SENTINEL HOLDING
INSTITUT

SHI PRODUCT PASSPORT

Find products. Certify buildings.

SHI Product Passport No.:

15314-10-1000

SPC 0.55mm

Product group: Design floors - Floor coverings / Wall coverings - Interior construction

Green-Flor®

G.T.Floor B.V.
Rooijakkersstraat 32
5652BB Eindhoven

Product qualities:

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

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

Köttner

Helmut Köttner
Scientific Director
Freiburg, 02 February 2026

SENTINEL HOLDING
INSTITUT

Product:
SPC 0.55mm

SHI Product Passport no.:
15314-10-1000

Green-Flor®

Contents

The SHI Database is the first and only database for construction products whose comprehensive processes and data accuracy are regularly verified by the independent auditing company SGS-TÜV Saar

SGS TÜV SAAR

SENTINEL HOLDING
INSTITUT

Product:
SPC 0.55mm

SHI Product Passport no.:
15314-10-1000

Green-Flor®

SHI Product Assessment 2024

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

Criteria	Product category	Harmful substance limit	Assessment
SHI Product Assessment	Other floor coverings	TVOC ≤ 160 µg/m^3 Formaldehyd ≤ 10 µg/m^3	Indoor Air Quality Certified
Valid untill: 03 July 2027			

Product:
SPC 0.55mm

SHI Product Passport no.:
15314-10-1000

Green-Flor®

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 Eco Instituts vom 16.06.2025 (59924-A003-AgBB-L). Herstellererklärung vom 01.07.2025.			

Product:
SPC 0.55mm

SHI Product Passport no.:
15314-10-1000

Green-Flor®

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 Eco Instituts vom 16.06.2025 (59924-A003-AgBB-L). Herstellererklärung vom 01.07.2025.			

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 Eco Instituts vom 16.06.2025 (59924-A003-AgBB-L). Herstellererklärung vom 01.07.2025.			

Product:
SPC 0.55mm

SHI Product Passport no.:
15314-10-1000

Green-Flor®

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 Eco Instituts vom 16.06.2025 (59924-A003-AgBB-L). Herstellererklärung vom 01.07.2025.			

Product:
SPC 0.55mm

SHI Product Passport no.:
15314-10-1000

Green-Flor®

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 Eco Instituts vom 16.06.2025 (59924-A003-AgBB-L). Herstellererklärung vom 01.07.2025.			

Product:
SPC 0.55mm

SHI Product Passport no.:
15314-10-1000

Green-Flor®

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 Eco Instituts vom 16.06.2025 (59924-A003-AgBB-L). Herstellererklärung vom 01.07.2025.			

Product:
SPC 0.55mm

SHI Product Passport no.:
15314-10-1000

Green-Flor®

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 Eco Instituts vom 16.06.2025 (59924-A003-AgBB-L).			

Product:
SPC 0.55mm

SHI Product Passport no.:
15314-10-1000

Green-Flor®

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.

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.

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.

Global GreenTag International Pty Ltd is an Australian company that provides manufacturers with an easy way to create and publish verified Environmental Product Declarations (EPDs). This is based on comprehensive life cycle assessments (LCAs) carried out in accordance with international standards such as ISO 14025, EN 15804 and ISO 21930.

Product:
SPC 0.55mm

SHI Product Passport no.:
15314-10-1000

Green-Flor®

Legal notices

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

Find our criteria here: https://www.sentinel-holding.eu/de/Themenwelten/Pr%C3%BCfkriterien%20f%C3%BCr%20Produkte

The SHI Database is the first and only database for construction products whose comprehensive processes and data accuracy are regularly verified by the independent auditing company SGS-TÜV Saar

SGS TÜV SAAR

Publisher

Sentinel Holding Institut GmbH
Bötzinger Str. 38
79111 Freiburg im Breisgau
Germany
Tel.: +49 761 590 481-70
info@sentinel-holding.eu
www.sentinel-holding.eu

