CONCRETE REINFORCING BAR/REBAR & MERCHANT BAR QUALITY by ArcelorMittal Long Products Canada

created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 4412921158656

CLASSIFICATION: 03 21 00 Reinforcement Bars

PRODUCT DESCRIPTION: This HPD covers the following two products from ArcelorMittal Long Products Canada, CONCRETE REINFORCING BAR / REBAR and Merchant Bar Quality (MBQ). CONCRETE REINFORCING BAR / REBAR : Rebar is the foundation that provides tensile strength to concrete, which is why the official name is concrete reinforcing bar. It is a essential part of roads, buildings and infrastructures around the world. Concrete is a material that is very strong in compression, but relatively weak in tension. To compensate for this imbalance in concrete's behavior, rebar is cast into it to carry the tensile loads. MERCHANT BAR QUALITY: Merchant Bar Quality steel (MBQ) is specified when standard steel quality for non-critical applications is needed. These types of bars are generally used in structural type applications involving bending, forming, punching and welding. Merchant Bars are used by fabricators and manufacturers to produce a wide variety of products including steel frames and structures, brackets, steel floor and roof joists, walkways, ornamental furniture, railings, and more.

Section 1: Summary

CONTENT INVENTORY

- **Inventory Reporting Format**
- Nested Materials Method
 Basic Method
- Basic Wethou
- Threshold Disclosed Per
- C Material
- O Product
- Threshold Level
 100 ppm
 1,000 ppm
 Per GHS SDS

O Other

Residuals/Impurities Evaluation

- CompletedPartially Completed
- © Not Completed
- Explanation(s) provided : • Yes O No

Basic Method / Product Threshold

For all contents above the threshold,	the manufacturer has:			
Characterized	⊙ Yes ⊖ No			
Provided weight and role.				
Screened	O Yes O No			
Provided screening results using HPDC-approved				
methods.				
Identified	⊙ Yes ⊖ 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.

PRODUCT | MATERIAL OR SUBSTANCE | RESIDUAL OR IMPURITY GREENSCREEN SCORE | HAZARD TYPE

CONCRETE REINFORCING BAR/REBAR & MERCHANT BAR QUALITY [IRON LT-P1 | END MANGANESE LT-P1 | END | MUL | REP | MAM | AQU COPPER LT-P1 | MUL | AQU | MAM CHROMIUM LT-P1 | END | SKI | MAM | REP | RES CARBON LT-UNK SILICON LT-UNK NICKEL LT-1 | CAN | MUL | RES | MAM | SKI | AQU VANADIUM LT-1 | CAN | MUL | GEN NIOBIUM LT-UNK NITROGEN NoGS TIN LT-P1 | MAM | EYE | AQU LEAD BM-1 | END | PBT | MUL | CAN | DEV | REP | GEN | AQU | MAM ZINC, ELEMENTAL LT-P1 | MUL | AQU TITANIUM LT-UNK | PHY PHOSPHORUS BM-2 | MAM | PHY | EYE | AQU | SKI SULFUR LT-UNK | SKI | MAM MOLYBDENUM LT-UNK | MAM | SKI | REP ALUMINUM BM-1 | END | MAM | PHY COBALT LT-1 | CAN | REP | MUL | RES | GEN | EYE | MAM | SKI | AQU ANTIMONY, ELEMENTAL LT-1 | CAN | AQU | EYE | REP | SKI]

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

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:

This HPD has been prepared using a Basic Inventory method with a product threshold of 100 ppm. The content inventory includes ranges to encompass both products by ArcelorMittal Long Products Canada: concrete reinforcing bars (rebars) and merchant bar quality (MBQ). Both steel products made by ArcelorMittal Long Products Canada contain materials with Special Conditions (metal alloy ingredients) as per the HPDC. Guidelines for reporting Special Conditions materials are still under development by HPDC. ArcelorMittal Long Products Canada will update the HPD accordingly once these guidelines get published. Substances present in rebars and MBQ products, as well as known residuals and impurities, have been disclosed at 100 ppm. Additional details about how residuals and impurities were considered are available in the appropriate section.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: Inherently non- emitting source per LEED® LCA: Environmental Product Declaration (EPD) by CSA - Product Specific

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Option 1. Pre-checked for LEED v4.1 Option 1.

