



SCREENING DATE: 2025-12-03
PUBLISHED DATE: 2025-12-03
EXPIRY DATE: 2028-12-03
PREPARER: Self-Prepared
VERIFIER: WAP Sustainability
VERIFICATION #: zPr-26705

created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 53195141120
HPD UNIQUE PRODUCT ID: Extensive list provided, see Section 5 General Notes for complete list.
CLASSIFICATION: 22 42 43 Flushometers
PRODUCT DESCRIPTION: A sensor flushometer is a type of activation mechanism for either a diaphragm or piston flushometer, which uses infrared or motion sensors with multi-focused lobular sensing fields for automatic, hands-free flushing. In addition, it typically includes an override button.

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

SENSOR FLUSHOMETERS [LEADED SEMI-RED BRASS (VALVE METAL), UNS C84400, COPPER CASTING ALLOY MULTIPLE UNS C37700 MULTIPLE FREE-CUTTING BRASS, UNS C36000 MULTIPLE UNS C27200 (YELLOW BRASS 63.5%), H80 HARD DRAWN MULTIPLE MANGANESE DIOXIDE (MANGANESE OXIDE (MNO2)) BM-1 | MUL | EYE | MAM | GEN | REP 1,3,5-TRIOXANE, POLYMER WITH 1,3-DIOXOLANE (COPOLYMER OF DIOXOLANE AND TRIOXANE) LT-UNK POLYCARBONATE (POLYCARBONATE) LT-UNK ZAMAK 3 MULTIPLE EBV136A SOLENOID ASSEMBLY BERYLLIUM COPPER, UNS C17200 MULTIPLE CARTRIDGE BRASS, UNS C26000 (260 BRASS), OS100 TEMPER FLAT PRODUCTS MULTIPLE CARBON BLACK BM-1 * | CAN | EYE | MAM | PHY TITANIUM DIOXIDE BM-1 * | CAN | END | MAM QUARTZ BM-1 * | CAN | MAM | GEN NYLON-66 (NYLON 6,6) LT-UNK POLYDIMETHYLSILOXANES (DIMETHICONE) BM-2 | EYE POLYETHYLENE LT-UNK LIME (CALCIUM OXIDE) BM-2 | SKI | MAM | EYE HYDROTREATED HEAVY PARAFFINIC PETROLEUM DISTILLATES (MINERAL OIL) (HYDROTREATED HEAVY PARAFFINIC PETROLEUM DISTILLATES) LT-1 | CAN | MUL | SKI | DEV TRI-(2-CHLOROISOPROPYL)PHOSPHATE (TRIS(2-CHLORO-1-METHYLETHYL) PHOSPHATE (TCPP)) BM-U | END | MUL | AQU | MAM | REP ETHENE, POLYMER WITH 1-PROPENE (ETHYLENE PROPYLENE POLYMER) LT-UNK GRAPHITE LT-UNK POTASSIUM HYDROXIDE (POTASSIUM HYDROXIDE) LT-P1 | SKI | MAM | EYE SODIUM OXIDE (SODIUM OXIDE) BM-2 POLYETHYLENE TEREPHTHALATE (PET) (POLYETHYLENE TEREPHTHALATE) LT-UNK NICKEL (NICKEL (METALLIC)) LT-1 | CAN | RES | MAM | SKI | AQU 1,3-DIOXEPANE, POLYMER WITH 1,3,5-TRIOXANE LT-UNK ZINC, ELEMENTAL (ZINC) LT-UNK | AQU IRON, ELEMENTAL (IRON) LT-P1 |

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

This HPD includes all chemicals and residuals present in the product above the stated threshold of 100ppm.

*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.

