

HPD UNIQUE IDENTIFIER: 1840371712
HPD UNIQUE PRODUCT ID: Not provided.
CLASSIFICATION: 08 51 13 Aluminum Windows
PRODUCT DESCRIPTION: YKK AP's thermal architectural commercial windows are AW rated and engineered to enhance energy efficiency and occupant comfort in modern buildings. These windows feature advanced thermal barrier technologies, such as ThermaBond Plus® and MegaTherm®, which significantly reduce heat transfer and improve insulation. Available in various configurations—including zero sightline, fixed, casement, awning, and sliding styles—they accommodate both monolithic and insulating glass options. Designed for seamless integration with YKK AP's storefront, window wall, and curtain wall systems, these windows offer superior performance without compromising aesthetic appeal. Ideal for new construction and retrofit projects, YKK AP's thermal windows meet stringent industry standards, ensuring durability and long-term energy savings. YKK AP also offers hurricane-resistant thermal windows solutions for meeting stringent impact for coastal and high-wind regions.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Residuals/Impurities Evaluation	For all contents above the threshold, the manufacturer has:
→ Basic Method	→ Completed	
Threshold Disclosed Per	Explanation(s) provided :	Characterized
→ Product	Yes	Provided weight and role.
Threshold Level		Screened
→ 100 ppm		Provided screening results using HPDC-approved methods.
		Identified
		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
ARCHITECTURAL WINDOWS (THERMAL) [ALUMINUM ALLOY 6063
MULTIPLE AISI 304 STAINLESS STEEL MULTIPLE POLYURETHANE
FOAMS (POLYURETHANE FOAMS) LT-UNK HYDROTREATED HEAVY
PARAFFINIC PETROLEUM DISTILLATES (MINERAL OIL)
(HYDROTREATED HEAVY PARAFFINIC PETROLEUM DISTILLATES)
LT-1 | CAN | MUL | SKI | DEV CARBON BLACK BM-1 * | CAN | EYE |
MAM | PHY 4,4'-DIPHENYLMETHANE DIISOCYANATE (4,4'-
METHYLENEDIPHENYL DIISOCYANATE) LT-UNK | CAN | RES | SKI |
EYE | MAM KAOLIN, CALCINED LT-UNK POLYPROPYLENE GLYCOL
(POLY[OXY(METHYL-1,2-ETHANEDIYL)], α-HYDRO-ω-HYDROXY-) LT-
UNK | EYE POLYPROPYLENE LT-UNK POLYMETHYLENE
POLYPHENYL ISOCYANATE LT-UNK | CAN | RES | EYE | SKI | MAM
AISI 1018 STEEL MULTIPLE POLYVINYL CHLORIDE LT-P1 | MAM
METHYL METHACRYLATE LT-P1 | END | SKI | PHY | EYE | MAM
BICYCLO(2.2.1)HEPT-2-ENE, 5-ETHYLIDENE-, POLYMER WITH
ETHENE AND 1-PROPENE (ETHYLENE, ETHYLIDENE NORBORNENE,
PROPYLENE) LT-UNK ETHYLENE GLYCOL LT-1 | END | DEV | MAM |
EYE | SKI TRIS(2-CHLOROETHYL) PHOSPHATE (TRIS (2-
CHLOROETHYL) PHOSPHATE (TCEP)) BM-1 | END | REP | MUL | CAN
| AQU | MAM ANTIMONY TRIOXIDE (ANTIMONY OXIDE (ANTIMONY
TRIOXIDE)) BM-1 | MUL | CAN | SKI | EYE | MAM | AQU ALUMINUM
HYDROXIDE, DRIED (ALUMINUM HYDROXIDE) BM-2 | SKI | EYE
RESIDUAL OILS, PETROLEUM, SOLVENT-REFINED (RESIDUAL OILS
(PETROLEUM), SOLVENT-REFINED) LT-1 | CAN | PBT | MUL | SKI |
DEV BENZENEDIAMINE, AR,AR-DIETHYL-AR-METHYL- LT-P1 | MUL |

Number of Greenscreen BM-4/BM3 contents ... 1
Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ...
LT-P1, LT-UNK, LT-1, BM-2, BM-1
Nanomaterial ... No
INVENTORY AND SCREENING NOTES:
Special Conditions applied: [MetalAlloy]

*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.