Green-Flor ® Nature Living - Datasheet				
		Standard requirement		**Test result**
Product specifications				
Total thickness	EN ISO 24346	2.0 mm	✓	-
Thickness of wear layer	EN ISO 24340	0.3 mm	✓	-
Weight	EN ISO 23997	3.6 kg/m2	✓	-
Side length, delivery form	EN ISO 24342	-	✓	Size 1219.2 x 228.6 mm (9 x 48 inch) Carton 12 Plank = 3.34 m2
Classification & Certification				
Type of flooring	EN ISO 10582	Heterogeneous, PVC	✓	-
Classification	EN ISO 10874	23 / 31	✓	-
Burning behaviour	EN 13501-1/ EN ISO 9239-1/ 11925-2 EN 14041: 2004/AC:2006	Bfl-s1	✓ ✓ ✓	Bfl-s1
Electrical behaviour	EN 1815	-	✓	≤ 1.2 KV (rubber), Antistatic
Slip resistance	DIN 51130/ EN 13893 EN 14041: 2004/AC:2006	R9, DS	✓	R9, DS
Declaration of Performance	-	-	-	n° GFL - NTL - DoP - 018
Technical performance				
Abrasion resistance	EN ISO 10582	-	✓	Class T
Dimension stability	EN ISO 23999	< 0.25%	✓	≤ 0.05 %
Straightness and squareness	EN ISO 24342	< 0.35 mm Abweichung	✓	0 mm
Curling after exposure to heat	EN ISO 23999	< 2 mm	✓	0 mm
Residual indentation	EN ISO 24343-1	< 0.1 mm	✓	0.05 mm
Castor wheel chair	ISO 4918	25.000 revolutions	✓	no damage. Wheel type W.
Flexibility	EN ISO 24344	20 mm no crack	✓	< 10 mm no crack
Surface treatment	-	-	-	Top Protection Plus, PUR
Color fastness	EN ISO 105-B02	≥ 6	✓	> 6
Staining and chemical resistance Caustic soda solution (25%), Citric acid (10%), Acetone, Coffee (120g/l)	EN ISO 26987	-	✓	Index 0, excellent
Thermal resistance	EN ISO 8302	-	✓	0.019 m2 K/W
Underfloor heating	-	-	✓	max. 28°C
Environment / Indoor air quality				
Formaldehyde emissions	EN 14041: 2004/AC:2006	-	✓	E1 HCHO
Pentachlorophenol content	EN 14041: 2004/AC:2006	-	✓	DL PCP
TVOC after 28 days	ISO 16000	-	✓	Certification A+ (Öti report no. 71995)
REACH	(EU) No 1907/2006	in conformity	✓	no SVHC (Centexbel no. 13.03928.01)

Material Safety Data Sheet

Created: 26-Aug-17
Revision: 1-Mar-23

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT NAME:PLASTICIZED POLYVINYL CHLORIDE FILM
THIS IS A MIXED SUBSTANCE.
CHEMICAL FAMILY:PVC RESIN, PLASTICIZER, STABILIZER, MODIDIFER, PIGMENT
CHEMICAL FORMULA:MIXED SUBSTANCE FOR FLOOR TOP LAYER AND MIDDLE & BACKING LAYER SHEETING.
MANUFACTURER:JIANGSU CHANG LONG PLASTICS CO., LTD
LOCATION:NO.168, BAI CHUAN Rd., HAIAN, JIANGSU China
EMERGENCY TELEPHONE NUMBER:0513-69817888
HMIS:

HEALTH:0
REACTIVITY:0
PERSONAL PROTECTION:0

2. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT	COMPOSITION/APPROX		ACGIH TLV		OSHA PEL	
	WT%	CAS REG NO.	TWA	STEL	TWA	STEL
PVC RESIN	25～35	9002-86-2	NE	NE	NE	NE
PLASTICIZER(DOTP)	1～2	6422-86-2	NE	NE	NE	NE
Calcium carbonate	60～70	471-34-1	NE	NE	NE	NE
STABILIZER(Ca/Zn)	1.5～3	1592-23-0 557-05-1	NE	NE	NE	NE
carbon black	0.1～1	1333-86-4	NE	NE	NE	NE
UV normasal	<0.1	1843-05-6	NE	NE	NE	NE
Methyl methacrylate	0.5～2	80-62-6				
Chlorinated Polyethylene	0.5～2	63231-66-3	NE	NE	NE	NE
polyethylene	0.5～2	9002-88-4	NE	NE	NE	NE
PUA C0ATING	0.1～0.4	1304834-33-4	NE	NE	NE	NE

3. HAZARDS IDENTIFICATION

HETHLTH HAZARDS:

HARMFUL:MAY CAUSE LUNG DENAGE IF SWALLOWED.

PHYSICAL AND CHEMICAL HAZARDS/FIRE AND EXPOSION HAZRDS:

4 FIRST AID MEASURE

INHALATION:

ADMINISTER ARTIFICIAL RESPIRATION IF BREATHING IS STOPPED. KEEP AT REST. CALL FOR PROMPT MEDICAL ATTENTION.

SKIN CONTACT:

FLUSH WITH LARGE AMOUNTS OF WATER; USE SOAP IF AVAILABLE.

EYE CONTACT:

FLUSH EYES WITH LARGE AMOUNTS OF WATER UNTIL IRRITATION SUBSIDES.

IF IRRITATION PRESSISTS, GET MEDICAL ATTENTION.

INGESTION:

IF SWALLOWED, DO NOT INDUCE VOMITING. KEEP AT REST, GET PROMPT MEDICAL ATTENTION.

