



HPD UNIQUE IDENTIFIER: 1272619008
CLASSIFICATION: 09 65 19.23 Vinyl Tile Flooring
PRODUCT DESCRIPTION: 5.0mm Looselay is designed to deliver installation advantages that save time and reduce cost through a loose-lay method, eliminating the need for adhesive in smaller spaces; larger areas require only a perimeter application of releasable adhesive. It also features Sol coating on the backing side, which allows for easier installation with non-slip characteristics, and an inserted glass fiber sheet, which provides better dimensional stability.

Section 1: Summary Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold Level	Residuals/Impurities Evaluation	<i>For all contents above the threshold, the manufacturer has:</i>
☐ Nested Materials Method	☐ 100 ppm	☒ Completed	Characterized ☒ Yes ☐ No
☒ Basic Method	☒ 1,000 ppm	☐ Partially Completed	<i>Provided weight and role.</i>
Threshold Disclosed Per	☐ Per GHS SDS	☐ Not Completed	Screened ☒ Yes ☐ No
☐ Material	☐ Other	Explanation(s) provided :	<i>Provided screening results using HPDC-approved methods.</i>
☒ Product		☒ Yes ☐ No	Identified ☒ Yes ☐ No
			<i>Provided name and CAS RN or other identifier.</i>

CONTENT IN DESCENDING ORDER OF QUANTITY

Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

PRODUCT | MATERIAL OR SUBSTANCE | RESIDUAL OR IMPURITY
GREENSCREEN SCORE | HAZARD TYPE

5.0MM LOOSELAY (5MM PRODUCTS) [CALCIUM CARBONATE
POLYVINYL CHLORIDE LT-P1 | MAM BIS(2-ETHYLHEXYL)
CYCLOHEXANE-1,4-DICARBOXYLATE NoGS BIS(2-ETHYLHEXYL)
TEREPHTHALATE BM-3dg CONTINUOUS FILAMENT GLASS FIBER,
NON-RESPIRABLE LT-UNK POLYMER OF ACRYLONITRILE / BUTYL
ACRYLATE / STYRENE/ METHYL METHACRYLATE NoGS VINYL
CHLORIDE VINYL ACETATE COPOLYMER LT-UNK PHOSPHOROUS
ACID, TRIISODECYL ESTER (9CI) LT-P1 MUL EPOXIDIZED
SOYBEAN OIL LT-P1 AQU CALCIUM STEARATE LT-UNK TITANIUM
DIOXIDE BM-1 CAN | END | MAM 2-PROPENOIC ACID, 2-METHYL-,
METHYL ESTER, POLYMER WITH BUTYL 2-PROPENOATE, 2-
ETHYLHEXYL 2-PROPENOATE AND 2-PROPENOIC ACID LT-UNK]

Number of Greenscreen BM-4/BM3 contents ... 1
Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ...
LT-P1, BM-1
Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Special Conditions applied: [GeologicalMaterial]
Special Conditions applied: [Polymers]

Dongshin Polymer Co. worked with the HPDC Approved Preparer to confirm that all intentionally added ingredients, residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: UL/GreenGuard Gold Certified
ENVIRONMENTAL PRODUCT DECLARATION: ENVIRONMENTAL
PRODUCT DECLARATION

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Option 1.
Pre-checked for LEED v4.1 Option 1.

Third Party Verified?

☒ Yes
☐ No

PREPARER: ToxServices LLC
VERIFIER: SCS Global Services
VERIFICATION #: qGE-24319

SCREENING DATE: 2025-06-23
PUBLISHED DATE: 2025-06-25
EXPIRY DATE: 2028-06-23

This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- Basic Inventory method with Product-level threshold.
- Nested Material Inventory method with Product-level threshold
- Nested Material Inventory method with individual Material-level thresholds

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.3, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-3-standard

5.0MM LOOSELAY (5MM PRODUCTS)

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

RESIDUALS AND IMPURITIES NOTES: Dongshin Polymer Co. worked with the HPDC Approved Preparer to confirm that all intentionally added ingredients, residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 1,000 ppm threshold.

OTHER PRODUCT NOTES:

CALCIUM CARBONATE

ID: Geological Material

HAZARD DATA SOURCE: HPDC Special Conditions Policy

%: 60.4900 - 66.8600

GreenScreen: Not Required

RC: None

NANO: No

MATERIAL ROLE: Filler

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

Hazard Screening is not applicable to this Special Condition

INGREDIENT DESCRIPTION AND COMPOSITION: 100% CaCO3

COUNTRY OF ORIGIN: Korea

RADIOACTIVE ELEMENTS: Unknown

POTENTIAL PRESENCE OF TOXIC METALS: Unknown

MATERIAL CONTENT NOTES: This disclosure does not provide potential presence of radioactive elements which may be found in certain geological materials.
This disclosure does not provide potential presence of toxic metals which may be found in certain geological materials.