EYE | AQU | MAM **CALCIUM CARBONATE** **BM-3** | EYE **STYRENE BUTADIENE RUBBER (BENZENE, ETHENYL-, POLYMER WITH 1,3-BUTADIENE) (STYRENE-BUTADIENE COPOLYMERS)** **LT-UNK** **1,3-ISOBENZOFURANDIONE, POLYMER WITH 2,2'-OXYBIS[ETHANOL]** **LT-UNK** **1,3,5-TRIOXANE, POLYMER WITH 1,3-DIOXOLANE (COPOLYMER OF DIOXOLANE AND TRIOXANE)** **LT-UNK** **POLY(OXYMETHYLENE)** **NoGS** **DIETHYLENE GLYCOL (DIETHYLENE GLYCOL)** **LT-P1** | END | MAM | REP **1,3-BUTADIENE, POLYMER WITH 2-PROPENENITRILE (BUTADIENE ACRYLONITRILE COPOLYMER)** **LT-UNK** **DI(2-ETHYLHEXYL)PHTHALATE (DEHP) (PRIMARY CASRN) (DI(2-ETHYLHEXYL)PHTHALATE (DEHP))** **BM-1** | CAN | END | REP | MUL | DEV | MAM | AQU **POLYETHYLENE** **LT-UNK** **STAINLESS STEEL - GRADE 302HQ** **MULTIPLE** **METHACRYLIC ACID (2-PROPENOIC ACID, 2-METHYL-)** **LT-UNK** | SKI | MAM | EYE **ZINC, BIS(DIBUTYLDITHIOCARBAMATO)- (ZINC, BIS(DIBUTYLCARBAMODITHIOATO-S,S')-, (T-4)-)** **LT-P1** | END | MUL | SKI | EYE | AQU | MAM **4,4'-DITHIODIMORPHOLINE (MORPHOLINE, 4,4'-DITHIOBIS-)** **LT-P1** | MUL **2,2'-DIBENZOTHIAZYL DISULFIDE (BENZOTHIAZOLE, 2,2'-DITHIOBIS-)** **LT-P1** | SKI | MUL | AQU **MERCAPTOBENZOTHIAZOLE (2(3H)-BENZOTHIAZOLETHIONE)** **LT-1** | CAN | END | SKI | MUL | AQU **2-(TERT-BUTYLAMINOTHIO)BENZOTHIAZOLE (2-BENZOTHIAZOLESULFENAMIDE, N-(1,1-DIMETHYLETHYL)-)** **LT-P1** | MUL | AQU **SULFUR, PRECIPITATED (SULFUR, ELEMENTAL)** **LT-UNK** | SKI | MAM **STANNANE, BIS(DODECYLTHIO)DIMETHYL-** **LT-UNK** **STEARIC ACID (STEARIC ACID)** **LT-P1** | END **SILICIC ACID, ALUMINUM POTASSIUM SODIUM SALT** **LT-UNK** **TIN DICHLORIDE (TIN CHLORIDE (SNCL2))** **LT-P1** | END | MUL | MAM | SKI | EYE | AQU **MELAMINE** **LT-P1** | END | CAN | MUL | MAM **SOYBEAN OIL** **NoGS** **ISOBUTANE** **LT-UNK** | PHY | MAM **CASTOR OIL (CASTOR OIL)** **NoGS** **2-PROPENOIC ACID, BUTYL ESTER, POLYMER WITH 2-ETHYLHEXYL 2-PROPENOATE** **LT-UNK** **TRIETHYLENEDIAMINE (1,4-DIAZABICYCLO[2.2.2]OCTANE)** **LT-UNK** | SKI | EYE | MAM | REP **ZINC STEARATE** **LT-UNK** | AQU **HEXANOIC ACID, 2-ETHYL-, BARIUM SALT (2:1) (HEXANOIC ACID, 2-ETHYL-, BARIUM SALT)** **LT-1** | REP | DEV **CALCIUM STEARATE** **LT-UNK** **ALUMINUM OXIDE (ALUMINUM OXIDE)** **BM-2** | MAM **ZINC OXIDE** **BM-1** | END | MUL | AQU | MAM | REP **UNS C36000 BRASS** **MULTIPLE** |

VOLATILE ORGANIC COMPOUND (VOC) CONTENT
VOC Content data is not applicable for this product category.

COMPLIANCE *See Section 3 for additional listings.*
VOC emissions: CDPH Standard Method - Not tested

CONSISTENCY WITH OTHER PROGRAMS
No pre-checks completed or disclosed.

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

ARCHITECTURAL WINDOWS (THERMAL)

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities have been evaluated and are included in the inventory.

OTHER PRODUCT NOTES:

ALUMINUM ALLOY 6063 ID: UNS A96063

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

%: 65.0000 - 85.0000 GreenScreen: MULTIPLE RC: None NANO: No MATERIAL ROLE: Structure component

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

METAL ALLOY HPD: See alloy HPD for alloying content inventory, GreenScreen scores, and hazards: [UNS A96063]

METAL ALLOY NOTES: In compliance with HPDC Special Conditions Policy for Metal Alloys, the listed alloy is considered the ingredient in this product, and is reported without information regarding its alloying elements. Metal alloys have different intrinsic characteristics, including health and environmental hazards, than their alloying elements. An alloy HPD with alloying element content inventory, their GreenScreen scores, and hazards is available at the link above.

