



HPD UNIQUE IDENTIFIER: 1493371904

CLASSIFICATION: 09 65 19.23 Vinyl Tile Flooring

PRODUCT DESCRIPTION: Mannington Commercial's domestically manufactured LVT/LVP is crafted to deliver industry-leading performance. Providing a beautiful solution for every type of space, LVT/LVP domestically manufactured by Mannington in Madison, Georgia, features an ortho-phthalate free construction and is FloorScore Certified to support improved indoor air quality. This LVT/LVP offers the superior performance of Quantum Guard technology. Boasting the largest array of designs and options in the industry, as well as a product specific, third-party verified EPD, Mannington Commercial LVT/LVP enables specifiers to craft unique spaces that contribute to people's wellbeing.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

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

CONTENT IN DESCENDING ORDER OF QUANTITY

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

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

LUXURY VINYL TILE & PLANK (LVT/LVP) - 2, 2.5 (12, 20, AND 30 MIL), 3, AND 4MM [POLYVINYL CHLORIDE LT-P1 | MAM CALCIUM CARBONATE BM-3dg | DI(2-ETHYLHEXYL) TEREPHTHALATE BM-3dg | SOYBEAN OIL NoGS | QUARTZ BM-1 * | CAN | MAM | GEN CARBON BLACK BM-1 * | CAN | EYE | MAM | PHY NEODECANOIC ACID, ZINC SALT LT-P1 | MUL FATTY ACIDS, C18-UNSATD., DIMERS, ESTERS WITH POLYPROPYLENE GLYCOL MONO-BU ETHER NoGS | SOYBEAN OIL, EPOXIDIZED LT-P1 | AQU [1,1'-BIANTHRACENE]-9,9',10,10'-TETRONE, 4,4'-DIAMINO- LT-1 | PBT | CAN PHOSPHOROUS ACID, TRIISODECYL ESTER LT-P1 | MUL WATER BM-4 | PHOSPHOROUS ACID, TRI-C12-15-ALKYL ESTERS NoGS | OXYBIS(METHYL-2,1-ETHANEDIYL) DIACRYLATE LT-UNK | SKI | EYE 2-ETHYLHEXYL METHYL TEREPHTHALATE NoGS | 2-PROPENOIC ACID, 2-METHYL-, BUTYL ESTER, POLYMER WITH ETHYL 2-PROPENOATE AND METHYL 2-METHYL-2-PROPENOATE LT-UNK | ACRYLATE URETHANE N/A | 2-PROPENOIC ACID, 1,6-HEXANEDIYL ESTER LT-P1 | SKI | MUL | EYE | AQU PHENOL, TETRAPROPYLENE-, BARIUM SALT, OVERBASED LT-UNK | ALCOHOLS, C14-18 LT-UNK | ACRYLONITRILE-BUTADIENE-STYRENE COPOLYMER LT-UNK | VINYL CHLORIDE-VINYL ACETATE COPOLYMERS LT-UNK | BENZOIC ACID LT-P1 | END | SKI | MAM | EYE | REP CALCIUM STEARATE LT-UNK | METHANONE, [2-HYDROXY-4-(OCTYLOXY)PHENYL]PHENYL- LT-UNK | METHANONE, (4-METHYLPHENYL)PHENYL- LT-P1 | MUL METHANONE, (1-HYDROXYCYCLOHEXYL)PHENYL- LT-UNK | EYE TITANIUM DIOXIDE BM-1 * | CAN | END | MAM 2-PROPENOIC ACID, 2-PHENOXYETHYL ESTER LT-P1 | MUL ALUMINUM OXIDE BM-2 | MAM NEODECANOIC

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

INVENTORY AND SCREENING NOTES:

Special Conditions applied: [Polymers]

This HPD includes all chemicals and residuals present in the product above the stated threshold of 100 ppm. This includes all colors available. The polymer special condition was utilized for polymer substances without CASRNs.

*Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. For this reason, this score is intentionally omitted from the "Contents highest concern" line above. See HPDC's Special Conditions policy for more information.

