Vinyl Flooring (Kingdom, Viet Nam, and Thailand Lines)

by Zhejiang Kingdom New Material Group Co., Ltd.

SCREENING DATE: 2026-06-11
PUBLISHED DATE: 2026-06-15
EXPIRY DATE: 2029-06-11
PREPARER: ToxServices LLC
VERIFIER: SCS Global Services
VERIFICATION #: qGE-27979

Health Product Declaration v3.0
created via: HPDC Online Builder

THIRD-PARTY VERIFIED

HPD UNIQUE IDENTIFIER: 1044112384
HPD UNIQUE PRODUCT ID: Not provided.
CLASSIFICATION: 09 60 00 Flooring
PRODUCT DESCRIPTION: LVT products belong to PVC plastic flooring, which is a multi-layer structure and is formed using hot pressing and extruding technology. They can be formed in different thicknesses according to needs, and have characteristics such as fireproof, formaldehyde free, and waterproof. SPC products belong to hard PVC plastic flooring, and there is no DOTP in the system, making them more stable and reliable. They adopt an extrusion molding process and have the characteristics of fire resistance, anti-slip, and zero formaldehyde. EPC products are a combination of LVT products and EPC substrates, making them more lightweight, quiet, and environmentally friendly. ESPC products are formed using a hot-pressing process, which combines the flexibility of LVT and the rigidity of SPC, providing excellent stability, flame retardancy, and environmental friendliness. This HPD covers the assessment of the following Vinyl Flooring lines from China, Viet Nam, and Thailand: Kingdom (ESPC; SPC; LVT and EPC), Viet Nam (EPC; SPC and LVT), and Thailand (LVT; SPC and EPC)

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format
→ Basic Method

Threshold Disclosed Per
→ Product

Threshold Level
→ 1,000 ppm

Residuals/Impurities Evaluation
→ Completed

Explanation(s) provided :
Yes

For all contents above the threshold, the manufacturer has:

Characterized Yes
Provided weight and role.

Screened Yes
Provided screening results using HPDC-approved methods.

Identified No
Provided name and CAS RN or other identifier.

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

VINYL FLOORING (KINGDOM, VIET NAM, AND THAILAND LINES) [
POLYVINYL CHLORIDE LT-P1 | CAN | MAM **CALCIUM CARBONATE** 1 **BIS(2-ETHYLHEXYL) TEREPHTHALATE** BM-3dg **2-PROPENOIC ACID, 2-METHYL-, METHYL ESTER, POLYMER WITH BUTYL 2-PROPENOATE** LT-UNK **POLYETHYLENE** LT-UNK **STEARIC ACID** LT-P1 | END **QUERCUS SUBER BARK – CORK** NoGS **CALCIUM STEARATE** LT-UNK **ZEOLITES** LT-UNK | MAM **ZINC STEARATE** LT-UNK | AQU **POLYMETHYL METHACRYLATE** LT-P1 **CALCIUM CARBONATE** BM-3 | EYE **UNDISCLOSED** Not Screened **ETHENE, HOMOPOLYMER, OXIDIZED** LT-UNK **SILICON DIOXIDE** BM-1 | CAN | MAM **VINYL CHLORIDE VINYL ACETATE COPOLYMER** LT-UNK **GLYCERYL MONOSTEARATE** LT-UNK **GLYCERYL MONOSTEARATE** LT-UNK **PROPANOL, [(1-METHYL-1,2-ETHANEDIYL)BIS(OXY)]BIS-, POLYMER WITH 1,1'-METHYLENEBIS[ISOCYANATOBENZENE] AND OXYBIS[PROPANOL]** LT-P1 | SKI | EYE | MAM **RUBBER, POLYSULFIDE** NoGS **1,1'-AZOBIS(FORMAMIDE)** LT-UNK | PHY | RES **SILICIC ACID, ALUMINUM POTASSIUM SALT** LT-UNK **EPOXIDIZED SOYBEAN OIL** LT-P1 | AQU **MAGNESIUM ALUMINUM HYDROXIDE CARBONATE HYDRATE** NoGS **CALCIUM** LT-P1 | SKI | EYE | PHY **PALMITIC ACID** LT-P1 | END **LIME** BM-2 | SKI | MAM | EYE **1,6-**

Number of Greenscreen BM-4/BM3 contents ... 2

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-P1, BM-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

"Proprietary Ingredient Due Diligence Exception"; Method: "Direct entry of data without verifiability of CASRN or other identifier"

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

Zhejiang Kingdom New Material Group Co., Ltd. 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.

