



HPD UNIQUE IDENTIFIER: 976502784  
CLASSIFICATION: 05 40 00 Cold-Formed Metal Framing  
PRODUCT DESCRIPTION: This HPD is for Marino\WARE® cold-formed steel framing products. This includes structural framing, shaftwall, area separation wall, slotted track, lath and steel accessories. It also includes ViperStud®, StudRite®, JoistRite®, ClipSource® Connectors, QuickFrame®, FAS® Track and SoundGuard®. In order to obtain cold-formed steel framing products that comply with this HPD, you must request domestic prime mill certified steel at the time you place your order. Requests made after ordering may be denied. This HPD applies to classifications under 09 22 16 & 05 40 00.

Section 1: SummaryNested Method / Product Threshold

CONTENT INVENTORY

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

CONTENT IN DESCENDING ORDER OF QUANTITY

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

NESTED MATERIAL | MATERIAL OR SUBSTANCE | RESIDUAL OR IMPURITY

GREENSCREEN SCORE | HAZARD TYPE

STEEL [ IRON, ELEMENTAL LT-P1 | END MANGANESE LT-P1 | END | MUL | REP | MAM | AQU COPPER LT-P1 | MUL | AQU | MAM NICKEL NoGS CHROMIUM LT-P1 | END | SKI | MAM | REP | RES CARBON LT-UNK TITANIUM LT-UNK | PHY VANADIUM LT-1 | CAN | GEN PHOSPHORUS BM-2 | MAM | PHY | EYE | AQU | SKI MOLYBDENUM LT-UNK | MAM | SKI | REP NIOBIUM LT-UNK NITROGEN NoGS SULFUR, PRECIPITATED LT-UNK | SKI | MAM ALUMINUM BM-1 | END | MAM | PHY BORON NoGS ] ZINC COATING (GALVANIZED) [ ZINC (POWDER/DUST) LT-P1 | END | MUL | PHY | AQU ALUMINUM BM-1 | END | MAM | PHY ] PASSIVATION COATING [ WATER (PRIMARY CASRN IS 7732-18-5) BM-4 PHOSPHORIC ACID LT-P1 | SKI | MAM | EYE PHOSPHORIC ACID, CHROMIUM(3+) SALT LT-UNK | SKI CHROMIUM (VI) LT-1 | CAN | END | SKI | DEV | REP | GEN | AQU ]

Number of Greenscreen BM-4/BM3 contents ... 1  
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 does not contain substance(s) that are intentionally added above the [Product - 100 ppm] threshold to act as antimicrobials.

Threshold disclosures are provided heat analysis from steel mill certificate per ASTM A653 or ASTM A1003.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: Inherently non-emitting source per LEED  
LCA: ISO 14040:2006 Environmental management -- Life cycle assessment

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4.1 Option 1.

Third Party Verified?

☒ Yes  
☐ No

PREPARER: Self-Prepared  
VERIFIER: Green Seal  
VERIFICATION #: 572-23510

SCREENING DATE: 2025-01-22  
PUBLISHED DATE: 2025-02-12  
EXPIRY DATE: 2028-01-22

## Section 2: Content in Descending Order of Quantity

This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- Basic Inventory method with Product-level threshold.
- Nested Material Inventory method with Product-level threshold
- Nested Material Inventory method with individual Material-level thresholds

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.3, available on the HPDC website at: [www.hpd-collaborative.org/hpd-2-3-standard](http://www.hpd-collaborative.org/hpd-2-3-standard)

### STEEL

?: 91.5200 - 99.2290

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No

MATERIAL TYPE: Metal

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities are known or are to be expected at or above the Content Inventory Threshold. Supplier SDS states that all commercial steel products may contain small amounts of various elements that generally originate in the raw materials used. The elements not reported in this HPD and are expected to be below the threshold are: antimony, arsenic, cadmium, calcium, cobalt, lead, silicon, tin and zirconium.

OTHER MATERIAL NOTES: This HPD was completed in accordance with the latest HPD standard. Disclosures are per ASTM A1003 & A653. Cold-Formed Steel is ordered from the mill to ASTM Specifications. These ASTM specifications are listed in AISI S100, S220 & S240 and referenced in the IBC.

### IRON, ELEMENTAL

ID: 7439-89-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-01-23 13:54:01

?: 96.0200 - 99.9050

GreenScreen: LT-P1

RC: PostC

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: 25% standard post-consumer recycled content per LEED. Higher recycled content may be available.