ACID, OXIRANYLMETHYL ESTER **LT-P1** | MUL | GEN | SKI | AQU
 BENZENE, 1,1'-OXYBIS-, TETRAPROPYLENE DERIVS.,
 SULFONATED, SODIUM SALTS **LT-P1** | MUL PHENOL, 2-(2H-
 BENZOTRIAZOL-2-YL)- 4,6-BIS(1-METHYL-1-PHENYLETHYL)- **BM-1** |
 PBT SILICIC ACID, CALCIUM SALT **LT-UNK** TRIS(2-ETHYLHEXYL)
 TRIMELLITATE **BM-U** | END 1H-ISOINDOL-1-ONE, 3,3'-(1,4-
 PHENYLENEDIIMINO) BIS[4,5,6,7-TETRACHLORO- **LT-P1** | PBT
 ALUMINUM HYDROXIDE **BM-2** | SKI | EYE IRON HYDROXIDE OXIDE
 (FE(OH)O) **LT-UNK** MICA **LT-UNK** | MAM QUINO[2,3-B]ACRIDINE-7,14-
 DIONE, 5,12-DIHYDRO- **LT-UNK** CYCLOHEXANONE **LT-P1** | CAN | END
 | EYE | MAM | GEN | SKI | REP 2-ETHYLHEXYL ACRYLATE **BM-2** | SKI
 | CAN | MAM | EYE | AQU BARIUM-DIOLEATE **LT-UNK** BENZOIC ACID,
 ZINC SALT **LT-P1** | MUL ETHANOL, 2-(2-BUTOXYETHOXY)- **LT-P1** |
 END | EYE | MAM CARBONIC ACID, BARIUM SALT (1:1) **BM-2** | MAM
 9-OCTADECENOIC ACID (Z)-, ZINC SALT **LT-P1** | MUL NEODECANOIC
 ACID, BARIUM SALT **LT-UNK** 2-PROPENOIC ACID, (1-METHYL-1,2-
 ETHANEDIYL) BIS[OXY(METHYL-2,1-ETHANEDIYL)] ESTER **LT-P1** |
 SKI | MUL | EYE | AQU AZACYCLOTRIDECAN-2-ONE,
 HOMOPOLYMER **LT-UNK** SILICA SAND **BM-1** | CAN | MAM
 DIISONONYL PHTHALATE **BM-1** | END | CAN | DEV | REP 9-
 OCTADECENOIC ACID (Z)- **LT-P1** | END | SKI | EYE PYRROLO[3,4-
 C]PYRROLE-1,4-DIONE, 3,6-BIS([1,1'-BIPHENYL]-4-YL)-2,5-DIHYDRO-
LT-UNK DIISONONYL CYCLOHEXANEDICARBOXYLATE **BM-2**
 HYDROTREATED HEAVY PARAFFINIC PETROLEUM DISTILLATES
LT-1 | CAN | MUL | SKI | DEV 1,3-PROPANEDIONE, 1,3-DIPHENYL-
 NoGS BENZENEPROPANOIC ACID, 3,5-BIS(1,1-DIMETHYLETHYL)-4-
 HYDROXY-, OCTADECYL ESTER **BM-2** | REP | AQU 2-PROPENOIC
 ACID, 2-METHYL-, METHYL ESTER, POLYMER WITH 1,3-BUTADIENE
 AND ETHENYL BENZENE **LT-UNK** 2-PROPENOIC ACID, 2-METHYL-,
 METHYL ESTER, POLYMER WITH BUTYL 2-PROPENOATE **LT-UNK**
 ZINC STEARATE **LT-UNK** | AQU 2-PROPENOIC ACID, ETHYL ESTER,
 HOMOPOLYMER **LT-UNK** OCTADECANOIC ACID, BARIUM SALT **LT-
 UNK** | SKI | EYE | MAM BUTANAMIDE, 2,2'-[(3,3'-DICHLORO[1,1'-
 BIPHENYL]-4,4'-DIYL)BIS(AZO)]BIS[N-(4-CHLORO-2,5 -
 DIMETHOXYPHENYL)-3-OXO- **LT-P1** | EYE | AQU C. I. PIGMENT BLUE
 15 **BM-3** ACRYLIC RESIN **N/A** ORGANIC RESIN **N/A** URETHANE
 ACRYLATE OLIGOMER **N/A** |

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: RFCI FloorScore

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Option 1.

Pre-checked for LEED v4.1 Option 1.

Third Party Verified?

Yes

No

PREPARER: Self-Prepared

VERIFIER: WAP Sustainability Consulting

VERIFICATION #: zPr-23626

SCREENING DATE: 2025-03-19

PUBLISHED DATE: 2025-03-19

EXPIRY DATE: 2028-03-19

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 2.3, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-3-standard

LUXURY VINYL TILE & PLANK (LVT/LVP) - 2, 2.5 (12, 20, AND 30 MIL), 3, AND 4MM

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED:
Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were collected from suppliers and those that fall above the threshold are included.

