



HPD UNIQUE IDENTIFIER: 1397797081088

HPD UNIQUE PRODUCT ID: Not provided.

CLASSIFICATION: 08 44 13 Glazed Aluminum Curtain Walls

PRODUCT DESCRIPTION: Hydro's aluminum curtain wall systems—developed under its leading global brands Technal, WICONA, and SAPA—offer high-performance, modular façade solutions tailored to contemporary architectural and sustainability requirements. These systems are engineered using high-quality aluminum extrusions, often containing a high percentage of recycled post-consumer content, in line with Hydro's commitment to low-carbon, circular aluminum production (e.g., Hydro CIRCAL and Hydro REDUXA). WICTEC50NGMT TENTAL50MT TENTAL50TT WICTEC50TT WICTEC60NGMT This HPD covers the curtain wall framing system only and excludes glazing components.

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Residuals/Impurities Evaluation	For all contents above the threshold, the manufacturer has:
→ Nested Materials Method	Completed in 11 of 11 Materials	
Threshold Disclosed Per	Explanation(s) provided for Residuals/Impurities?	Characterized Yes
→ Product	Yes	Provided weight and role. Yes
Threshold Level		Screened Yes
→ 100 ppm		Provided screening results using HPDC-approved methods. Identified No
		Provided name and CAS RN or other identifier.

CONTENT IN DESCENDING ORDER OF QUANTITY

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

NESTED MATERIAL | MATERIAL OR SUBSTANCE | RESIDUAL OR IMPURITY
GREENSCREEN SCORE | HAZARD TYPE
CIRCAL ALUMINUM EXTRUSIONS [ALUMINUM (PRIMARY CASRN IS 7429-90-5) LT-P1] END | MAM | PHY **MAGNESIUM LT-UNK** | PHY | MAM | SKI | EYE **SILICON, ELEMENTAL LT-UNK** **MANGANESE LT-P1** | END | MUL | REP | MAM | AQU **IRON, ELEMENTAL LT-P1** | END **ZINC, ELEMENTAL LT-UNK** | AQU **TIN LT-UNK** | MAM | EYE | AQU **TECHNICAL/OTHER NAMES THAT MATCH YOUR QUERY: NoGS COPPER LT-P1** | MUL | AQU | MAM **CHROMIUM LT-P1** | END | SKI | MAM | REP | RES **TITANIUM LT-UNK** | PHY **EPDM (ETHYLENE PROPYLENE DIENE MONOMER RUBBER) [UNDISCLOSED NoGS ETHANONE, 1-[3-(1-HYDROXY-1-METHYLETHYL)PHENYL]- NoGS ((3,3,5-TRIMETHYLCYCLOHEXYL)OXY)ACETALDEHYDE (3,3,5-TRIMETHYLCYCLOHEXYL)OXY)ACETALDEHYDE) NoGS 1,4-BENZENEDIMETHANOL, ALPHA,ALPHA,ALPHA',ALPHA'-TETRAMETHYL- NoGS] ABS [ABS RESIN (PRIMARY CASRN IS 9003-56-9) LT-UNK] POLYESTER POWDER COATING (TGIC/TGIC-FREE, POLYESTER RESIN) [UNDISCLOSED NoGS UNDISCLOSED BM-2]** CAN | MAM **UNDISCLOSED LT-UNK UNDISCLOSED LT-UNK** | MAM **UNDISCLOSED NoGS UNDISCLOSED BM-1 *** | CAN **UNDISCLOSED BM-1 *** | CAN | EYE | MAM | PHY **UNDISCLOSED LT-P1** | MUL **UNDISCLOSED LT-UNK UNDISCLOSED LT-P1** | MUL **UNDISCLOSED LT-P1** | MUL | AQU | SKI **UNDISCLOSED BM-1 *** | CAN | END | MAM **UNDISCLOSED BM-2** | MAM **UNDISCLOSED LT-P1** | END | MAM | PHY **UNDISCLOSED BM-1** | PBT **TPE (THERMOPLASTIC ELASTOMER) [THERMOPLASTIC ELASTOMER NoGS] EPDM FOAM**

Number of Greenscreen BM-4/BM3 contents ... 0
Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-P1, LT-1, BM-1
Nanomaterial ... No
INVENTORY AND SCREENING NOTES:
Antimicrobial Pesticides Reporting: This product contains substance(s) that are intentionally added above the [Product - 100 ppm] threshold to act as antimicrobials. See Substance Notes and General Notes for more information.
Information is not available as to whether the product contains substance(s) that are intentionally added below the selected threshold to act as antimicrobials.

Scope: Curtain wall assembly (glazing excluded): aluminum alloy extrusions (CIRCAL 6060), elastomeric gaskets/seals (EPDM, TPE/TPV incl. Santoprene), powder coating, and hardware (stainless steel grades A2/A4 incl. A2-20H/A4-21H, mild steel, ZP5 zinc alloy). Threshold: Product —1,000 ppm. Residuals/impurities considered per HPD guidance. Data & Screening: Ingredient data from supplier SDS/TDS and written attestations; screening completed against the HPD Priority Hazard Lists current at preparation (incl. GreenScreen® LT, REACH SVHC, CA Prop 65, IARC, etc.). Special Conditions: Metal Alloys Special Condition applied for aluminum and stainless steel (reported by grade as alloys; no elemental breakdown). Coatings: Powder-coating constituents screened; proprietary constituents (if any) are identified as proprietary and reported at full % by weight with verifier review on file. Family coverage: This HPD represents a product family (WICTEC 50 NG MT, WICTEC 50 TT, TENTAL 50 MT, TENTAL 50 TT). Ingredient % are shown as ranges, and worst-case screening was applied across variants. PFAS attestation: [select one—No intentionally added PFAS confirmed by suppliers / Unknown pending supplier confirmation / Yes—intentionally added PFAS present].