Third Party Verified?

PREPARER: Vertima

SCREENING DATE: 2024-11-15

○ Yes○ No

VERIFIER: VERIFICATION #: PUBLISHED DATE: 2024-11-19 EXPIRY DATE: 2027-11-15

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

CONCRETE REINFORCING BAR/REBAR & MERCHANT BAR QUALITY

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

ID: 7439-89-6

RESIDUALS AND IMPURITIES NOTES: All known residuals or impurities above 100 ppm have been disclosed in the content inventory as such. The impurities are essentially introduced in rebar and MBQ products through recycled scrap metals. The type and quantity of impurities are determined by ArcelorMittal Long Products Canada through chemical testing of production samples. Aluminum is used as deoxidizer in the steelmaking operations. It is removed from the steel, but residuals may remain.

OTHER PRODUCT NOTES: Concrete Reinforcing bars and Merchant Bar Quality contain 0% to 5% of pre-consumer recycled content, as well as 18% to 20% of post-consumer recycled content.

IRON

HAZARD DATA SOURCE: PI	naros Chemical and Materials Libr	ary	HAZ	ARD SCREENING DATE: 2024-11-15 6:41:34
%: 90.0000 - 99.0000	GreenScreen: LT-P1	RC: Both	NANO: No	SUBSTANCE ROLE: Structure component
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
END	TEDX - Potential Endocrine [Disruptors	Potential End	docrine Disruptor
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATI	ON
None found				No listings found on Additional Hazard Lists

None found

SUBSTANCE NOTES: ArcelorMittal Long Products Canada billets contain 0% - 4.9% pre-consumer recycled content and 17.9% - 19.6% postconsumer recycled content. Pre-consumer recycled content is material diverted from the waste stream during the fabrication process of fabricated rebar or fabricated MBQ steel and put back in the EAF process, while post-conumer iron includes materials generated by houshoulds or by commercial, industrial and institutional facilities in their role as end-user of the product which can no longer be used for ints intented purpose.

MANGANESE				ID: 7439-96-5
HAZARD DATA SOURCE:	Pharos Chemical and Materials Lib	rary	HAZARD	SCREENING DATE: 2024-11-15 6:41:35
%: 0.5000 - 1.7000	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 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 (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: The weight range is used to cover multiple rebar and MBQ steel grades.

COPPER				ID: 7440-50-8
HAZARD DATA SOURCE: Pha	aros Chemical and Materials Library	7	HAZAR	D SCREENING DATE: 2024-11-15 6:41:36
%: 0.0000 - 0.8000	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 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]
МАМ	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 v4.0 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

CHROMIUM				ID: 7440-47- 3	3
HAZARD DATA SOURCE:	Pharos Chemical and Materials Librar	у	HAZARD	SCREENING DATE: 2024-11-15 6:41:30	3
%: 0.0100 - 0.5500	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	МАК	Sensitizing Substance Sh - Danger of skin sensitization
МАМ	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 v4.0 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 v4.0 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
		Children's Toy 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: The weight range is used to cover multiple rebar and MBQ steel grades. Chromium may also be an impurity in certain steel grades.