HEXANEDIOL DIACRYLATE LT-P1 | SKI | MUL | EYE | AQU **UNDISCLOSED** LT-UNK **PETROLEUM RESINS** LT-UNK **MAGNESIUM ALUMINUM HYDROXIDE CARBONATE** LT-UNK **HYDROTALCITE** NoGS **SODIUM BICARBONATE** LT-P1 | END **PENTAERYTHRITOL** LT-UNK **BENZENE, ETHENYL-, POLYMER WITH 2-METHYL-1,3-BUTADIENE** LT-UNK **WHITE MINERAL OIL** LT-UNK **ALUMINUM OXIDE** BM-2 | CAN | MAM **CARBON BLACK** BM-1 | CAN | EYE | MAM | PHY **HYDROCARBONS, C6-20, POLYMERS, HYDROGENATED** LT-P1 | MUL **ACETYL ACETONE** LT-UNK | MAM | EYE | GEN | AQU **NEOPENTYL GLYCOL, ADIPIC ACID, ISOPHORONE DIISOCYANATE, 2-HYDROXYETHYL ACRYLATE POLYMER** LT-UNK | SKI | EYE | MAM **4,4'-DIPHENYLMETHANE DIISOCYANATE** LT-UNK | CAN | RES | SKI | EYE | MAM **STYRENE BUTADIENE RUBBER (BENZENE, ETHENYL-, POLYMER WITH 1,3-BUTADIENE)** LT-UNK **TITANIUM DIOXIDE** BM-1 | CAN | END | MAM **UNDISCLOSED** LT-UNK | CAN | MAM]

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

COMPLIANCE *See Section 3 for additional listings.*

VOC emissions: RFCI FloorScore
VOC emissions: UL/GreenGuard Gold Certified
LCA: Environmental Product Declaration (EPD) by SCS

CONSISTENCY WITH OTHER PROGRAMS

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

Section 2: Content in Descending Order of Quantity

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 3.0, available on the HPDC website at: www.hpd-collaborative.org/hpd-3-0-standard

VINYL FLOORING (KINGDOM, VIET NAM, AND THAILAND LINES)

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

RESIDUALS AND IMPURITIES NOTES: Zhejiang Kingdom New Material Group Co., Ltd. worked with the HPDC Approved Preparer to confirm that all 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:

POLYVINYL CHLORIDE

ID: **9002-86-2**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2026-06-11 23:40:47**

%: **2.1000 - 88.5000**

GreenScreen: **LT-P1**

RC: **None**

NANO: **No**

POLYMER ROLE: **Structure component**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
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	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 (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Avoidance of Organohalogens and Functionally Related Chemical Classes of Concern
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Flame Retardants

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: Range > 20% because it is an alternate structural ingredient only used in certain models.

CALCIUM CARBONATE 1

ID: **Geological Material**

HAZARD DATA SOURCE: **HPDC Special Conditions Policy**

%: **0.0000 - 74.7600** GreenScreen: **Not Required** RC: **None** NANO: **No** MATERIAL ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
Hazard Screening is not applicable to this Special Condition		

INGREDIENT DESCRIPTION AND COMPOSITION: 99.68% calcium carbonate, 0.07% magnesium carbonate, 0.08% sodium carbonate, 0.12% silica, 0.05% iron oxide

COUNTRY OF ORIGIN: China

RADIOACTIVE ELEMENTS: Unknown

POTENTIAL PRESENCE OF TOXIC METALS: Unknown

MATERIAL CONTENT NOTES: Range > 20% because it is an alternate structural ingredient only used in certain models.