5 FIRE FIGHTING MEASURES

SPECIAL FIRE FIGHTING PROCEDURES:

FIREFIGHTERS MUST BE EQUIPPED TO PREVENT BREATHING OF VAPORS PRODUCTS OF COMBUSTION. WEAR AN APPROVED SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING.

UNUSUAL FIRE AND EXPLOSION HARARDS:NONE

FLASHPOINT:(METHOD USED)CLEVELAND OPEN CUP>320℃

FLAMMABLE LIMITS%: NO DATA AVAILABLE

EXTINGUISHING AGENTS:

DRYCHEMICAL OR CO2 OR FOAM

CLOSED CONTAINER EXPOSED TO FIRE MAY BE COOLED WITH WATER

6 ACCIDENTAL RELEASE MEASURE

ELIMINATION SOURCES OF IGNITION. WARN OCCUPANTS OF DOWNWIND AREAS OF FIRE AND EXPLOSION HAZARD. PREVENT LIQUID FROM ENTERING SEWERS, WATERCOUSES, OR LOW AREAS.

PROCEDURES FOR CLEAN-UP:

WASTE DISPOSAL.

7 HANDING AND STORAGE

DO NOT STORE NEAR STRONG OXIDIZING AGENTS.

COMBUSTIBLE. KEEP AWAY FROM HEAT, FLAMES AND ALL SOURCES OF IGNITION.

KEEP CONTAINER CLOSED UNTIL READY FOR USE.

8 EXPOSURE CONTROL/PERSONAL PROTECTION

VENTLATION TYPE REQUIRED(LOCAL, MECHANICAL, SPECIAL):

USE ADEQUATE LOCAL EXHAUST TO MAINTAIN SOLVENTS BELOW EXPOSURE LIMITS IN SECTION IV, RESPIRATORY PROTECTION REQUIRED WHEN LEVELS EXCEED LIMITS.

PROTECTIVE GLOVES: NEOPRENE TYPE

EYE PROTECTION: CHEMICAL SAFETY GOGGLE

OTHER PROTECTIVE EQUIPMENT:NEOPRENE PROTECTIVE TYPE APRON

9 CHEMICAL AND PHYSICAL PROPERTIES

INCOMPATIBILITY(KEEP AWAY FROM):

STRONG OXIDIZERS SUCH AS HYDROGEN PEROXIDE

TOXIC AND HAZARDOUS INGREDIENTS:NO

FORM:SOLID

APPEARANCE:FILM

ODOR:NONE

COLOR:CLEAR

SPECIFIC GRAVITY(WATER=1):1.2~2.0
BOILING POINT:NOT APPLICABLE
MELTING POINT:130~200℃
SOLUBILITY IN WATER(BY WEIGHT%):NEGLIGIBLE
EVAPORATION RATE:(BUTYL ACETATE=1) NEGLIGIBLE
VAPOR PRESSURE(mmHG at 20℃):NEGLIGIBLE
VAPOR DENSITY(AIR=1):NEGLIGIBLE
PH(as is):NOT APPLICABLE
VISCOSITY SUS AT 30℃:NEGLIGIBLE

10 STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION?	NO
CONDITIONS TO AVOID POLYMERIZATION:	NOT APPLICABLE
STABILITY:	IS STABLE UNDER NORMAL CONDITIONS
CONDITIONS TO AVOID INSTABILITY:	NOT APPLICABLE
MATERIALS AND CONDITIONS TO AVOID(INCOMPATIBILITY):	STRONG OXIDIZING AGENTS
HAZARDS DECOMPOSITION PRODUCT:	CARBON MONOOXIDE AND CARBON DIOXIDE FROM BURNING

11 TOXICOLOGICAL INFORMATION

PERMISSIBLE CONCENTRATIONS(AIR):NOT APPLICABLE
CHRONIC EFFECTS OF OVEREXPOSURE:NO DATA AVAILABLE
ACUTE TOXICOLOGICAL PROPERTIES:
SOME PEOPLE MAY HAVE AN ALLERGIC RESPONE
EMERGENCY FIRST AID PROCEDURES:
SKIN CONTACT:WASH WITH SOAP AND WATER
INHALATION:
IF SWALLOWED:
CALL A PHYSICIAN IMMEDIATELY. INDUCE VOMITING IF VICTIM IS CONSCIOUS.
NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

12 ECOLOGICAL INFORMATION

ENVIRONMENTAL INFORMATION:NO DATA AT THIS TIME
ENVIRONMENTAL DEGRADABILITY:NO DATA AT THIS TIME
ECOTOXICITY AND BIOACCUMULATION:NO DATA AT THIS TIME

13 DISPOSAL CONSIDERATIONS

DISPOSAL OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.