ALLOYING ELEMENTS

- Aluminum (Al)
CASRN: 7429-90-5
Percentage: 97.5 % - 99.35 %
Element Role: Alloy element
GreenScreen Score: LT-P1

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

- Magnesium (Mg)
CASRN: 7439-95-4
Percentage: 0.45 % - 0.9 %
Element Role: Alloy element
GreenScreen Score: LT-UNK

No listings found on Additional Hazard Lists

- Silicon (Si)
CASRN: 7440-21-3
Percentage: 0.20 % - 0.60 %
Element Role: Alloy element
GreenScreen Score: LT-UNK

No listings found on Additional Hazard Lists

- Iron (Fe)
CASRN: 7439-89-6

Percentage: 0 % - 0.35 %
Element Role: Alloy element
GreenScreen Score: LT-P1

No listings found on Additional Hazard Lists

• **Chromium (Cr)**

CASRN: 7440-47-3
Percentage: 0 % - 0.10 %
Element Role: Alloy element
GreenScreen Score: LT-P1

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products

• **Copper (Cu)**

CASRN: 7440-50-8
Percentage: 0 % - 0.1 %
Element Role: Alloy element
GreenScreen Score: LT-P1

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 Antimicrobials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products

• **Manganese (Mn)**

CASRN: 7439-96-5
Percentage: 0 % - 0.1 %
Element Role: Alloy element
GreenScreen Score: LT-P1

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products

• **Titanium (Ti)**

CASRN: 7440-32-6
Percentage: 0 % - 0.10 %
Element Role: Alloy element
GreenScreen Score: LT-UNK

No listings found on Additional Hazard Lists

• **Zinc (Zn)**

CASRN: 7440-66-6
Percentage: 0 % - 0.10 %
Element Role: Alloy element
GreenScreen Score: LT-P1

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

MATERIAL CONTENT NOTES:

AISI 304 STAINLESS STEEL

ID: UNS S30400

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

%: 0.0000 - 15.0000 GreenScreen: MULTIPLE RC: None NANO: No MATERIAL ROLE: Structure component

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

METAL ALLOY HPD: See alloy HPD for alloying content inventory, GreenScreen scores, and hazards: [[UNS S30400](#)]

METAL ALLOY NOTES: In compliance with HPDC Special Conditions Policy for Metal Alloys, the listed alloy is considered the ingredient in this product, and is reported without information regarding its alloying elements. Metal alloys have different intrinsic characteristics, including health and environmental hazards, than their alloying elements. An alloy HPD with alloying element content inventory, their GreenScreen scores, and hazards is available at the link above.

ALLOYING ELEMENTS

- Carbon (C)**
CASRN: 7440-44-0
Percentage: 0 % - 0.080 %
Element Role: Alloy element
GreenScreen Score: LT-UNK

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

- Chromium (Cr)**
CASRN: 7440-47-3
Percentage: 18 % - 20 %
Element Role: Alloy element
GreenScreen Score: LT-P1

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products

- Iron (Fe)**
CASRN: 7439-89-6
Percentage: 66.345 % - 74 %
Element Role: Alloy element
GreenScreen Score: LT-P1

No listings found on Additional Hazard Lists

- Manganese (Mn)**
CASRN: 7439-96-5
Percentage: 0 % - 2.0 %
Element Role: Alloy element

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products

- Nickel (Ni)**
CASRN: 7440-02-0
Percentage: 8 % - 10.5 %
Element Role: Alloy element
GreenScreen Score: LT-1

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Certain Metals
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 All Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products

- Phosphorus (P)**
CASRN: 7723-14-0
Percentage: 0 % - 0.045 %
Element Role: Alloy element
GreenScreen Score: BM-2

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products

- Silicon (Si)**
CASRN: 7440-21-3
Percentage: 0 % - 1 %
Element Role: Alloy element
GreenScreen Score: LT-UNK

No listings found on Additional Hazard Lists

- Sulfur (S)**
CASRN: 7704-34-9
Percentage: 0 % - 0.030 %
Element Role: Alloy element
GreenScreen Score: LT-UNK

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

MATERIAL CONTENT NOTES:

%: **0.0000 - 10.0000**

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:

HYDROTREATED HEAVY PARAFFINIC PETROLEUM
DISTILLATES (MINERAL OIL) (HYDROTREATED HEAVY
PARAFFINIC PETROLEUM DISTILLATES)

ID: **64742-54-7**

%: **0.0000 - 5.0000**

GreenScreen: **LT-1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Plasticizer**

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	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 All Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products

SUBSTANCE NOTES:

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-12-03 9:48:15

%: 0.0000 - 5.0000	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.

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-12-03 9:48:16

%: 0.0000 - 5.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Adhesive
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels		
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization		
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]		
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]		
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]		

SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
CAN	GHS - New Zealand	Carcinogenicity category 2
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
CAN	EU - Annex VI CMRs	Carcinogen Category 2 - Suspected human Carcinogen
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
SKI	GHS - New Zealand	Skin sensitisation category 1
MAM	GHS - New Zealand	Acute inhalation toxicity category 2
EYE	GHS - Korea	H319 - Causes serious eye irritation [Serious eye damage/irritation - Category 2]
SKI	GHS - Korea	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	Québec CSST - WHMIS 1988	Class D1A - Very toxic material causing immediate and serious toxic effects
MAM	GHS - Australia	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: dust, mist) - Category 2]
CAN	GHS - Australia	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	GHS - Korea	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List Precautionary list of substances recommended for avoidance
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 All Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products
SUBSTANCE NOTES:		

KAOLIN, CALCINED				ID: 92704-41-1
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:17	
%: 0.0000 - 5.0000	GreenScreen: LT-UNK	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:				