HAZARD DATA SOURCE:	Pharos Chemical and Materials Librar	ry	HAZARD	SCREENING DATE: 2024-11-15 6:41:37
%: 0.1500 - 0.5000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No wa	arnings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Green Science Policy Institute	(GSPI)	GSPI - Six Class	ses Precautionary List
			Antimicrobials	

 ${\sf SUBSTANCE} \ {\sf NOTES}: {\sf The weight range is used to cover multiple rebar and MBQ steel grades}.$

HAZAND DATA SOUNCE.	Pharos Chemical and Materials Library		HAZARD	SCREENING DATE: 2024-11-15 6:41:30
%: 0.1000 - 0.5000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Alloy element
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
None found			No wa	rnings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			N	o listings found on Additional Hazard Lists
SUBSTANCE NOTES. THe	weight range is used to cover multiple reba	ai anu moQ si	eel grades.	
				D: 9040 21
				ID: 8049-31-4
NICKEL HAZARD DATA SOURCE: I	Pharos Chemical and Materials Library		HAZARD	ID: 8049-31-4 SCREENING DATE: 2024-11-15 6:41:3

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	МАК	Carcinogen Group 1 - Substances that cause cancer in man
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
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	МАК	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]
МАМ	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]
МАМ	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 v4.0 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 v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Footwear, Apparel & Jewelry Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024
		All 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
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

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD	SCREENING DATE:	2024-11-15 6:41:3
%: 0.0000 - 0.1500	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROL	E: Alloy element
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
CAN	МАК		Carcinogen Grou man	up 2 - Considered to be	e carcinogenic for
MUL	German FEA - Substances Waters	Hazardous to	Class 2 - Hazard	to Waters	
GEN	МАК		Germ Cell Mutag	jen 2	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION		
None found			Ν	lo listings found on Ad	ditional Hazard Lists