(ETHYLENE-PROPYLENE-DIENE MONOMER RUBBER, FOAMED) [UVCB CONDENSATION PRODUCT OF: TETRAKIS-HYDROXYMETHYLPHOSPHONIUM CHLORIDE, UREA AND DISTILLED HYDROGENATED C16-18 TALLOW ALKYLAMINE LT-P1 CAN | SKI | AQU] ZP5 (ZINC ALLOY) [UNS Z35531 ZINC ALLOY LT-P1 END | AQU | PHY AA 6560 ALUMINUM ALLOY LT-P1 END | MAM | PHY COPPER LT-P1 MUL | AQU | MAM MAGNESIUM LT-UNK PHY | MAM | SKI | EYE IRON, ELEMENTAL LT-P1 END SILICON, ELEMENTAL LT-UNK NICKEL LT-1 CAN | RES | MAM | SKI | AQU LEAD BM-1 END | PBT | MUL | CAN | DEV | REP | GEN | AQU | MAM CADMIUM LT-1 CAN | END | PBT | MUL | DEV | GEN | REP | MAM | AQU | PHY TIN LT-UNK MAM | EYE | AQU] A2-20H STAINLESS STEEL FASTENERS [IRON, ELEMENTAL LT-P1 END CHROMIUM LT-P1 END | SKI | MAM | REP | RES NICKEL LT-1 CAN | RES | MAM | SKI | AQU MANGANESE LT-P1 END | MUL | REP | MAM | AQU SILICON, ELEMENTAL LT-UNK CARBON LT-UNK PHOSPHORUS BM-2 MAM | PHY | EYE | AQU | SKI SULFUR, PRECIPITATED LT-UNK SKI | MAM] MULTI-MATERIAL STEEL (X10CRNI18-8 + X5CRNI18-10) [IRON, ELEMENTAL LT-P1 END CHROMIUM LT-P1 END | SKI | MAM | REP | RES NICKEL LT-1 CAN | RES | MAM | SKI | AQU MANGANESE LT-P1 END | MUL | REP | MAM | AQU SILICON, ELEMENTAL LT-UNK CARBON LT-UNK NITROGEN NoGS PHOSPHORUS BM-2 MAM | PHY | EYE | AQU | SKI SULFUR, PRECIPITATED LT-UNK SKI | MAM] SANTOPRENE™ 8221-75M300 (THERMOPLASTIC VULCANIZATE) [UNDISCLOSED LT-UNK] MILD STEEL (CARBON STEEL) [IRON, ELEMENTAL LT-P1 END MANGANESE LT-P1 END | MUL | REP | MAM | AQU SILICON, ELEMENTAL LT-UNK COPPER LT-P1 MUL | AQU | MAM CARBON LT-UNK PHOSPHORUS BM-2 MAM | PHY | EYE | AQU | SKI SULFUR, PRECIPITATED LT-UNK SKI | MAM]

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

*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.

PFAS DETAILS:
Product **contains** intentionally added PFAS that is "Essential Use" as defined by the EPA, and alternatives are **not** being actively explored.

Attestation:

Hoda Ibrahim

2025-12-02

COMPLIANCE See Section 3 for additional listings.
VOC emissions: Inherently non-emitting source per LEED
LCA: Environmental Product Declaration (EPD) by Labeling Sustainability

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

CIRCAL ALUMINUM EXTRUSIONS		%: 78.1900 - 87.5000	
PRODUCT THRESHOLD: 100 ppm		RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Metal
RESIDUALS AND IMPURITIES NOTES: Aluminum is the primary constituent of this alloy. Although metallurgically considered the base metal, HPD Builder does not provide 'Base Metal' as a selectable role. Therefore, it is categorized as 'Alloying Element (Primary Constituent)' for disclosure purposes. Average raw materials used are: Post-consumer scrap: 81% Primary ingot: 11% Process scrap (pre-consumer scrap): 8% Alloying materials: 0.1%			
OTHER MATERIAL NOTES: CIRCAL Aluminum Extrusion (EN AW-6060 / EN AW-6063)			

ALUMINUM (PRIMARY CASRN IS 7429-90-5)			ID: 1374563-22-0	
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:51	
%: 97.0000 - 98.0000	GreenScreen: LT-P1	RC: Both	NANO: No	SUBSTANCE ROLE: Alloy element
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
END	TEDX - Potential Endocrine Disruptors		Potential Endocrine Disruptor	
MAM	GHS - Japan		H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]	
MAM	GHS - Japan		H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]	
PHY	GHS - Japan		H261 - In contact with water releases flammable gas [Substances and mixtures, which in contact with water, emit flammable gases - Category 2]	
PHY	GHS - Malaysia		H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]	
PHY	GHS - Australia		H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]	
PHY	GHS - New Zealand		Pyrophoric solids category 1	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)		C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025	
			Children's Toy Products	

SUBSTANCE NOTES: Aluminum is the primary constituent of this alloy. Although metallurgically considered the base metal, HPD Builder does not provide 'Base Metal' as a selectable role. Therefore, it is categorized as 'Alloying Element (Primary Constituent)' for disclosure purposes.

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:52	
?: 0.3500 - 0.9000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H260 - In contact with water releases flammable gases which may ignite spontaneously [Substances and mixtures which, in contact with water, emit flammable gases - Category 1]		
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]		
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]		
PHY	GHS - Australia	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]		
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]		
PHY	GHS - Australia	H260 - In contact with water releases flammable gases which may ignite spontaneously [Substances and mixtures which, in contact with water, emit flammable gases - Category 1]		
EYE	GHS - Japan	H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		
SUBSTANCE NOTES: Strengthening via Mg ₂ Si precipitation.				

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:52	
%: 0.2000 - 0.6000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
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: Improves strength & corrosion resistance.				

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:53	
?: 0.1000 - 0.3500	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
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	
REP	GHS - Japan		H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]	
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]	
AQU	GHS - New Zealand		Hazardous to the aquatic environment - chronic category 3	
AQU	GHS - Japan		H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]	
AQU	GHS - Japan		H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)		C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025	
			Children's Toy Products	
SUBSTANCE NOTES: Improves strength, corrosion resistance.				

IRON, ELEMENTAL

ID: 7439-89-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:52	
%: 0.1000 - 0.3500	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residual
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: Typically controlled impurity.				

ZINC, ELEMENTAL

ID: 7440-66-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:53	
%: 0.1000 - 0.1500	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residual
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 (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025		
		Children's Toy Products		
SUBSTANCE NOTES: Limited for corrosion protection.				

TIN

ID: 7440-31-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:53	
%: 0.0500 - 0.1500	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residual
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
MAM	GHS - Japan		H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]	
EYE	GHS - New Zealand		Eye irritation category 2	
MAM	GHS - Japan		H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - 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	
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: Controlled residual impurity. Not intentionally added; present only as a trace residual within alloy production limits.				

TECHNICAL/OTHER NAMES THAT MATCH YOUR QUERY:

ID: Not registered

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:54	
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%: 0.0500 - 0.1500		GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Impurity
HAZARD TYPE		LIST NAME AND SOURCE		WARNINGS	
None found				No warnings found on HPD Priority Hazard Lists	
ADDITIONAL LISTINGS		LIST NAME AND SOURCE		NOTIFICATION	
None found				No listings found on Additional Hazard Lists	
SUBSTANCE NOTES: other impurities Each ≤ 0.05%; total ≤ 0.15%.					

