Environmental Product Declaration

IN ACCORDANCE WITH ISO 14025 AND ISO 21930:2017

Program Operator: Smart EPD®
www.smartepd.com

SmartEPD-2025-001-0485-01

Stonkote CE4

Date of Issue	Expiration date	Last updated
May 16, 2025	**May 16, 2030**	**May 15, 2025**

STONHARD

Refer to the EPD Library at www.smartepd.com for the latest EPD listing information

General Information

Stonhard

1000 E. Park Ave., Maple Shade, NJ 08052

stonhard.com

Product Name:	Stonkote CE4
Functional Unit:	1 m2 of covered and protected flooring surface for a period of 60 years
Declaration Number:	SmartEPD-2025-001-0485-01
Date of Issue:	May 16, 2025
Expiration:	May 16, 2030
Last updated:	May 15, 2025
EPD Scope:	Cradle to grave A1 - A3, A4, A5, B1 - B7, C1 - C4, D
Market(s) of Applicability:	North America

General Organization Information

Stonhard is the unprecedented leader in manufacturing and installing high performance floors. Our seamless, long lasting, easy to clean systems are engineered for both industrial and commercial markets. We also bring the same performance to our wall and lining systems. Joining form and function, our floors are the dependable go-to choice for tough manufacturing environments, while still honoring innovative design for commercial environments. Epoxy, urethane and fast-track methyl methacrylate resin-based systems deliver a broad range of options for every market and application.

Stonhard manufactures and installs products throughout the world with headquarters in Maple Shade, New Jersey. Stonhard is an ISO-9001 registered company.

Further information can be found at: https://www.stonhard.com/about-us/who-we-are/

Limitations, Liability, and Ownership

Environmental declarations from different programs (ISO 14025) may not be comparable. Comparison of the environmental performance of products using EPD information shall be based on the product's use and impacts at the building level, and therefore EPDs may not be used for comparability purposes when not considering the whole building life cycle. EPD comparability is only possible when all stages of a life cycle have been considered. However, variations and deviations are possible. Example of variations: Different LCA software and background LCI datasets may lead to differences results for upstream or downstream of the life cycle stages declared.

The EPD owner has sole ownership, liability, and responsibility for the EPD.

Reference Standards

Standard(s):	ISO 14025 and ISO 21930:2017
PCR:	NSF PCR for Resinous Floor Coatings v.1e Date of issue: December 17, 2018 Valid until: December 17, 2024

PCR review panel: Contact Smart EPD for more information.

General Program Instructions: Smart EPD General Program Instructions v.1.0, November 2022

Verification Information

LCA Author/Creator: Juan David Villegas | juan@parqhq.com

EPD Program Operator: Smart EPD | info@smartepd.com | www.smartepd.com
585 Grove St., Ste. 145 PMB 966, Herndon, VA 20170, USA

Verification:

Independent critical review of the LCA and data, according to ISO 14044 and ISO 14071: External
Rifat Karim | Independent Consultant | rifat.chimique@gmail.com

Independent external verification of EPD, according to ISO 14025 and reference PCR(s): External
Rifat Karim | Independent Consultant | rifat.chimique@gmail.com

Product Information

Functional Unit: 1 m2 of covered and protected flooring surface for a period of 60 years

Mass: 0.4033 kg

Reference Service Life: 60 Years

Product Specificity:

- ✗ Product Average
- ✓ Product Specific

Product Description

Stonkote CE4 is a two-component, high solids, clear epoxy sealer. It is formulated to increase abrasion and chemical resistance while improving cleanability. Stonkote CE4 is easily applied and hardens to an attractive gloss finish.