END BICYCLO(2.2.1)HEPT-2-ENE, 5-ETHYLIDENE-, POLYMER WITH ETHENE AND 1-PROPENE (ETHYLENE, ETHYLIDENE NORBORNENE, PROPYLENE) LT-UNK POLY(METHYLHYDROSILOXANE) (SILOXANES AND SILICONES, ME HYDROGEN) NoGS ABS RESIN (ACRYLONITRILE-BUTADIENE-STYRENE COPOLYMER) LT-UNK FIBERGLASS LT-UNK WATER BM-4 SILICON DIOXIDE (SILICA SAND) BM-1 CAN | MAM 1,1-DIETHOXYETHANE (ETHANE, 1,1-DIETHOXY-) LT-P1 MUL | SKI | EYE | PHY | MAM CARBONIC DICHLORIDE, POLYMER WITH 4,4'-(1-METHYLETHYLIDENE)BIS(PHENOL), 4-(1-METHYL-1-PHENYLETHYL)PHENYL ESTER (CARBONIC DICHLORIDE, POLYMER WITH 4,4'-(1-METHYLETHYLIDENE)BIS[PHENOL], 4-(1-METHYL-1-PHENYLETHYL)PHENYL ESTER) NoGS SOLIS DUAL FLASH CL CR MAIN PCB ASSEMBLY PROGRAM 430 STAINLESS STEEL MULTIPLE 316 STAINLESS STEEL MULTIPLE 304 STAINLESS STEEL MULTIPLE ZINC OXIDE BM-1 END | MUL | AQU | MAM | REP BRASS NoGS STEARIC ACID (STEARIC ACID) LT-P1 END 2-(2H-BENZOTRIAZOL-2-YL)-4,6-BIS(1-METHYL-1-PHENYLETHYL)PHENOL (PHENOL, 2-(2H-BENZOTRIAZOL-2-YL)-4,6-BIS(1-METHYL-1-PHENYLETHYL)-) BM-1 PBT CHROMIUM (CHROMIUM, METALLIC) LT-P1 END | SKI | MAM | REP | RES POLICAPRAM (NYLON 6 POLYMER) LT-UNK IRGANOX 1010 (BENZENEPROPANOIC ACID, 3,5-BIS(1,1-DIMETHYLETHYL)-4-HYDROXY-, 2,2-BIS[[3-[3,5-BIS(1,1-DIMETHYLETHYL)-4-HYDROXYPHENYL]-1-OXOPROPOXY]METHYL]-1,3-PROPANEDIYL ESTER) LT-UNK TALC BM-1 CAN | MAM CELLULOSE, MICROCRYSTALLINE (CELLULOSE) LT-UNK 4,7-METHANO-1H-INDENE, 3A,4,7,7A-TETRAHYDRO-, POLYMER WITH ETHENE AND 1-PROPENE LT-UNK POLYPROPYLENE LT-UNK POLYVINYL CHLORIDE LT-P1 MAM STYRENE BUTADIENE RUBBER (BENZENE, ETHENYL-, POLYMER WITH 1,3-BUTADIENE) (STYRENE-BUTADIENE COPOLYMERS) LT-UNK PHENOL, 2,6-DIMETHYL-, HOMOPOLYMER LT-UNK MAM MAGNESIUM OXIDE BM-3dg CAN | MAM ANTIMONY TRIOXIDE (ANTIMONY OXIDE (ANTIMONY TRIOXIDE)) BM-1 MUL | CAN | SKI | EYE | MAM | AQU POLY(OXYMETHYLENE), ALPHA-ACETYL-OMEGA-(ACETYLOXY)- (POLY(OXYMETHYLENE), α-ACETYL-ω-(ACETYLOXY)-) LT-UNK POLY(OXYMETHYLENE) NoGS DIMETHICONE (SILOXANES AND SILICONES, DI-ME) BM-2 PBT AISI 1020 STEEL MULTIPLE COPPER ALLOY, UNS C51900 MULTIPLE ARCHITECTURAL BRONZE, UNS C38000 MULTIPLE PCB FLEX KEYPAD 302 STAINLESS STEEL 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
LCA: Environmental Product Declaration (EPD) by SCS

CONSISTENCY WITH OTHER PROGRAMS
Pre-checked for LEED v4 Option 1.
Pre-checked for LEED v4.1 Option 1.

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

SENSOR FLUSHOMETERS

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:

LEADED SEMI-RED BRASS (VALVE METAL), UNS C84400, COPPER CASTING ALLOY

ID: UNS C84400

HAZARD DATA SOURCE: Pharos Chemical and Materials Library				
%: 40.0000 - 50.0000	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 C84400]

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: 0 % - 0.005 %
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

- Copper (Cu)
CASRN: 7440-50-8
Percentage: 78 % - 82 %
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

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: 0 % - 0.4 %
 Element Role: Alloy element
 GreenScreen Score: LT-P1

No listings found on Additional Hazard Lists

• **Lead (Pb)**

CASRN: 7439-92-1
 Percentage: 6 % - 8 %
 Element Role: Alloy element
 GreenScreen Score: BM-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	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 (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 All Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Electronics (RoHS)
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