POLYPROPYLENE GLYCOL (POLY[OXY(METHYL-1,2-ETHANEDIYL)], α-HYDRO-ω-HYDROXY-)				ID: 25322-69-4
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:14	
?: 0.0000 - 5.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
EYE	GHS - New Zealand		Eye irritation category 2	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Green Science Policy Institute (GSPI)		GSPI - Six Classes Precautionary List	
			Some Solvents	
SUBSTANCE NOTES:				

POLYPROPYLENE				ID: 9003-07-0	
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:15		
%: 0.0000 - 5.0000	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:					

POLYMETHYLENE POLYPHENYL ISOCYANATE					ID: 9016-87-9
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:16		
?: 0.0000 - 5.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species	

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	GHS - Australia	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
CAN	GHS - 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]
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
MAM	GHS - New Zealand	Acute inhalation toxicity category 2
MAM	Québec CSST - WHMIS 1988	Class D1A - Very toxic material causing immediate and serious toxic effects
MAM	GHS - Australia	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: dust, mist) - Category 2]
CAN	GHS - Australia	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List Precautionary list of substances recommended for avoidance
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 All Products
SUBSTANCE NOTES:		

HAZARD DATA SOURCE: Pharos Chemical and Materials Library				
%: 0.0000 - 5.0000	GreenScreen: MULTIPLE	RC: None	NANO: No	MATERIAL ROLE: Structure component
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
Hazard Screening is not applicable to this Special Condition				
METAL ALLOY HPD: See alloy HPD for alloying content inventory, GreenScreen scores, and hazards: [UNS G10180]				
METAL ALLOY NOTES: In compliance with HPDC Special Conditions Policy for Metal Alloys, the listed alloy is considered the ingredient in this product, and is reported without information regarding its alloying elements. Metal alloys have different intrinsic characteristics, including health and environmental hazards, than their alloying elements. An alloy HPD with alloying element content inventory, their GreenScreen scores, and hazards is available at the link above.				

ALLOYING ELEMENTS

- Carbon (C)**
CASRN: 7440-44-0
Percentage: 0.14 % - 0.20 %
Element Role: Alloy element
GreenScreen Score: LT-UNK

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

- Iron (Fe)**
CASRN: 7439-89-6
Percentage: 98.81 % - 99.26 %
Element Role: Alloy element
GreenScreen Score: LT-P1

No listings found on Additional Hazard Lists

- Manganese (Mn)**
CASRN: 7439-96-5
Percentage: 0.6 % - 0.9 %
Element Role: Alloy element
GreenScreen Score: LT-P1

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products

- Phosphorus (P)**
CASRN: 7723-14-0
Percentage: 0 % - 0.04 %
Element Role: Alloy element
GreenScreen Score: BM-2

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products

- Sulfur (S)**
CASRN: 7704-34-9
Percentage: 0 % - 0.050 %
Element Role: Alloy element
GreenScreen Score: LT-UNK

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

MATERIAL CONTENT NOTES:

POLYVINYL CHLORIDE

ID: 9002-86-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 9:48:17	
%: 0.0000 - 1.0000	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	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
SUBSTANCE NOTES:		

METHYL METHACRYLATE

ID: 80-62-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:17	
%: 0.0000 - 1.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Monomer

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
SKI	GHS - New Zealand	Skin sensitisation category 1
SKI	GHS - Malaysia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
PHY	GHS - New Zealand	Flammable liquids category 2
PHY	GHS - Japan	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
PHY	GHS - Malaysia	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
PHY	GHS - Australia	H225 - Highly flammable liquid and vapour [Flammable liquids - 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 Some Solvents

SUBSTANCE NOTES:

BICYCLO(2.2.1)HEPT-2-ENE, 5-ETHYLIDENE-, POLYMER WITH ETHENE AND 1-PROPENE (ETHYLENE, ETHYLIDENE NORBORNENE, PROPYLENE)

ID: **25038-36-2**

%: 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:					

ETHYLENE GLYCOL

ID: 107-21-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:18		
%: 0.0000 - 1.0000	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Reagent	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
END	TEDX - Potential Endocrine Disruptors		Potential Endocrine Disruptor		
DEV	US NIH - Reproductive & Developmental Monographs		Clear Evidence of Adverse Effects - Developmental Toxicity		
DEV	CA EPA - Prop 65		Developmental - specific to chemical form or exposure route		
MAM	GHS - Japan		H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]		
EYE	GHS - New Zealand		Eye irritation category 2		
MAM	GHS - New Zealand		Specific target organ toxicity - repeated exposure category 1		
MAM	GHS - Japan		H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]		
SKI	GHS - Japan		H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION		
RESTRICTED LIST	Green Science Policy Institute (GSPI)		GSPI - Six Classes Precautionary List		
			Some Solvents		
SUBSTANCE NOTES:					

TRIS(2-CHLOROETHYL) PHOSPHATE (TRIS (2-CHLOROETHYL) PHOSPHATE (TCEP))

ID: 115-96-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:19		
%: 0.0000 - 1.0000		GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Flame retardant