%: 0.0000 - 0.1000 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 Lis ADDITIONAL LISTINGS LIST NAME AND SOURCE NOTIFICATION None found No listings found on Additional Hazard Lis SUBSTANCE NOTES: The weight range is used to cover multiple rebar and MBQ steel grades. NTROGEN ID: 7727-3 HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2024-11-15 6:41 %: 0.0000 - 0.1000 GreenScreen: NOGS RC: None NANO: No HAZARD TYPE LIST NAME AND SOURCE WARNINGS None found No warnings found on HPD Priority Hazard Lis %: 0.0000 - 0.1000 GreenScreen: NOGS RC: None MAZARD TYPE LIST NAME AND SOURCE WARNINGS None found No warnings found on HPD Priority Hazard Lis ADDITIONAL LISTINGS LIST NAME AND SOURCE WARNINGS 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	HAZARD DATA SOURCE:	Pharos Chemical and Materials Library		HAZARI	D SCREENING DATE:	2024-11-15 6:41:3
None found No warnings found on HPD Priority Hazard List ADDITIONAL LISTINGS LIST NAME AND SOURCE None found No listings found on Additional Hazard List SUBSTANCE NOTES: The weight range is used to cover multiple rebar and MBQ steel grades. NTROGEN ILIST NAME AND SOURCE MAZARD DATA SOURCE: Pharos Could on GreenScreen: NOGS MAZARD TYPE LIST NAME AND SOURCE None found No warnings found on HPD Priority Hazard List None found Kazard Type LIST NAME AND SOURCE WARNINGS None found No warnings found on HPD Priority Hazard List ADDITIONAL LISTINGS LIST NAME AND SOURCE WARNINGS ADDITIONAL LISTINGS LIST NAME AND SOURCE NortificATION REXEMPT Evropean Union / European Commission (EU) EVROPT	%: 0.0000 - 0.1000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROL	E: Alloy element
ADDITIONAL LISTINGS LIST NAME AND SOURCE NOTIFICATION None found No listings found on Additional Hazard List SUBSTANCE NOTES: The weight range is used to cover multiple rebar and MBQ steel grades. ID: 7727-3 NTROGEN ID: 7727-3 HAZARD DATA SOURCE Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2024-11-15 6:41 %: 0.0000 - 0.1000 GreenScreen: NoGS RC: None NANO: No SUBSTANCE ROLE: Impurity/Residu HAZARD TYPE LIST NAME AND SOURCE WARNINGS No warnings found on HPD Priority Hazard List ADDITIONAL LISTINGS LIST NAME AND SOURCE NOTIFICATION EXEMPT European Union / European Commission (EU EU - REACH Exemptions	HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
None found No listings found on Additional Hazard List SUBSTANCE NOTES: The weight range is used to cover multiple rebar and MBQ steel grades. NTROGEN HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD TYPE LIST NAME AND SOURCE None found None found None found LIST NAME AND SOURCE Materials LIST NAME AND SOURCE Nortification EXEMPT European Union / European Commission (EU) EV	None found			No w	varnings found on HPD	Priority Hazard List
SUBSTANCE NOTES: The weight range is used to cover multiple rebar and MBQ steel grades. ID: 7727-3 HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD TYPE LIST NAME AND SOURCE None found No warnings found on HPD Priority Hazard List ADDITIONAL LISTINGS LIST NAME AND SOURCE EXEMPT European Union / European Commission (EU EC) EU - REACH Exemptions	ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	I	
NITROGEN HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2024-11-15 6:41 %: 0.0000 - 0.1000 GreenScreen: NOGS RC: None NANO: No SUBSTANCE ROLE: IIST NAME AND SOURCE WARNINGS None found No warnings found on HPD Priority Hazard List ADDITIONAL LISTINGS LIST NAME AND SOURCE NOTIFICATION EXEMPT European Union / European Commission (EU EU - REACH Exemptions	None found			I	No listings found on Ad	ditional Hazard List
HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2024-11-15 6:41 %: 0.0000 - 0.1000 GreenScreen: NoGS RC: None NANO: No SUBSTANCE ROLE: Impurity/Residu HAZARD TYPE LIST NAME AND SOURCE WARNINGS None found No warnings found on HPD Priority Hazard List ADDITIONAL LISTINGS LIST NAME AND SOURCE NOTIFICATION EXEMPT European Union / European Commission (EU EC) EU - REACH Exemptions						
Marcine						
HAZARD TYPE LIST NAME AND SOURCE WARNINGS None found No warnings found on HPD Priority Hazard List ADDITIONAL LISTINGS LIST NAME AND SOURCE NOTIFICATION EXEMPT European Union / European Commission (EU EC) EU - REACH Exemptions	NITROGEN					ID: 7727-3 7
None found No warnings found on HPD Priority Hazard List ADDITIONAL LISTINGS LIST NAME AND SOURCE NOTIFICATION EXEMPT European Union / European Commission (EU EC) EU - REACH Exemptions		Pharos Chemical and Materials Library		HAZARI	D SCREENING DATE:	
ADDITIONAL LISTINGS LIST NAME AND SOURCE NOTIFICATION EXEMPT European Union / European Commission (EU EC) EU - REACH Exemptions	HAZARD DATA SOURCE:	-				2024-11-15 6:41:
EXEMPT European Union / European Commission (EU EU - REACH Exemptions EC)	HAZARD DATA SOURCE: %: 0.0000 - 0.1000	GreenScreen: NoGS		NANO: No		2024-11-15 6:41:
EC)	HAZARD DATA SOURCE: %: 0.0000 - 0.1000 HAZARD TYPE	GreenScreen: NoGS		NANO: No Warnings	SUBSTANCE ROLE:	2024-11-15 6:41: Impurity/Residua
	HAZARD DATA SOURCE: %: 0.0000 - 0.1000 HAZARD TYPE None found	GreenScreen: NoGS		NANO: No WARNINGS No w	SUBSTANCE ROLE:	2024-11-15 6:41: Impurity/Residua
safety	HAZARD DATA SOURCE: %: 0.0000 - 0.1000 HAZARD TYPE None found ADDITIONAL LISTINGS	GreenScreen: NoGS LIST NAME AND SOURCE LIST NAME AND SOURCE European Union / European Cor	RC: None	NANO: No WARNINGS No w	SUBSTANCE ROLE: rarnings found on HPD	2024-11-15 6:41: Impurity/Residua