COPPER

ID: 7440-50-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:54		
%: 0.1000 - 0.1000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residual	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
MUL	German FEA - Substances Hazardous to Waters		Class 2 - Hazard to Waters		
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1		H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]		
MAM	GHS - Japan		H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]		
MAM	GHS - Japan		H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION		
RESTRICTED LIST	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		
SUBSTANCE NOTES: Kept low for corrosion resistance.					

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:55	
%: 0.0500 - 0.1000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
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: Trace addition for corrosion resistance.				

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:54	
%: 0.1000 - 0.1000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
PHY	GHS - Japan	H225 - Highly flammable liquid and vapour [Flammable solids - Category 1]		
PHY	GHS - Japan	H250 - Catches fire spontaneously if exposed to air [Pyrophoric solids - 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: Improves grain structure & mechanical properties.				

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: This EPDM material is a fully vulcanized synthetic elastomer. The manufacturer did not disclose formulation-level information, including polymer ratios, fillers (e.g., carbon black), plasticizers, or curing additives. In cross-linked rubber systems, individual ingredients cannot be isolated in the final product. According to HPDC Special Conditions for Elastomers, undisclosed additives and fillers may be reported at the material level when ingredient-level data are unavailable. No intentionally added substances at or above the 100 ppm threshold were provided by the supplier.

OTHER MATERIAL NOTES: EPDM is documented following HPDC Special Conditions for Elastomers. The supplier provided only the base polymer name without additive disclosure. Therefore, the material is reported as a single elastomeric material with no substances listed. A worst-case hazard screen has been applied based on typical EPDM compounds (e.g., carbon black, paraffinic oils, accelerators).

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:54	
%: 99.0000 - 100.0000	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: The manufacturer classified the content as EPDM rubber but did not disclose CAS-level ingredient information for polymer composition, fillers, stabilizers, curing systems, or processing oils. Entered as an undisclosed polymer mixture per HPDC Special Conditions for rubber materials.				

ETHANONE, 1-[3-(1-HYDROXY-1-METHYLETHYL)PHENYL]-

ID: 87771-41-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:55	
%: 0.5000 - 1.0000	GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Residual
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: Residuals and impurities screening was completed. Only one supplier disclosed three substances associated with peroxide curing or thermal decomposition (<1%). No other suppliers disclosed any residual or impurity information. A representative worst-case List Translator screening was performed using typical EPDM compound additives (carbon black, paraffinic oils, stabilizers, crosslinking agents) following HPDC Best Practices.				

((3,3,5-TRIMETHYLCYCLOHEXYL)OXY)ACETALDEHYDE (3,3,5-TRIMETHYLCYCLOHEXYL)OXY)ACETALDEHYDE)

ID: Undisclosed

%: 0.0000 - 0.7000	GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Residual
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: This substance is an EPDM rubber compound identified in the supplier SDS. The SDS lists CAS RN 56305-13-6; however, this CAS is a UVCB identifier not recognized by the HPD Builder. Therefore, the substance is entered without a CAS RN following HPDC guidance. Due to supplier non-disclosure, no detailed formulation, additives, curing agents, fillers, pigments, or accelerators were provided. Screening was performed using representative EPDM compositions consistent with HPDC Best Practices.

1,4-BENZENEDIMETHANOL, ALPHA,ALPHA,ALPHA',ALPHA'-TETRAMETHYL-

ID: **2948-46-1**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:55	
%: 0.0000 - 0.3000	GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Residual
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: Residuals and impurities screening was completed. Only one supplier disclosed three substances associated with peroxide curing or thermal decomposition (<1%). No other suppliers disclosed any residual or impurity information. A representative worst-case List Translator screening was performed using typical EPDM compound additives (carbon black, paraffinic oils, stabilizers, crosslinking agents) following HPDC Best Practices.

ABS

%: **2.9400 - 4.8000**

PRODUCT THRESHOLD: 100 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No	MATERIAL TYPE: Polymeric Material
RESIDUALS AND IMPURITIES NOTES: ABS consists of polymerized styrene–acrylonitrile–butadiene. The product contains only trace levels of residual monomers (styrene, acrylonitrile, butadiene) all below 0.1% as per SDS.		
OTHER MATERIAL NOTES: Polymer mixture exempt from full disclosure as per HPD Special Conditions for Polymers		

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:56	
%: 100.0000 - 100.0000	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: The manufacturer did not disclose additive-level formulation or residual monomer content. All additives and stabilizers are treated as undisclosed. Data gap recorded.				

POLYESTER POWDER COATING (TGIC/TGIC-FREE, POLYESTER RESIN)

%: 2.5800 - 2.6200

PRODUCT THRESHOLD: 100 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Polymeric Material
RESIDUALS AND IMPURITIES NOTES: Thermoset polyester powder coating applied to metal components. Supplier did not disclose specific chemical formulation or CAS RN–level information. Generic constituents below are based on typical polyester powder coating formulations per industry standards		
OTHER MATERIAL NOTES: All substance-level information for the polyester powder coating was provided by the suppliers. The composition reflects the full list of intentionally added ingredients at or above the HPD reporting threshold. Any undisclosed components are present only as trace residuals or impurities inherent to raw materials or manufacturing, and not intentionally added. No generic assumptions were used.		

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:56	
%: 65.0000 - 82.0000	GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Binder
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		
SUBSTANCE NOTES: This is a polymer mixture (polyester resin) used as a binder. No single CAS number applies. Reported as a proprietary polymer family; composition may include polyacids and polyols in varying ratios				

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:57	
%: 9.0000 - 20.0000	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Filler

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
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: It is used as a filler and extender pigment in powder coatings. It contributes to film build, mechanical strength, and chemical resistance, while improving flow and surface smoothness.		

UNDISCLOSED				ID: Undisclosed
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:57	
%: 2.7000 - 5.5000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Curing agent
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: It is used as a curing agent (cross-linker) in polyester powder coatings, reacting with carboxyl groups of the resin to form durable, chemically resistant films.				

UNDISCLOSED				ID: Undisclosed
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-22 8:22:58		
%: 1.0000 - 5.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Filler
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES: It is used in powder coatings as a filler and extender to enhance mechanical strength, smoothness, and barrier properties. Hazards are related to inhalation of fine dust during handling of the raw powder. In the final cured coating film, mica is encapsulated in the resin matrix, and these hazards are not expected to occur under normal building use.