14 TRANSPORTATION INFORMATION

D.O.T:NOT REGULATED
REPORTABLE QUANTITY:NOT APPLICABLE
FREIGHT CLASSIFICATION:
SPECIAL TRANSPORTATION NOTES:
UN NO:NOT APPLICABLE

15 REGULATIONS INFORMATION

CLASSIFICATION ACCORDING TO EEC DIRECTIVES:

CLASSIFICATION/SYMBOL:HARMFUL/Xn

NATURE OF SPECIAL RISK:

R65 HARMFUL:MAY CAUSE LUNG DAMAGE IF SWALLOWED

SAFETY ADVICE:

S23 DO NOT BREATHE GAS/FUMES/VAPOUR/SPRAY

S24 AVOID CONTACT WITH SKIN

S43A IN CASE OF FIRE USE SAND, EARTH, CHEMICAL POWDER, OR FOAM

16 OTHER INFORMATION

THIS INFORMATION RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PROCESS. SUCH INFORMATION IS TO THE BEST OF SHANGHAI CHANG LONG PLASTICS CO., LTD'S KNOWLEDGE AND BELIEVED ACCURATE AND REIABLE AS OF THE DATE INDICATED.

HOWEVER, NO REPRESENTATION, WARRANTY OR GUARANTEE IS MADE AS TO ITS ACCURACY, RELIABILITY OR COMPLETENESS. IT IS THE USER'S RESPONSIBILITY TO SAFETY HIMSELF AS TO THE SUITABILITY AND COMPLETENESS OF SUCH INFORMATION FOR HIS OWN PARTICULAR USE.

GLOBAL GREEN TAG INTERNATIONAL PTY LTD
Level 38/71 Eagle St, Brisbane, OLD, 4000, Australia

EPD™

Environmental Product Declaration

in accordance with ISO 14025 and EN 15804

Green-Flor®

G. T. Floor CO., LTD

Heesakkerweg 15, 5721 KM Asten, The Netherlands.
+31 40 845 96 16
https://www.green-flor.com/en/index.asp

Product

SPC PVC Flooring

ECO PLATFORM
ECO PLATFORM EPD VERIFIED

Environmental Product Declaration Details

EPD Type	Cradle to Gate with modules C1–C4 and module D (A1–A3, C and D)
EPD Number	JDC:FL01:2024:EP
Issue Date	02 August 2024
Valid Until	02 August 2029
GPI Version	Version 2.1
Demonstration of Verification	
PCR	CEN Standard EN 15804+A2 2019 serves as core Product Category Rules (PCR). Sub-PCR FC:2022 V1 Interior Floor Coverings V1
Verification	Independent external verification of the declaration and data, mandatory for business-to-consumer communication according to ISO 14025:2010.
Communication	This EPD discloses potential environmental outcomes compliant with EN 15804 for business-to-business communication.
Comparability	EPD of construction products may not be comparable if they do not comply with EN 15804. Different program EPDs may not be comparable. Comparability is further dependent on the product category rules and data source used.
Reliability	LCIA results are relative expressions that do not predict impacts on category endpoints, exceeding of thresholds, safety margins or risks.
Owner	This EPD is the property of the declared manufacturer.
Explanations	Further explanatory information is available at info@globalgreentag.com or by contacting epd@globalgreentag.com.

EPD Program Operator

Global GreenTag International Pty ,Ltd

Level 38, 71 Eagle Street Brisbane City, QLD 4000,Australia
+61 1300 263 586
http://www.globalgreentag.com

Declaration Owner

G. T. Floor CO., LTD

Heesakkerweg 15, 5721 KM Asten, The Netherlands.
+31 40 845 96 16
https://www.green-flor.com/en/index.asp

Program Description

EPD Scope	Cradle to gate with options (A1 to A3, C1-C4 and D)
EPD Type	EPD based on specific site and product data
System boundary	The system boundary with nature includes processing material and energy system inputs, transport to factory gate, manufacturing plus packing, waste disposal, as well as waste removal and waste disposal after the expiration of product life.
Stages included	A1-A3, C1-C4, D
Stages excluded	A4-A5, B1-B7
Information Modules	Figure 1 depicts all modules being declared including some with zero results. Any module not declared (MND) does not indicate a zero result.

