UnidecoTile, Looselay Tile, Click Tile, and Eco Unideco Tile

by KDF CO.,LTD

SCREENING DATE: 2026-03-25
PUBLISHED DATE: 2026-03-25
EXPIRY DATE: 2029-03-25
PREPARER: ToxServices LLC
VERIFIER: SCS Global Services
VERIFICATION #: qGE-16204

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

THIRD-PARTY VERIFIED

HPD UNIQUE IDENTIFIER: 7879030109184
HPD UNIQUE PRODUCT ID: Not provided.
CLASSIFICATION: 09 65 19.23 Vinyl Tile Flooring
PRODUCT DESCRIPTION: It is possible to produce a unique indoor space by applying differentiated design and pattern, and the tile is resistant to scratches due to its high durability design which can withstand heavy load. The KDF tile models that are represented under this HPD are Unideco Tile (2 mm - 5 mm); Looselay Tile (4 mm - 7mm); Click Tile (4.3 mm - 6 mm); and Eco Unideco Tile (Zone LVT 1.6 mm - 5mm) which all have both color and design variations dependent on the tile's print layer.

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

UNIDECOTILE, LOOSELAY TILE, CLICK TILE, AND ECO UNIDECO TILE [LIMESTONE BM-3dg **RECYCLED PVC 1 POLYVINYL CHLORIDE** LT-P1 | CAN | MAM **RECYCLED PVC 2 BIS(2-ETHYLHEXYL) TEREPHTHALATE** BM-3dg **CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE** LT-UNK **RECYCLED PLASTICIZER CALCIUM CARBONATE** BM-3 | EYE **PULP, CELLULOSE** NoGS **1,4-BENZENEDICARBOXYLIC ACID, MIXED BU AND 2-ETHYLHEXYL DIESTERS** NoGS **1,3-BUTADIENE, POLYMER WITH 2-PROPENENITRILE** LT-UNK **(UNKNOWN)** Not Screened **HYDROXYPROPYL ACRYLATE** LT-P1 | SKI | MUL | MAM | EYE | AQU **BARIUM CARBONATE** BM-2 | MAM **DIPROPYLENE GLYCOL DIACRYLATE** LT-UNK | SKI | EYE **POLY(OXY-1,2-ETHANEDIYL), ALPHA-(1-OXO-2-PROPEN-1-YL)-OMEGA-((1-OXO-2-PROPEN-1-YL)OXY)-** LT-UNK **BARIUM DIOLEATE** LT-UNK **FATTY ACIDS, C6-19-BRANCHED, ZINC SALTS** LT-P1 | PBT **2-PROPENOIC ACID, 2-HYDROXYETHYL ESTER, POLYMER WITH 1,1'-METHYLENEBIS[4-ISOCYANATOCYCLOHEXANE] AND .ALPHA.,.ALPHA.',.ALPHA.''-1,2,3-PROPANETRIYLTRIS[.OMEGA.-HYDROXYPOLY[OXY(METHYL-1,2-ETHANEDIYL)]]** LT-UNK | SKI | EYE | MAM **TITANIUM DIOXIDE** BM-1 | CAN | END | MAM **DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC** LT-1 | CAN | MUL | SKI | DEV **BARIUM DISTEARATE** LT-UNK | SKI | EYE | MAM **PARAFFIN** LT-UNK | MAM **ZINC STEARATE** LT-UNK | AQU **]**

Number of Greenscreen BM-4/BM3 contents ... 3

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-P1, BM-1, LT-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: [MixedRecycledContent]
Special Conditions applied: [Polymers]

The KDF team worked with an 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.

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
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

UNIDECOTILE, LOOSELAY TILE, CLICK TILE, AND ECO UNIDECO TILE

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

RESIDUALS AND IMPURITIES NOTES: The KDF Team worked with an 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:

LIMESTONE

ID: **1317-65-3**

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

HAZARD SCREENING DATE: **2026-03-25 0:40:30**

%: **36.8000 - 59.7200** GreenScreen: **BM-3dg** RC: **None** NANO: **No** SUBSTANCE ROLE: **Filler**

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: Range greater than 20% due to varying use levels across models. The GreenScreen® Benchmark Score of BM-3dg comes from the HPDC Builder Tool.

RECYCLED PVC 1

ID: **Mixed Recycled Content**

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

%: **0.0000 - 34.2200** GreenScreen: **Not Required** RC: **Both** NANO: **No** MATERIAL ROLE: **Structure component**

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

INGREDIENT DESCRIPTION: Recycled PVC is sourced from reclaimed flooring materials from demolished buildings, as well as internal scrap.