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-12-22 8:22:56

%: 0.5000 - 3.0000

GreenScreen: NoGS

RC: None

NANO: No

SUBSTANCE ROLE: Binder

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

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

SUBSTANCE NOTES: Derived from vegetable oil. Used as a bio-based additive to improve flexibility and performance of coatings/adhesives.

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-12-22 8:22:57

%: 1.0000 - 2.5000

GreenScreen: BM-1

RC: None

NANO: No

SUBSTANCE ROLE: Pigment

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification**

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

SUBSTANCE NOTES: It is used as a black pigment in powder coatings to provide color and opacity. Hazards are form-specific and relate to inhalation of respirable dust during handling of the raw powder. In the final cured coating film, these hazards are not expected to occur during normal use, as the substance is fully encapsulated in the resin matrix.

**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.

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-12-22 8:22:57

%: 0.5000 - 1.2000

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: It is used in powder coatings as a black pigment, providing deep color, UV stability, and conductivity in specialty formulations. Hazards are related to inhalation of respirable dust during raw material handling. In the cured coating film, carbon black is encapsulated in the resin matrix and does not pose particulate hazards under normal use.

**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.

UNDISCLOSED				ID: Undisclosed
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:58	
%: 1.0000 - 1.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Stabilizer
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES: It is used as a secondary antioxidant in powder coatings and polymer systems, typically at low loadings (<1%). It protects resins from oxidative degradation during processing and storage by reacting with hydroperoxides.

UNDISCLOSED	ID: Undisclosed
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%: **0.5000 - 0.5000**

GreenScreen: **LT-UNK**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Binder**

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

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

SUBSTANCE NOTES: Functions as a bio-based dicarboxylic acid monomer used in polymer resins.

UNDISCLOSED

ID: **Undisclosed**

%: **0.3000 - 0.5000**

GreenScreen: **LT-P1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Residual**

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

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

SUBSTANCE NOTES: Benzoin is included as an intentional additive. It functions as a curing/UV stabilizer and polymerization inhibitor in coatings.

UNDISCLOSED

ID: **Undisclosed**

%: **0.5000 - 0.5000**

GreenScreen: **LT-P1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Stabilizer**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
SKI	GHS - New Zealand	Skin sensitisation category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 2
AQU	GHS - Australia	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists
SUBSTANCE NOTES: It is a hindered amine light stabilizer. It acts as an additive to protect polymers against degradation from UV exposure and oxidation		

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-22 8:22:58		
?: 0.5000 - 0.5000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen**		
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route**		
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources**		
CAN	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value**		
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor**		
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels**		
CAN	IARC	Group 2b - Possibly carcinogenic to humans**		
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]**		
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]**		
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]**		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
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: It is used as a pigment in powder coatings to provide whiteness, opacity, and UV resistance. Hazards are associated with inhalation of respirable powder during manufacturing and application. In the cured coating film, TiO₂ is encapsulated within the resin matrix and these hazards are not expected to occur under normal use during building occupancy.

****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.

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-12-22 8:23:00**

%: 0.1000 - 0.2000	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Filler
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]		
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025		
		Children's Toy Products		

SUBSTANCE NOTES: It is used in powder coatings as a filler and performance additive to improve abrasion resistance, durability, and matting properties. Hazards are associated with inhalation of respirable dust during raw material handling. In the cured coating film, aluminum oxide is fully encapsulated in the resin matrix, and these hazards are not expected under normal building use.

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-12-22 8:22:59**

%: 0.1000 - 0.2000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment
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HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
PHY	GHS - Japan	H261 - In contact with water releases flammable gas [Substances and mixtures, which in contact with water, emit flammable gases - Category 2]
PHY	GHS - Malaysia	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
PHY	GHS - Australia	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
PHY	GHS - New Zealand	Pyrophoric solids category 1
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products

SUBSTANCE NOTES: It is used in powder coatings as a metallic pigment to provide silver and pearlescent finishes, as well as improved reflectivity and barrier properties. Hazards are associated with inhalation of fine powder during manufacturing or application. In the final cured coating, aluminum flakes are encapsulated in the resin matrix and do not pose particulate inhalation risks under normal building use.

UNDISCLOSED

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:59	
%: 0.0000 - 0.1500	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Abrasion resistance
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action		

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 PFAS
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 Avoidance of Organohalogens and Functionally Related Chemical Classes of Concern

SUBSTANCE NOTES: It is used in powder coatings as a performance additive to improve slip, abrasion resistance, and non-stick properties. It is typically present in low concentrations (<5%). PTFE is chemically inert, highly stable, and appears as a white fine powder.

TPE (THERMOPLASTIC ELASTOMER) %: 2.3200 - 2.5700

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: This Thermoplastic Elastomer (TPE) component is supplied as a proprietary polymer blend. The manufacturer did not disclose individual monomers or additives. According to the supplier, all intentionally added ingredients and additives in this material are present below the HPD reporting threshold of 100 ppm when scaled to this product. TPE is listed under HPDC Special Conditions for polymeric materials, and to the best of available information, no substances at or above 100 ppm are required to be disclosed.

OTHER MATERIAL NOTES: TPE used in this product is a proprietary thermoplastic elastomer compound. It is processed as a single material in the product with no known intentionally added substances above the 100 ppm threshold. Supplier did not provide a full formulation.

This entry follows HPDC Special Conditions for polymeric materials (Thermoplastic Elastomers).

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:00	
%: 100.0000 - 100.0000	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: This Thermoplastic Elastomer (TPE) component is supplied as a proprietary polymer blend. The manufacturer did not disclose individual monomers or additives.

According to the supplier, all intentionally added ingredients and additives in this material are present below the HPD reporting threshold of 100 ppm when scaled to this product.

TPE is listed under HPDC Special Conditions for polymeric materials, and to the best of available information, no substances at or above 100 ppm are required to be disclosed.

EPDM FOAM (ETHYLENE-PROPYLENE-DIENE MONOMER RUBBER, FOAMED)

%: 0.0000 - 1.8300

PRODUCT THRESHOLD: 100 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Polymeric Material
RESIDUALS AND IMPURITIES NOTES: Impurities are limited to trace substances typical of EPDM elastomers and foam blowing processes. All intentionally added components and known additives were included based on supplier SDSs. No unexpected impurities above 100 ppm are known beyond those inherent to polymerization or foaming.		
OTHER MATERIAL NOTES: Closed-cell EPDM foam manufactured by expanding EPDM rubber using standard foaming agents. The foaming process alters only the physical density and does not introduce additional substances above the 100-ppm threshold. Composition is equivalent to EPDM elastomer with typical processing additives (antioxidants, curing agents, fillers). No HPD exists from the component manufacturers based on supplier SDS review.		

