/42

SPEZIFIKATIONEN

Dicke		EN ISO 24346	3,6 mm
Gewicht		EN ISO 23997	3800 g/m²
Rollenlänge		EN ISO 24341	8 - 16 m
Breite		EN ISO 24341	145 cm

PRODUKTEIGENSCHAFTEN

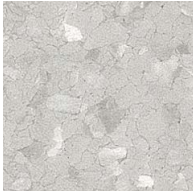
EIGENSCHAFT	TESTMETHODE	ERGEBNIS
Umwelt- und Raumluftzertifizierungen		M1, Floorscore
Brandverhalten		EN 13501-1 C _{fi} -s1
Resteindruck		EN ISO 24343-1 (2,5 h) ca. 0,13 mm
Gleitreibungswiderstand Rutschsicherheit / -hemmung		EN 13893 DIN 51130 DS (> 0,3) Gruppe R9
Elektrostatisches Verhalten		EN 1815 ≤ 2 kV (antistatisch)
Chemische Beständigkeit		EN ISO 26987 Hervorragend
Fußbodenheizung		Geeignet (bis max. +28 °C Oberflächentemperatur bei Warmwasserheizung)
Isolationswiderstand		EN 1081 > 100 GΩ
Wärmeleitfähigkeit		EN 12667 R = 0,030 [m²K/W]
Trittschalldämmung		ISO 717-2 ΔL _w ~ 16 dB
Beständigkeit gegen Bakterien- und Pilzwachstum		ISO 846 Gut



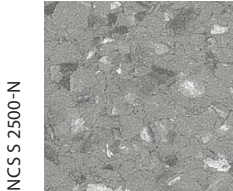
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ZERO SOUND

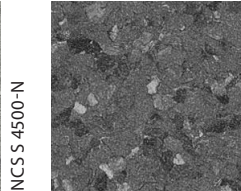
BODENBELAG AUS ENOMER®



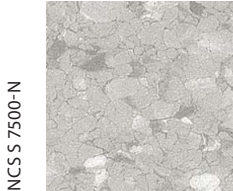
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5803 PEWTER



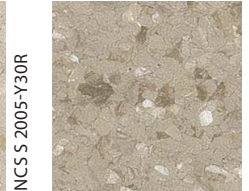
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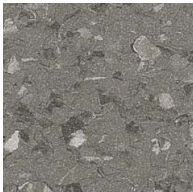
5811 SILVER GREY



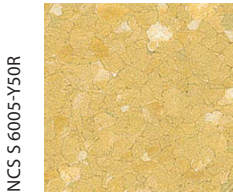
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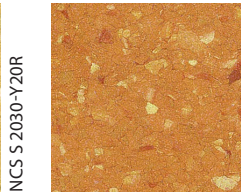
5823 MOROCCO



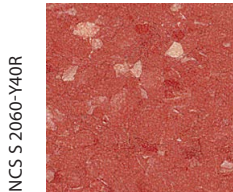
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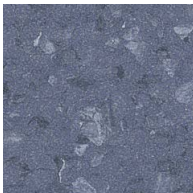
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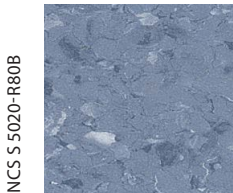
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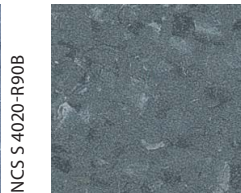
5843 TERRACOTTA



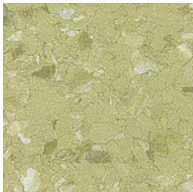
5852 BLUE MOON



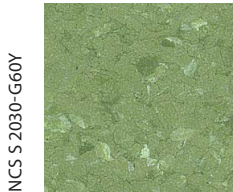
5858 BLUE ORCHID



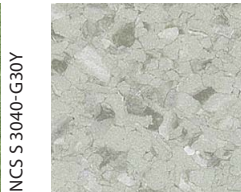
5859 DENIM



5862 THORN APPLE



5863 SPRUCE



5864 AMBROSIA

HERSTELLERERKLÄRUNG

QNG – Schadstoffvermeidung in Baumaterialien

(Version 1.3, Korrekturfassung v. 14.09.2023)