Further information can be found at: https://www.stonhard.com/products/complementary/floor-coatings/

Product Specifications

Product Classification Codes: EC3 - Finishes -> Flooring -> OtherFlooring

Material Composition

Material/Component Category	Origin	% Mass
Amine		29 - 44
Resin		50 - 75

Packaging Material	Origin	kg Mass
Aluminium foil		0.01
Supersack		None

Hazardous Materials
Benzyl alcohol (100-51-6)
cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, reaction products with bisphenol a diglycidyl ether homopolymer (68609-08-5)
3-Aminomethyl-3,5,5-trimethylcyclohexylamine (2855-13-2)
Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700) (25068-38-6)
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609-97-2)
Epoxy resin based on bisphenol F (9003-36-5)
Solvent naphtha (petroleum), light arom. (64742-95-6)

EPD Data Specificity

Primary Data Year: June 1st 2023 to May 31st 2024

Manufacturing Specificity:

- ✗ Industry Average
- ✗ Manufacturer Average
- ✗ Facility Specific

Averaging:

Averaging was not conducted for this EPD

System Boundary

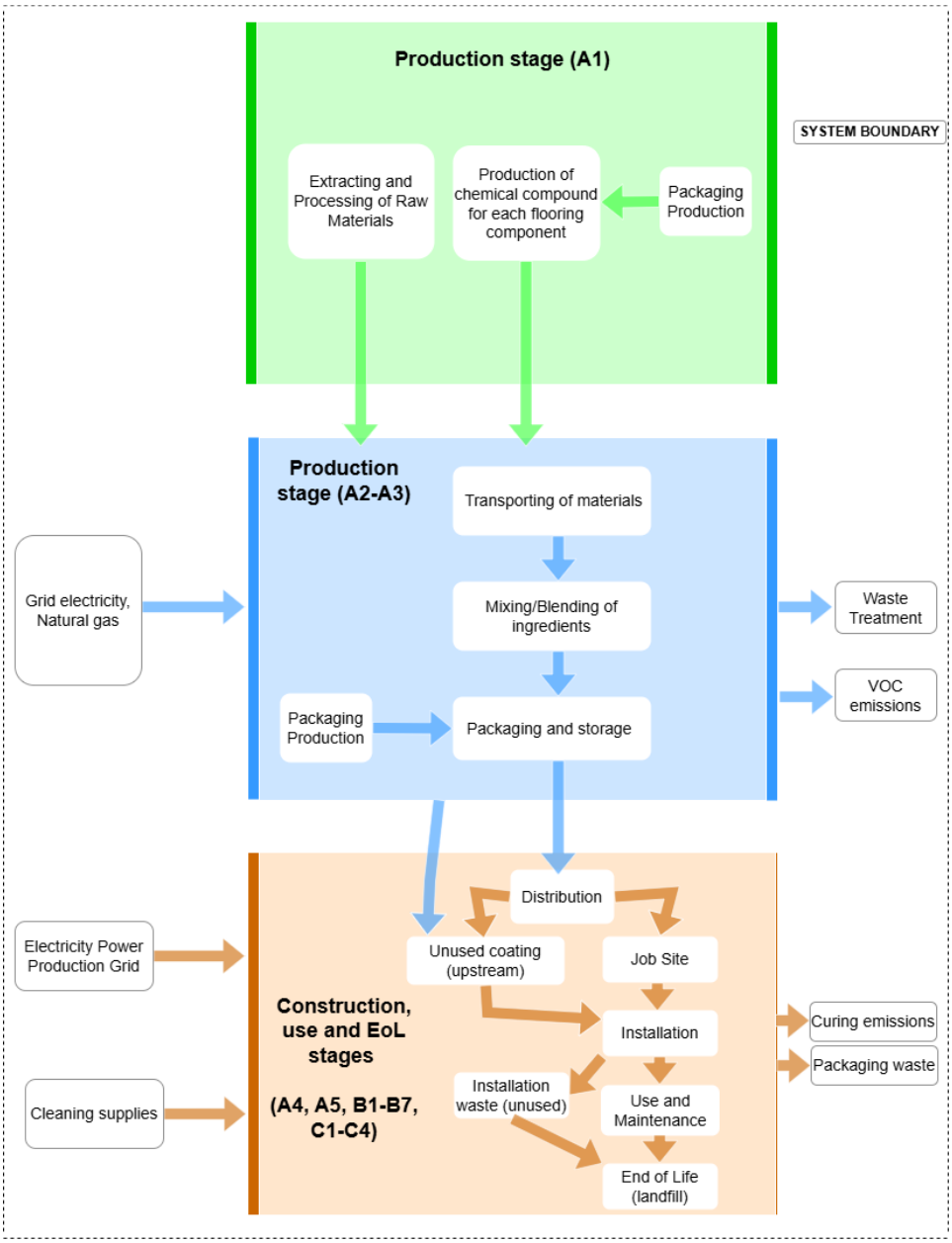
Production	A1	Raw material supply	✓
	A2	Transport	✓
	A3	Manufacturing	✓
Construction	A4	Transport to site	✓
	A5	Assembly / Install	✓
Use	B1	Use	✓
	B2	Maintenance	✓
	B3	Repair	✓
	B4	Replacement	✓
	B5	Refurbishment	✓
	B6	Operational Energy Use	✓
	B7	Operational Water Use	✓
End of Life	C1	Deconstruction	✓
	C2	Transport	✓
	C3	Waste Processing	✓
	C4	Disposal	✓
Benefits & Loads Beyond System Boundary	D	Recycling, Reuse Recovery Potential	✓