• **Nickel (Ni)**

CASRN: 7440-02-0
 Percentage: 0 % - 1 %
 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 (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 All Products
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

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 Cosmetics and Personal Care Products

- Phosphorus (P)**
CASRN: 7723-14-0
Percentage: 0 % - 0.02 %
Element Role: Alloy element
GreenScreen Score: BM-2

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 Cosmetics and Personal Care Products

- Silicon (Si)**
CASRN: 7440-21-3
Percentage: 0 % - 0.005 %
Element Role: Alloy element
GreenScreen Score: LT-UNK

No listings found on Additional Hazard Lists

- Sulfur (S)**
CASRN: 7704-34-9
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

- Tin (Sn)**
CASRN: 7440-31-5
Percentage: 2.3 % - 3.5 %
Element Role: Alloy element
GreenScreen Score: LT-UNK

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

- Zinc (Zn)**
CASRN: 7440-66-6
Percentage: 7 % - 10 %
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:

%: **10.0000 - 20.0000** 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 C37700](#)]

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: 58 % - 62 %
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: 0 % - 0.3 %
Element Role: Alloy element
GreenScreen Score: LT-P1

No listings found on Additional Hazard Lists

- Lead (Pb)**
CASRN: 7439-92-1
Percentage: 1.5 % - 2.5 %
Element Role: Alloy element
GreenScreen Score: BM-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	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

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 Electronics (RoHS)
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

- Zinc (Zn)**
CASRN: 7440-66-6
Percentage: 38 % - 40 %
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:

FREE-CUTTING BRASS, UNS C36000 ID: UNS C36000

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

%: 10.0000 - 15.0000 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 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 (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products

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

- 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
GreenScreen Score: BM-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	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:

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 C27200]		
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: 62 % - 65 % 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 % - 0.070 % Element Role: Alloy element GreenScreen Score: LT-P1		

No listings found on Additional Hazard Lists

Lead (Pb) CASRN: 7439-92-1 Percentage: 0 % - 0.070 % Element Role: Alloy element GreenScreen Score: BM-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	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 (C2CPiI)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 All Products

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 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: 34.6 % - 38 %
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:

MANGANESE DIOXIDE (MANGANESE OXIDE (MNO2))

ID: 1313-13-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-12-03 8:55:13

%: 0.0000 - 5.0000

GreenScreen: BM-1

RC: None

NANO: No

SUBSTANCE ROLE: Oxidizing agent

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
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 - 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
REP	GHS - New Zealand	Reproductive toxicity category 2
REP	GHS - New Zealand	Effects on or via lactation

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:		

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 8:55:13		
%: 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:				

POLYCARBONATE (POLYCARBONATE)

ID: 25037-45-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 8:55:14		
%: 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:				

ZAMAK 3

ID: UNS Z33520

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 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: 3.5 % - 4.3 %
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

- Copper (Cu)**
CASRN: 7440-50-8
Percentage: 0 % - 0.25 %
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: 0 % - 0.10 %
Element Role: Alloy element
GreenScreen Score: LT-P1

No listings found on Additional Hazard Lists

- Lead (Pb)**
CASRN: 7439-92-1
Percentage: 0 % - 0.005 %
Element Role: Alloy element
GreenScreen Score: BM-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	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

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 All Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Electronics (RoHS)
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

- Magnesium (Mg)**
CASRN: 7439-95-4
Percentage: 0.025 % - 0.050 %
Element Role: Alloy element
GreenScreen Score: LT-UNK

No listings found on Additional Hazard Lists

- Tin (Sn)**
CASRN: 7440-31-5
Percentage: 0 % - 0.0030 %
Element Role: Alloy element
GreenScreen Score: LT-UNK

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

- Zinc (Zn)**
CASRN: 7440-66-6
Percentage: 95.288 % - 96.075 %
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:

EBV136A SOLENOID ASSEMBLY

ID: **Electronic Component**

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

%: **0.0000 - 5.0000**

GreenScreen: **Not Required**

RC: **None**

NANO: **No**

MATERIAL ROLE: **Electronic component**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

Hazard Screening is not applicable to this Special Condition

INGREDIENT DESCRIPTION: EBV136A Solenoid Assembly

EU ROHS COMPLIANCE: No

END-OF-LIFE MANAGEMENT: No end-of-life management plan

BERYLLIUM COPPER, UNS C17200

ID: UNS C17200

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 C17200](#)]