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.

CALCIUM CARBONATE 2

ID: **Geological Material**

HAZARD DATA SOURCE: **HPDC Special Conditions Policy**

%: **0.0000 - 73.0000 ALT** GreenScreen: **Not Required** RC: **None** NANO: **No** MATERIAL ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
Hazard Screening is not applicable to this Special Condition		

INGREDIENT DESCRIPTION AND COMPOSITION: 98.89% calcium carbonate, 0.05% silicon dioxide, 0.20% magnesium oxide, 0.013% iron (III) oxide, 0.033% aluminum oxide, 0.814% unknown

COUNTRY OF ORIGIN: Vietnam

RADIOACTIVE ELEMENTS: Unknown

POTENTIAL PRESENCE OF TOXIC METALS: Unknown

MATERIAL CONTENT NOTES: Range > 20% because it is an alternate structural ingredient only used in certain models.

ALTERNATE: This material is an alternate material to Calcium Carbonate 1.
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.

CALCIUM CARBONATE 3

ID: **Geological Material**

HAZARD DATA SOURCE: **HPDC Special Conditions Policy**

%: **0.0000 - 72.0900 ALT** GreenScreen: **Not Required** RC: **None** NANO: **No** MATERIAL ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
Hazard Screening is not applicable to this Special Condition		

INGREDIENT DESCRIPTION AND COMPOSITION: 98.75% calcium carbonate, 0.026% sodium oxide, 0.32% magnesium oxide, 0.16% aluminum oxide, 0.527% silicon dioxide, 0.013% phosphorous pentaoxide, 0.011% sulfur trioxide, 0.019% chlorine, 0.032% potassium oxide, 0.098% ferric oxide, 0.013% copper (II) oxide, 0.009% zinc oxide, and 0.022% strontium oxide

COUNTRY OF ORIGIN: Thailand

RADIOACTIVE ELEMENTS: Unknown

POTENTIAL PRESENCE OF TOXIC METALS: Unknown

MATERIAL CONTENT NOTES: Range > 20% because it is an alternate structural ingredient only used in certain models.

ALTERNATE: This material is an alternate material to Calcium Carbonate 1.
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.

BIS(2-ETHYLHEXYL) TEREPHTHALATE

ID: **6422-86-2**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:38**

%: **0.6000 - 21.6900** 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 Bisphenols and Phthalates

SUBSTANCE NOTES: Range > 20% because it is only present in certain models. The GreenScreen® Benchmark Score of BM-3dg comes from the HPDC Builder Tool.

2-PROPENOIC ACID, 2-METHYL-, METHYL ESTER, POLYMER WITH BUTYL 2-PROPENOATE

ID: **25852-37-3**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:42**

%: **0.0000 - 11.4800** GreenScreen: **LT-UNK** 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:

POLYETHYLENE ID: **9002-88-4**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:43**

%: **0.0000 - 10.1100** GreenScreen: **LT-UNK** RC: **None** NANO: **No** POLYMER 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

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:

STEARIC ACID ID: **57-11-4**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:38**

%: **0.0000 - 3.4800** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Stabilizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

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

SUBSTANCE NOTES:

QUERCUS SUBER BARK – CORK

ID: **61789-98-8**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:39**

%: **0.0000 - 3.4000** GreenScreen: **NoGS** 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
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: **2026-06-11 23:40:40**

%: **0.0300 - 3.1000** 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:

ZEOLITES

ID: **1318-02-1**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:41**

%: **0.0000 - 1.5700** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Stabilizer**

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]

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

SUBSTANCE NOTES:

ZINC STEARATE

ID: **557-05-1**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:38**

%: **0.0000 - 1.1600** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Stabilizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v5.0 Product Standard Restricted Substances - Effective March 16, 2026 Children's Toy Products