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 1B
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CAN	CA EPA - Prop 65	Carcinogen
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
REP	GHS - Australia	H360F - May damage fertility [Reproductive toxicity - Category 1A or 1B]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
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]
REP	EU - GHS (H-Statements) Annex 6 Table 3-1	H360F - May damage fertility [Reproductive toxicity - Category 1A or 1B]
CAN	GHS - New Zealand	Carcinogenicity category 2
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
CAN	EU - Annex VI CMRs	Carcinogen Category 2 - Suspected human Carcinogen
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]
CAN	GHS - Australia	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
REP	EU - SVHC List	Toxic to reproduction - Candidate list
REP	EU - SVHC List	Toxic to reproduction - Prioritized for listing
REP	EU - SVHC List	Toxic to reproduction - Banned unless Authorised
REP	EU - REACH Annex XVII CMRs	Reproductive toxicants: Category 1B

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 Some Solvents
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, 2025 All Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Avoidance of Organohalogens and Functionally Related Chemical Classes of Concern
SUBSTANCE NOTES:		

ANTIMONY TRIOXIDE (ANTIMONY OXIDE (ANTIMONY TRIOXIDE))				ID: 1309-64-4
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 9:48:20		
%: 0.0000 - 1.0000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Flame retardant

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
CAN	CA EPA - Prop 65	Carcinogen
CAN	IARC	Group 2b - Possibly carcinogenic to humans
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
CAN	IARC	Group 2a - Agent is probably Carcinogenic to humans
CAN	GHS - Japan	H350 - May cause cancer [Carcinogenicity - Category 1B]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
CAN	GHS - New Zealand	Carcinogenicity category 2
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1
CAN	EU - Annex VI CMRs	Carcinogen Category 2 - Suspected human Carcinogen
MAM	GHS - Japan	H371 - May cause damage to organs [Specific target organs/systemic toxicity following single exposure - Category 2]
SKI	GHS - Korea	H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - 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]
AQU	GHS - Korea	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
CAN	GHS - Australia	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
CAN	GHS - Korea	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]

ALUMINUM HYDROXIDE, DRIED (ALUMINUM HYDROXIDE) ID: 21645-51-7HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-12-03 9:48:2**

%: **0.0000 - 1.0000** GreenScreen: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Flame retardant**

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

EYE	GHS - New Zealand	Eye irritation category 2
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ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION

RESTRICTED LIST Cradle to Cradle Products Innovation Institute C2C Certified v4.1 Product Standard Restricted

Children's Toy Products

SUBSTANCE NOTES:

RESIDUAL OILS, PETROLEUM, SOLVENT-REFINED (RESIDUAL OILS (PETROLEUM), SOLVENT-REFINED) ID: 64742-01-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-12-03 9:48:14**

%: 0.0000 - 1.0000	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Plasticizer
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HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans
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	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:		

BENZENEDIAMINE, AR,AR-DIETHYL-AR-METHYL-					ID: 68479-98-1
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:19		
: 0.0000 - 1.0000		GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Curing agent

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
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	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
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 - New Zealand	Specific target organ toxicity - repeated exposure category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1
AQU	GHS - Australia	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1
MAM	GHS - New Zealand	Acute dermal toxicity category 3
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists
SUBSTANCE NOTES:		

CALCIUM CARBONATE

ID: 471-34-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 9:48:20		
?: 0.0000 - 1.0000	GreenScreen: BM-3	RC: None	NANO: No	SUBSTANCE ROLE: Filler
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:				

STYRENE BUTADIENE RUBBER (BENZENE, ETHENYL-, POLYMER WITH 1,3-BUTADIENE) (STYRENE-BUTADIENE COPOLYMERS)

ID: 9003-55-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:21	
%: 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:				

1,3-ISOBENZOFURANDIONE, POLYMER WITH 2,2'-OXYBIS[ETHANOL]

ID: 32472-85-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:21	
%: 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:				

1,3,5-TRIOXANE, POLYMER WITH 1,3-DIOXOLANE (COPOLYMER OF DIOXOLANE AND TRIOXANE)

ID: 24969-26-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:19	
%: 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:				

POLY(OXYMETHYLENE)

ID: 9002-81-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:19	
%: 0.0000 - 1.0000	GreenScreen: NoGS	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
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 All Products
SUBSTANCE NOTES:		

DIETHYLENE GLYCOL (DIETHYLENE GLYCOL)

ID: 111-46-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:20	
%: 0.0000 - 1.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Reagent
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
END	TEDX - Potential Endocrine Disruptors		Potential Endocrine Disruptor	
MAM	GHS - Japan		H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]	
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	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	
			Cosmetics and Personal Care Products	
SUBSTANCE NOTES:				

1,3-BUTADIENE, POLYMER WITH 2-PROPENENITRILE (BUTADIENE ACRYLONITRILE COPOLYMER)

ID: 9003-18-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:21	
?: 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:		

DI(2-ETHYLHEXYL)PHTHALATE (DEHP) (PRIMARY CASRN) (DI(2-ETHYLHEXYL)PHTHALATE (DEHP))