Model	Actual			*Scenarios*												*Potential*
Information	*Life Cycle Assessment*															*Supplementary*
Stages	*Product*			*Construct*		*Use*							*End-of-Life*				*Benefit & load beyond system*
Modules						*Fabric*					*Operation*						
Unit Operations	*A1*	*A2*	*A3*	A4	A5	*B1*	*B2*	*B3*	*B4*	*B5*	*B6*	*B7*	*C1*	*C2*	*C3*	*C4*	*D*
Cradle to grave phases	*Resources*	*Transport*	*Manufacture*	*Transport*	*Construct*	*Use*	*Maintain*	*Repair*	*Replace*	*Refurbish*	*Energy Use*	*Water use*	*Demolish*	*Transport*	*Process Waste*	*Disposal*	*Reuse*
Modules Declared	✓	✓	✓	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	✓	✓	✓	✓	✓

Note: ND = Module not declared ✓= included

Figure 1 EPD Life Cycle Modules Cradle to Grave

Product Information	General Information
Brand Name & Code	Green-Flor PVC flooring
Range Names	SPC flooring
Factory warranty	10-20 Years
Geographical Area	China
Application	Indoor flooring
Function in Building	Flooring covering
Reference Service Life	10 Years
Declared Unit	8.2 kg of SPC interior floor covering per square metre covered in any building sectors cradle to gate.
Manufacturer Warranty	10-20 Years
Substances Of Very High Concern	None

Test Reports

Standard/Certification	*Status*	*Last Date Completed*
EN 13501-1:2018 Fire	B_{fl}-s1, passed	Apr 12, 2023
ISO 8301:1991 Thermal Conductivity and Thermal Resistance	<0.05 m^2K/W, passed	Apr 11, 2023
EN 717-1:2004 Formaldehyde Emission (In air)	0.080 mg/m^3	Apr 14, 2023
BS EN 14041:2018 Annex B & EN12673:1999 Pentachlorophenol (PCP)	0.1 mg/kg	Apr 11, 2023
ASTM E 648-19ae1 Critical Radiant Flux	Min. 1.1W/cm^2 (Class I > 0.45W/cm2), passed	Apr 11, 2023
ASTM E662-21ae1 Smoke Density	Smoke density of <450	Apr 11, 2023
EN ISO 26987:2012 Determination of Staining and Resistance to Chemical	Index 0 (Not affected, passed)	May 31, 2024
EN ISO 105-B02:2014 Colour Fastness to Light	≥6, passed	Jun 05, 2024
ISO 4918:2016+Amd.1:2018 Castor Chair Test	No visible damage after 25000 cycles	May 31, 2024
EN 1815:2016 Method A Static electricity propensity	<=2.0KV, passed	May 31, 2024
BS 7976-2:2002+A1:2013 Slip Test	KT 2.0 #19 emboss Dry 60, Wet 32	May 31, 2024
DIN EN 16165:2023-02 Annex B Slip Test	KT 2.0 #19 emboss R9 (9.7 drgree)	May 31, 2024

	EN 14372:2004 Diisononyl Phthalate (DINP)	0.010%	Jun 11, 2024
	EN 71-3:2019+A1:2021 Migration of certain elements	Passed	Jun 11, 2024
	SGS In-House method SVHC Test	SVHC ≤ 0.1%(w/w), passed	Jun 11, 2024
	ISO 16000-9:2006 / Cor1:2007	TVOC, SVOC not detectable	Jul 05, 2024
	EN 660-2:1999+A1:2003 Wear Resistance	Passed, Group T	May 31, 2024

Table 2 SPC resilient flooring specifications

Attribute	Comment	Date
Density	*2000 kg/m^3*	2024.02
Product thickness	*4mm*	
Product weight	*8.2 kg/m^2*	

Manufacturing Process

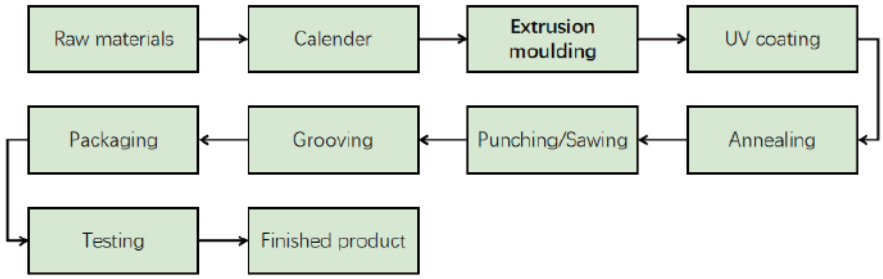

Figure 3. SPC resilient flooring Cradle to Gate System Boundary

Product Components

In product content listed below the % mass has a ±5% range and a confidence interval that is 90% certain to contain true population means at any time. Listing such 90±5% certainty considers normal resource acquisition, supply chain, sedimentation, seasonal, manufacturing and product colour variation over this EPD's 5-year validity period. This also allows for intellectual property protection whilst ensuring fullest possible transparency.