Plants

Stonhard Maple Shade
Maple Shade, NJ, USA

Stonhard Fort Wayne
Fort Wayne, IN, USA

Product Flow Diagram



Software and Database

LCA Software:	SimaPro v. 9.5
LCI Foreground Database(s):	Ecoinvent v. 3.9.1

LCI Background Database(s): Ecoinvent v. 3.9.1

Data Quality

The quality of inventory data is evaluated based on several criteria, including precision, completeness, consistency, and representativeness.

Precision and completeness:

- Precision: The inventory data used in this study were either directly measured, calculated, or estimated based on primary data sources, ensuring high precision. Background data from ecoinvent v3 database also has documented precision to the extent available.
- Completeness: The product system's mass balance and inventory completeness were thoroughly checked. Some exclusions were made in line with the PCR requirements, such as personnel impacts, R&D activities, business travel, secondary packaging, point of sale infrastructure, and the coating applicator. However, no data was intentionally omitted.

Consistency and reproducibility:

- Consistency: Primary data were collected with a similar level of detail, while background data primarily came from the ecoinvent database, with other databases used only if necessary or more representative. The modeling approach and other methodological choices were applied consistently throughout the model.
- Reproducibility: This study ensures reproducibility by providing comprehensive disclosure of input-output data, dataset choices, and modeling approaches. A knowledgeable third party should be able to approximate the results using the same data and modeling methods.

Representativeness:

- Temporal: Primary data were collected for a 12 month period starting on June 2023 and ending on May 2024 to ensure the representativeness of post-consumer content. Secondary data from the ecoinvent v3 database is typically representative of recent years.
- Geographical: Primary data represent Stonhard's production facilities in Mapple Shade, NJ, US. Where applicable, differences in electric grid mix were considered using appropriate secondary data. The use of country-specific data ensures high geographical representativeness, and proxy data were only used when country-specific data were unavailable..
- Technological: Both primary and secondary data were tailored to the specific technologies studied, ensuring high technological representativeness.

Life Cycle Module Descriptions

Primary data were collected for a 12-month period from June 2023 and ending on May 2024 to ensure technical, geographical, and temporal representativeness. The manufacturing process starts with the reception of raw materials, typically in the form of chemical packages (cans, supersacks, bags, pails, among others). Next, the raw materials are mixed to forms resins and additives. After this step, the products are packaged and distributed to various distribution centers. Non-hazardous waste, consisting mainly of packaging waste materialas, is sent for disposal, incineration, and/or recycling. Hazardous waste consist on manufacturing, product losses and its disposal is model according to PCR descriptions (solvent-based coatings are incinerated for energy recovery and water-based coatings are sent to landfill)

LCA Discussion

Allocation Procedure

Allocation of co-products was avoided, to the extent it was possible, based on the guidance given in ISO 14044:2006, 4.3., in ISO 21930:2017. Energy use and VOC emissions at the Maple Shade, NJ factory were allocated by mass. Overhead burdens (building heating and corporate use consumption) were excluded using a square footage factor, that benchmarked and validated with process engineering models of resinous floor coatings production. The process do not consume process water or generate wastewater . Solid waste was estimated using packaging masses and material losses and allocated following the polluter pays principle.