Hiermit bestätigen wir:

Kährs Finland Oy

Puntunlahdenkatu 4

39500 Ikaalinen, Finland

für das folgende Produkt / die folgenden Produkte:

Kährs Infinity

Kährs Zero Sheet

Kährs Zero Sound

Nach Position 2.2 *Elastische Bodenbeläge – auch mehrschichtige Systeme:*

Das Produkt/ Erzeugnis/ mindestens ein Teilerzeugnis enthält Stoffe der Kandidatenliste (Version zum Ausstellungsdatum) oberhalb 0,1 Massen%:	nein
Einhaltung des AgBB-Schemas	ja
Reproduktionstoxische Phthalate < 0,10 %	ja
keine Zinn-, Cadmium- und Bleistabilisatoren	ja

HERSTELLERERKLÄRUNG

QNG – Schadstoffvermeidung in Baumaterialien

(Version 1.3, Korrekturfassung v. 14.09.2023)

Hiermit bestätigen wir:

Kährs Finland Oy

Puntunlahdenkatu 4

39500 Ikaalinen, Finland

für das folgende Produkt / die folgenden Produkte:

Kährs Infinity

Kährs Zero Sheet

Kährs Zero Sound

Nach Position 2.3 *Mehrschichtiges Holzparkett, Bambusbeläge und Bodenbeläge auf Holzwerkstoff-Trägerplatten:*

Das Produkt/ Erzeugnis/ mindestens ein Teilerzeugnis enthält Stoffe der Kandidatenliste (Version zum Ausstellungsdatum) oberhalb 0,1 Massen%:	nein
Einhaltung des AgBB-Schemas	ja
Geräuchertes Holz: Ammoniak _{28d} ≤ 0,10 mg/m ³	ja

ENVIRONMENTAL PRODUCT DECLARATION

as per /EN 16810/ and
as per /ISO 14025/ and /EN 15804/

Owner of the Declaration	ERFMI - European Resilient Flooring Manufacturers' Institute
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-ERF-20180178-CCI1-EN
ECO EPD Ref. No.	ECO-00000848
Issue date	05/03/2019
Valid to	04/03/2024

**Polyvinyl chloride floor coverings with foam layer
according to EN 651**

ERFMI

**European Resilient Flooring Manufacturers'
Institute**

www.ibu-epd.com / <https://epd-online.com>



General Information

ERFMI- European Resilient Flooring Manufacturers' Institute

Programme holder

IBU - Institut Bauen und Umwelt e.V.
Panoramastr. 1
10178 Berlin
Germany

Declaration number

EPD-ERF-20180178-CCI1-EN

This declaration is based on the product category rules:

Floor coverings, 02/2018
(PCR checked and approved by the SVR)

Issue date

05/03/2019

Valid to

04/03/2024



Prof. Dr.-Ing. Horst J. Bossenmayer
(President of Institut Bauen und Umwelt e.V.)



Dr. Alexander Röder
(Head of Board IBU)

Polyvinyl chloride floor coverings with foam layer according to EN 651

Owner of the declaration

ERFMI vzw, European Resilient Flooring Manufacturers' Institute
24, Rue Montoyer
B-1000 Brussels

Declared product / declared unit

1m² Polyvinyl chloride floor coverings with foam layer

Scope:

In this EPD polyvinyl chloride floor coverings with foam layer are declared. The application of this EPD is restricted to polyvinyl chloride floor coverings with foam layer produced by the members of the European Resilient Flooring Manufacturers' Institute (ERFMI). Data are based upon production during 2017 in Europe. Data have been provided by 7 companies of ERFMI which represent 100% of ERFMI members.

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.

Verification

The standard /EN 15804/ serves as the core PCR

Independent verification of the declaration and data according to /ISO 14025:2010/

☐ internally ☒ externally



Prof. Dr. Birgit Grahl
(Independent verifier appointed by SVR)

Product

Product description / Product definition

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

Polyvinyl chloride floor coverings with foam layer are based on polyvinyl chloride with a polyvinyl chloride foam layer.

For the placing on the market of the product on the EU/EFTA (with exception of Switzerland) Regulation (EU) No. 305/2011 (CPR) applies. The product needs a Declaration of Performance taking into consideration /EN 14041: 2004/AC 2006 Resilient, textile and laminate floor coverings. Essential characteristics/and the CE-marking. For the application and use the respective national provisions apply.

