



HPD UNIQUE IDENTIFIER: 986374993920

CLASSIFICATION: 05 10 00 Structural Metal Framing

PRODUCT DESCRIPTION: Gerdau Long Steel Products are hot rolled long products used in the construction, agricultural, service center, and energy markets produced to industry and/or customer requirements. PRODUCT IDENTIFICATION: HPD covers Straight and Fabricated Concrete Reinforcing Bars, Bantam Beams, Super-Light Beams, Guard Rail Beams, Wide Flange Beams, H-pile, PS Flat Sheet Piling, PZC Sheet Piling, Angles, Channels, Flats, Rounds, Squares.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

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

CONTENT IN DESCENDING ORDER OF QUANTITY

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

PRODUCT | MATERIAL OR SUBSTANCE | RESIDUAL OR IMPURITY

GREENSCREEN SCORE | HAZARD TYPE

HOT ROLLED MERCHANT, REBAR, AND STRUCTURAL STEEL GRADES [IRON (IRON) LT-P1 | END ALUMINUM BM-1 | END | PHY | MAM SILICON LT-UNK MANGANESE LT-P1 | END | MUL | REP | MAM | AQU NICKEL LT-1 | CAN | RES | MUL | MAM | SKI | AQU COPPER LT-P1 | MUL | AQU | GEN | MAM | EYE | SKI | CHROMIUM LT-P1 | END | SKI | MAM | REP | RES CARBON LT-UNK MOLYBDENUM LT-UNK | MAM | SKI | REP SULFUR LT-UNK | SKI | MAM VANADIUM LT-1 | MUL | CAN | GEN PHOSPHORUS BM-2 | MAM | PHY | EYE | AQU | SKI | NIOBIUM LT-UNK TIN LT-P1 | MAM | EYE | AQU BORON LT-UNK | MAM | TITANIUM LT-UNK | PHY]

Number of Greenscreen BM-4/BM3 contents ... 0

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-P1, BM-1, LT-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

The manufacturer confirmed that all intentionally added ingredients, residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 100 ppm threshold.

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: CDPH Standard Method - Not tested

LCA: Environmental Product Declaration

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Option 1.

Pre-checked for LEED v4.1 Option 1.

Third Party Verified?

☒ Yes

☐ No

PREPARER: Self-Prepared

VERIFIER: SCS Global Services

VERIFICATION #: qGE-4251

SCREENING DATE: 2023-09-05

PUBLISHED DATE: 2023-09-26

EXPIRY DATE: 2026-09-05

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

HOT ROLLED MERCHANT, REBAR, AND STRUCTURAL STEEL GRADES

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

RESIDUALS AND IMPURITIES NOTES: Gerdau worked with the HPDC Approved Preparer to confirmed that all intentionally added ingredients, residuals and impurities were considered under the preparation of this HPD.

OTHER PRODUCT NOTES:

IRON (IRON)

ID: 7439-89-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2023-09-05 11:44:07

%: 89.4000 - 98.0000

GreenScreen: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Structure component

HAZARD TYPE

LIST NAME AND SOURCE

WARNINGS

END

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

ADDITIONAL LISTINGS

LIST NAME AND SOURCE

NOTIFICATION

None found

No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

ALUMINUM

ID: 7429-90-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2023-09-05 11:44:07

%: 0.0100 - 2.7000

GreenScreen: BM-1

RC: None

NANO: No

SUBSTANCE ROLE: Structure component

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
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	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
PHY	GHS - New Zealand	Flammable solids 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 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 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Children's Products
SUBSTANCE NOTES:		

SILICON					ID: 7440-21-3
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2023-09-05 11:44:08		
%: 0.1000 - 2.4000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Structure component	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
None found	No warnings found on HPD Priority Hazard Lists				
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION		
None found	No listings found on Additional Hazard Lists				
SUBSTANCE NOTES:					

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2023-09-05 11:44:08		
%: 2.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Structure component	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
END	TEDX - Potential Endocrine Disruptors		Potential Endocrine Disruptor		
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 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 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022		
			Children's Products		
SUBSTANCE NOTES:					

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2023-09-05 11:44:08		
%: 2.0000	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Structure component	

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
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
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 (C2CPPI)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPPI)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPPI)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Footwear, Apparel & Jewelry Products

SUBSTANCE NOTES:

COPPER

ID: 7440-50-8

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

HAZARD SCREENING DATE: **2023-09-05 11:44:08**

?: **1.5000**

GreenScreen: **LT-P1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Structure component**