ID: 117-81-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:22	
%: 0.0000 - 1.0000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Plasticizer
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen		
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor		
END	OSPAR - Priority PBTs & EDs & equivalent concern	Endocrine Disruptor - Chemical for Priority Action		
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 1B		
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant		
CAN	CA EPA - Prop 65	Carcinogen		
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels		
CAN	IARC	Group 2b - Possibly carcinogenic to humans		
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen		
CAN	US EPA - IRIS Carcinogens	(1986) Group B2 - Probable human Carcinogen		
DEV	CA EPA - Prop 65	Developmental toxicity		
DEV	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity		
REP	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Reproductive Toxicity		
REP	CA EPA - Prop 65	Reproductive Toxicity - Male		
END	EU - Priority Endocrine Disruptors	Category 1 - In vivo evidence of Endocrine Disruption Activity		
CAN	GHS - Australia	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]		
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]		
REP	GHS - Australia	H360FD - May damage fertility. May damage the unborn child [Reproductive toxicity - Category 1A or 1B]		
REP	GHS - Korea	H360 - May damage fertility or the unborn child [Category 1(1B)]		
REP	EU - GHS (H-Statements) Annex 6 Table 3-1	H360FD - May damage fertility. May damage the unborn child [Reproductive toxicity - Category 1A or 1B]		

REP	GHS - Malaysia	H360Fd - May damage fertility. Suspected of damaging the unborn child [Reproductive toxicity - Category 1A or 1B]
REP	GHS - New Zealand	Reproductive toxicity category 1
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 2
AQU	GHS - Japan	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Korea	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Korea	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - Japan	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
END	EU - SVHC List	Equivalent Concern - Candidate List: endocrine disrupting properties cause probable serious effects to the environment or human health
REP	EU - SVHC List	Toxic to reproduction - Candidate list
REP	EU - SVHC List	Toxic to reproduction - Prioritized for listing
REP	EU - SVHC List	Toxic to reproduction - Banned unless Authorised
REP	EU - REACH Annex XVII CMRs	Reproductive toxicants: Category 1B
DEV	GHS - Japan	H362 - May cause harm to breast-fed children [Developmental Toxicity - May cause harm to breast-fed children]
END	EU - SVHC List	Endocrine disrupting properties cause probable serious effects to the environment or human health - Banned unless Authorised
END	EU - SVHC List	Equivalent Concern - Prioritization List: endocrine disrupting properties cause probable serious effects to the environment or human health

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	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 All Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Electronics (RoHS)
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:		

POLYETHYLENE

ID: 9002-88-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:20	
#: 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:				

STAINLESS STEEL - GRADE 302HQ

ID: UNS S30430

?: 0.0000 - 1.0000

GreenScreen: **MULTIPLE**

RC: None

NANO: **No**

MATERIAL ROLE: **Structure component**

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

METAL ALLOY HPD: See alloy HPD for alloying content inventory, GreenScreen scores, and hazards: [[UNS S30430](#)]

METAL ALLOY NOTES: In compliance with HPDC Special Conditions Policy for Metal Alloys, the listed alloy is considered the ingredient in this product, and is reported without information regarding its alloying elements. Metal alloys have different intrinsic characteristics, including health and environmental hazards, than their alloying elements. An alloy HPD with alloying element content inventory, their GreenScreen scores, and hazards is available at the link above.

ALLOYING ELEMENTS

- **Carbon (C)**

CASRN: 7440-44-0

Percentage: 0 % - 0.08 %

Element Role: Alloy element

GreenScreen Score: LT-UNK

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

- **Chromium (Cr)**

CASRN: 7440-47-3

Percentage: 17 % - 19 %

Element Role: Alloy element

GreenScreen Score: LT-P1

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products

- **Copper (Cu)**

CASRN: 7440-50-8

Percentage: 3 % - 4 %

Element Role: Alloy element

GreenScreen Score: LT-P1

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 Antimicrobials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products

- **Iron (Fe)**

CASRN: 7439-89-6

Percentage: 62 % - 72 %

Element Role: Alloy element
GreenScreen Score: LT-P1

No listings found on Additional Hazard Lists

- **Manganese (Mn)**
CASRN: 7439-96-5
Percentage: 0 % - 2 %
Element Role: Alloy element
GreenScreen Score: LT-P1

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products

- **Nickel (Ni)**
CASRN: 7440-02-0
Percentage: 8 % - 10 %
Element Role: Alloy element
GreenScreen Score: LT-1

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Certain Metals
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 All Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products

- **Phosphorus (P)**
CASRN: 7723-14-0
Percentage: 0 % - 0.045 %
Element Role: Alloy element
GreenScreen Score: BM-2

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products

- **Silicon (Si)**
CASRN: 7440-21-3
Percentage: 0 % - 1 %
Element Role: Alloy element
GreenScreen Score: LT-UNK

No listings found on Additional Hazard Lists

- **Sulfur (S)**
CASRN: 7704-34-9
Percentage: 0 % - 0.030 %
Element Role: Alloy element
GreenScreen Score: LT-UNK

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

METHACRYLIC ACID (2-PROPENOIC ACID, 2-METHYL-)

ID: 79-41-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2025-12-03 9:48:21

%: 0.0000 - 0.1000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Adhesive
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
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	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]		
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 - Australia	H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]		
SKI	GHS - New Zealand	Skin corrosion category 1B		
MAM	GHS - Japan	H311 - Toxic in contact with skin [Acute Toxicity (dermal) - Category 3]		
MAM	GHS - Australia	H311 - Toxic in contact with skin [Acute toxicity (dermal) - Category 3]		
MAM	GHS - New Zealand	Acute dermal toxicity category 3		
SKI	GHS - Japan	H314 - Causes severe skin burns and eye damage [Skin corrosion / irritation - Category 1A]		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List		
		Some Solvents		