SUBSTANCE NOTES:

POLYMETHYL METHACRYLATE

ID: **9011-14-7**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:44**

%: **0.0000 - 1.1200** GreenScreen: **LT-P1** 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
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List Precautionary list of substances recommended for avoidance

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:

CALCIUM CARBONATE

ID: **471-34-1**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:39**

%: **0.0000 - 0.9800** GreenScreen: **BM-3** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
EYE	GHS - New Zealand	Eye irritation category 2

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

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

UNDISCLOSED ID: **Undisclosed**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **Not Screened**

%: **0.0000 - 0.9700** GreenScreen: **Not Screened** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
	Proprietary Ingredient Due Diligence Exception	

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
	Proprietary Ingredient Due Diligence Exception	

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient but was unable to obtain the identity of this specific chemical. Therefore the Approved Preparer is utilizing the 1% Data Gap Exemption for this chemical.

ETHENE, HOMOPOLYMER, OXIDIZED ID: **68441-17-8**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:46**

%: **0.0000 - 0.9100** 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 : ≥1,000 Da and ≤ 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:

SILICON DIOXIDE ID: **7631-86-9**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:39**

%: **0.0000 - 0.8900** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	GHS - Japan	H350 - May cause cancer [Carcinogenicity - Category 1A]
CAN	GHS - Australia	H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
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 - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Antimicrobials
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Flame Retardants

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

VINYL CHLORIDE VINYL ACETATE COPOLYMER ID: **9003-22-9**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:47**

%: **0.0000 - 0.8200** 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 v4.1 Product Standard Restricted Substances - Effective July 1, 2025 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:

GLYCERYL MONOSTEARATE

ID: **123-94-4**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:40**

%: **0.0000 - 0.8100** 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
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex IV listing due to intrinsic safety

SUBSTANCE NOTES:

GLYCERYL MONOSTEARATE

ID: **31566-31-1**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:39**

%: **0.0000 - 0.7300** 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:

PROPANOL, [(1-METHYL-1,2-ETHANEDIYL)BIS(OXY)]BIS-, POLYMER WITH 1,1'-METHYLENEBIS[ISOCYANATOBENZENE] AND OXYBIS[PROPANOL]

ID: **68092-58-0**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:43**

%: **0.0000 - 0.6000** GreenScreen: **LT-P1** RC: **None** NANO: **No** POLYMER ROLE: **Adhesive**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
MAM	GHS - Australia	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]

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

POLYMER TYPE: Thermoset prepolymer (i.e. partially reacted)

AVERAGE MOLECULAR WEIGHT : <1,000 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:

RUBBER, POLYSULFIDE ID: **63148-67-4**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:44**

%: **0.0000 - 0.5600** GreenScreen: **NoGS** RC: **None** NANO: **No** POLYMER 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

POLYMER TYPE: Crosslinked thermoset

AVERAGE MOLECULAR WEIGHT : ≥1,000 Da and ≤ 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:

1,1'-AZOBIS(FORMAMIDE) ID: **123-77-3**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:39**

%: **0.0000 - 0.5100** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Blowing agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
PHY	GHS - New Zealand	Flammable solids category 1
PHY	GHS - Japan	H225 - Highly flammable liquid and vapour [Flammable solids - Category 1]
RES	EU - SVHC List	Equivalent Concern - Candidate List: Respiratory sensitizing
RES	EU - SVHC List	Equivalent Concern - Prioritization List: Respiratory sensitizing

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Flame Retardants
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v5.0 Product Standard Restricted Substances - Effective March 16, 2026 Restrictions Based on Hazard Endpoints and Risk (Silver)

SUBSTANCE NOTES:

SILICIC ACID, ALUMINUM POTASSIUM SALT

ID: **1327-44-2**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:40**

%: **0.0000 - 0.5000** 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:

EPOXIDIZED SOYBEAN OIL

ID: **8013-07-8**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:41**

%: **0.0000 - 0.4300** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Stabilizer**