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]
GEN	GHS - New Zealand	Germ cell mutagenicity category 1
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	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
SKI	GHS - New Zealand	Skin sensitisation category 1
MAM	GHS - New Zealand	Acute inhalation toxicity category 2
MAM	GHS - New Zealand	Acute oral toxicity category 2
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute 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
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 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 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
SUBSTANCE NOTES:		

CHROMIUM

ID: 7440-47-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-09-05 11:44:09	
%: 1.1000	GreenScreen: LT-P1	RC: None	NANO: No SUBSTANCE ROLE: Structure component

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
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 (C2CP II)	C2C Certified v4 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 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 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products
SUBSTANCE NOTES:		

CARBON

ID: 7440-44-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2023-09-05 11:44:09	
%: 1.1000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List		
		Antimicrobials		
SUBSTANCE NOTES:				

MOLYBDENUM

ID: 7439-98-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2023-09-05 11:44:10		
%: 0.4000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Structure component	

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:		

SULFUR

ID: 7704-34-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-09-05 11:44:09		
%: 0.4000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
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:				

VANADIUM

ID: 7440-62-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-09-05 11:44:09		
%: 0.2000	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters		
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:		

PHOSPHORUS

ID: 7723-14-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2023-09-05 11:44:10	
%: 0.1500	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
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 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022		
		Cosmetics & Personal Care Products		

NIOBIUM

ID: 7440-03-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-09-05 11:44:10		
%: 0.1500	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		

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

TIN

ID: 7440-31-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2023-09-05 11:44:11	
%: 0.1500	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
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	
None found			No listings found on Additional Hazard Lists	
SUBSTANCE NOTES:				

BORON

ID: 7440-42-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-09-05 11:44:11		
%: 0.1000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
MAM	GHS - Japan	H371 - May cause damage to organs [Specific target organs/systemic toxicity following single exposure - Category 2]		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 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 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022		
		Children's Products		

SUBSTANCE NOTES:

TITANIUM

ID: 7440-32-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-09-05 11:44:11

%: 0.1000 GreenScreen: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Structure component

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:

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	CDPH Standard Method - Not tested	
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2023-09-05	CERTIFIER OR LAB: None
APPLICABLE FACILITIES: All Gerdau Facilites	EXPIRY DATE:	
CERTIFICATE URL:		
CERTIFICATION AND COMPLIANCE NOTES:		
LCA	Environmental Product Declaration	
CERTIFYING PARTY: Third Party	ISSUE DATE: 2015-12-15	CERTIFIER OR LAB: SCS Global
APPLICABLE FACILITIES: Gerdau Steel Mills	EXPIRY DATE: 2026-08-29	Services
CERTIFICATE URL: https://www.scsglobalservices.com/certified-green-products-guide		
CERTIFICATION AND COMPLIANCE NOTES: SCS-EPD-07287; SCS-EPD-07505; and SCS-EPD-07496 Searching 'Gerdau' on the site of the Certificate URL leads to a total of 24 unique EPDs that have been generated for Gerdau's Hot Rolled Structural, Merchant, and Rebar Steel Grade products. These EPDs can be accessed by clicking on the picture of each product and an additional link under the heading 'Environmental Product Declaration (EPD).' Please note that these 24 products are associated with different applicable facility addresses and issue/expiry dates, all of which are stated in their respective EPDs. PCR Guidance for version 3.2 UL Environment December 12, 2018.		

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

Gerdau worked with the HPDC Approved Preparer to confirmed that all intentionally added ingredients, residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 100 ppm threshold.

MANUFACTURER INFORMATION

MANUFACTURER: Gerdau
ADDRESS: Gerdau Long Steel North America
 4221 West Boy Scout Blvd
 Tampa, Florida 33607
COUNTRY: USA

WEBSITE: www.gerdau.com
CONTACT NAME: Marcos Burger
TITLE: Quality System Manager
PHONE: 804-481-6955
EMAIL: Marcos.Burger@gerdau.com

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

KEY

Hazard Types

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

GreenScreen (GS)

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

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

Recycled Types

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

Other Terms:

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

Inventory Methods:

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

Nano Composed of nano scale particles or nanotechnology

Third Party Verified Verification by independent certifier approved by HPDC

Preparer Third party preparer, if not self-prepared by manufacturer

Applicable facilities Manufacturing sites to which testing applies

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

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

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

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

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