OTHER PRODUCT NOTES:

POLYVINYL CHLORIDE

ID: 9002-86-2

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

HAZARD SCREENING DATE: **2025-03-19 6:52:36**

%: **35.0000 - 50.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Polymer species**

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]
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 v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Core Restrictions
RESTRICTED LIST	International Living Future Institute (ILFI)	Living Building Challenge 4.0 - Red List of Materials & Chemicals - Effective February 1, 2025 Red List substances to avoid in Living Building Challenge V4.0 projects
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024 Avoidance of Organohalogens and Functionally Related Chemical Classes of Concern

SUBSTANCE NOTES:

LOCATIONS:

Country	Location	Process Stage	Status
United States	Undisclosed	Manufacturing	Location Undisclosed

CALCIUM CARBONATE

ID: **1317-65-3**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:36**

%: **30.0000 - 45.0000** 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:

DI(2-ETHYLHEXYL) TEREPHTHALATE

ID: **6422-86-2**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:37**

%: **10.0000 - 15.0000** 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:

SOYBEAN OIL

ID: **8001-22-7**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:37**

%: **0.0000 - 5.0000** GreenScreen: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

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

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

QUARTZ

ID: 14808-60-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2025-03-19 6:52:38**%: **0.0000 - 1.0000**GreenScreen: **BM-1**RC: **None**NANO: **No**SUBSTANCE ROLE: **Impurity**

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	US NIH - Report on Carcinogens	Known to be Human Carcinogen (respirable size - occupational setting)**
CAN	MAK	Carcinogen Group 1 - Substances that cause cancer in man**
CAN	IARC	Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources**
CAN	IARC	Group 1 - Agent is Carcinogenic to humans**
CAN	CA EPA - Prop 65	Carcinogen**
CAN	US NIH - Report on Carcinogens	Known to be a human Carcinogen**
CAN	GHS - Japan	H350 - May cause cancer [Carcinogenicity - Category 1A]**
CAN	GHS - Australia	H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]**
CAN	GHS - New Zealand	Carcinogenicity category 1**
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]**
GEN	GHS - Japan	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]**
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**
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: **Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. See HPDC's Special Conditions policy for more information. Manufacturer's Safety Data Sheet (SDS), if applicable, may offer occupational health and safety information.

CARBON BLACK

ID: 1333-86-4

%: **0.0000 - 1.0000** 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: **Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. See HPDC's Special Conditions policy for more information. Manufacturer's Safety Data Sheet (SDS), if applicable, may offer occupational health and safety information.

NEODECANOIC ACID, ZINC SALT

ID: **27253-29-8**

%: **0.0000 - 1.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Heat or UV stabilizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

FATTY ACIDS, C18-UNSATD., DIMERS, ESTERS WITH POLYPROPYLENE GLYCOL MONO-BU ETHER

ID: **2699628-00-5**

#: 0.0000 - 1.0000

GreenScreen: NoGS

RC: None

NANO: No

SUBSTANCE ROLE: Surface modifier

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:		

SOYBEAN OIL, EPOXIDIZED

ID: 8013-07-8

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:37**

#: 0.0000 - 1.0000

GreenScreen: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Plasticizer

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 2
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists
SUBSTANCE NOTES:		

[1,1'-BIANTHRACENE]-9,9',10,10'-TETRONE, 4,4'-DIAMINO-

ID: 4051-63-2

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:37**

#: 0.0000 - 1.0000

GreenScreen: LT-1

RC: None

NANO: No

SUBSTANCE ROLE: Pigment

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
CAN	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
PBT	WA DoE - PBT	PBT
PBT	US EPA - Toxics Release Inventory PBTs	PBT
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Substance of Possible Concern

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
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, 2024 All Products

SUBSTANCE NOTES:

PHOSPHOROUS ACID, TRIISODECYL ESTER

ID: 25448-25-3

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:38**

#: **0.0000 - 1.0000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Heat or UV stabilizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters

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

SUBSTANCE NOTES:

WATER

ID: 7732-18-5

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:39**

#: **0.0000 - 1.0000** GreenScreen: **BM-4** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impurity**

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:

PHOSPHOROUS ACID, TRI-C12-15-ALKYL ESTERS

ID: 68610-62-8

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:39**

#: 0.0000 - 1.0000 GreenScreen: NoGS RC: None NANO: No SUBSTANCE ROLE: Heat or UV 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:		

OXYBIS(METHYL-2,1-ETHANEDIYL) DIACRYLATE

ID: 57472-68-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:40**

#: 0.0000 - 1.0000 GreenScreen: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Curing agent

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:		

2-ETHYLHEXYL METHYL TEREPHTHALATE

ID: 63468-13-3

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:41**

#: 0.0000 - 1.0000 GreenScreen: NoGS RC: None NANO: No SUBSTANCE ROLE: Plasticizer

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists
SUBSTANCE NOTES:		

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

ID: 40471-03-2

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:39**

#: 0.0000 - 1.0000 GreenScreen: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Polymer species

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:		

ACRYLATE URETHANE

ID: **Polymer**

HAZARD DATA SOURCE: **GHS-compliant SDS** HAZARD SCREENING DATE: **2025-02-06 01:27:55**

#: **0.0000 - 1.0000** GreenScreen: **N/A** RC: **None** NANO: **No** POLYMER ROLE: **Polymer species**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
Hazards Screening not applicable for this special condition. See GHS or CLP warnings below.		