UVCB CONDENSATION PRODUCT OF: TETRAKIS-HYDROXYMETHYLPHOSPHONIUM CHLORIDE, UREA AND DISTILLED HYDROGENATED C16-18 TALLOW ALKYLAMINE

ID: Undisclosed

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:01	
%: 100.0000 - 100.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
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]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
SKI	GHS - Australia	H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]
CAN	EU - Annex VI CMRs	Carcinogen Category 2 - Suspected human Carcinogen
AQU	GHS - Australia	H410 - Very toxic to aquatic life with long lasting effects [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	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: This material is EPDM foam confirmed by the manufacturer; however, the supplier refused to disclose formulation details, including base polymer ratios, blowing agents, curing agents, pigments, stabilizers, fillers, or crosslinking systems. No CAS numbers or SDS ingredient information were provided.

EPDM foam is therefore treated as a UVCB polymer per HPDC guidance.

A worst-case List Translator (LT) screening was performed using representative EPDM foam formulations as described in HPDC Best Practices for Hazard Screening (v3.0). Screening results reflect potential hazards associated with typical EPDM compounds rather than the specific undisclosed formulation. This constitutes a data gap due to supplier non-disclosure.

ZP5 (ZINC ALLOY)

#: 0.0900 - 1.1400

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

MATERIAL TYPE: Metal

RESIDUALS AND IMPURITIES NOTES: ZP5 (Grade ZP0410) is a zinc alloy manufactured according to EN 12844:1998 “Zinc and Zinc Alloys – Castings – Specifications.” Chemical composition is defined by the standard and confirmed in the manufacturer SDS (ZP0410). Zinc is the primary metal, with controlled additions of aluminum, copper, and magnesium. All other elements (Fe, Si, Ni, Pb, Sn, Cd) are restricted impurities with maximum allowable concentrations listed in the SDS/standard.

OTHER MATERIAL NOTES: ZP5 is a standardized zinc alloy produced according to EN 12844 and ISO 301 standards. The supplier did not provide a full formulation or CAS-level disclosure. Constituent percentages entered in this HPD are based on published industry specifications for ZP5, including zinc as the base metal with controlled additions of aluminum, copper, and magnesium, and typical impurity limits for Fe, Si, Ni, Pb, Sn, and Cd. Data represents worst-case allowable ranges from industry standards, not supplier-specific formulation.

%: **94.0000 - 96.0000**

GreenScreen: **LT-P1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Alloy element**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
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]
PHY	GHS - Australia	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
PHY	GHS - Australia	H260 - In contact with water releases flammable gases which may ignite spontaneously [Substances and mixtures which, in contact with water, emit flammable gases - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1
AQU	GHS - Australia	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List
		Antimicrobials

SUBSTANCE NOTES: Primary alloy metal. Concentration based on EN 12844 (ZP0410) SDS specification; balance after all other elements.

AA 6560 ALUMINUM ALLOY

ID: **7429-90-5**

%: **3.7000 - 4.3000**

GreenScreen: **LT-P1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Alloy element**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
PHY	GHS - Japan	H261 - In contact with water releases flammable gas [Substances and mixtures, which in contact with water, emit flammable gases - Category 2]
PHY	GHS - Malaysia	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
PHY	GHS - Australia	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
PHY	GHS - New Zealand	Pyrophoric solids category 1
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
SUBSTANCE NOTES: Improves strength and hardness. Range per EN 12844 (ZP0410) SDS.		

COPPER

ID: 7440-50-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:22:59	
%: 0.7000 - 1.2000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters		
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]		
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]		
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]		

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	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
SUBSTANCE NOTES: Enhances mechanical properties and corrosion resistance. Value per SDS.		

MAGNESIUM

ID: 7439-95-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:00	
%: 0.0250 - 0.0600	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H260 - In contact with water releases flammable gases which may ignite spontaneously [Substances and mixtures which, in contact with water, emit flammable gases - Category 1]		
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]		
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]		
PHY	GHS - Australia	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]		
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]		
PHY	GHS - Australia	H260 - In contact with water releases flammable gases which may ignite spontaneously [Substances and mixtures which, in contact with water, emit flammable gases - Category 1]		
EYE	GHS - Japan	H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES: Grain refiner; contributes to hardness and strength. Range per SDS.

IRON, ELEMENTAL

ID: 7439-89-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:01	
%: 0.0000 - 0.0500	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Impurity
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: Controlled impurity per EN 12844; kept low to prevent corrosion issues.

SILICON, ELEMENTAL

ID: 7440-21-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:03	
%: 0.0000 - 0.0300	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Impurity
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found			No listings found on Additional Hazard Lists	

SUBSTANCE NOTES: Trace impurity allowed by alloy standard; not intentionally added.

NICKEL

ID: 7440-02-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:04	
%: 0.0000 - 0.0200	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Impurity

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 (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 All Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
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: Trace impurity; present only due to raw material background.		

LEAD

ID: 7439-92-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:00	
%: 0.0000 - 0.0050	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Impurity
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor		
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action		
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1		
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		
DEV	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant		
CAN	US EPA - IRIS Carcinogens	(1986) Group B2 - Probable human Carcinogen		
CAN	IARC	Group 2a - Agent is probably Carcinogenic to humans		
DEV	CA EPA - Prop 65	Developmental toxicity		
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT		
PBT	US EPA - Toxics Release Inventory PBTs	PBT		

DEV	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity
REP	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Reproductive Toxicity
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 1A
GEN	MAK	Germ Cell Mutagen 3a
REP	CA EPA - Prop 65	Reproductive Toxicity - Female
REP	CA EPA - Prop 65	Reproductive Toxicity - Male
CAN	GHS - Korea	H350 - May cause cancer [Carcinogenicity - Category 1]
REP	GHS - Korea	H360 - May damage fertility or the unborn child [Reproductive toxicity - Category 1]
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1A]
DEV	GHS - Australia	H360Df - May damage the unborn child. Suspected of damaging fertility [Reproductive toxicity - Category 1A or 1B]
REP	EU - GHS (H-Statements) Annex 6 Table 3-1	H360FD - May damage fertility. May damage the unborn child [Reproductive toxicity - Category 1A or 1B]
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]
DEV	EU - GHS (H-Statements) Annex 6 Table 3-1	H362 - May cause harm to breast-fed children [Reproductive toxicity, effects on or via lactation]
REP	GHS - New Zealand	Reproductive toxicity 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]
GEN	GHS - Australia	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
GEN	GHS - Japan	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1
AQU	GHS - Japan	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Japan	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]

AQU	GHS - Australia	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1
AQU	GHS - Korea	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Korea	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
GEN	GHS - New Zealand	Germ cell mutagenicity category 2
MAM	GHS - New Zealand	Acute oral toxicity category 3
REP	GHS - New Zealand	Effects on or via lactation
CAN	GHS - Australia	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
REP	EU - SVHC List	Toxic to reproduction - Candidate list
REP	EU - SVHC List	Toxic to reproduction - Prioritized for listing
REP	EU - REACH Annex XVII CMRs	Reproductive toxicants: Category 1A
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
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Electronics (RoHS)
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 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: Restricted substance; controlled to low levels for RoHS alignment. Present only as unintentional impurities. Concentration limits defined by EN 12844 (ZP0410). Controlled to meet alloy specification; not intentionally added.