Table 4 List of key components and additives by function, type, key operation, source and amount

Function	Component	Source	Amount
Fillers	$CaCO_3$	China	50-75%
Binder	PVC	Taiwan, China	35-45%
Plasticizer	DOTP	China	10-15%
Backing	PRINTING FILMS	China	0-5%
Stabilizer	Calcium stearate	China	0-5%
Pigment	Carbon black	China	0-5%
Pigment	UV Lacquer.	China	0-5%
Packing			
Pallet	Wood pallet	China	55-60%
Cardboard caps	Cardboard box	China	35-40%
PET	PET Wrapping Film and Strapping	China	0-5%

materials is assumed at end-of-life.

Table 7 C1-C4 and D Scenario Information

Processes	Unit	SPC Scenario Value
Collection process by type	kg collected separately	8.2
	kg collected with mixed construction waste	0
Recovery system by type	Kg for re-use	0
	Kg for recycling	0
	Kg for energy recovery	0
Safe disposal	Kg or product or material for final disposal	8.2
transportation	km	161

Additional Technical Information

The environmental impact category indicators are also reported based on the CML-IA characterization factors according to EN15804.
No substances required to be reported as hazardous (as determined under the Resource Conservation and Recovery Act (RCRA (EPA, n.d.)) are associated with the production of flooring.

Additional Environmental Information

The flooring products in this EPD comply with the Indoor Air Comfort GOLD requirements. Low VOC cleaning materials are available for use in maintaining flooring.

Product Results

Table 8 LCA impact indicators, resource use, waste and other measured flows

Acronyms, methods and units of impact potentials plus inventory inputs and outputs, are defined below:

Impact Potentials	Acronym	Description of Methods	Units
Climate Change biogenic	GWP_{bio}	GWP biogenic [7]	kg CO_{2eq}
Climate Change luluc	GWP_{luluc}	GWP land use & change [7]	kg CO_{2eq}
Climate Change fossil	GWP_{ff}	GWP fossil fuels [7]	kg CO_{2eq}
Climate Change total	GWP_{t}	Global Warming Potential [7]	kg CO_{2eq}

Stratospheric Ozone Depletion	ODP	Stratospheric Ozone Loss [8]	kg CFC_{11eq}
Photochemical Ozone Creation	POCP	Summer Smog [9]	kg NMOC $_{eq}$
Acidification Potential	AP	Accumulated Exceedance [10]	mol H^+ $_{eq}$
Eutrophication Freshwater	EP $_{fresh}$	Excess nutrients freshwater [11]	kg Po_4 $_{eq}$
Eutrophication Marine	EP $_{marine}$	Excess marine nutrients [11]	kg N $_{eq}$
Eutrophication Terrestrial	EP $_{land}$	Excess Terrestrial nutrients [11]	mol N $_{eq}$
Mineral & Metal Depletion[1]	ADP $_{min}$	Abiotic Depletion minerals [12]	kg Sb $_{eq}$
Fossil Fuel Depletion[1]	ADP $_{ff}$	Abiotic Depletion fossil fuel [13]	MJ $_{ncv}$
Water Depletion[1]	WDP	Water Deprivation Scarcity [14,15]	m^3 $_{WDP\ eq}$
Particulate Matter Emissions	PM	SETAC-UNE [26]	Disease incidence
Ionizing Radiation, Human Health[2]	IRP	Human health effect model [27]	kBq U235 eq
Eco-toxicity (freshwater)[1]	ETP-fw	USEtox [28]	CTUe
Human toxicity, cancer effects[1]	HTP-c	USEtox [28]	CTUh
Human toxicity, non-cancer effects[1]	HTP-nc	USEtox [28]	CTUh
Land use related impacts/ Soil quality[1]	SQP	Soil quality index	dimensionless

Resource Use	**Acronym**	**Units**
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	PERE	MJ_{NCV}
Use of renewable primary energy resources used as raw materials	PERM	MJ_{NCV}
Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)	PERT	MJ_{NCV}
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	PENRE	MJ_{NCV}
Use of non-renewable primary energy resources used as raw materials	PENRM	MJ_{NCV}

[1] The results of this environmental impact indicator shall be used with care as uncertainties on these results are high or as there is limited experience with the indicator.
[2] This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure 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.

Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)	PENRT	MJ_{NCV}
Use of secondary material	SM	kg
Use of renewable secondary fuels	RSF	MJ_{NCV}
Use of non-renewable secondary fuels	NRSF	MJ_{NCV}
Use of net fresh water	FW	m3
Waste Type	**Acronym**	**Units**
Hazardous waste disposed	HWD	kg
Non-hazardous waste disposed	NHWD	kg
Radioactive waste disposed	RWD	kg
Other Outputs	**Acronym**	**Units**
Components for re-use	CRU	kg
Materials for recycling	MFR	kg
Materials for energy recovery	MER	kg
Exported energy	EE	Mj_{pec}

Note: MJ_{NCV} is MJ, net calorific value, Mj_{pec} is Mj, per energy carrier

Table 3 Inventory Resource Use Results/1 m2-SPC flooring

		Product stage	End of life stage				Resource recovery stage
		A1-A3	C1	C2	C3	C4	D
Module Codes	Unit	Production	De-construction demolition	Transport	Waste processing	Disposal	Reuse, Recovery, Recycling
GWP-total	kg CO2 eq	2.26E+01	0.00E+00	1.26E-01	0.00E+00	8.32E-01	0.00E+00
GWP-luluc	kg CO2 eq	1.60E-02	0.00E+00	6.55E-05	0.00E+00	8.10E-05	0.00E+00
GWP-biogenic	kg CO2 eq	4.47E-02	0.00E+00	3.42E-05	0.00E+00	6.58E-05	0.00E+00
GWP-fossil	kg CO2 eq	2.25E+01	0.00E+00	1.26E-01	0.00E+00	8.31E-01	0.00E+00
ADP-fossil	MJ, net calorific value	3.97E+02	0.00E+00	1.81E+00	0.00E+00	2.17E+00	0.00E+00
ADP-minerals & metals	kg Sb eq.	1.68E-04	0.00E+00	3.91E-07	0.00E+00	2.23E-07	0.00E+00
EP-freshwater	kg P eq.	4.08E-03	0.00E+00	1.04E-05	0.00E+00	1.46E-05	0.00E+00
POCP	kg NMVOC eq.	7.16E-02	0.00E+00	8.25E-04	0.00E+00	1.16E-03	0.00E+00
AP	mol H+eq.	9.77E-02	0.00E+00	5.99E-04	0.00E+00	7.43E-04	0.00E+00
EP-terrestrial	mol N eq	1.97E-01	0.00E+00	2.42E-03	0.00E+00	2.85E-03	0.00E+00
EP-marine	kg N eq.	1.86E-02	0.00E+00	2.26E-04	0.00E+00	1.75E-02	0.00E+00
ODP	kg CFC 11 eq.	1.02E-05	0.00E+00	1.94E-09	0.00E+00	2.30E-09	0.00E+00
WDP	m3 world eq	6.66E+00	0.00E+00	8.82E-03	0.00E+00	1.29E-02	0.00E+00

See table 8 for additional information

Table 6 Optional Indicators -SPC flooring

		Product stage	End of life stage				Resource recovery stage
		A1-A3	C1	C2	C3	C4	D
Module Codes	Unit	Production	De-construction demolition	Transport	Waste processing	Disposal	Reuse, Recovery, Recycling
ETP-fw	CTUe	1.02E+02	0.00E+00	9.84E-01	0.00E+00	4.10E+00	0.00E+00
HTP-c	CTUh	1.90E-08	0.00E+00	6.62E-11	0.00E+00	6.21E-11	0.00E+00
HTP-nc	CTUh	1.40E-06	0.00E+00	1.41E-09	0.00E+00	2.26E-09	0.00E+00
SQP	dimensionless	9.69E+01	0.00E+00	1.34E+00	0.00E+00	4.77E+00	0.00E+00
PM	Disease incidence	4.54E-06	0.00E+00	1.21E-08	0.00E+00	1.50E-08	0.00E+00
IRP	kBq U235 eq	1.01E+00	0.00E+00	1.61E-03	0.00E+00	3.39E-03	0.00E+00

See table 8 for additional information

Table 9 Resource Use and other environmental flows -SPC

		Product stage	End of life stage				Resource recovery stage
		A1-A3	C1	C2	C3	C4	D
		Production	De-construction demolition	Transport	Waste processing	Disposal	Reuse, Recovery, Recycling
Resource Use	**Unit**						
PERE	MJ_{NCV}	1.78E+01	0.00E+00	2.36E-02	0.00E+00	4.48E-02	MNR
PERM	MJ_{NCV}	1.07E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	MNR
PERT	MJ_{NCV}	2.85E+01	0.00E+00	2.36E-02	0.00E+00	4.48E-02	MNR
PENRE	MJ_{NCV}	2.74E+02	0.00E+00	1.81E+00	0.00E+00	2.17E+00	MNR
PENRM	MJ_{NCV}	1.23E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	MNR
PENRT	MJ_{NCV}	3.97E+02	0.00E+00	1.81E+00	0.00E+00	2.17E+00	MNR
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	MNR
RSF	MJ_{NCV}	7.34E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	MNR
NRSF	MJ_{NCV}	5.17E+01	0.00E+00	1.05E+00	0.00E+00	0.00E+00	MNR
FW	m^3	1.01E-01	0.00E+00	1.15E-04	0.00E+00	3.37E-04	MNR
Waste	**Unit**						
HWD	kg	1.78E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	MNR
NHWD	kg	1.02E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	MNR
RWD	kg	3.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	MNR
Outputs	**Unit**						
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	MNR
MFR	kg	1.14E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	MNR
MER	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	MNR
EE	M_{Jpec}	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	MNR

See table 8 for additional information

Table 18 Biogenic Carbon at Factory Gate (A1-A3)

Biogenic Carbon	*Unit*	*SPC*
Biogenic carbon content in product	*Kg C*[3]	0
Biogenic carbon content in accompanying	*Kg C*	0.6788

[3] 1 kg biogenic carbon is equivalent to 44/12 kg of CO2.