POLYMER TYPE: Crosslinked thermoset

AVERAGE MOLECULAR WEIGHT : >10,000 Da

PERCENTAGE OF POLYMER WITH MOLECULAR WEIGHT LESS THAN 500 DA : 1%

ADDITIONAL SUBSTANCES CONSIDERED: Yes

GHS HAZARD STATEMENTS: None

HAZARD SCREENING COMPLIANCE: Hazard screening data sourced from OSHA and/or EU compliance CLP or SDS, as allowed by HPDC Special Conditions policy for polymers.

POLYMER NOTES: This polymer has been reported in accordance to [HPDC Special Conditions Policy](#) for polymers without disclosed CAS numbers.

ADDITIONAL NOTES: No CASRN has been registered for this polymer.

2-PROPENOIC ACID, 1,6-HEXANEDIYL ESTER

ID: **13048-33-4**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:39**

#: **0.0000 - 0.1000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Curing agent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe 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:

PHENOL, TETRAPROPYLENE-, BARIUM SALT, OVERBASED

ID: 78330-15-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:40**

%: **0.0000 - 0.1000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Heat or UV 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:

ALCOHOLS, C14-18

ID: 67762-30-5

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:40**

%: 0.0000 - 0.1000

GreenScreen: **LT-UNK**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Lubricant**

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:

ACRYLONITRILE-BUTADIENE-STYRENE COPOLYMER

ID: **9003-56-9**

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

HAZARD SCREENING DATE: **2025-03-19 6:52:41**

%: 0.0000 - 0.1000

GreenScreen: **LT-UNK**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Polymer species**

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:

VINYL CHLORIDE-VINYL ACETATE COPOLYMERS

ID: **9003-22-9**

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

HAZARD SCREENING DATE: **2025-03-19 6:52:39**

%: 0.0000 - 0.1000

GreenScreen: **LT-UNK**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Film former**

HAZARD TYPE

LIST NAME AND SOURCE

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS

LIST NAME AND SOURCE

NOTIFICATION

RESTRICTED LIST

Cradle to Cradle Products Innovation Institute (C2CPII)

C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022

Core Restrictions

RESTRICTED LIST

Cradle to Cradle Products Innovation Institute (C2CPII)

C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024

Avoidance of Organohalogens and Functionally Related Chemical Classes of Concern

SUBSTANCE NOTES:

BENZOIC ACID

ID: **65-85-0**

%: **0.0000 - 0.1000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Heat or UV stabilizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	GHS - Japan	H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]
EYE	GHS - Australia	H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Antimicrobials
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE Safer Chemicals Ingredients list (SCIL) Preservatives-Antioxidants - Green Circle (Verified Low Concern)
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024 Cosmetics and Personal Care Products

SUBSTANCE NOTES:

CALCIUM STEARATEID: **1592-23-0**

%: **0.0000 - 0.1000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Lubricant**

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:

METHANONE, [2-HYDROXY-4-(OCTYLOXY)PHENYL]PHENYL-

ID: 1843-05-6

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

HAZARD SCREENING DATE: **2025-03-19 6:52:41**

%: **0.0000 - 0.1000** 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:

METHANONE, (4-METHYLPHENYL)PHENYL-

ID: 134-84-9

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

HAZARD SCREENING DATE: **2025-03-19 6:52:42**

%: **0.0000 - 0.1000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Stabilizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters

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

SUBSTANCE NOTES:

METHANONE, (1-HYDROXYCYCLOHEXYL)PHENYL-

ID: 947-19-3

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

HAZARD SCREENING DATE: **2025-03-19 6:52:42**

%: **0.0000 - 0.1000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Photoinitiator**

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:

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

HAZARD SCREENING DATE: **2025-03-19 6:52:42**

%: **0.0000 - 0.1000** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen**
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route**
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources**
CAN	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value**
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor**
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels**
CAN	IARC	Group 2b - Possibly carcinogenic to humans**
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]**
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]**
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]**
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE Safer Chemicals Ingredients list (SCIL) Colorants - Green Circle (Verified Low Concern)
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024 Cosmetics and Personal Care Products

SUBSTANCE NOTES: **Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. See HPDC's Special Conditions policy for more information. Manufacturer's Safety Data Sheet (SDS), if applicable, may offer occupational health and safety information.