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:

MAGNESIUM ALUMINUM HYDROXIDE CARBONATE HYDRATE

ID: **12539-23-0**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:42**

%: **0.0000 - 0.3600** GreenScreen: **NoGS** 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:

CALCIUM

ID: **7440-70-2**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:40**

%: **0.0000 - 0.3500** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Processing regulator**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
PHY	GHS - Japan	H261 - In contact with water releases flammable gas [Substances and mixtures, which in contact with water, emit flammable gases - Category 2]
EYE	GHS - Japan	H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]
SKI	GHS - Japan	H314 - Causes severe skin burns and eye damage [Skin corrosion / irritation - Category 1]
PHY	GHS - Japan	H250 - Catches fire spontaneously if exposed to air [Pyrophoric solids - Category 1]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Flame Retardants

SUBSTANCE NOTES:

PALMITIC ACID

ID: **57-10-3**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:41**

%: **0.0000 - 0.3500** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Processing regulator**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

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

SUBSTANCE NOTES:

LIME

ID: **1305-78-8**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:43**

%: **0.0000 - 0.3400** GreenScreen: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - 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]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
SKI	GHS - New Zealand	Skin corrosion category 1C
EYE	GHS - New Zealand	Serious eye damage category 1
EYE	GHS - Japan	H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
EYE	GHS - Australia	H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]

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

SUBSTANCE NOTES: The GreenScreen® Benchmark Score of BM-2 comes from the HPDC Builder Tool.

1,6-HEXANEDIOL DIACRYLATE ID: **13048-33-4**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:44**

%: **0.0000 - 0.3000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
SKI	GHS - New Zealand	Skin sensitisation category 1
AQU	GHS - Japan	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Japan	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]

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

SUBSTANCE NOTES:

UNDISCLOSED ID: **Polymer**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:45**

%: **0.0000 - 0.3000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** POLYMER ROLE: **Adhesive**

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 : ≥1,000 Da and ≤ 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 without disclosed CAS numbers.

ADDITIONAL NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 1

PETROLEUM RESINS ID: **64742-16-1**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:46**

%: **0.0000 - 0.3000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** POLYMER ROLE: **Coating**

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 hydrocarbon resin mixture (UVCB)

AVERAGE MOLECULAR WEIGHT : ≥1,000 Da and ≤ 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:

MAGNESIUM ALUMINUM HYDROXIDE CARBONATE ID: **11097-59-9**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:45**

%: **0.0000 - 0.2700** 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
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v5.0 Product Standard Restricted Substances - Effective March 16, 2026 Children's Toy Products

SUBSTANCE NOTES:

HYDROTALCITE ID: **12304-65-3**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:41**

%: **0.0000 - 0.2600** GreenScreen: **NoGS** 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:

SODIUM BICARBONATE

ID: **144-55-8**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:43**

%: **0.0000 - 0.2600** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Blowing agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Flame Retardants

SUBSTANCE NOTES:

PENTAERYTHRITOL

ID: **115-77-5**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:44**

%: **0.0000 - 0.2600** 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
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Flame Retardants

SUBSTANCE NOTES:

BENZENE, ETHENYL-, POLYMER WITH 2-METHYL-1,3-BUTADIENE

ID: **25038-32-8**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:47**

%: **0.0000 - 0.2400** GreenScreen: **LT-UNK** RC: **None** NANO: **No** POLYMER ROLE: **Coating**

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 : ≥1,000 Da and ≤ 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:

WHITE MINERAL OIL ID: **8042-47-5**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:45**

%: **0.0000 - 0.2100** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Adhesive**

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:

ALUMINUM OXIDE ID: **1344-28-1**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:46**

%: **0.0000 - 0.2000** GreenScreen: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
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 v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v5.0 Product Standard Restricted Substances - Effective March 16, 2026 Children's Toy Products

SUBSTANCE NOTES: The GreenScreen® Benchmark Score of BM-2 comes from the HPDC Builder Tool.