Cut-off Procedure

The system boundary was defined based on relevance to the goal of the study. For the raw material (A1) and process related inputs (A3), all available energy and material flow data have been included in the model. Exclusions allowed by the PCR such as secondary and tertiary packaging, were implemented, as well as overhead burdens such as building heating and corporate office consumption.

Renewable Electricity

Energy Attribute Certificates (EACs) such as Renewable Energy Certificates (RECs) or Power Purchase Agreements (PPAs) are included in the baseline reported results:	✕ No

Results

Environmental Impact Assessment Results

IPCC AR5 GWP 100, TRACI 2.1

per 1 m2 of covered and protected flooring surface for a period of 60 years of product .

LCIA results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins or risks.

Tech

Impact Category	Method	Unit	A1A2A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-total	IPCC AR5 GWP 100	kg CO2-eq	2.18e+0	1.94e-1	4.91e-2	ND	1.23e+1	ND	2.67e+1	ND	ND	ND	0	1.67e-2	3.51e-1	9.83e-1	-6.69e-1
ODP	TRACI 2.1	kg CFC-11 eq	1.07e-7	3.33e-9	2.20e-9	ND	3.69e-7	ND	1.23e-6	ND	ND	ND	0	2.87e-10	2.40e-9	2.69e-8	-2.03e-8
AP	TRACI 2.1	kg SO2 eq	8.77e-3	6.20e-4	1.88e-4	ND	4.68e-2	ND	1.05e-1	ND	ND	ND	0	5.33e-5	2.30e-4	3.40e-3	-3.69e-3
EP	TRACI 2.1	kg N eq	1.02e-2	1.71e-4	2.07e-4	ND	5.75e-2	ND	1.16e-1	ND	ND	ND	0	1.47e-5	1.49e-4	3.39e-3	-1.77e-3
POCP	TRACI 2.1	kg O3 eq	1.13e-1	1.42e-2	2.57e-3	ND	6.48e-1	ND	1.43e+0	ND	ND	ND	0	1.22e-3	3.02e-3	5.52e-2	-4.17e-2

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

GWP = Global Warming Potential, 100 years (may also be denoted as GWP-total, GWP-fossil (fossil fuels), GWP-biogenic (biogenic sources), GWP-luluc (land use and land use change)), ODP = Ozone Depletion Potential, AP = Acidification Potential, EP = Eutrophication Potential, SFP = Smog Formation Potential, POCP = Photochemical oxidant creation potential, ADP-Fossil = Abiotic depletion potential for fossil resources, ADP-Minerals&Metals = Abiotic depletion potential for non-fossil resources, WDP = Water deprivation potential, PM = Particular Matter Emissions, IRP = Ionizing radiation, human health, ETP-fw = Eco-toxicity (freshwater), HTP-c = Human toxicity (cancer), HTP-nc = Human toxicity (non-cancer), SQP = Soil quality index.

The estimated service life under this scenario is 5.0 years.

per 1 m2 of covered and protected flooring surface for a period of 60 years of product .

Market

Impact Category	Method	Unit	A1A2A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-total	TRACI 2.1	kg CO2-eq	2.18e+0	1.94e-1	4.91e-2	ND	1.23e+1	ND	2.67e+1	ND	ND	ND	0	1.67e-2	3.51e-1	9.83e-1	-6.69e-1
ODP	TRACI 2.1	kg CFC-11 eq	1.07e-7	3.33e-9	2.20e-9	ND	3.69e-7	ND	1.23e-6	ND	ND	ND	0	2.87e-10	2.40e-9	2.69e-8	-2.03e-8
AP	TRACI 2.1	kg SO2 eq	8.77e-3	6.20e-4	1.88e-4	ND	4.68e-2	ND	1.05e-1	ND	ND	ND	0	5.33e-5	2.30e-4	3.40e-3	-3.69e-3
EP	TRACI 2.1	kg N eq	1.02e-2	1.71e-4	2.07e-4	ND	5.75e-2	ND	1.16e-1	ND	ND	ND	0	1.47e-5	1.49e-4	3.39e-3	-1.77e-3
POCP	TRACI 2.1	kg O3 eq	1.13e-1	1.42e-2	2.57e-3	ND	6.48e-1	ND	1.43e+0	ND	ND	ND	0	1.22e-3	3.02e-3	5.52e-2	-4.17e-2