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: 0 % - 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 (C2CP11)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products

- Silicon (Si)**
CASRN: 7440-21-3
Percentage: 0 % - 0.2 %
Element Role: Alloy element
GreenScreen Score: LT-UNK

No listings found on Additional Hazard Lists

- Cobalt (Co)**
CASRN: 7440-48-4
Percentage: 0 % - 0.2 %
Element Role: Alloy element
GreenScreen Score: LT-1

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP11)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 All Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP11)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP11)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products

- Copper (Cu)**
CASRN: 7440-50-8
Percentage: 97.4 % - 97.6 %
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

- Nickel (Ni)**
CASRN: 7440-02-0
Percentage: 0 % - 1 %
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

MATERIAL CONTENT NOTES:

CARTRIDGE BRASS, UNS C26000 (260 BRASS), OS100 TEMPER FLAT PRODUCTS
ID: UNS C26000

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 C26000]

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: 68.5 % - 71.7 %
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 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

- Iron (Fe)**

CASRN: 7439-89-6

Percentage: 0 % - 0.05 %

Element Role: Alloy element

GreenScreen Score: LT-P1

No listings found on Additional Hazard Lists

- Lead (Pb)**

CASRN: 7439-92-1

Percentage: 0 % - 0.070 %

Element Role: Alloy element

GreenScreen Score: BM-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	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 (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 All Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Electronics (RoHS)
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

- Zinc (Zn)**

CASRN: 7440-66-6

Percentage: 28.5 % - 31.5 %

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

CARBON BLACK

ID: 1333-86-4

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-12-03 8:55:14**

%: 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.

TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-12-03 8:55:15**

%: 0.0000 - 1.0000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment
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HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen**
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route**
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources**
CAN	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value**
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor**
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels**
CAN	IARC	Group 2b - Possibly carcinogenic to humans**
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]**
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]**
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]**
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE Safer Chemicals Ingredients list (SCIL)
		Colorants - Green Circle (Verified Low Concern)
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025
		Cosmetics and Personal Care Products

SUBSTANCE NOTES: **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.

QUARTZ				ID: 14808-60-7
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:13	
%: 0.0000 - 1.0000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Glass component

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen**
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route**
CAN	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	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.

NYLON-66 (NYLON 6,6)
ID: **32131-17-2**

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**
HAZARD SCREENING DATE: **2025-12-03 8:55:13**

%: **0.0000 - 1.0000**
GreenScreen: **LT-UNK**
RC: **None**
NANO: **No**
SUBSTANCE ROLE: **Structure component**

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

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

POLYDIMETHYLSILOXANES (DIMETHICONE)

ID: 9006-65-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 8:55:14		
%: 0.0000 - 1.0000	GreenScreen: BM-2	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:				

POLYETHYLENE

ID: 9002-88-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 8:55:15		
%: 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:				

LIME (CALCIUM OXIDE)

ID: 1305-78-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 8:55:15		
%: 0.0000 - 1.0000	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Glass component

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
SKI	GHS - New Zealand	Skin corrosion category 1C
EYE	GHS - New Zealand	Serious eye damage category 1
EYE	GHS - Japan	H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
EYE	GHS - Australia	H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List
		Antimicrobials
SUBSTANCE NOTES:		

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

ID: 64742-54-7

HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SCREENING DATE:	2025-12-03 8:55:16
%: 0.0000 - 1.0000	GreenScreen: LT-1	RC: None	NANO: No
			SUBSTANCE ROLE: Lubricant

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:		

TRI-(2-CHLOROISOPROPYL)PHOSPHATE (TRIS(2-CHLORO-1-METHYLETHYL) PHOSPHATE (TCPP))

ID: **13674-84-5**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:17	
%: 0.0000 - 1.0000	GreenScreen: BM-U	RC: None	NANO: No	SUBSTANCE ROLE: Flame retardant
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	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 3		
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]		
REP	GHS - Australia	H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child [Reproductive toxicity - 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
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:		

ETHENE, POLYMER WITH 1-PROPENE (ETHYLENE PROPYLENE POLYMER)

ID: **9010-79-1**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:17	
%: 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:				

GRAPHITE

ID: **7782-42-5**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:18	
%: 0.0000 - 1.0000	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:				