ANALYTICAL TESTING: The recycled PVC is subjected to asbestos testing in accordance with the Korean Standard Asbestos Testing Method for content in bulk samples (KSL5300). The chemicals covered under the KSL5300 testing method include Chrysotile, Amosite, Crocidolite, Anthophyllite Asbestos, Actinolite Asbestos, and Tremolite Asbestos. Testing is performed by FITI Testing & Research Institute, which is accredited to ISO 17025.

BATCH VARIATION: Yes, As the recycled PVC is sourced from reclaimed flooring materials from demolished buildings and procured from multiple suppliers, some variation may occur between batches.

COUNTRY OF ORIGIN: Korea

MATERIAL CONTENT NOTES: Range > 20% due to varying use level across models

This disclosure does not provide information on the potential presence of hazardous substances which may be found in certain mixed recycled materials.

POLYVINYL CHLORIDE

ID: **9002-86-2**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-03-25 00:40:34**

%: **10.2600 - 30.9700** 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

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% due to varying concentration across models

RECYCLED PVC 2

ID: **Mixed Recycled Content**

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

%: **0.0000 - 27.0600** GreenScreen: **Not Required** RC: **PreC** NANO: **No** MATERIAL ROLE: **Structure component**

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

INGREDIENT DESCRIPTION: Waste wallpaper

ANALYTICAL TESTING: In general, supplier conducts analyses of material properties after production.

BATCH VARIATION: Yes, Variation in composition ratio by batch. The variation is mainly due to differences in the incoming raw materials.

COUNTRY OF ORIGIN: Korea

MATERIAL CONTENT NOTES: Range > 20% due to varying use level across models

This disclosure does not provide information on the potential presence of hazardous substances which may be found in certain mixed recycled materials.

BIS(2-ETHYLHEXYL) TEREPHTHALATE

ID: **6422-86-2**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-03-25 0:40:31**

%: **3.1100 - 13.7800** 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: **2026-03-25 0:40:31**

%: **0.0000 - 5.0300** 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:

RECYCLED PLASTICIZER

ID: **Mixed Recycled Content**

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

%: **0.0000 - 3.7900** GreenScreen: **Not Required** RC: **PostC** NANO: **No** MATERIAL ROLE: **Plasticizer**

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

INGREDIENT DESCRIPTION: Waste PET

ANALYTICAL TESTING: In general, the supplier conducts analyses of material properties after production.

BATCH VARIATION: Yes, Variation in color (APHA value) by batch. The variation is mainly due to differences in the incoming raw materials.

COUNTRY OF ORIGIN: Korea

MATERIAL CONTENT NOTES: This disclosure does not provide information on the potential presence of hazardous substances which may be found in certain mixed recycled materials.

CALCIUM CARBONATE

ID: **471-34-1**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-03-25 0:40:32**

%: **0.0000 - 3.1800** 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.

PULP, CELLULOSE

ID: **65996-61-4**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-03-25 0:40:32**

%: **0.0000 - 1.3800** 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
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex IV listing due to intrinsic safety

SUBSTANCE NOTES:

1,4-BENZENEDICARBOXYLIC ACID, MIXED BU AND 2-ETHYLHEXYL DIESTERS ID: **1571954-81-8**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-03-25 0:40:31**

%: **0.0000 - 1.0800** 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:

1,3-BUTADIENE, POLYMER WITH 2-PROPENENITRILE ID: **9003-18-3**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-03-25 00:40:35**

%: **0.0000 - 0.9500** 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: 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:

(UNKNOWN) ID: **Unknown**

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

%: **0.0600 - 0.6000** GreenScreen: **Not Screened** RC: **None** NANO: **No** SUBSTANCE ROLE: **Stabilizer**

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.

HYDROXYPROPYL ACRYLATE

ID: **25584-83-2**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-03-25 0:40:31**

%: **0.0700 - 0.2500** 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	H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H331 - Toxic if inhaled [Acute toxicity (inhalation) - Category 3]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H301 - Toxic if swallowed [Acute toxicity (oral) - Category 3]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H311 - Toxic in contact with skin [Acute toxicity (dermal) - Category 3]
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]
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	H314 - Causes severe skin burns and eye damage [Skin corrosion / irritation - Category 1]
SKI	GHS - Australia	H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]
MAM	GHS - New Zealand	Acute inhalation toxicity category 3
SKI	GHS - New Zealand	Skin sensitisation category 1
AQU	GHS - Japan	H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]
MAM	GHS - Australia	H301 - Toxic if swallowed [Acute toxicity (oral) - Category 3]
MAM	GHS - Australia	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
MAM	GHS - Japan	H310 - Fatal in contact with skin [Acute Toxicity (dermal) - Category 2]