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

GWP = Global Warming Potential, 100 years (may also be denoted as GWP-total, GWP-fossil (fossil fuels), GWP-biogenic (biogenic sources), GWP-luluc (land use and land use change)), ODP = Ozone Depletion Potential, AP = Acidification Potential, EP = Eutrophication Potential, SFP = Smog Formation Potential, POCP = Photochemical oxidant creation potential, ADP-Fossil = Abiotic depletion potential for fossil resources, ADP-Minerals&Metals = Abiotic depletion potential for non-fossil resources, WDP = Water deprivation potential, PM = Particular Matter Emissions, IRP = Ionizing radiation, human health, ETP-fw = Eco-toxicity (freshwater), HTP-c = Human toxicity (cancer), HTP-nc = Human toxicity (non-cancer), SQP = Soil quality index.

The estimated service life under this scenario is 5.0 years.

Comparisons cannot be made between product-specific or industry average EPDs at the design stage of a project, before a building has been specified. Comparisons may be made between product-specific or industry average EPDs at the time of product purchase when product performance and specifications have been established and serve as a functional unit for comparison. Environmental impact results shall be converted to a functional unit basis before any comparison is attempted. Any comparison of EPDs shall be subject to the requirements of ISO 21930 or EN 15804. EPDs are not comparative assertions and are either not comparable or have limited comparability when they have different system boundaries. EPDs are not comparative assertions and are either not comparable or have limited comparability when they have different system boundaries, are based on different product category rules or are missing relevant environmental impacts. Such comparison can be inaccurate, and could lead to erroneous selection of materials or products which are higher-impact, at least in some impact categories.

Resource Use Indicators

per 1 m2 of covered and protected flooring surface for a period of 60 years of product .

Tech

Indicator	Unit	A1A2A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
RPRE	MJ	9.02e-1	2.69e-2	1.86e-2	ND	6.11e+0	ND	1.04e+1	ND	ND	ND	0	2.31e-3	7.36e-3	2.50e-1	-5.89e-1
RPRM	MJ	4.60e-1	8.89e-3	9.39e-3	ND	1.01e+2	ND	5.26e+0	ND	ND	ND	0	7.64e-4	1.87e-3	3.58e+0	-7.18e-2
RPRT	MJ	1.36e+0	3.58e-2	2.80e-2	ND	1.07e+2	ND	1.57e+1	ND	ND	ND	0	3.07e-3	9.23e-3	3.83e+0	-6.60e-1
NRPRE	MJ	4.36e+1	2.82e+0	9.28e-1	ND	1.76e+2	ND	5.20e+2	ND	ND	ND	0	2.43e-1	1.57e+0	1.10e+1	-6.62e+0
NRPRM	MJ	2.44e-3	4.86e-5	4.98e-5	ND	2.26e-2	ND	2.79e-2	ND	ND	ND	0	4.18e-6	6.11e-6	5.19e-4	-2.00e-4
NRPRT	MJ	4.36e+1	2.82e+0	9.28e-1	ND	1.76e+2	ND	5.20e+2	ND	ND	ND	0	2.43e-1	1.57e+0	1.10e+1	-6.62e+0
ADPF	MJ	5.36e+0	3.96e-1	1.15e-1	ND	2.07e+1	ND	6.46e+1	ND	ND	ND	0	3.41e-2	2.34e-1	6.76e-1	-4.09e-1
FW	m3	2.62e-2	3.69e-4	5.33e-4	ND	2.14e+0	ND	2.98e-1	ND	ND	ND	0	3.17e-5	1.55e-4	4.72e-3	-4.18e-3
RE	MJ	0	0	0	ND	0	ND	0	ND	ND	ND	0	0	0	0	0
RSF	MJ	0	0	0	ND	0	ND	0	ND	ND	ND	0	0	0	0	0
NRSF	MJ	0	0	0	ND	0	ND	0	ND	ND	ND	0	0	0	0	0
SM	kg	0	0	0	ND	0	ND	0	ND	ND	ND	0	0	0	0	0