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:19	
%: 0.0000 - 1.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Conductor
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 - Japan		H314 - Causes severe skin burns and eye damage [Skin corrosion / irritation - Category 1]	
SKI	GHS - Australia		H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]	
SKI	GHS - Korea		H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1]	
SKI	GHS - New Zealand		Skin corrosion category 1B	
MAM	GHS - Korea		H301 - Toxic if swallowed [Acute toxicity (oral) - Category 3]	
MAM	GHS - New Zealand		Acute oral toxicity category 3	
MAM	GHS - Japan		H301 - Toxic if swallowed [Acute Toxicity (oral) - Category 3]	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)		C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025	
			Cosmetics and Personal Care Products	
SUBSTANCE NOTES:				

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:16	
?: 0.0000 - 1.0000	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Glass component
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		

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

POLYETHYLENE TEREPHTHALATE (PET) (POLYETHYLENE TEREPHTHALATE)

ID: 25038-59-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 8:55:17		
%: 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:				

NICKEL (NICKEL (METALLIC))

ID: 7440-02-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 8:55:18		
%: 0.0000 - 1.0000	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Coating

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	MAK	Carcinogen Group 1 - Substances that cause cancer in man
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	IARC	Group 2b - Possibly carcinogenic to humans
CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - 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]
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]
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [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 - New Zealand	Skin sensitisation category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1
CAN	GHS - Australia	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 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
SUBSTANCE NOTES:		

1,3-DIOXEPANE, POLYMER WITH 1,3,5-TRIOXANE
ID: 25214-85-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:19	
%: 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:				

ZINC, ELEMENTAL (ZINC)
ID: 7440-66-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:20	
%: 0.0000 - 1.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Reducing agent
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1		
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1		

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:		

IRON, ELEMENTAL (IRON)

ID: **7439-89-6**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:16	
%: 0.0000 - 1.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
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:				

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

ID: **25038-36-2**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 8:55:17		
%: 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(METHYLHYDROSILOXANE) (SILOXANES AND SILICONES, ME HYDROGEN)

ID: **63148-57-2**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 8:55:18		
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%: 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		
None found			No listings found on Additional Hazard Lists		
SUBSTANCE NOTES:					

ABS RESIN (ACRYLONITRILE-BUTADIENE-STYRENE COPOLYMER)					ID: 9003-56-9
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:19		
%: 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:					

FIBERGLASS				ID: 65997-17-3	
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:20		
%: 0.0000 - 1.0000	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		
EXEMPT	European Union / European Commission (EU EC)		EU - REACH Exemptions Exempted from REACH Annex V listing due to intrinsic safety		
SUBSTANCE NOTES:					

WATER					ID: 7732-18-5
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:19		
%: 0.0000 - 1.0000		GreenScreen: BM-4	RC: None	NANO: No	SUBSTANCE ROLE: Solvent

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:		

SILICON DIOXIDE (SILICA SAND)

ID: 7631-86-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:20	
%: 0.0000 - 1.0000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Glass component
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:				

1,1-DIETHOXYETHANE (ETHANE, 1,1-DIETHOXY-)

ID: 105-57-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 8:55:21		
%: 0.0000 - 1.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
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]
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H225 - Highly flammable liquid and vapour [Flammable liquids - Category 2]
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
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]
EYE	GHS - Japan	H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]
PHY	GHS - New Zealand	Flammable liquids category 2
PHY	GHS - Japan	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	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Some Solvents

SUBSTANCE NOTES:

CARBONIC DICHLORIDE, POLYMER WITH 4,4'-(1-METHYLETHYLIDENE)BIS(PHENOL), 4-(1-METHYL-1-PHENYLETHYL)PHENYL ESTER (CARBONIC DICHLORIDE, POLYMER WITH 4,4'-(1-METHYLETHYLIDENE)BIS[PHENOL], 4-(1-METHYL-1-PHENYLETHYL)PHENYL ESTER)

ID: 111211-39-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:22	
%: 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		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES:

HAZARD DATA SOURCE: [HPDC Special Conditions Policy](#)

%: 0.0000 - 1.0000 GreenScreen: Not Required RC: None NANO: No MATERIAL ROLE: Electronic component

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

INGREDIENT DESCRIPTION: Printed circuit board that acts as the brain of the electrical system

EU ROHS COMPLIANCE: No

END-OF-LIFE MANAGEMENT: No end-of-life management plan

MATERIAL CONTENT NOTES:

430 STAINLESS STEEL

ID: UNS S43000

HAZARD DATA SOURCE: [Pharos Chemical and Materials Library](#)

%: 0.0000 - 1.0000 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 S43000](#)]

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 % - 0.12 %
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: 10 % - 12 %
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
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: 85 % - 90 %
Element Role: Alloy element
GreenScreen Score: LT-P1

No listings found on Additional Hazard Lists

• **Manganese (Mn)**
CASRN: 7439-96-5
Percentage: 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 (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

• **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 % - 0.03 %
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:

316 STAINLESS STEEL

ID: UNS S31600

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

%: 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 S31600]

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: 16 % - 18 %
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
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: 61.8 % - 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 (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products

- Molybdenum (Mo)**
CASRN: 7439-98-7
Percentage: 2 % - 3 %
Element Role: Alloy element
GreenScreen Score: LT-UNK

No listings found on Additional Hazard Lists

- Nickel (Ni)**
CASRN: 7440-02-0
Percentage: 10 % - 14 %
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

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 All Products
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

- 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 (C2CPH)	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 % - 0.03 %
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:

304 STAINLESS STEEL
ID: UNS S30400

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

%: 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 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 % - 0.08 %
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: 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 (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: 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 %
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 % - 10.5 %
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

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

- Phosphorus (P)**
CASRN: 7723-14-0
Percentage: 0 % - 0.0045 %
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 % - 0.03 %
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:

ZINC OXIDE

ID: 1314-13-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-12-03 8:55:23

%: 0.0000 - 0.1000

GreenScreen: BM-1

RC: None

NANO: No

SUBSTANCE ROLE: Activator

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:		

BRASS

ID: 12597-71-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:20		
%: 0.0000 - 0.1000	GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Structure component	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
None found	No warnings found on HPD Priority Hazard Lists				

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

STEARIC ACID (STEARIC ACID)

ID: 57-11-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 8:55:21		
%: 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:				

2-(2H-BENZOTRIAZOL-2-YL)-4,6-BIS(1-METHYL-1-PHENYLETHYL)PHENOL (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: 2025-12-03 8:55:23		
%: 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:				

CHROMIUM (CHROMIUM, METALLIC)

ID: 7440-47-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 8:55:24		
%: 0.0000 - 0.1000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Coating

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
REP	GHS - New Zealand	Reproductive toxicity category 2
RES	GHS - Japan	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled [Respiratory sensitization - Category 1A]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products
SUBSTANCE NOTES:		

POLICAPRAM (NYLON 6 POLYMER)

ID: 25038-54-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:25	
%: 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:				

IRGANOX 1010 (BENZENEPROPANOIC ACID, 3,5-BIS(1,1-DIMETHYLETHYL)-4-HYDROXY-, 2,2-BIS[[3-[3,5-BIS(1,1-DIMETHYLETHYL) -4-HYDROXYPHENYL]-1-OXOPROPOXY]METHYL]-1,3-PROPANEDIYL ESTER)

ID: 6683-19-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:21	
%: 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
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE Safer Chemicals Ingredients list (SCIL) Preservatives-Antioxidants - Green Circle (Verified Low Concern)
SUBSTANCE NOTES:		

TALC

ID: 14807-96-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:22	
%: 0.0000 - 0.1000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Filler
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
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 2a - Agent is probably Carcinogenic to humans		
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]		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES:

CELLULOSE, MICROCRYSTALLINE (CELLULOSE)

ID: 9004-34-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:23	
%: 0.0000 - 0.1000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Insulator
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 8:55:24	
%: 0.0000 - 0.1000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		
SUBSTANCE NOTES:				

POLYPROPYLENE

ID: 9003-07-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:25	
%: 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:				

POLYVINYL CHLORIDE

ID: 9002-86-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:21	
%: 0.0000 - 0.1000	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:		

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 8:55:22		
%: 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:				

PHENOL, 2,6-DIMETHYL-, HOMOPOLYMER

ID: 25134-01-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-03 8:55:23		
%: 0.0000 - 0.1000	GreenScreen: LT-UNK	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]		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES:

MAGNESIUM OXIDE

ID: 1309-48-4

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-12-03 8:55:24**

%: **0.0000 - 0.1000** GreenScreen: **BM-3dg** RC: **None** NANO: **No** SUBSTANCE ROLE: **Glass component**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