CADMIUM

ID: 7440-43-9

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

HAZARD SCREENING DATE: 2025-12-22 8:23:02

%: 0.0000 - 0.0050

GreenScreen: **LT-1**

RC: None

NANO: **No**

SUBSTANCE ROLE: **Impurity/Residual**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
CAN	MAK	Carcinogen Group 1 - Substances that cause cancer in man
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CAN	US EPA - IRIS Carcinogens	(1986) Group B1 - Probable human Carcinogen
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
DEV	CA EPA - Prop 65	Developmental toxicity
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT
GEN	MAK	Germ Cell Mutagen 3a
REP	CA EPA - Prop 65	Reproductive Toxicity - Male
CAN	GHS - Australia	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
CAN	GHS - Japan	H350 - May cause cancer [Carcinogenicity - Category 1A]
CAN	GHS - Korea	H350 - May cause cancer [Carcinogenicity - Category 1]
CAN	GHS - Malaysia	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]
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]

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]
PHY	EU - GHS (H-Statements) Annex 6 Table 3-1	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
GEN	EU - GHS (H-Statements) Annex 6 Table 3-1	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
MAM	EU - GHS (H-Statements) Annex 6 Table 3-1	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
REP	EU - GHS (H-Statements) Annex 6 Table 3-1	H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child [Reproductive toxicity - Category 2]
CAN	GHS - New Zealand	Carcinogenicity category 1
GEN	GHS - New Zealand	Germ cell mutagenicity category 1
REP	GHS - New Zealand	Reproductive toxicity 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 - Australia	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
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]
PHY	GHS - Australia	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
MAM	GHS - New Zealand	Acute inhalation toxicity category 3
MAM	GHS - New Zealand	Acute oral toxicity category 2
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1
AQU	GHS - Japan	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Japan	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - Australia	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1

AQU	GHS - Korea	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Korea	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
REP	GHS - Korea	H361 - Suspected of damaging fertility or the unborn child [Reproductive toxicity - Category 2]
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 2
REP	GHS - Australia	H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child [Reproductive toxicity - Category 2]
MAM	GHS - Korea	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - Repeated exposure - Category 1]
GEN	GHS - Korea	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
MAM	Québec CSST - WHMIS 1988	Class D1A - Very toxic material causing immediate and serious toxic effects
GEN	EU - Annex VI CMRs	Mutagen - Category 2
GEN	GHS - Malaysia	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
MAM	GHS - Korea	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 2]
MAM	GHS - Australia	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
AQU	GHS - Malaysia	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - Malaysia	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
MAM	GHS - Malaysia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
MAM	GHS - Malaysia	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
MAM	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: dust, mist) - Category 1]
CAN	EU - REACH Annex XVII CMRs	Carcinogens: Category 1B
CAN	EU - SVHC List	Carcinogenic - Candidate list
REP	GHS - Malaysia	H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child [Reproductive toxicity - Category 2]
MAM	EU - SVHC List	Equivalent Concern - Candidate List: Systemic Toxicity/Organ Effects (Repeated Exposure)

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

SUBSTANCE NOTES: Highly restricted substance; controlled by EN 12844 and SDS to trace levels only. Present only as unintentional impurities. Concentration limits defined by EN 12844 (ZP0410). Controlled to meet alloy specification; not intentionally added.

TIN				ID: 7440-31-5	
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:03		
%: 0.0000 - 0.0020	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residual	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
MAM	GHS - Japan		H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]		
EYE	GHS - New Zealand		Eye irritation category 2		
MAM	GHS - Japan		H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - 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		

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: Unintentional trace impurity; present only due to raw material origin. Present only as unintentional impurities. Concentration limits defined by EN 12844 (ZP0410). Controlled to meet alloy specification; not intentionally added.		

A2-20H STAINLESS STEEL FASTENERS %: 0.3400 - 1.0300

PRODUCT THRESHOLD: 100 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Metal
RESIDUALS AND IMPURITIES NOTES: Minor residual elements (C, P, S, Cu, N) are controlled by ISO 15510:2010 for A2 fastener grades. No process-related contaminants were identified beyond alloy specification limits.		
OTHER MATERIAL NOTES: A2-20H stainless steel (ISO 3506 & ISO 15510:2010) is an austenitic Cr-Ni alloy typically equivalent to EN 1.4301 (AISI 304). Substance ranges below follow ISO-15510-2010 allowable composition with trace residual elements included per standard limits.		

IRON, ELEMENTAL				ID: 7439-89-6
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-22 8:23:04		
%: 66.0900 - 73.9300	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
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: Iron is the primary metal matrix of the stainless-steel alloy. HPD Builder does not include 'Base Metal' as a selectable role; therefore, Iron is reported as an Alloying Element. Its percentage is the remainder after alloying additions and is consistent with ISO 15510:2010 stainless-steel composition requirements

CHROMIUM				ID: 7440-47-3
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-22 8:23:05		
%: 17.0000 - 19.5000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element

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 (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
SUBSTANCE NOTES: Chromium is intentionally added to provide corrosion resistance and passivation properties. The disclosed percentage range aligns with ISO 15510:2010 specifications for A2/304 stainless steel		

NICKEL		ID: 7440-02-0		
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-22 8:23:01		
?: 8.0000 - 10.5000	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element

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: Nickel is intentionally added to improve formability, toughness, and corrosion resistance. The percentage range is based on ISO 15510:2010 composition limits for A2-20H stainless steel.		