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

RPRE or PERE = Renewable primary resources used as energy carrier (fuel), RPRM or PERM = Renewable primary resources with energy content used as material, RPRT or PERT = Total use of renewable primary resources with energy content, NRPRE or PENRE = Non-renewable primary resources used as an energy carrier (fuel), NRPRM or PENRM = Non-renewable primary resources with energy content used as material, NRPRT or PENRT = Total non-renewable primary resources with energy content, SM = Secondary materials, RSF = Renewable secondary fuels, NRSF = Non-renewable secondary fuels, RE = Recovered energy, ADPF = Abiotic depletion potential, FW = Use of net freshwater resources, VOCs = Volatile Organic Compounds.

The estimated service life under this scenario is 5.0 years.

per 1 m2 of covered and protected flooring surface for a period of 60 years of product .

Market

Indicator	Unit	A1A2A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
RPRE	MJ	9.02e-1	2.69e-2	1.86e-2	ND	6.11e+0	ND	1.04e+1	ND	ND	ND	0	2.31e-3	7.36e-3	2.50e-1	-5.89e-1
RPRM	MJ	4.60e-1	8.89e-3	9.39e-3	ND	1.01e+2	ND	5.26e+0	ND	ND	ND	0	7.64e-4	1.87e-3	3.58e+0	-7.18e-2
RPRT	MJ	1.36e+0	3.58e-2	2.80e-2	ND	1.07e+2	ND	1.57e+1	ND	ND	ND	0	3.07e-3	9.23e-3	3.83e+0	-6.60e-1
NRPRE	MJ	4.36e+1	2.82e+0	9.28e-1	ND	1.76e+2	ND	5.20e+2	ND	ND	ND	0	2.43e-1	1.57e+0	1.10e+1	-6.62e+0
NRPRM	MJ	2.44e-3	4.86e-5	4.98e-5	ND	2.26e-2	ND	2.79e-2	ND	ND	ND	0	4.18e-6	6.11e-6	5.19e-4	-2.00e-4
NRPRT	MJ	4.36e+1	2.82e+0	9.28e-1	ND	1.76e+2	ND	5.20e+2	ND	ND	ND	0	2.43e-1	1.57e+0	1.10e+1	-6.62e+0
ADPF	MJ	5.36e+0	3.96e-1	1.15e-1	ND	2.07e+1	ND	6.46e+1	ND	ND	ND	0	3.41e-2	2.34e-1	6.76e-1	-4.09e-1
FW	m3	2.62e-2	3.69e-4	5.33e-4	ND	2.14e+0	ND	2.98e-1	ND	ND	ND	0	3.17e-5	1.55e-4	4.72e-3	-4.18e-3
RE	MJ	0	0	0	ND	0	ND	0	ND	ND	ND	0	0	0	0	0
RSF	MJ	0	0	0	ND	0	ND	0	ND	ND	ND	0	0	0	0	0
NRSF	MJ	0	0	0	ND	0	ND	0	ND	ND	ND	0	0	0	0	0
SM	kg	0	0	0	ND	0	ND	0	ND	ND	ND	0	0	0	0	0

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

RPRE or PERE = Renewable primary resources used as energy carrier (fuel), RPRM or PERM = Renewable primary resources with energy content used as material, RPRT or PERT = Total use of renewable primary resources with energy content, NRPRE or PENRE = Non-renewable primary resources used as an energy carrier (fuel), NRPRM or PENRM = Non-renewable primary resources with energy content used as material, NRPRT or PENRT = Total non-renewable primary resources with energy content, SM = Secondary materials, RSF = Renewable secondary fuels, NRSF = Non-renewable secondary fuels, RE = Recovered energy, ADPF = Abiotic depletion potential, FW = Use of net freshwater resources, VOCs = Volatile Organic Compounds.