### MANGANESE

ID: 7439-96-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-01-23 14:06:56

?: 0.0100 - 1.6500

GreenScreen: LT-P1

RC: PostC

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 3 - Severe 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 (C2CPH)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024  Children's Toy Products
SUBSTANCE NOTES: 25% standard post-consumer recycled content per LEED. Higher recycled content may be available.		

COPPER					ID: 7440-50-8
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-01-23 14:08:25		
%: 0.0100 - 0.5000	GreenScreen: LT-P1	RC: PostC	NANO: No	SUBSTANCE ROLE: Alloy element	

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe 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 (C2CP II)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024  Children's Toy Products
SUBSTANCE NOTES: 25% standard post-consumer recycled content per LEED. Higher recycled content may be available.		

NICKEL

ID: 21595-53-9

HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b>			HAZARD SCREENING DATE: <b>2025-01-23 14:10:35</b>	
%: <b>0.0100 - 0.3000</b>	GreenScreen: <b>NoGS</b>	RC: <b>PostC</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Alloy element</b>
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: 25% standard post-consumer recycled content per LEED. Higher recycled content may be available.

CHROMIUM

ID: 7440-47-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2025-01-23 14:09:30

%: 0.0100 - 0.3000 GreenScreen: LT-P1 RC: PostC 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 v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Cosmetics & Personal Care Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024  Children's Toy Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024  Cosmetics and Personal Care Products

SUBSTANCE NOTES: 25% standard post-consumer recycled content per LEED. Higher recycled content may be available.

CARBON

ID: 7440-44-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2025-01-23 14:13:39

%		0.0100 - 0.2500		GreenScreen:	LT-UNK	RC:	PostC	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: 25% standard post-consumer recycled content per LEED. Higher recycled content may be available.												

TITANIUM

ID: 7440-32-6

HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2025-01-23 14:15:49</b>		
%: <b>0.0100 - 0.2000</b>	GreenScreen: <b>LT-UNK</b>	RC: <b>PostC</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Alloy element</b>
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: 25% standard post-consumer recycled content per LEED. Higher recycled content may be available.				

VANADIUM

ID: 22541-77-1

HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b>			HAZARD SCREENING DATE: <b>2025-01-23 14:17:23</b>		
%: <b>0.0100 - 0.2000</b>		GreenScreen: <b>LT-1</b>	RC: <b>PostC</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Alloy element</b>
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
CAN	MAK		Carcinogen Group 2 - Considered to be carcinogenic for man		
GEN	MAK		Germ Cell Mutagen 2		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION		
None found			No listings found on Additional Hazard Lists		

SUBSTANCE NOTES: 25% standard post-consumer recycled content per LEED. Higher recycled content may be available.

PHOSPHORUS

ID: 7723-14-0

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**      HAZARD SCREENING DATE: **2025-01-23 14:14:42**

%: **0.0100 - 0.2000**      GreenScreen: **BM-2**      RC: **PostC**      NANO: **No**      SUBSTANCE ROLE: **Alloy element**

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

SUBSTANCE NOTES: 25% standard post-consumer recycled content per LEED. Higher recycled content may be available.

MOLYBDENUM

ID: 7439-98-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**      HAZARD SCREENING DATE: **2025-01-23 14:18:15**

%: **0.0100 - 0.1600**      GreenScreen: **LT-UNK**      RC: **PostC**      NANO: **No**      SUBSTANCE ROLE: **Alloy element**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
REP	GHS - New Zealand	Reproductive toxicity category 2
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists
SUBSTANCE NOTES: 25% standard post-consumer recycled content per LEED. Higher recycled content may be available.		

NIOBIUM

ID: 7440-03-1

HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b>			HAZARD SCREENING DATE: <b>2025-01-23 14:19:35</b>	
?: <b>0.0010 - 0.1500</b>	GreenScreen: <b>LT-UNK</b>	RC: <b>PostC</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Alloy element</b>
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: 25% standard post-consumer recycled content per LEED. Higher recycled content may be available.				

NITROGEN

ID: 7727-37-9

HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b>			HAZARD SCREENING DATE: <b>2025-01-23 14:22:54</b>	
?: <b>0.0010 - 0.1000</b>	GreenScreen: <b>NoGS</b>	RC: <b>PostC</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Alloy element</b>
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: 25% standard post-consumer recycled content per LEED. Higher recycled content may be available.				



HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b>			HAZARD SCREENING DATE: <b>2025-01-23 14:20:37</b>	
%: <b>0.0100 - 0.0400</b>	GreenScreen: <b>LT-UNK</b>	RC: <b>PostC</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Alloy element</b>
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: 25% standard post-consumer recycled content per LEED. Higher recycled content may be available.				

HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b>			HAZARD SCREENING DATE: <b>2025-01-23 14:21:25</b>	
%: <b>0.0010 - 0.0100</b>	GreenScreen: <b>BM-1</b>	RC: <b>PostC</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Alloy element</b>
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 (C2CPH)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024  Children's Toy Products

SUBSTANCE NOTES: 25% standard post-consumer recycled content per LEED. Higher recycled content may be available.

BORON				ID: 14798-13-1
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-01-23 14:22:08	
?: 0.0010 - 0.0100	GreenScreen: NoGS	RC: PostC	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: 25% standard post-consumer recycled content per LEED. Higher recycled content may be available.

ZINC COATING (GALVANIZED)      ??: 0.7700 - 8.4300

PRODUCT THRESHOLD: 100 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No	MATERIAL TYPE: Metal
RESIDUALS AND IMPURITIES NOTES: ASTM Standards require zinc coating to be 99% pure zinc with a small amount of aluminum to be added for adhesion. Lead levels are limited to 0.009% and is below the Content Reporting Threshold.		
OTHER MATERIAL NOTES: Galvanized coating in compliance with ASTM A1003 & ASTM A653		

ZINC (POWDER/DUST)				ID: 7440-66-6
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-01-23 14:28:12	
?: 99.7500 - 99.9500	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Galvanizing

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
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]
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]
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
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 - 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
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List  Antimicrobials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024  Children's Toy Products

SUBSTANCE NOTES:

ALUMINUM

ID: 7429-90-5

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2025-01-23 14:30:14**

%: **0.0500 - 0.2500** GreenScreen: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Corrosion inhibitor**

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 v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024  Children's Toy Products

SUBSTANCE NOTES:

PASSIVATION COATING

?: 0.0010 - 0.0500

PRODUCT THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No MATERIAL TYPE: Other: Short term corrosion inhibitor

RESIDUALS AND IMPURITIES NOTES: Hexavalent chromium (Cr(VI)) is widely used in cold-formed steel and is considered a highly effective short-term corrosion inhibitor due to its ability to rapidly form a protective layer on metal surfaces.

OTHER MATERIAL NOTES: Passivation coatings using Chromium VI are industry standard for cold-formed steel. The percentage by mass is below the reportable threshold.

WATER (PRIMARY CASRN IS 7732-18-5)				ID: 558440-22-5	
HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b>			HAZARD SCREENING DATE: <b>2025-02-10 19:28:24</b>		
%: <b>40.0000 - 70.0000</b>	GreenScreen: <b>BM-4</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Solvent</b>	
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: Used for short-term corrosion resistance, typically used in cold-formed steel framing materials.					

PHOSPHORIC ACID				ID: 7664-38-2	
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-02-10 19:23:44		
%: 10.0000 - 20.0000	GreenScreen: LT-P1	RC: UNK	NANO: No	SUBSTANCE ROLE: Corrosion inhibitor	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
SKI	EU - GHS (H-Statements) Annex 6 Table 3-1		H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]		
MAM	GHS - Japan		H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]		
EYE	GHS - Japan		H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]		
SKI	GHS - Japan		H314 - Causes severe skin burns and eye damage [Skin corrosion / irritation - Category 1]		
SKI	GHS - Australia		H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1A or 1B or 1C]		
MAM	GHS - Japan		H331 - Toxic if inhaled [Acute toxicity (inhalation: dust, mist) - Category 3]		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION		
RESTRICTED LIST	Green Science Policy Institute (GSPI)		GSPI - Six Classes Precautionary List		
			Antimicrobials		

HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b>			HAZARD SCREENING DATE: <b>2025-02-10 9:47:00</b>	
%: <b>10.0000 - 20.0000</b>	GreenScreen: <b>LT-UNK</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Corrosion inhibitor</b>
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
SKI	MAK		Sensitizing Substance Sh - Danger of skin sensitization	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022		
		Biological and Environmentally Released Materials		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022		
		Children's Products		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024		
		Children's Toy Products		
SUBSTANCE NOTES: Used for short-term corrosion resistance, typically used in cold-formed steel framing materials.				