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

SUBSTANCE NOTES:

BARIUM CARBONATE

ID: **513-77-9**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-03-25 0:40:32**

%: **0.0300 - 0.2400** GreenScreen: **BM-2** 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]
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]
MAM	GHS - Japan	H301 - Toxic if swallowed [Acute Toxicity (oral) - Category 3]

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

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

DIPROPYLENE GLYCOL DIACRYLATE

ID: **57472-68-1**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-03-25 0:40:32**

%: **0.0400 - 0.2000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Coating**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	GHS - New Zealand	Skin irritation category 2
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:

POLY(OXY-1,2-ETHANEDIYL), ALPHA-(1-OXO-2-PROPEN-1-YL)-OMEGA-((1-OXO-2-PROPEN-1-YL)OXY)-

ID: **26570-48-9**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-03-25 0:40:33**

%: **0.0400 - 0.2000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE 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

SUBSTANCE NOTES:

BARIUM DIOLEATE

ID: **591-65-1**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-03-25 0:40:33**

%: **0.0100 - 0.2000** 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
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

SUBSTANCE NOTES:

FATTY ACIDS, C6-19-BRANCHED, ZINC SALTS

ID: **68551-44-0**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-03-25 0:40:34**

%: **0.0100 - 0.2000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTE) to the Environment (based on aquatic organisms)

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

SUBSTANCE NOTES:

2-PROPENOIC ACID, 2-HYDROXYETHYL ESTER, POLYMER WITH 1,1'-METHYLENEBIS[4-ISOCYANATOCYCLOHEXANE] AND .ALPHA.,.ALPHA.',.ALPHA.''-1,2,3-PROPANETRIYLTRIS[.OMEGA.-HYDROXYPOLY[OXY(METHYL-1,2-ETHANEDIYL)]]

ID: **73324-00-2**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-03-25 00:40:33**

%: **0.0400 - 0.2000** 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: Aliphatic urethane acrylate oligomer

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:

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

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-03-25 0:40:34**

%: **0.0000 - 0.1900** 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

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

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC ID: **64742-55-8**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-03-25 0:40:34**

%: **0.0200 - 0.1700** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Stabilizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CAN	GHS - Australia	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
DEV	GHS - Australia	H361d - Suspected of damaging the unborn child [Reproductive toxicity - Category 2]
CAN	EU - REACH Annex XVII CMRs	Carcinogens: Category 1B

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

SUBSTANCE NOTES:

BARIUM DISTEARATE

ID: **6865-35-6**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-03-25 0:40:33**

%: **0.0200 - 0.1400** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Stabilizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
MAM	GHS - New Zealand	Acute oral toxicity category 3

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

SUBSTANCE NOTES:

PARAFFIN

ID: **8002-74-2**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2026-03-25 0:40:34**

%: **0.0100 - 0.1100** 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]

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: **2026-03-25 0:40:34**

%: **0.0100 - 0.1100** 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

SUBSTANCE NOTES:

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
CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: SCS Global Services
COMPLIANCE DETAILS:
COMPLIANCE SCOPE: Product Line
APPLICABLE FACILITIES: All Facilities
COMPLIANCE URL: http://www.scsglobalservices.com/certified-green-products-guide
COMPLIANCE NOTES: 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. Indoor Air Quality Certified to SCS-105 Version 4.2 – 2023.

ISSUE DATE: 2025-07-01 **EXPIRY DATE:** 2026-06-30

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

COMPLIANCE TYPE: Third Party
CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: SCS Global Services
COMPLIANCE DETAILS:
COMPLIANCE SCOPE: Product Line
APPLICABLE FACILITIES: All facilities
COMPLIANCE URL: https://www.scsglobalservices.com/certified-green-products-guide
COMPLIANCE NOTES: Registration # SCS-EPD-10175; This EPD conforms to ISO 14025, 14040, 14044, and 21930.

ISSUE DATE: 2024-06-06 **EXPIRY DATE:** 2029-06-05

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

The KDF team 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.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **KDF CO.,LTD**
ADDRESS: **110-3, Sinbong-gil, Yeongin-Myeon, Asan-si, Chungcheongnam-do, Republic of Korea Asan-si Chungcheongnam-do 31422**
COUNTRY: **South Korea**
WEBSITE: **www.ikdf.co.kr**
CONTACT NAME: **SHIN DONG MIN**
TITLE: **Quality Management Dept. Assitant Manager**
PHONE: **+82-41-549-0311**
EMAIL: **dm103@ikdf.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
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.