The estimated service life under this scenario is 5.0 years.

Waste and Output Flow Indicators

per 1 m2 of covered and protected flooring surface for a period of 60 years of product .

Tech

Indicator	Unit	A1A2A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
HWD	kg	8.07e-3	0	1.61e-4	ND	0	ND	9.05e-2	ND	ND	ND	0	0	9.68e-2	4.84e+0	0
NHWD	kg	1.71e-4	0	6.25e-3	ND	0	ND	7.06e-2	ND	ND	ND	0	0	0	0	0
MR	kg	2.27e-4	0	3.86e-3	ND	0	ND	4.49e-2	ND	ND	ND	0	0	0	0	-4.90e-2
MER	kg	0	0	0	ND	0	ND	0	ND	ND	ND	0	0	0	0	0
ILLRW	m3	0	0	0	ND	0	ND	0	ND	ND	ND	0	0	0	0	0
HLLRW	m3	0	0	0	ND	0	ND	0	ND	ND	ND	0	0	0	0	0

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

HWD = Hazardous waste disposed, NHWD = Non-hazardous waste disposed, RWD = Radioactive waste disposed, HLRW = High-level radioactive waste, ILLRW = Intermediate- and low-level radioactive waste, CRU = Components for re-use, MFR or MR = Materials for recycling, MER = Materials for energy recovery, MNER = Materials for incineration, no energy recovery, EE or EEE = Recovered energy exported from the product system, EET = Exported thermal energy.

The estimated service life under this scenario is 5.0 years. Significant data limitations currently exist within the LCI data used to generate waste metrics for Life Cycle Assessments and Environmental Product Declarations. The waste metrics were calculated in a way conformant with the requirements of ISO 21930:2017, but these values represent rough estimates and are for informational purposes only. As such, no decisions regarding actual cradle-grave waste performance between products should be derived from these reported values

per 1 m2 of covered and protected flooring surface for a period of 60 years of product .

Market

Indicator	Unit	A1A2A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
HWD	kg	8.07e-3	0	1.61e-4	ND	0	ND	9.05e-2	ND	ND	ND	0	0	9.68e-2	4.84e+0	0
NHWD	kg	1.71e-4	0	6.25e-3	ND	0	ND	7.06e-2	ND	ND	ND	0	0	0	0	0
MR	kg	2.27e-4	0	3.86e-3	ND	0	ND	4.49e-2	ND	ND	ND	0	0	0	0	-4.90e-2
MER	kg	0	0	0	ND	0	ND	0	ND	ND	ND	0	0	0	0	0
ILLRW	m3	0	0	0	ND	0	ND	0	ND	ND	ND	0	0	0	0	0
HLLRW	m3	0	0	0	ND	0	ND	0	ND	ND	ND	0	0	0	0	0

Note:

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Carbon Emissions and Removals

per 1 m2 of covered and protected flooring surface for a period of 60 years of product .

Tech

Indicator	Unit	A1A2A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Bio Carbon Removal from Product	kg C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio Carbon Emission from Product	kg C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio Carbon Removal from Packaging	kg C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio Carbon Emission from Packaging	kg C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio Carbon Emission from Waste during Manufacturing (renewable source)	kg C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calcination Carbon Removal	kg C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carbonation Carbon Emission	kg C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carbon Emission from Waste during Manufacturing (non-renewable source)	kg C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

BCRP = Biogenic Carbon Removal from Product, BCEP = Biogenic Carbon Emission from Product, BCRK = Biogenic Carbon Removal from Packaging, BCEK = Biogenic Carbon Emission from Packaging, BCEW = Biogenic Carbon Emission from Combustion of Waste from Renewable Sources Used in Production Processes, CCE = Calcination Carbon Emissions, CCR = Carbonation Carbon Removals, CWNR = Carbon Emissions from Combustion of Waste from Non-Renewable Sources used in Production Processes, GWP-luc = Carbon Emissions from Land-use Change.