2-PROPENOIC ACID, 2-PHENOXYETHYL ESTER

ID: 48145-04-6

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:43**

%: **0.0000 - 0.1000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Monomer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
-------------	----------------------	----------

MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
-----	---	-----------------------------------

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
---------------------	----------------------	--------------

None found		No listings found on Additional Hazard Lists
------------	--	--

SUBSTANCE NOTES:

ALUMINUM OXIDE

ID: 1344-28-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:44**

%: **0.0000 - 0.1000** GreenScreen: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Abrasion resistance**

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]
-----	-------------	---

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
---------------------	----------------------	--------------

RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
-----------------	---	--

RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
-----------------	---	--

RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024 Children's Toy Products
-----------------	---	---

SUBSTANCE NOTES:

NEODECANOIC ACID, OXIRANYLMETHYL ESTER

ID: 26761-45-5

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:45**

%: **0.0000 - 0.1000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Stabilizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
GEN	GHS - Japan	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
SKI	GHS - New Zealand	Skin sensitisation category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 2
AQU	GHS - Japan	H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]
AQU	GHS - Japan	H411 - Toxic to aquatic life with long lasting effects [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:

BENZENE, 1,1'-OXYBIS-, TETRAPROPYLENE DERIVS., SULFONATED, SODIUM SALTS

ID: 119345-04-9

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:42**

%: **0.0000 - 0.1000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Emulsifier**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

PHENOL, 2-(2H-BENZOTRIAZOL-2-YL)- 4,6-BIS(1-METHYL-1-PHENYLETHYL)-

ID: 70321-86-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:43**

%: **0.0000 - 0.1000** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Heat or UV stabilizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
PBT	ChemSec - SIN List	PBT / vPvB (Persistent, Bioaccumulative, & Toxic / very Persistent & very Bioaccumulative)
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

SILICIC ACID, CALCIUM SALT

ID: 1344-95-2

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

HAZARD SCREENING DATE: 2025-03-19 6:52:43

%: **0.0000 - 0.1000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Opacifier**

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:

TRIS(2-ETHYLHEXYL) TRIMELLITATE

ID: 3319-31-1

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

HAZARD SCREENING DATE: 2025-03-19 6:52:44

%: **0.0000 - 0.1000** GreenScreen: **BM-U** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impact modifier**

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 Bisphenols and Phthalates

SUBSTANCE NOTES:

1H-ISOINDOL-1-ONE, 3,3'-(1,4-PHENYLENEDIIMINO) BIS[4,5,6,7-TETRACHLORO-

ID: 5590-18-1

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

HAZARD SCREENING DATE: 2025-03-19 6:52:45

%: **0.0000 - 0.1000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
PBT	ChemSec - SIN List	PBT / vPvB (Persistent, Bioaccumulative, & Toxic / very Persistent & very Bioaccumulative)

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Core Restrictions

SUBSTANCE NOTES:

ALUMINUM HYDROXIDE

ID: 21645-51-2

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

HAZARD SCREENING DATE: **2025-03-19 6:52:43**

#: **0.0000 - 0.1000** GreenScreen: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Opacifier**

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
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP11)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP11)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP11)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024 Children's Toy Products

SUBSTANCE NOTES:

IRON HYDROXIDE OXIDE (FE(OH)O)

ID: 20344-49-4

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

HAZARD SCREENING DATE: **2025-03-19 6:52:43**

#: **0.0000 - 0.1000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

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:

MICA

ID: 12001-26-2

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

HAZARD SCREENING DATE: **2025-03-19 6:52:44**

#: **0.0000 - 0.1000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

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:

QUINO[2,3-B]ACRIDINE-7,14-DIONE, 5,12-DIHYDRO-

ID: 1047-16-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:45**
 %: **0.0000 - 0.1000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Heat or UV 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, 2024 Cosmetics and Personal Care Products

SUBSTANCE NOTES:

CYCLOHEXANONE

ID: 108-94-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:46**
 %: **0.0000 - 0.1000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Solvent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
EYE	GHS - New Zealand	Eye 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]
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]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
MAM	GHS - Japan	H371 - May cause damage to organs [Specific target organs/systemic toxicity following single exposure - Category 2]
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]
MAM	GHS - Japan	H311 - Toxic in contact with skin [Acute Toxicity (dermal) - Category 3]
MAM	GHS - New Zealand	Acute dermal toxicity category 3
EYE	GHS - Japan	H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]

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

SUBSTANCE NOTES:

2-ETHYLHEXYL ACRYLATE ID: 103-11-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: 2025-03-19 6:52:43