Application

According to /EN ISO 10874/ (EN685) the area of application for resilient floor coverings is indicated by use classes. The declared product group covers the use classes 23, 34, 42.

Technical Data

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

Constructional data

Name	Value	Unit
Product thickness	2.3	mm
Surface weight	2.7	kg/m ²
Product Form	sheet	-

The data set out in the Declaration of Performance apply.

Base materials / Ancillary materials

The product group has the following composition:

- Additives 2%
- Filler 25%
- Plasticizer 23%
- Pigments <1%
- Polymers (PVC) 42%
- Auxiliaries 2%
- Lacquer <1%
- Flooring Recyclate (PVC) 4%

Reference service life

The service lifetime of a floor covering for a certain application on a floor is too widespread to give one

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

ERFMI provides an online tool for the calculation of a specific service life on the ERFMI home page (www.erfmi.com) for the end-user.

LCA: Calculation rules

Declared Unit

1m² of floor covering.

Declared unit

Name	Value	Unit
Declared unit	1	m ²
Declared unit	2.7	kg/m ²
Conversion factor to 1 kg	0.3704	-

The declaration refers to an average product from 11 production sites of ERFMI members. The data have been weighted according to the annual square meters produced by each site. The life cycle impact assessment is conducted based on the vertical average.

System boundary

Type of EPD: cradle to grave

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

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

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

Module B2 is including provision of cleaning agent, energy and water consumption for the cleaning of the floor covering incl. waste water treatment. The LCA

results in this EPD are declared for a one-year usage.

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

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

End of life scenarios are declared for:

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

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

Module D is declared for each scenario separately.

Comparability

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

As background database /GaBi ts/ is used.

LCA: Scenarios and additional technical information

The following technical information is a basis for the declared modules

Transport to the construction site (A4)

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

Installation in the building (A5)

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

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

Maintenance (B2)

Name	Value	Unit
Water consumption	0.003	m ³
Auxiliary	0.04	kg
Electricity consumption	0.55	kWh
Maintenance cycle (vacuuming cleaning & wet cleaning)	156	number/a

End of Life (C1-C4)

Name	Value	Unit
Energy recovery [100%, Scenario 1]	2.7	kg
Landfilling [100%, Scenario 2]	2.7	kg
Recycling [100%, Scenario 3]	2.7	kg

Reuse, recovery and/or recycling potentials (D), relevant scenario information

For module D the potential benefits given in module A5 and C3 are declared. For waste incineration combustion in a WIP ($R1 > 0.6$) with energy recuperation is considered.

LCA: Results

The results for module B2 refer to a period of one year. For the calculation of the impact of B2 for a certain service life the values for B2 have to be multiplied by the estimated service life in years.

ERFMI provides an online tool for this calculation on the ERFMI home page (www.erfmi.com) for the end-user.

Scenario 1 applies to 100% incineration.

Scenario 2 applies to 100% landfilling.

Scenario 3 applies to 100% recycling.

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

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

RESULTS OF THE LCA - ENVIRONMENTAL IMPACT: 1 m² polyvinyl chloride floor coverings with foam layer (2.7 kg/m²)