POLYVINYL CHLORIDE

ID: 9002-86-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-06-23 17:13:37

%: 23.1300 - 25.5900

GreenScreen: LT-P1

RC: None

NANO: No

POLYMER ROLE: Structure component

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List Precautionary list of substances recommended for avoidance
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Core Restrictions
RESTRICTED LIST	International Living Future Institute (ILFI)	Living Building Challenge 4.0 - Red List of Materials & Chemicals - Effective February 1, 2025 Red List substances to avoid in Living Building Challenge V4.0 projects
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024 Avoidance of Organohalogens and Functionally Related Chemical Classes of Concern

POLYMER TYPE: Thermoplastic

AVERAGE MOLECULAR WEIGHT : >10,000 Da

PERCENTAGE OF POLYMER WITH MOLECULAR WEIGHT LESS THAN 500 DA: Unknown

ADDITIONAL SUBSTANCES CONSIDERED: Yes

POLYMER NOTES: This polymer has been reported in accordance to [HPDC Special Conditions Policy](#) for polymers with disclosed CAS numbers.

ADDITIONAL NOTES:

BIS(2-ETHYLHEXYL) CYCLOHEXANE-1,4-DICARBOXYLATE

ID: **84731-70-4**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-06-23 17:13:34**

%: **5.5900 - 6.2500** GreenScreen: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

BIS(2-ETHYLHEXYL) TEREPHTHALATE

ID: 6422-86-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2025-06-23 17:13:34

%: 3.4500 - 3.8400 GreenScreen: BM-3dg RC: None NANO: No SUBSTANCE ROLE: Plasticizer

HAZARD TYPE LIST NAME AND SOURCE WARNINGS

None found No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS LIST NAME AND SOURCE NOTIFICATION

RESTRICTED LIST Green Science Policy Institute (GSPI) GSPI - Six Classes Precautionary List

Some Solvents

SUBSTANCE NOTES: The GreenScreen® Benchmark Score of BM-3dg comes from the HPDC Builder Tool.

CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE

ID: 65997-17-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2025-06-23 17:13:35

%: 0.4100 - 0.5100 GreenScreen: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Structure component

HAZARD TYPE LIST NAME AND SOURCE WARNINGS

None found No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS LIST NAME AND SOURCE NOTIFICATION

EXEMPT European Union / European Commission (EU EC) EU - REACH Exemptions

Exempted from REACH Annex V listing due to intrinsic safety

SUBSTANCE NOTES:

POLYMER OF ACRYLONITRILE / BUTYL ACRYLATE / STYRENE/
METHYL METHACRYLATE

ID: 25852-38-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2025-06-23 17:13:37

%: 0.2600 - 0.3000 GreenScreen: NoGS RC: None NANO: No POLYMER ROLE: Processing regulator

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists
POLYMER TYPE: Thermoplastic		
AVERAGE MOLECULAR WEIGHT : >10,000 Da		
PERCENTAGE OF POLYMER WITH MOLECULAR WEIGHT LESS THAN 500 DA: Unknown		
ADDITIONAL SUBSTANCES CONSIDERED: Yes		
POLYMER NOTES: This polymer has been reported in accordance to HPDC Special Conditions Policy for polymers with disclosed CAS numbers.		
ADDITIONAL NOTES:		
VINYL CHLORIDE VINYL ACETATE COPOLYMER		ID: 9003-22-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-06-23 17:13:38		
%: 0.2100 - 0.2300	GreenScreen: LT-UNK	RC: None	NANO: No	POLYMER ROLE: Structure component
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No warnings found on HPD Priority Hazard Lists	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)		C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022	
			Core Restrictions	
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)		C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024	
			Avoidance of Organohalogens and Functionally Related Chemical Classes of Concern	
POLYMER TYPE: Thermoplastic				
AVERAGE MOLECULAR WEIGHT : >10,000 Da				
PERCENTAGE OF POLYMER WITH MOLECULAR WEIGHT LESS THAN 500 DA: Unknown				
ADDITIONAL SUBSTANCES CONSIDERED: Yes				
POLYMER NOTES: This polymer has been reported in accordance to HPDC Special Conditions Policy for polymers with disclosed CAS numbers.				
ADDITIONAL NOTES:				
PHOSPHOROUS ACID, TRIISODECYL ESTER (9CI)				ID: 25448-25-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-06-23 17:13:35		
%: 0.1600 - 0.1900	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Stabilizer
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters		

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists
SUBSTANCE NOTES:		

EPOXIDIZED SOYBEAN OIL

ID: 8013-07-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-06-23 17:13:36		
%: 0.1500 - 0.1800	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Plasticizer
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
AQU	GHS - New Zealand		Hazardous to the aquatic environment - chronic category 2	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No listings found on Additional Hazard Lists	
SUBSTANCE NOTES:				

CALCIUM STEARATE

ID: 1592-23-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-06-23 17:13:35		
%: 0.1200 - 0.1500	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Stabilizer
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No warnings found on HPD Priority Hazard Lists	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No listings found on Additional Hazard Lists	
SUBSTANCE NOTES:				

TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-06-23 17:13:36		
%: 0.1000 - 0.1300	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources
CAN	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
CAN	IARC	Group 2b - Possibly carcinogenic to humans
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE Safer Chemicals Ingredients list (SCIL) Colorants - Green Circle (Verified Low Concern)
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024 Cosmetics and Personal Care Products

SUBSTANCE NOTES: The GreenScreen® Benchmark Score of BM-1 comes from the HPDC Builder Tool.