%: **0.0000 - 0.1000** GreenScreen: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
CAN	CA EPA - Prop 65	Carcinogen
CAN	IARC	Group 2b - Possibly carcinogenic to humans
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
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]
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic 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]
AQU	GHS - Japan	H411 - Toxic to aquatic life with long lasting effects [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:

BARIUM-DIOLEATE

ID: 591-65-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:44**

%: **0.0000 - 0.1000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Heat or UV 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 v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024 Children's Toy Products

SUBSTANCE NOTES:

BENZOIC ACID, ZINC SALT

ID: 553-72-0

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:45**

%: **0.0000 - 0.1000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Heat or UV stabilizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters

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

SUBSTANCE NOTES:

ETHANOL, 2-(2-BUTOXYETHOXY)-

ID: 112-34-5

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:45**

%: **0.0000 - 0.1000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Solvent**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
EYE	GHS - New Zealand	Eye irritation category 2
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
EYE	GHS - Japan	H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]
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 v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024 All Products

SUBSTANCE NOTES:

CARBONIC ACID, BARIUM SALT (1:1)

ID: 513-77-9

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:46**

%: **0.0000 - 0.1000** GreenScreen: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Heat or UV 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 (C2CP11)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP11)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP11)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP11)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024 Children's Toy Products

SUBSTANCE NOTES:

9-OCTADECENOIC ACID (Z)-, ZINC SALT

ID: 557-07-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-03-19 6:52:45	
%: 0.0000 - 0.1000	GreenScreen: LT-P1	RC: None	NANO: No SUBSTANCE ROLE: Heat or UV stabilizer
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS	
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION	
None found		No listings found on Additional Hazard Lists	

SUBSTANCE NOTES:

NEODECANOIC ACID, BARIUM SALT

ID: 55172-98-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-03-19 6:52:46	
%: 0.0000 - 0.1000	GreenScreen: LT-UNK	RC: None	NANO: No SUBSTANCE ROLE: Heat or UV 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 v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024 Children's Toy Products

SUBSTANCE NOTES:

2-PROPENOIC ACID, (1-METHYL-1,2-ETHANEDIYL) BIS[OXY(METHYL-2,1-ETHANEDIYL)] ESTER

ID: **42978-66-5**

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

HAZARD SCREENING DATE: **2025-03-19 6:52:47**

%: **0.0000 - 0.1000**

GreenScreen: **LT-P1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Plasticizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe 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]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - 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]
SKI	GHS - New Zealand	Skin sensitisation category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 2
AQU	GHS - Australia	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
AQU	GHS - Japan	H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]
AQU	GHS - Japan	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
EYE	GHS - Japan	H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]

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

SUBSTANCE NOTES:

AZACYCLOTRIDECAN-2-ONE, HOMOPOLYMER

ID: 25038-74-8

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:47**

%: **0.0000 - 0.1000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Polymer species**

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:

SILICA SAND

ID: **7631-86-9**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:48**

%: **0.0000 - 0.1000** 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

SUBSTANCE NOTES:

DIISONONYL PHTHALATE

ID: **28553-12-0**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:46**

%: **0.0000 - 0.1000** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
END	ChemSec - SIN List	Endocrine Disruption
CAN	CA EPA - Prop 65	Carcinogen
DEV	US NIH - Reproductive & Developmental Monographs	Some Evidence of Adverse Effects - Developmental Toxicity
END	EU - Priority Endocrine Disruptors	Category 2 - In vitro evidence of biological activity related to Endocrine Disruption
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]
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	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Bisphenols and Phthalates
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Some Solvents
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	International Living Future Institute (ILFI)	Living Building Challenge 4.0 - Red List of Materials & Chemicals - Effective February 1, 2025 Red List substances to avoid in Living Building Challenge V4.0 projects
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024 All Products

SUBSTANCE NOTES:

9-OCTADECENOIC ACID (Z)-

ID: **112-80-1**

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

HAZARD SCREENING DATE: **2025-03-19 6:52:47**

%: **0.0000 - 0.1000**

GreenScreen: **LT-P1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Heat or UV stabilizer**

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

PYRROLO[3,4-C]PYRROLE-1,4-DIONE, 3,6-BIS([1,1'-BIPHENYL]-4-YL)-2,5-DIHYDRO-

ID: 88949-33-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:48**

%: **0.0000 - 0.1000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

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:

DIISONONYL CYCLOHEXANEDICARBOXYLATE

ID: 166412-78-8

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:49**

%: **0.0000 - 0.1000** GreenScreen: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Film former**

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:

HYDROTREATED HEAVY PARAFFINIC PETROLEUM DISTILLATES

ID: 64742-54-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:49**

%: **0.0000 - 0.1000** GreenScreen: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Defoamer**

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 2 - 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	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024 All Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024 Cosmetics and Personal Care Products