CARBON BLACK

ID: **1333-86-4**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:42**

%: **0.0000 - 0.1800** 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	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CAN	IARC	Group 2b - Possibly carcinogenic to humans
EYE	GHS - New Zealand	Eye irritation category 2
CAN	GHS - New Zealand	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]
PHY	GHS - Japan	H251 - Self-heating;; may catch fire [Self-heating substances and mixtures - Category 1]

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

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

HYDROCARBONS, C6-20, POLYMERS, HYDROGENATED

ID: **69430-35-9**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:43**

%: **0.0000 - 0.1800** GreenScreen: **LT-P1** RC: **None** NANO: **No** POLYMER ROLE: **Adhesive**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

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

POLYMER TYPE: Thermoplastic

AVERAGE MOLECULAR WEIGHT : ≥1,000 Da and ≤ 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:

ACETYL ACETONE ID: **123-54-6**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:43**

%: **0.0000 - 0.1600** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Stabilizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
EYE	GHS - New Zealand	Eye irritation category 2
GEN	GHS - Japan	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
MAM	GHS - Japan	H331 - Toxic if inhaled [Acute toxicity (inhalation: vapor) - Category 3]
MAM	GHS - New Zealand	Acute inhalation toxicity category 3
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 3
MAM	GHS - Japan	H311 - Toxic in contact with skin [Acute Toxicity (dermal) - Category 3]
MAM	GHS - Australia	H331 - Toxic if inhaled [Acute toxicity (inhalation) - Category 3]
MAM	GHS - New Zealand	Acute dermal toxicity category 3
MAM	GHS - New Zealand	Acute oral toxicity category 3

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

SUBSTANCE NOTES:

NEOPENTYL GLYCOL, ADIPIC ACID, ISOPHORONE DIISOCYANATE, 2-HYDROXYETHYL ACRYLATE POLYMER ID: **70766-56-2**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:44**

%: **0.0000 - 0.1600** GreenScreen: **LT-UNK** RC: **None** NANO: **No** POLYMER ROLE: **Coating**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
MAM	GHS - Australia	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]

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

POLYMER TYPE: Crosslinked thermoset

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:

4,4'-DIPHENYLMETHANE DIISOCYANATE ID: **101-68-8**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:45**

%: **0.0000 - 0.1200** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Adhesive**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
CAN	GHS - New Zealand	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]
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
CAN	EU - Annex VI CMRs	Carcinogen Category 2 - Suspected human Carcinogen
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
SKI	GHS - New Zealand	Skin sensitisation category 1
MAM	GHS - New Zealand	Acute inhalation toxicity category 2
EYE	GHS - Korea	H319 - Causes serious eye irritation [Serious eye damage/irritation - Category 2]
SKI	GHS - Korea	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	Québec CSST - WHMIS 1988	Class D1A - Very toxic material causing immediate and serious toxic effects
MAM	GHS - Australia	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: dust, mist) - Category 2]
CAN	GHS - Australia	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	GHS - Korea	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 (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 All Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v5.0 Product Standard Restricted Substances - Effective March 16, 2026 Core List - Mixtures Only
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v5.0 Product Standard Restricted Substances - Effective March 16, 2026 Restrictions Based on Hazard Endpoints and Risk (Silver)

SUBSTANCE NOTES:

STYRENE BUTADIENE RUBBER (BENZENE, ETHENYL-, POLYMER WITH 1,3-BUTADIENE) ID: **9003-55-8**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:46**

%: **0.0000 - 0.1200** GreenScreen: **LT-UNK** RC: **None** NANO: **No** POLYMER ROLE: **Adhesive**

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: Crosslinked thermoset

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:

TITANIUM DIOXIDE ID: **13463-67-7**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:46**

%: **0.0000 - 0.1100** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

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
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, 2025 Cosmetics and Personal Care Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v5.0 Product Standard Restricted Substances - Effective March 16, 2026 Cosmetics & Personal Care Products

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

UNDISCLOSED ID: **Polymer**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-06-11 23:40:47**

%: **0.0000 - 0.1100** GreenScreen: **LT-UNK** RC: **None** NANO: **No** POLYMER ROLE: **Adhesive**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
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
None found		No listings found on Additional Hazard Lists

POLYMER TYPE: Thermoplastic

AVERAGE MOLECULAR WEIGHT : ≥1,000 Da and ≤ 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 without disclosed CAS numbers.