SUBSTANCE NOTES:

ZINC, BIS(DIBUTYLDITHIOCARBAMATO)- (ZINC, BIS(DIBUTYLCARBAMODITHIOATO-S,S')-, (T-4)-)

ID: 136-23-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2025-12-03 9:48:22

%: 0.0000 - 0.1000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Activator
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HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
SKI	GHS - New Zealand	Skin irritation category 2
EYE	GHS - New Zealand	Eye irritation category 2
SKI	GHS - New Zealand	Skin sensitisation category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute 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]
AQU	GHS - Australia	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1
AQU	GHS - Korea	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Korea	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
EYE	GHS - Korea	H319 - Causes serious eye irritation [Serious eye damage/irritation - Category 2]
MAM	GHS - Korea	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List
		Antimicrobials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025
		Children's Toy Products

SUBSTANCE NOTES:

4,4'-DITHIODIMORPHOLINE (MORPHOLINE, 4,4'-DITHIOBIS-)

ID: 103-34-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2025-12-03 9:48:23

%: 0.0000 - 0.1000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Curing agent
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
MUL	German FEA - Substances Hazardous to Waters		Class 2 - Hazard to Waters	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found	No listings found on Additional Hazard Lists			
SUBSTANCE NOTES:				

2,2'-DIBENZOTHIAZYL DISULFIDE (BENZOTHAZOLE, 2,2'-DITHIOBIS-)

ID: 120-78-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2025-12-03 9:48:24

%: 0.0000 - 0.1000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Activator
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		
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]		
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]		
SKI	GHS - New Zealand	Skin sensitisation category 1		
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1		
AQU	GHS - Australia	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]		
AQU	GHS - New Zealand	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:				

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-12-03 9:48:22

%: 0.0000 - 0.1000

GreenScreen: LT-1

RC: None

NANO: No

SUBSTANCE ROLE: Activator

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
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
CAN	CA EPA - Prop 65	Carcinogen
CAN	IARC	Group 2a - Agent is probably Carcinogenic to humans
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CAN	GHS - Japan	H350 - May cause cancer [Carcinogenicity - Category 1B]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
SKI	GHS - New Zealand	Skin sensitisation category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute 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]
AQU	GHS - Australia	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1
AQU	GHS - Korea	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Korea	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
CAN	GHS - Korea	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List
		Antimicrobials

SUBSTANCE NOTES:

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 9:48:23		
%: 0.0000 - 0.1000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Activator
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
MUL	German FEA - Substances Hazardous to Waters		Class 2 - Hazard to Waters	
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:				

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:24	
%: 0.0000 - 0.1000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Curing agent
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1		H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]	
SKI	GHS - New Zealand		Skin irritation category 2	
SKI	GHS - Australia		H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]	
MAM	GHS - Japan		H370 - Causes damage to organs [Specific target organs/systemic toxicity following single 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:				

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:26	
%: 0.0000 - 0.1000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Catalyst

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List Precautionary list of substances recommended for avoidance
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 Children's Toy Products
SUBSTANCE NOTES:		

STEARIC ACID (STEARIC ACID)

ID: 57-11-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 9:48:27		
%: 0.0000 - 0.1000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Activator
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
END	TEDX - Potential Endocrine Disruptors		Potential Endocrine Disruptor	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No listings found on Additional Hazard Lists	
SUBSTANCE NOTES:				

SILICIC ACID, ALUMINUM POTASSIUM SODIUM SALT

ID: 12736-96-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 9:48:22		
%: 0.0000 - 0.1000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Absorbent
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:				

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:23	
?: 0.0000 - 0.1000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Stabilizer
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
END	TEDX - Potential Endocrine Disruptors		Potential Endocrine Disruptor	
MUL	German FEA - Substances Hazardous to Waters		Class 3 - Severe Hazard to Waters	
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	
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 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]	
SKI	GHS - Korea		H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1]	
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: 2025-12-03 9:48:25	
?: 0.0000 - 0.1000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Water resistance

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	IARC	Group 2b - Possibly carcinogenic to humans
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
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]
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
CAN	EU - Annex VI CMRs	Carcinogen Category 2 - Suspected human Carcinogen
CAN	GHS - Australia	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	EU - SVHC List	Equivalent Concern - Prioritization List
MAM	EU - SVHC List	Equivalent Concern - Candidate List

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products

SUBSTANCE NOTES:

SOYBEAN OIL

ID: 8001-22-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-12-03 9:48:26

%: 0.0000 - 0.1000

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:

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:27	
%: 0.0000 - 0.1000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Blowing agent
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H220 - Extremely flammable gas [Flammable gases - Category 1]		
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]		
PHY	Québec CSST - WHMIS 1988	Class B1 - Flammable gases		
PHY	GHS - Japan	H220 - Extremely flammable gas [Flammable gases - Category 1]		
PHY	GHS - New Zealand	Flammable gas category 1A		
PHY	GHS - Australia	H220 - Extremely flammable gas [Flammable gases - 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		
		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:				