MANGANESE

ID: 7439-96-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:03	
%: 0.0000 - 2.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
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		
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]		
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]		
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 3		
AQU	GHS - Japan	H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]		
AQU	GHS - Japan	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]		

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
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: Manganese is intentionally added to enhance hot-working characteristics and overall alloy strength. Reported values reflect ISO 15510:2010 standard chemical composition		

SILICON, ELEMENTAL				ID: 7440-21-3
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:04	
%: 0.0000 - 1.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
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: Silicon is intentionally included as a deoxidizing element during steelmaking. It contributes to improved strength and oxidation resistance. The percentage aligns with ISO 15510:2010 requirements				

CARBON			ID: 7440-44-0	
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:05	
%: 0.0000 - 0.0800	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Impurity
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List		
		Antimicrobials		
SUBSTANCE NOTES: Carbon is present only as a controlled impurity. It is limited to very small amounts to ensure adequate corrosion resistance and weldability. The trace level is consistent with ISO 15510:2010 limits.				

PHOSPHORUS	ID: 7723-14-0
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%: 0.0000 - 0.0450	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Impurity
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
MAM	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances		
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1		
PHY	GHS - New Zealand	Pyrophoric solids category 1		
EYE	GHS - New Zealand	Serious eye damage 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		
MAM	Québec CSST - WHMIS 1988	Class D1A - Very toxic material causing immediate and serious toxic effects		
SKI	GHS - New Zealand	Skin corrosion category 1A		
MAM	GHS - New Zealand	Acute dermal toxicity category 1		
MAM	GHS - New Zealand	Acute inhalation toxicity category 1		
MAM	GHS - New Zealand	Acute oral toxicity category 1		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025		
		Cosmetics and Personal Care Products		

SUBSTANCE NOTES: Phosphorus occurs as a residual impurity from steelmaking feedstocks. It is not intentionally added and is controlled to low levels per ISO 15510:2010 requirements.

SULFUR, PRECIPITATED

ID: **7704-34-9**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2025-12-22 8:23:03			
%: 0.0000 - 0.0300	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Impurity
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]		
SKI	GHS - New Zealand	Skin irritation category 2		
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]		
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]		

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List
		Antimicrobials
SUBSTANCE NOTES: Sulfur is present as a trace impurity resulting from raw-material refining. Its content is restricted to very low percentages according to ISO 15510:2010. It is not intentionally added		

MULTI-MATERIAL STEEL (X10CRNI18-8 + X5CRNI18-10) %: 0.0000 - 0.3300

PRODUCT THRESHOLD: 100 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Metal
RESIDUALS AND IMPURITIES NOTES: Material consists of stainless-steel fasteners supplied in mixed grades X10CrNi18-8 and X5CrNi18-10.		
OTHER MATERIAL NOTES: Composition ranges below represent the combined allowable envelope across both ISO-15510-2010 grades.		

IRON, ELEMENTAL				ID: 7439-89-6
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:04	
%: 66.0000 - 78.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
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: Primary constituent of the stainless steel; remainder of alloy after addition of specified alloying elements.				

CHROMIUM				ID: 7440-47-3
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-22 8:23:05		
%: 16.0000 - 20.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
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: Provides corrosion resistance; defines stainless-steel class.		

NICKEL

ID: 7440-02-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-12-22 8:23:06

%: 6.0000 - 10.5000

GreenScreen: LT-1

RC: None

NANO: No

SUBSTANCE ROLE: Alloy element

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: Improves ductility, toughness, and corrosion resistance		

MANGANESE

ID: 7439-96-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-12-22 8:23:07

%: 0.0000 - 2.0000

GreenScreen: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Alloy element

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
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
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]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 3
AQU	GHS - Japan	H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]
AQU	GHS - Japan	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]

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

SUBSTANCE NOTES: Acts as a deoxidizer; improves workability

SILICON, ELEMENTAL

ID: 7440-21-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:06	
%: 1.0000 - 2.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
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: Deoxidizer; enhances strength at high temperature				

CARBON

ID: 7440-44-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:06		
%: 0.0500 - 0.1500	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
None found			No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION		
RESTRICTED LIST	Green Science Policy Institute (GSPI)		GSPI - Six Classes Precautionary List		
			Antimicrobials		
SUBSTANCE NOTES: Carbon level influences the ‘X10’ / ‘X5’ grade designation and mechanical strength.					

NITROGEN

ID: 7727-37-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:07		
%: 0.0000 - 0.1000	GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element	
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: Improves pitting resistance and mechanical strength		

PHOSPHORUS

ID: 7723-14-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:08	
%: 0.0450 - 0.0450	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residual
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
MAM	US EPA - EPCRA Extremely Hazardous Substances		Extremely Hazardous Substances	
MAM	GHS - New Zealand		Specific target organ toxicity - repeated exposure category 1	
PHY	GHS - New Zealand		Pyrophoric solids category 1	
EYE	GHS - New Zealand		Serious eye damage 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	
MAM	Québec CSST - WHMIS 1988		Class D1A - Very toxic material causing immediate and serious toxic effects	
SKI	GHS - New Zealand		Skin corrosion category 1A	
MAM	GHS - New Zealand		Acute dermal toxicity category 1	
MAM	GHS - New Zealand		Acute inhalation toxicity category 1	
MAM	GHS - New Zealand		Acute oral toxicity category 1	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)		C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025	
			Cosmetics and Personal Care Products	
SUBSTANCE NOTES: Controlled to maintain toughness and corrosion resistance.				

SULFUR, PRECIPITATED

ID: 7704-34-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:08	
%: 0.0300 - 0.0300	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Impurity

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
SKI	GHS - New Zealand	Skin irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Antimicrobials
SUBSTANCE NOTES: Trace impurity; controlled to avoid hot-shortness and maintain toughness.		

SANTOPRENE™ 8221-75M300 (THERMOPLASTIC VULCANIZATE)

%: 0.0000 - 0.2600

PRODUCT THRESHOLD: 100 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No	MATERIAL TYPE: Polymeric Material
RESIDUALS AND IMPURITIES NOTES: The supplier did not disclose CAS-level ingredient information for Santoprene™ 8221-75M300. The available Product Datasheet provides only physical and mechanical properties and does not list chemical composition, additives, stabilizers, vulcanizing agents, antioxidants, pigments, or processing oils. This constitutes a data gap due to supplier non-disclosure. No CAS RN information is available in the provided documentation.		
OTHER MATERIAL NOTES: Santoprene™ 8221-75M300 is a thermoplastic vulcanizate (TPV) consisting of a polyolefin matrix and dynamically vulcanized rubber phase. The product is intended for automotive and sealing applications and is RoHS compliant. Because no composition data was provided by ExxonMobil, a worst-case hazard screening cannot be performed. Recorded as a single material entry per HPDC rules for polymeric materials with undisclosed formulation.		