Parameter	Unit	A1-A3	A4	A5	B2	C1	C2	C3/1	C4/2	D/1	D/2	D/3
GWP	[kg CO ₂ -Eq.]	6.28	0.25	0.97	0.28	0.01	0.02	4.13	0.19	-1.15	-0.08	-0.08
ODP	[kg CFC11-Eq.]	5.39E-10	6.92E-15	3.54E-11	1.03E-12	5.53E-14	6.77E-16	1.65E-12	5.08E-14	-2.15E-12	-1.53E-13	-1.53E-13
AP	[kg SO ₂ -Eq.]	9.64E-3	5.53E-4	1.44E-3	7.28E-4	3.53E-5	5.41E-5	3.50E-3	5.14E-4	-1.75E-3	-1.24E-4	-1.24E-4
EP	[kg (PO ₄) ³ -Eq.]	1.75E-3	1.40E-4	2.65E-4	9.38E-5	3.31E-6	1.37E-5	1.76E-4	5.25E-4	-1.96E-4	-1.37E-5	-1.37E-5
POCP	[kg ethene-Eq.]	8.38E-3	-1.81E-4	6.14E-4	5.93E-5	2.21E-6	-1.77E-5	8.93E-5	5.62E-5	-1.45E-4	-1.01E-5	-1.01E-5
ADPE	[kg Sb-Eq.]	2.47E-5	2.08E-8	1.77E-6	1.64E-7	6.61E-9	2.03E-9	1.17E-6	4.12E-8	-2.87E-7	-2.03E-8	-2.03E-8
ADPF	[MJ]	141.92	3.45	18.70	3.36	0.13	0.34	4.98	2.73	-16.38	-1.13	-1.13
Caption	GWP = Global warming potential; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential of land and water; EP = Eutrophication potential; POCP = Formation potential of tropospheric ozone photochemical oxidants; ADPE = Abiotic depletion potential for non-fossil resources; ADPF = Abiotic depletion potential for fossil resources											

RESULTS OF THE LCA - RESOURCE USE: 1 m² polyvinyl chloride floor coverings with foam layer (2.7 kg/m²)

Parameter	Unit	A1-A3	A4	A5	B2	C1	C2	C3/1	C4/2	D/1	D/2	D/3
PERE	[MJ]	13.53	0.19	4.24	1.59	0.09	0.02	2.32	0.21	-3.33	-0.24	-0.24
PERM	[MJ]	1.40	0.00	-0.81	0.00	0.00	0.00	-1.40	0.00	0.00	0.00	0.00
PERT	[MJ]	14.93	0.19	3.43	1.59	0.09	0.02	0.92	0.21	-3.33	-0.24	-0.24
PENRE	[MJ]	109.37	3.46	19.89	5.13	0.23	0.34	49.94	2.83	-20.06	-1.39	-1.39
PENRM	[MJ]	44.40	0.00	-0.15	0.00	0.00	0.00	-44.40	0.00	0.00	0.00	0.00
PENRT	[MJ]	153.77	3.46	19.74	5.13	0.23	0.34	5.54	2.83	-20.06	-1.39	-1.39
SM	[kg]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.70
RSF	[MJ]	IND	IND	IND	IND	IND	IND	IND	IND	IND	IND	IND
NRSF	[MJ]	IND	IND	IND	IND	IND	IND	IND	IND	IND	IND	IND
FW	[m ³]	3.30E-2	3.52E-4	4.44E-3	2.47E-3	1.16E-4	3.44E-5	1.15E-2	-7.28E-6	-4.54E-3	-3.23E-4	-3.23E-4
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water											

RESULTS OF THE LCA – OUTPUT FLOWS AND WASTE CATEGORIES: 1 m² polyvinyl chloride floor coverings with foam layer (2.7 kg/m²)

Parameter	Unit	A1-A3	A4	A5	B2	C1	C2	C3/1	C4/2	D/1	D/2	D/3
HWD	[kg]	3.33E-6	2.00E-7	2.52E-7	2.43E-9	1.07E-10	1.96E-8	3.65E-8	1.21E-8	-7.99E-9	-5.57E-10	-5.57E-10
NHWD	[kg]	3.19E-1	2.90E-4	1.48E-1	8.38E-3	1.60E-4	2.83E-5	2.04E+0	2.67E+0	-7.79E-3	-5.49E-4	-5.49E-4
RWD	[kg]	4.68E-3	4.74E-6	4.13E-4	7.02E-4	3.77E-5	4.63E-7	2.22E-4	4.02E-5	-1.46E-3	-1.04E-4	-1.04E-4
CRU	[kg]	IND	IND	IND	IND	IND	IND	IND	IND	IND	IND	IND
MFR	[kg]	IND	IND	IND	IND	IND	IND	IND	IND	IND	IND	2.70
MER	[kg]	IND	IND	IND	IND	IND	IND	IND	IND	2.70	IND	IND
EEE	[MJ]	IND	IND	0.24	IND	IND	IND	4.08	IND	IND	IND	IND
EET	[MJ]	IND	IND	0.59	IND	IND	IND	9.88	IND	IND	IND	IND
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EEE = Exported thermal energy											

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