Interpretation

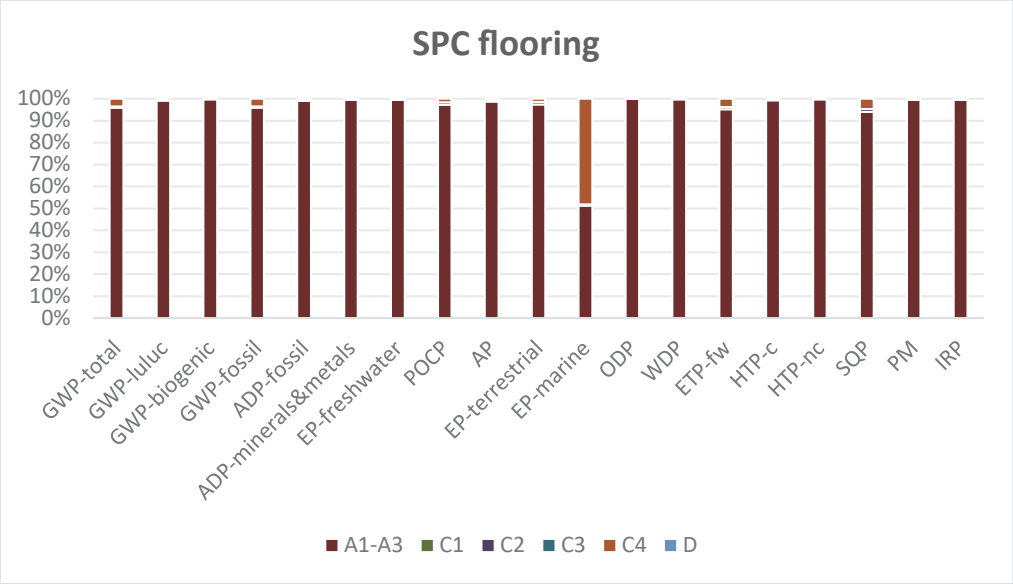

Figure 6. SPC each stage contribution to LCA results

For the indicator EP-marine, the high contribution of the C4 phase compared to other indicators is due to direct emissions such as total organic carbon during waste disposal (treatment of waste plastic, mixture, sanitary landfill).

The wastewater generated from the used water is divided into two parts. One part needs to be discharged after WWT wastewater treatment, and the other part is directly discharged into the municipal wastewater system. Therefore this part is not included in the inventory.

The LCA study has been carried out based on available data, information, regional and global knowledge and experience to achieve more possible accuracy, completeness and representative of the results.

G.T.Floor B.V.

Green-Flor®

Manufacturer Ingredients Declaration

July 1st, 2025

To whom it may concerns,

We here by confirm that the following ingredients are not used in the production for all specifications of our LVT, Looselay and SPC flooring collections in compliance with the AgBB scheme:

- SVHC < 0.1%
- CMR substances (categories 1A/1B) < 0.1%
- Reprotoxic phthalates < 0.1%
- Tin, cadmium, or lead-based stabilizers
- Chlorinated paraffins (SCCP, MCCP, LCCP) < 0.1%

These collections include but are not limited to *Authentic Mood, Authentic Mood 30, Authentic Mood 55, Authentic Mood 55 Click, Essential Discovery, Grand Class, Master Collection, Master Trend, Modern Vintage, Modern Vintage Chic, Modern Vintage Smart, Natural Perfection, Nature Fit 30/55, Nature Fit 30/55 Stark, Nature Living, New Square, New Square Piazza, Performance 50/70 XL, Performance 50/70 XXL, Performance 55/70, Performance XL, Performance XXL, Prime Inspiration, Prime Inspiration Click, Pure and Powerful 30, Pure and Powerful 55, Pure Plaza, Pure Spectra 30/55, Royal Touch, Silent Elegance, Solid Essence Collection, Stone Design, Stylish Grid, Tierra Nueva, True Hive, True Spirit, Wood Design, Young Living*

Sincerely,

Peter Lin, Director
G.T. Floor B.V.

Heesakkerweg 15, 5721 KM Asten, The Netherlands. T / +31 40 845 96 16
www.green-flor.com