The estimated service life under this scenario is 5.0 years.

per 1 m2 of covered and protected flooring surface for a period of 60 years of product .

Market

Indicator	Unit	A1A2A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Bio Carbon Removal from Product	kg C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio Carbon Emission from Product	kg C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio Carbon Removal from Packaging	kg C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio Carbon Emission from Packaging	kg C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio Carbon Emission from Waste during Manufacturing (renewable source)	kg C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calcination Carbon Removal	kg C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carbonation Carbon Emission	kg C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carbon Emission from Waste during Manufacturing (non-renewable source)	kg C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

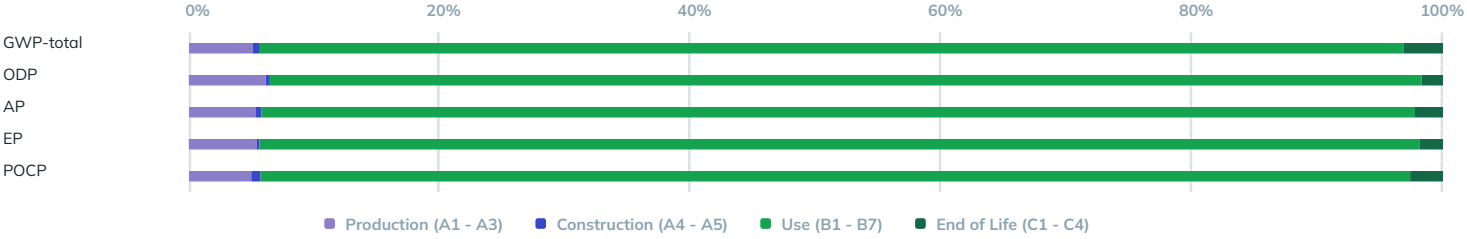
Abbreviations:

BCRP = Biogenic Carbon Removal from Product, BCEP = Biogenic Carbon Emission from Product, BCRK = Biogenic Carbon Removal from Packaging, BCEK = Biogenic Carbon Emission from Packaging, BCEW = Biogenic Carbon Emission from Combustion of Waste from Renewable Sources Used in Production Processes, CCE = Calcination Carbon Emissions, CCR = Carbonation Carbon Removals, CWNR = Carbon Emissions from Combustion of Waste from Non-Renewable Sources used in Production Processes, GWP-luc = Carbon Emissions from Land-use Change.

The estimated service life under this scenario is 5.0 years.

Interpretation

• Raw materials are sourced from suppliers, transported to manufacturing facilities, and mixed to produce products.The product stage (A1-A3) has the highest environmental impact, especially due to raw material production and energy use, impact amplified in the use phase (B4) from recoatings.The Market scenario shows higher use-phase impacts due to a shorter estimatedservice life (ESL).End-of-life impacts are relatively low, as products are assumed to be landfilled with building demolition waste.Switching to renewable energy is advised for products with high manufacturing energy demands.The manufacturer should explore lower-impact raw materials and work with suppliers using sustainable methods or renewable energy to enhance product sustainability.



Additional Environmental Information

None

References

• ISO 14025, Environmental labels and declarations -- Type III environmental declarations -- Principles and procedures, ISO14025:2006

• ISO 21930, Sustainability in buildings and civil engineering works Core rules for environmental product declarations of construction products and services. ISO21930:2017

• NSF International, Product Category Rules for Environmental Product Declarations for Resinous Floor Coatings, NSF International:2023.

• ISO 14044, Environmental management - Life cycle assessment - Requirements and guidelines, ISO14044:2006.

• Ecoinvent v3.9.1, December 2022. The ecoinvent database: Overview and methodology, Data quality guideline for the ecoinvent database version 3, www.ecoinvent.org

• Bare, J. C. TRACI 2.0 - The Tool for the Reduction and Assessment of Chemical and other environmental Impacts. CLEAN TECHNOLOGIES AND ENVIRONMENTAL POLICY. Springer-Verlag, New York, NY.