ANTIMONY TRIOXIDE (ANTIMONY OXIDE (ANTIMONY TRIOXIDE))

ID: 1309-64-4

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-12-03 8:55:25**

%: **0.0000 - 0.1000** 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]

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	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:		

POLY(OXYMETHYLENE), ALPHA-ACETYL-OMEGA-(ACETYLOXY)- (POLY(OXYMETHYLENE), α-ACETYL-ω-(ACETYLOXY)-)

ID: **25231-38-3**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:22	
%: 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:				

POLY(OXYMETHYLENE)

ID: **9002-81-7**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:23	
%: 0.0000 - 0.1000	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:				

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-03 8:55:25	
#: 0.0000 - 0.1000	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Curing agent
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
PBT	EC - CEPA DSL		Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans	
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				
%: 0.0000 - 0.1000	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 G10200]				
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: 0.17 % - 0.23 %
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: 99.08 % - 99.53 %
Element Role: Alloy element
GreenScreen Score: LT-P1

No listings found on Additional Hazard Lists

- Manganese (Mn)**
CASRN: 7439-96-5
Percentage: 0.3 % - 0.6 %
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

- 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 (C2CPII)	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 % - 0.05 %
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:

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 C51900](#)]

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.

- **Copper (Cu)**

CASRN: 7440-50-8

Percentage: 92.5 % - 95 %

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 % - 0.1 %

Element Role: Alloy element

GreenScreen Score: LT-P1

No listings found on Additional Hazard Lists

- **Lead (Pb)**

CASRN: 7439-92-1

Percentage: 0 % - 0.05 %

Element Role: Alloy element

GreenScreen Score: BM-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	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 (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 All Products

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 Electronics (RoHS)
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

- Phosphorus (P)**
CASRN: 7723-14-0
Percentage: 0.03 % - 0.35 %
Element Role: Alloy element
GreenScreen Score: BM-2

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 Cosmetics and Personal Care Products

- Tin (Sn)**
CASRN: 7440-31-5
Percentage: 5 % - 7 %
Element Role: Alloy element
GreenScreen Score: LT-UNK

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

- Zinc (Zn)**
CASRN: 7440-66-6
Percentage: 0 % - 0.3 %
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

- Nickel (Ni)**
CASRN: 7440-02-0
Percentage: 0 % - 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 (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 All Products
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

MATERIAL CONTENT NOTES:

ARCHITECTURAL BRONZE, UNS C38000

ID: JIS 3604/UNS C38000

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

%: 0.0000 - 0.1000

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: [[JIS 3604/UNS C38000](#)]

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: 0 % - 0.50 %
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

- Copper (Cu)**
CASRN: 7440-50-8
Percentage: 55 % - 60 %
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: 0 % - 0.35 %
Element Role: Alloy element
GreenScreen Score: LT-P1

No listings found on Additional Hazard Lists

- **Lead (Pb)**
CASRN: 7439-92-1
Percentage: 1.5 % - 2.5 %
Element Role: Alloy element
GreenScreen Score: BM-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	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

- **Tin (Sn)**
CASRN: 7440-31-5
Percentage: 0 % - 0.3 %
Element Role: Alloy element
GreenScreen Score: LT-UNK

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

- **Zinc (Zn)**
CASRN: 7440-66-6
Percentage: 36.5 % - 43.5 %
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:

PCB FLEX KEYPAD

ID: **Electronic Component**

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

%: **0.0000 - 0.1000** GreenScreen: **Not Required** RC: **None** NANO: **No** MATERIAL ROLE: **Electronic component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
Hazard Screening is not applicable to this Special Condition		
INGREDIENT DESCRIPTION: Flexible printed circuit board used to route power		
EU ROHS COMPLIANCE: No		
END-OF-LIFE MANAGEMENT: No end-of-life management plan		
MATERIAL CONTENT NOTES:		

302 STAINLESS STEEL

ID: UNS S30200

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

%: 0.0000 - 0.1000 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 S30200]		

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 % - 0.15 % 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: 19 % - 20 % 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
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: 65 % - 75 % 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 (C2CPH)	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 (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 All Products
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

- **Phosphorus (P)**
CASRN: 7723-14-0
Percentage: 0 % - 0.0045 %
Element Role: Alloy element
GreenScreen Score: BM-2