CASTOR OIL (CASTOR OIL)

ID: 8001-79-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:23	
%: 0.0000 - 0.1000 GreenScreen: NoGS RC: None NANO: No SUBSTANCE ROLE: Stabilizer				
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No warnings found on HPD Priority Hazard Lists	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No listings found on Additional Hazard Lists	
SUBSTANCE NOTES:				

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

ID: 26760-85-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:24	
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%: 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:		

TRIETHYLENEDIAMINE (1,4-DIAZABICYCLO[2.2.2]OCTANE)

ID: 280-57-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 9:48:26		
%: 0.0000 - 0.1000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Catalyst
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 - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]		
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]		
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: 2025-12-03 9:48:27		
%: 0.0000 - 0.1000	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 (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
SUBSTANCE NOTES:		

HEXANOIC ACID, 2-ETHYL-, BARIUM SALT (2:1) (HEXANOIC ACID, 2-ETHYL-, BARIUM SALT)

ID: 2457-01-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 9:48:29		
%: 0.0000 - 0.1000	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Stabilizer
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
REP	EU - Annex VI CMRs		Reproductive Toxicity - Category 1B	
DEV	EU - GHS (H-Statements) Annex 6 Table 3-1		H360D - May damage the unborn child [Reproductive toxicity - Category 1A or 1B]	
REP	EU - REACH Annex XVII CMRs		Reproductive toxicants: Category 1B	
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:				

CALCIUM STEARATE

ID: 1592-23-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 9:48:24		
%: 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:				

ALUMINUM OXIDE (ALUMINUM OXIDE)

ID: 1344-28-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:25	
%: 0.0000 - 0.1000	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Corrosion inhibitor
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 v4.1 Product Standard Restricted Substances - Effective July 1, 2025		
		Children's Toy Products		
SUBSTANCE NOTES:				

ZINC OXIDE

ID: 1314-13-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 9:48:26	
%: 0.0000 - 0.1000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Stabilizer
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
END	TEDX - Potential Endocrine Disruptors		Potential Endocrine Disruptor	
MUL	German FEA - Substances Hazardous to Waters		Class 2 - Hazard to Waters	
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1		H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]	
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1		H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]	
MAM	GHS - Japan		H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]	
AQU	GHS - New Zealand		Hazardous to the aquatic environment - acute 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]	
AQU	GHS - Australia		H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]	
AQU	GHS - New Zealand		Hazardous to the aquatic environment - chronic category 1	
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	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Antimicrobials
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:

UNS C36000 BRASSID: UNS C36000

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

%: 0.0000 - 0.1000GreenScreen: MULTIPLERC: NoneNANO: NoMATERIAL ROLE: Structure component

HAZARD TYPEAGENCY AND LIST TITLESWARNINGS

Hazard Screening is not applicable to this Special Condition

METAL ALLOY HPD: See alloy HPD for alloying content inventory, GreenScreen scores, and hazards: [UNS C36000]

METAL ALLOY NOTES: In compliance with HPDC Special Conditions Policy for Metal Alloys, the listed alloy is considered the ingredient in this product, and is reported without information regarding its alloying elements. Metal alloys have different intrinsic characteristics, including health and environmental hazards, than their alloying elements. An alloy HPD with alloying element content inventory, their GreenScreen scores, and hazards is available at the link above.

ALLOYING ELEMENTS

- Copper (Cu)
CASRN: 7440-50-8
Percentage: 60 % - 63 %
Element Role: Alloy element
GreenScreen Score: LT-P1

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 Antimicrobials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products

- Iron (Fe)
CASRN: 7439-89-6
Percentage: 0 % - 0.035 %
Element Role: Alloy element
GreenScreen Score: LT-P1

No listings found on Additional Hazard Lists

- Lead (Pb)
CASRN: 7439-92-1
Percentage: 2.5 % - 3.7 %
Element Role: Alloy element

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 Certain Metals
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, 2025 All Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Electronics (RoHS)
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products

• **Zinc (Zn)**
CASRN: 7440-66-6
Percentage: 35 % - 36 %
Element Role: Alloy element
GreenScreen Score: LT-P1

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

MATERIAL CONTENT 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	CDPH Standard Method - Not tested	
COMPLIANCE TYPE: Self-declaration	ISSUE DATE: 2025-11-24	EXPIRY DATE: No expiration
CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: None		
COMPLIANCE DETAILS:		
COMPLIANCE SCOPE:		
APPLICABLE FACILITIES: All facilities.		
COMPLIANCE URL:		
COMPLIANCE NOTES:		

Section 4: Accessories

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

No accessories are required for this product.

Section 5: General Notes

MANUFACTURER INFORMATION

MANUFACTURER: **YKK AP America Inc.**
ADDRESS: **101 Marietta Street NW**
Suite 2100
Atlanta, GA 30303
COUNTRY: **United States**

WEBSITE: **<https://www.ykkap.com>**
CONTACT NAME: **Heather Evans**
TITLE: **Technical Services Manager**
PHONE: **678-838-6044**
EMAIL: **heatherevans@ykkap.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 for compliance with the HPD standard noted.