%: **0.0800 - 0.1200**

GreenScreen: **LT-UNK**

RC: **None**

NANO: **No**

POLYMER ROLE: **Structure component**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

POLYMER TYPE: **Thermoplastic**

AVERAGE MOLECULAR WEIGHT : >10,000 Da

PERCENTAGE OF POLYMER WITH MOLECULAR WEIGHT LESS THAN 500 DA: **Unknown**

ADDITIONAL SUBSTANCES CONSIDERED: **Yes**

POLYMER NOTES: This polymer has been reported in accordance to [HPDC Special Conditions Policy](#) for polymers with disclosed CAS numbers.

ADDITIONAL NOTES:

Section 3: Certifications and Compliance

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

VOC EMISSIONS	UL/GreenGuard Gold Certified	
CERTIFYING PARTY: Third Party	ISSUE DATE: 2019-04-25 00:00:00	CERTIFIER OR LAB: UL Solutions
APPLICABLE FACILITIES: All	EXPIRY DATE: 2026-04-25 00:00:00	
CERTIFICATE URL: https://spot.ul.com/main-app/products/catalog/?keywords=dongshin+polymer		
CERTIFICATION AND COMPLIANCE NOTES: UL 2818 - 2022 Gold Standard for Chemical Emissions for Building Materials, Finishes and Furnishings.		
ENVIRONMENTAL PRODUCT DECLARATION	ENVIRONMENTAL PRODUCT DECLARATION	
CERTIFYING PARTY: Third Party	ISSUE DATE: 2024-11-27 00:00:00	CERTIFIER OR LAB: UL Solutions
APPLICABLE FACILITIES: All	EXPIRY DATE: 2029-11-27 00:00:00	
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES:		

Section 4: Accessories

This section lists related products or materials that the manufacturer requires or recommends for installation (such as adhesives or fasteners), maintenance, cleaning, or operations. For information relating to the contents of these related products, refer to their applicable Health Product Declarations, if available.

No accessories are required for this product.

Section 5: General Notes

This product also features M-Force™ Ultra technology, which provides exceptional resistance to scratches, stains, and dents, along with easy maintenance for long-lasting beauty.

MANUFACTURER INFORMATION

MANUFACTURER: **Dongshin Polymer co.**
 ADDRESS: **41-66, 966Bun-Gil, Chungseo-ro**
Guhang-Myeon, Hongseong-Gun Chungcheongnam-do
 COUNTRY: **Republic of Korea**

WEBSITE: **<http://www.dsarttile.co.kr/en/>**
 CONTACT NAME: **Yohan Choi**
 TITLE: **Staff**
 PHONE: **+82 10-8505-8162**
 EMAIL: **choijohn33@dsarttile.co.kr**

The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.

KEY

Hazard Types

AQU Aquatic toxicity	LAN Land toxicity	PHY Physical hazard (flammable or reactive)
CAN Cancer	MAM Mammalian/systemic/organ toxicity	REP Reproductive
DEV Developmental toxicity	MUL Multiple	RES Respiratory sensitization
END Endocrine activity	NEU Neurotoxicity	SKI Skin sensitization/irritation/corrosivity
EYE Eye irritation/corrosivity	NF Not found on Priority Hazard Lists	UNK Unknown
GEN Gene mutation	OZO Ozone depletion	
GLO Global warming	PBT Persistent, bioaccumulative, and toxic	

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-P1 List Translator Possible 1 (Possible Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Benchmark Unknown
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS No GreenScreen.
BM-U Benchmark Unspecified (due to insufficient data)	

GreenScreen Benchmark scores sometimes also carry subscripts, which provide more context for how the score was determined. These are DG (data gap), TP (transformation product), and CoHC (chemical of high concern). For more information, see 2.2.2.4 GreenScreen® for Safer Chemicals, www.greenscreenchemicals.org, and Best Practices for Hazard Screening on the HPDC website (hpd-collaborative.org).

Recycled Types

PreC Pre-consumer recycled content
PostC Post-consumer recycled content
UNK Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms:

GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Inventory Methods:

Nested Method / Material Threshold	Substances listed within each material per threshold indicated per material
Nested Method / Product Threshold	Substances listed within each material per threshold indicated per product
Basic Method / Product Threshold	Substances listed individually per threshold indicated per product

Nano Composed of nano scale particles or nanotechnology

Third Party Verified Verification by independent certifier approved by HPDC

Preparer Third party preparer, if not self-prepared by manufacturer

Applicable facilities Manufacturing sites to which testing applies

The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- a method for the assessment of exposure or risk associated with product handling or use,*
- a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.*

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and