SUBSTANCE NOTES:

1,3-PROPANEDIONE, 1,3-DIPHENYL-

ID: 120-46-7

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

HAZARD SCREENING DATE: **2025-03-19 6:52:46**

#: **0.0000 - 0.1000**

GreenScreen: **NoGS**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Heat or UV 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:

BENZENEPROPANOIC ACID, 3,5-BIS(1,1-DIMETHYLETHYL)-4-HYDROXY-, OCTADECYL ESTER

ID: 2082-79-3

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:47**

#: **0.0000 - 0.1000** GreenScreen: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Antioxidant**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]
AQU	GHS - Japan	H411 - Toxic to aquatic life with long lasting effects [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:

2-PROPENOIC ACID, 2-METHYL-, METHYL ESTER, POLYMER WITH 1,3-BUTADIENE AND ETHENYLBENZENE

ID: 25053-09-2

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-03-19 6:52:48**

#: **0.0000 - 0.1000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Impact modifier**

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:

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: **2025-03-19 6:52:49**

#: **0.0000 - 0.1000** GreenScreen: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE 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
SUBSTANCE NOTES:		

ZINC STEARATE

ID: 557-05-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-03-19 6:52:49
%: 0.0000 - 0.1000	GreenScreen: LT-UNK	RC: None NANO: No SUBSTANCE ROLE: Heat or UV 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 v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024 Children's Toy Products
SUBSTANCE NOTES:		

2-PROPENOIC ACID, ETHYL ESTER, HOMOPOLYMER

ID: 9003-32-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-03-19 6:52:47
%: 0.0000 - 0.1000	GreenScreen: LT-UNK	RC: None NANO: No SUBSTANCE ROLE: Binder
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:		

OCTADECANOIC ACID, BARIUM SALT

ID: 6865-35-6

#: **0.0000 - 0.1000** 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 v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024 Children's Toy Products

SUBSTANCE NOTES:

BUTANAMIDE, 2,2'-[(3,3'-DICHLORO[1,1'- BIPHENYL]-4,4'-DIYL)BIS(AZO)]BIS[N-(4-CHLORO-2,5 -DIMETHOXYPHENYL)-3-OXO-

ID: **5567-15-7**

#: **0.0000 - 0.1000** GreenScreen: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
EYE	GHS - New Zealand	Eye irritation category 2
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 3
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Core Restrictions

SUBSTANCE NOTES:

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2025-03-19 6:52:49**%: **0.0000 - 0.1000**GreenScreen: **BM-3**RC: **None**NANO: **No**SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
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, 2024 Cosmetics and Personal Care Products

SUBSTANCE NOTES:

ACRYLIC RESINID: **Polymer**HAZARD DATA SOURCE: **GHS-compliant SDS**HAZARD SCREENING DATE: **2025-02-06 01:31:16**%: **0.0000 - 0.1000**GreenScreen: **N/A**RC: **None**NANO: **No**POLYMER ROLE: **Polymer species**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
Hazards Screening not applicable for this special condition. See GHS or CLP warnings below.		

POLYMER TYPE: Crosslinked thermoset

AVERAGE MOLECULAR WEIGHT : $\geq 1,000$ Da and $\leq 10,000$ Da

PERCENTAGE OF POLYMER WITH MOLECULAR WEIGHT LESS THAN 500 DA : 0%

ADDITIONAL SUBSTANCES CONSIDERED: Yes

GHS HAZARD STATEMENTS: None

HAZARD SCREENING COMPLIANCE: Hazard screening data sourced from OSHA and/or EU compliance CLP or SDS, as allowed by HPDC Special Conditions policy for polymers.

POLYMER NOTES: This polymer has been reported in accordance to [HPDC Special Conditions Policy](#) for polymers without disclosed CAS numbers.

ADDITIONAL NOTES: No CASRN has been registered for this polymer.

ORGANIC RESINID: **Polymer**HAZARD DATA SOURCE: **GHS-compliant SDS**HAZARD SCREENING DATE: **2025-02-06 01:32:37**%: **0.0000 - 0.1000**GreenScreen: **N/A**RC: **None**NANO: **No**POLYMER ROLE: **Polymer species**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
Hazards Screening not applicable for this special condition. See GHS or CLP warnings below.		

POLYMER TYPE: Crosslinked thermoset

AVERAGE MOLECULAR WEIGHT : $\geq 1,000$ Da and $\leq 10,000$ Da

PERCENTAGE OF POLYMER WITH MOLECULAR WEIGHT LESS THAN 500 DA : 0%

ADDITIONAL SUBSTANCES CONSIDERED: Yes

GHS HAZARD STATEMENTS: None

HAZARD SCREENING COMPLIANCE: Hazard screening data sourced from OSHA and/or EU compliance CLP or SDS, as allowed by HPDC Special Conditions policy for polymers.