UNDISCLOSED				ID: Undisclosed
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:05	
%: 100.0000 - 100.0000	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: The supplier did not provide CAS-level disclosure for this Thermoplastic Vulcanizate. A generic worst-case polymer placeholder is used following HPDC guidance. No hazard screening could be completed due to missing ingredient information.				

PRODUCT THRESHOLD: 100 ppmRESIDUALS AND IMPURITIES EVALUATION COMPLETED: YesMATERIAL TYPE: Metal

RESIDUALS AND IMPURITIES NOTES: This material is documented as a generic low-carbon steel in accordance with ISO 4948-1 (unalloyed steels). Composition ranges are based on typical low-carbon structural and general-purpose steels. Iron is the base metal, with carbon, manganese and silicon as intentionally added alloying constituents within the stated ranges. Phosphorus and sulfur are controlled to specification limits and are treated as impurity-limited constituents. Copper is not intentionally added; when present it originates from recycled scrap and is maintained below typical residual limits (≤ 0.30 %). Other residual elements (e.g., Ni, Cr, Mo, Sn, etc.) may be present individually at very low levels below the reporting threshold and are controlled in accordance with standard low-carbon steel practice

OTHER MATERIAL NOTES: Composition ranges entered in this HPD are based on general classifications of low-carbon steels (per ISO 4948-1 / generic carbon steel specifications). These formulations typically contain iron as the base metal with controlled limits for carbon, manganese, silicon, phosphorus, and sulfur. Ranges reflect worst-case allowable values from industry standards, not supplier-specific data.

IRON, ELEMENTAL

ID: 7439-89-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:06	
%: 98.0000 - 99.5000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
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: Remainder of the alloy after all alloying elements and impurities; provides the structural matrix of the steel. Range reflects typical low-carbon unalloyed steels.				

MANGANESE

ID: 7439-96-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:07	
%: 0.2500 - 0.8000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element

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
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
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]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 3
AQU	GHS - Japan	H401 - Toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 2]
AQU	GHS - Japan	H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
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: Added to improve strength, toughness and hardenability and to assist deoxidation during steelmaking.

SILICON, ELEMENTAL

ID: 7440-21-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-12-22 8:23:08		
%: 0.0000 - 0.4000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
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: Used mainly as a deoxidizer during steelmaking and may also slightly increase strength. Present within typical limits for low-carbon steels.

COPPER

ID: 7440-50-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2025-12-22 8:23:08
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%: 0.0000 - 0.3000		GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Residual
HAZARD TYPE		LIST NAME AND SOURCE		WARNINGS	
MUL	German FEA - Substances Hazardous to Waters		Class 2 - Hazard to Waters		
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1		H411 - Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 2]		
MAM	GHS - Japan		H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]		
MAM	GHS - Japan		H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]		
ADDITIONAL LISTINGS		LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	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		
SUBSTANCE NOTES: Not intentionally added for this product. May be present from scrap feedstock; controlled to prevent surface cracking or hot-shortness. Reported as residual when present.					

CARBON

ID: 7440-44-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-12-22 8:23:06		
%: 0.0500 - 0.2500		GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
HAZARD TYPE		LIST NAME AND SOURCE		WARNINGS	
None found				No warnings found on HPD Priority Hazard Lists	
ADDITIONAL LISTINGS		LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST		Green Science Policy Institute (GSPI)		GSPI - Six Classes Precautionary List	
				Antimicrobials	

SUBSTANCE NOTES: Primary strength-controlling element. Carbon content in this range defines “low-carbon steel” per ISO 4948-1 and balances ductility and strength.

PHOSPHORUS

ID: 7723-14-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-12-22 8:23:07

%, 0.0000 - 0.0400

GreenScreen: BM-2

RC: None

NANO: No

SUBSTANCE ROLE: Impurity

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MAM	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1
PHY	GHS - New Zealand	Pyrophoric solids category 1
EYE	GHS - New Zealand	Serious eye damage 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
MAM	Québec CSST - WHMIS 1988	Class D1A - Very toxic material causing immediate and serious toxic effects
SKI	GHS - New Zealand	Skin corrosion category 1A
MAM	GHS - New Zealand	Acute dermal toxicity category 1
MAM	GHS - New Zealand	Acute inhalation toxicity category 1
MAM	GHS - New Zealand	Acute oral toxicity category 1
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products

SUBSTANCE NOTES: Residual element controlled by specification; kept below this limit to avoid embrittlement and loss of toughness.

SULFUR, PRECIPITATED

ID: 7704-34-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-12-22 8:23:07

%, 0.0000 - 0.0400

GreenScreen: LT-UNK

RC: None

NANO: No

SUBSTANCE ROLE: Impurity

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
SKI	GHS - New Zealand	Skin irritation category 2
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List
		Antimicrobials

SUBSTANCE NOTES: Residual element controlled by specification; high sulfur can cause hot-shortness and reduced ductility, so it is kept at low levels.

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	Inherently non-emitting source per LEED	
COMPLIANCE TYPE: Self-declaration CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: None COMPLIANCE DETAILS: COMPLIANCE SCOPE: APPLICABLE FACILITIES: na COMPLIANCE URL: COMPLIANCE NOTES:	ISSUE DATE: 2025-12-03	EXPIRY DATE: No expiration
LCA	Environmental Product Declaration (EPD) by Labeling Sustainability	
COMPLIANCE TYPE: Third-party certification CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: The Norwegian EPD foundation COMPLIANCE DETAILS: COMPLIANCE SCOPE: APPLICABLE FACILITIES: na COMPLIANCE URL: https://epd-global.no/getfile.php/13207131-1741719630/EPDer/Byggevarer/St%C3%A5lkonstruksjoner/NEPD-5009-4263_1-kg-CIRCAL-Aluminium-extrusion-ingot-from-the-Azuqueca--Clervaux--and-Wrexham-aluminium-recycling-plants.pdf COMPLIANCE NOTES:	ISSUE DATE: 2023-09-19	EXPIRY DATE: 2028-09-19

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

Hydro’s aluminum curtain wall systems—developed under its leading global brands Technal, WICONA, and SAPA—offer high-performance, modular façade solutions tailored to contemporary architectural and sustainability requirements. These systems are engineered using high-quality aluminum extrusions, often containing a high percentage of recycled post-consumer content, in line with Hydro’s commitment to low-carbon, circular aluminum production (e.g., Hydro CIRCAL and Hydro REDUXA).

Powder coating contains PTFE as a slip additive at <0.004% (~<40 ppm) of product. Below disclosure threshold, but PFAS attestation marked Yes due to intentional addition.

MANUFACTURER INFORMATION

MANUFACTURER: **Hydro Building Systems**
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Toulouse Cedex 1 - France
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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.