HAZARD DATA SOURCE: <b>Pharos Chemical and Materials Library</b>			HAZARD SCREENING DATE: <b>2025-01-23 14:31:13</b>	
%: <b>10.0000 - 20.0000</b>	GreenScreen: <b>LT-1</b>	RC: <b>None</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Corrosion inhibitor</b>

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
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
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
DEV	CA EPA - Prop 65	Developmental toxicity
CAN	US EPA - IRIS Carcinogens	(1986) Group A - Human Carcinogen
CAN	US EPA - IRIS Carcinogens	(1996) Known/likely human Carcinogen
REP	CA EPA - Prop 65	Reproductive Toxicity - Female
REP	CA EPA - Prop 65	Reproductive Toxicity - Male
GEN	MAK	Germ Cell Mutagen 2
CAN	GHS - Korea	H350 - May cause cancer [Carcinogenicity - 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]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]
CAN	EU - REACH Annex XVII CMRs	Carcinogens: Category 1B

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List  Precautionary list of substances recommended for avoidance
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List  Certain Metals
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Core Restrictions
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022  Footwear, Apparel & Jewelry Products
RESTRICTED LIST	International Living Future Institute (ILFI)	Living Building Challenge 4.0 - Red List of Materials & Chemicals - Effective April 1, 2024  Red List substances to avoid in Living Building Challenge V4.0 projects
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024  All Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024  Electronics (RoHS)
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024  Children's Toy Products

SUBSTANCE NOTES: Used for short-term corrosion resistance, typically used in cold-formed steel framing materials.



## Section 3: Certifications and Compliance

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

VOC EMISSIONS	Inherently non-emitting source per LEED	
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2025-01-23 00:00:00	CERTIFIER OR LAB: None
APPLICABLE FACILITIES: ALL	EXPIRY DATE:	
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES:		

LCA	ISO 14040:2006 Environmental management -- Life cycle assessment	
CERTIFYING PARTY: Third Party	ISSUE DATE: 2021-07-21 00:00:00	CERTIFIER OR LAB: UL
APPLICABLE FACILITIES: ALL	EXPIRY DATE: 2026-07-21 00:00:00	
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES:		

## Section 4: Accessories

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

SELF DRILLING/SELF TAPPING SCREWS
MANUFACTURER (OR GENERIC): Generic
HPD URL: No HPD available
ACCESSORY TYPE: Fastner
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Used to connect cold-formed steel members together.

## Section 5: General Notes

Steel products processed by Marino\WARE are not hazardous per OSHA GHS 29 CFR 1910, 1915, 1926. However, individual customer processes (such as welding, sawing during installation at the job site) may result in the formation of fumes, dust (combustible or otherwise) and/or particulate that may present the following hazards: OSHA HAZARDS: Carcinogen; Skin Sensitizer; Target Organ Effect – Lungs; GHS CLASSIFICATION: Carcinogenicity (Category 2); Skin Sensitization (Category 1); Specific Target Organ Toxicity-Repeated Exposure (Category 1); HAZARD STATEMENT(S): H317 Dust/fumes may cause an allergic skin reaction; H351 Dust/fumes suspected of causing cancer via inhalation; H372 Inhalation of dust/fumes causes damage to respiratory tract through prolonged or repeated exposure; PRECAUTIONARY STATEMENT(S): P202 Do not handle until all safety precautions have been read and understood; P261: Avoid breathing dust/fumes; P281 Use personal protective equipment as required; P308+P313 If exposed or concerned: Get medical advice/attention.

## MANUFACTURER INFORMATION

MANUFACTURER: **Marino\WARE**  
ADDRESS: **400 Metuchen Rd.**  
**South Plainfield, NJ 07080**  
COUNTRY: **USA**

WEBSITE: **www.marinoware.com**  
CONTACT NAME: **Jim DesLaurier**  
TITLE: **Technical Services**  
PHONE: **(866) 545-1545**  
EMAIL: **technicalservices@marinoware.com**

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

## KEY

### Hazard Types

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

### GreenScreen (GS)

<b>BM-4</b> Benchmark 4 (prefer-safer chemical)	<b>LT-P1</b> List Translator Possible 1 (Possible Benchmark-1)
<b>BM-3</b> Benchmark 3 (use but still opportunity for improvement)	<b>LT-1</b> List Translator 1 (Likely Benchmark-1)
<b>BM-2</b> Benchmark 2 (use but search for safer substitutes)	<b>LT-UNK</b> List Translator Benchmark Unknown
<b>BM-1</b> Benchmark 1 (avoid - chemical of high concern)	<b>NoGS</b> No GreenScreen.
<b>BM-U</b> 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](http://www.greenscreenchemicals.org), and Best Practices for Hazard Screening on the HPDC website ([hpd-collaborative.org](http://hpd-collaborative.org)).

### Recycled Types

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

### Other Terms:

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

### Inventory Methods:

<b>Nested Method / Material Threshold</b>	Substances listed within each material per threshold indicated per material
<b>Nested Method / Product Threshold</b>	Substances listed within each material per threshold indicated per product
<b>Basic Method / Product Threshold</b>	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*