POLYMER NOTES: This polymer has been reported in accordance to [HPDC Special Conditions Policy](#) for polymers without disclosed CAS numbers.

ADDITIONAL NOTES: No CASRN has been registered for this polymer.

URETHANE ACRYLATE OLIGOMER

ID: **Polymer**

HAZARD DATA SOURCE: **GHS-compliant SDS**

HAZARD SCREENING DATE: **2025-02-06 01:34:22**

#: **0.0000 - 0.1000**

GreenScreen: **N/A**

RC: **None**

NANO: **No**

POLYMER ROLE: **Polymer species**

HAZARD TYPE

LIST NAME AND SOURCE

WARNINGS

Hazards Screening not applicable for this special condition. See GHS or CLP warnings below.

POLYMER TYPE: Crosslinked thermoset

AVERAGE MOLECULAR WEIGHT : $\geq 1,000$ Da and $\leq 10,000$ Da

PERCENTAGE OF POLYMER WITH MOLECULAR WEIGHT LESS THAN 500 DA : 1%

ADDITIONAL SUBSTANCES CONSIDERED: Yes

GHS HAZARD STATEMENTS: None

HAZARD SCREENING COMPLIANCE: Hazard screening data sourced from OSHA and/or EU compliance CLP or SDS, as allowed by HPDC Special Conditions policy for polymers.

POLYMER NOTES: This polymer has been reported in accordance to [HPDC Special Conditions Policy](#) for polymers without disclosed CAS numbers.

ADDITIONAL NOTES: No CASRN has been registered for this polymer.

Section 3: Certifications and Compliance

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

VOC EMISSIONS	RFCI FloorScore
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: All CERTIFICATE URL: https://cdn.scs-certified.com/products/cert_pdfs/Mannington_2024_SCS-FS-01629_s.pdf CERTIFICATION AND COMPLIANCE NOTES: Registration # SCS-FS-01629	ISSUE DATE: 2024-10-01 00:00:00 EXPIRY DATE: 2025-09-30 00:00:00 CERTIFIER OR LAB: SCS Global

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.

V-88

MANUFACTURER (OR GENERIC): **Mannington Commercial**

HPD URL: No HPD Available

ACCESSORY TYPE: Adhesive

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: V-88 is a moisture-resistant adhesive that can be used for the installation of Mannington Commercial LVT. More information can be found at <https://www.manningtoncommercial.com/resources/lvt/#technical>

MOISTURELOC

MANUFACTURER (OR GENERIC): **Mannington Commercial**

HPD URL: No HPD Available

ACCESSORY TYPE: Adhesive

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: MoistureLoc Adhesive is a one component, 100% solids, cross-linking modified silane polymer-based adhesive that can be used for the installation of Mannington Commercial LVT. More information can be found at <https://www.manningtoncommercial.com/resources/lvt/#technical>

V-95

MANUFACTURER (OR GENERIC): **Mannington Commercial**

HPD URL: No HPD Available

ACCESSORY TYPE: Adhesive

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: V-95 is a solvent-free, two-component, epoxy adhesive that can be used for the high-performance indoor installation of Mannington Commercial LVT. More information can be found at <https://www.manningtoncommercial.com/resources/lvt/#technical>

XPRESSSTEP SPRAY ADHESIVE

MANUFACTURER (OR GENERIC): **Mannington Commercial**

HPD URL: No HPD Available

ACCESSORY TYPE: Adhesive

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: XpressStep is a water-based spray adhesive recommended for installations of Mannington Commercial LVT over porous and non-porous substrates. More information can be found at <https://www.manningtoncommercial.com/resources/lvt/#technical>

Section 5: General Notes

MANUFACTURER INFORMATION

MANUFACTURER: **Mannington Mills**
 ADDRESS: **1844 US Highway 41 S.E.**
Calhoun, GA 30701
 COUNTRY: **United States**

WEBSITE: **www.manningtoncommercial.com**
 CONTACT NAME: **Brian Kuritz**
 TITLE: **Director of Research and Development**
 PHONE: **800-241-2262**
 EMAIL: **brian.kuritz@mannington.com**

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

KEY

Hazard Types

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

GreenScreen (GS)

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

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

Recycled Types

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

Other Terms:

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

Inventory Methods:

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

Nano Composed of nano scale particles or nanotechnology
Third Party Verified Verification by independent certifier approved by HPDC
Preparer Third party preparer, if not self-prepared by manufacturer
Applicable facilities Manufacturing sites to which testing applies

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

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

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

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

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