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 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 % - 0.03 %
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

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: 2025-11-12	EXPIRY DATE: No expiration
CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: None		
COMPLIANCE DETAILS:		
COMPLIANCE SCOPE:		
APPLICABLE FACILITIES: All		
COMPLIANCE URL:		
COMPLIANCE NOTES:		

LCA	Environmental Product Declaration (EPD) by SCS	
COMPLIANCE TYPE: Third-party certification	ISSUE DATE: 2022-08-10	EXPIRY DATE: 2027-08-09
CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: SCS		
Global Services		
COMPLIANCE DETAILS:		
COMPLIANCE SCOPE:		
APPLICABLE FACILITIES: All		
COMPLIANCE URL:		
https://www.prddrupal.sloan.com/sites/default/files/2025-10/Sensor%20Flushometers%20EPD.pdf		
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

HPD UNIQUE PRODUCT ID: US-286-3780018, US-286-3780019, US-286-3780027, US-286-3780031, US-286-3780046, US-286-3770026, US-286-3770035, US-286-3770037, US-286-3770039, US-286-3770020, US-286-3770021, US-286-3780033, US-286-3780038, US-286-3780051, US-286-3780057, US-286-3780070, US-286-3370446, US-286-3370444, US-286-3370409, US-286-3370400T, US-286-3370411, US-286-3370408, US-286-3370458, US-286-3370448T, US-286-3370480, US-286-33704001, US-286-33704054, US-286-3250289, US-286-3250289T, US-286-3250298, US-286-3250314, US-286-3250320, US-286-3250335, US-286-3250348, US-286-3250352, US-286-3250371, US-286-32503024, US-286-32503025, US-286-32503026, US-286-32503027, US-286-32503028, US-286-3250340, US-286-3250295, US-286-3250345, US-286-3370085, US-286-33700003, US-286-33700027, US-286-33700016, US-286-3370002, US-286-3370002T, US-286-3370035, US-286-3370042, US-286-3370043, US-286-3370048, US-286-3370053, US-286-3370075, US-286-3370098, US-286-33700002, US-286-33700009, US-286-33700017, US-286-3370001, US-286-3370025, US-286-3370044, US-286-3370069, US-286-3370079, US-286-3370097, US-286-33700001, US-286-33700018, US-286-3370045, US-286-3370024, US-286-3250325, US-286-3250325T, US-286-3370415, US-286-3370419, US-286-3370427, US-286-3370438, US-286-3370450, US-286-3370457, US-286-33704007, US-286-33704008, US-286-33704009, US-286-33704011, US-286-33704012, US-286-3370425, US-286-3370425T, US-286-3370437, US-286-3370447, US-286-3250290, US-286-3250290T, US-286-33704013, US-286-33704014, US-286-33704015, US-286-33704016, US-286-33704017, US-286-3370430, US-286-3370430T, US-286-3370436, US-286-3370439, US-286-3370445, US-286-3370456, US-286-33704052, US-286-33704002, US-286-33704003, US-286-33704004, US-286-33704005, US-286-33704006, US-286-3370431, US-286-3370431T, US-286-3250293, US-286-3250299, US-286-3250300, US-286-3250310, US-286-3250311, US-286-3250313, US-286-3250424, US-286-3250424T, US-286-3250477, US-286-32503012, US-286-32503013, US-286-32503014, US-286-32503015, US-286-32503016, US-286-3370010, US-286-3370010T, US-286-3370019, US-286-3370033, US-286-3370054, US-286-3370083, US-286-3370084, US-286-3370100, US-286-33700028, US-286-33700005, US-286-33700025, US-286-33700012, US-286-3370005, US-286-3370005T, US-286-3370077, US-286-33700006, US-286-33700013, US-286-3370004, US-286-3370004T, US-286-3370014, US-286-3370017, US-286-3370039, US-286-3370074, US-286-3370086, US-286-3370099, US-286-33700007, US-286-33700011, US-286-33700014

MANUFACTURER INFORMATION

MANUFACTURER: **Sloan Valve Company**
ADDRESS: **10500 Seymour Avenue**
Franklin Park, Illinois 60131
COUNTRY: **United States**

WEBSITE: **www.sloan.com**
CONTACT NAME: **Paul Sambanis, PhD**
TITLE: **Vice President of Sustainability**
PHONE: **800-982-5839**
EMAIL: **customer.service@sloan.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.