ADDITIONAL NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 2

Section 3: 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 | **RFCI FloorScore**

COMPLIANCE TYPE: Third-party certification
CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: SCS Global Services
COMPLIANCE DETAILS:
COMPLIANCE SCOPE: Product Line
APPLICABLE FACILITIES: Zhejiang Kingdom New Material Group Co., Ltd., No. 38, Desheng Road, Heshan Industrial Park, Heshan Town, Tongxiang City, Zhejiang, China Thien Lam New Material Technology Co.,Ltd, Southern Industrial Park, Phu Thinh Communeyen Binh District, Yen Bai Province, Vietnam Vytec Floor Co.,Ltd., 55/9 Moo.7 Tha Bunmee Subdistrict, Ko Chan District, Chonburi 20240, Thailand.
COMPLIANCE URL: https://www.scsglobalservices.com/certified-green-products-guide
COMPLIANCE NOTES: Registration # SCS-FS-03218. Indoor Air Quality Certified to SCS-105 Version 4.2 – 2023 Conforms to the CDPH/EHLB Standard Method v1.2-2017 (California Section 01350), effective April 1, 2017, for the school classroom and private office parameters when modeled as Flooring. Measured Concentration of Total Volatile Organic Compounds (TVOC): Less than/equal to 0.5 mg/m³ (in compliance with CDPH/EHLB Standard Method v1.2-2017).

ISSUE DATE: 2025-12-01 **EXPIRY DATE:** 2026-11-30

VOC EMISSIONS | **UL/GreenGuard Gold Certified**

COMPLIANCE TYPE: Third-party certification
CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: UL Solutions
COMPLIANCE DETAILS:
COMPLIANCE SCOPE: Product Line
APPLICABLE FACILITIES: All facilities
COMPLIANCE URL: https://www.ul.com/cere-search-certificates
COMPLIANCE NOTES: UL 2818 - 2022 Gold Standard for Chemical Emissions for Building Materials, Finishes and Furnishings. Flooring products are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.2-2017 using an Office and Classroom. Environment.

ISSUE DATE: 2024-12-10 **EXPIRY DATE:** 2026-12-10

LCA | **Environmental Product Declaration (EPD) by SCS**

COMPLIANCE TYPE: Third-party certification
ISSUE DATE: 2024-03-21
EXPIRY DATE: 2029-03-20
CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: SCS Global Services
COMPLIANCE DETAILS:
COMPLIANCE SCOPE: Product Line
APPLICABLE FACILITIES: No. 38 Desheng Road, Heshan Town, Tongxiang City, Zhejiang Province, China
COMPLIANCE URL: https://www.scsglobalservices.com/certified-green-products-guide
COMPLIANCE NOTES: Product Category Rule. PCR2019:14 Construction Products. International EPD System. Version 1.3.2. December 2023. Complementary Product Category Rules (c-PCR) To PCR 2019:14.

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

Zhejiang Kingdom New Material Group Co., Ltd. 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.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **Zhejiang Kingdom New Material Group Co., Ltd.**
ADDRESS: **No. 38, Desheng Road**
Heshan Industrial Park
Heshan Town, Tongxiang City Zhejiang Province
COUNTRY: **China**

WEBSITE: **www.kingdomflooring.com.cn**
CONTACT NAME: **Customer Support**
TITLE: **Customer Support**
PHONE: **86-571-89376688**
EMAIL: **sales@kingdomflooring.com.cn**

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

GreenScreen (GS)

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

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 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 for compliance with the HPD standard noted.