TIN					ID: 7440-31-5
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library		HAZAF	RD SCREENING DATE:	2024-11-15 6:41:38
%: 0.0000 - 0.1000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE:	Impurity/Residual
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
MAM	GHS - Japan			use respiratory irritation [- Single exposure - Categ	
EYE	GHS - New Zealand		Eye irritation c	ategory 2	
МАМ	GHS - Japan		repeated expo	s damage to organs throu sure [Specific target orga ated exposure - Category	ns/systemic toxicity
AQU	GHS - New Zealand		Hazardous to t	the aquatic environment -	acute category 1
AQU	GHS - New Zealand		Hazardous to t	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, 2024
		Children's Toy Products
SUBSTANCE NOTES: Impuri	ties have multiple sources, but come mainly from stee	el scrap.
LEAD		ID: 7439-92-1
HAZARD DATA SOURCE: Ph	naros Chemical and Materials Library	HAZARD SCREENING DATE: 2024-11-15 6:41:39
%: 0.0000 - 0.1000	GreenScreen: BM-1 RC: None	NANO: No SUBSTANCE ROLE: Impurity/Residual
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
РВТ	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	МАК	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	РВТ
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	МАК	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 - 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	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Core Restrictions
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 v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	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 (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024
		All Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024
		Electronics (RoHS)
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
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

HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2024-11-15 6:41:3
%: 0.0000 - 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 3 - Severe Hazard to Waters
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List
		Antimicrobials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	e 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)	e 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)	e C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024
		Children's Toy Products

ZINC, ELEMENTAL

ΓΙΤΑΝΙUΜ					ID: 7440-32-6
HAZARD DATA SOURCE: Phar	os Chemical and Materials Library	,	HAZAF	RD SCREENING DATE:	2024-11-15 6:41:40
%: 0.0000 - 0.1000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE:	Impurity/Residual
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
РНҮ	GHS - Japan		H225 - Highly f solids - Catego	flammable liquid and vap ory 1]	our [Flammable
РНҮ	GHS - Japan			s fire spontaneously if ex lids - Category 1]	posed to air
PHY	GHS - Japan			ating;; may catch fire [Se d mixtures - Category 1]	If-heating
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATIO	Ν	
None found				No listings found on Add	ditional Hazard Lists

AZARD DATA SOURCE:	Pharos Chemical and Materials Library		HAZAF	RD SCREENING DATE: 2024-11-15 6:41:4
%: 0.0000 - 0.0600	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residua
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
MAM	US EPA - EPCRA Extremely Haza Substances	Irdous	Extremely Haza	ardous Substances
MAM	GHS - New Zealand		Specific target	organ toxicity - repeated exposure category
РНҮ	GHS - New Zealand		Pyrophoric soli	ds category 1
EYE	GHS - New Zealand		Serious eye da	mage category 1
AQU	GHS - New Zealand		Hazardous to t	he aquatic environment - acute category 1
AQU	GHS - New Zealand		Hazardous to the aquatic environment - chronic cate	
MAM	Québec CSST - WHMIS 1988		Class D1A - Very toxic material causing immediate an serious toxic effects	
SKI	GHS - New Zealand		Skin corrosion	category 1A
MAM	GHS - New Zealand		Acute dermal to	oxicity category 1
MAM	GHS - New Zealand		Acute inhalatio	n toxicity category 1
МАМ	GHS - New Zealand		Acute oral toxic	ity category 1
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	N
RESTRICTED LIST	Cradle to Cradle Products Innovati (C2CPII)	on Institute		v4.0 Product Standard Restricted st (RSL) - Effective July 1, 2022
			Cosmetics & P	ersonal Care Products
RESTRICTED LIST	Cradle to Cradle Products Innovati (C2CPII)	on Institute		4.1 Product Standard Restricted
			Cosmetics and	Personal Care Products

SULFUR					ID: 7704-34-9
HAZARD DATA SOURCE:	Pharos Chemical and Materials Lib	rary	HAZAF	RD SCREENING DATE:	2024-11-15 6:41:39
%: 0.0000 - 0.0500	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: I	mpurity/Residual

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

 ${\sf SUBSTANCE \ NOTES: \ Impurities \ have \ multiple \ sources, \ but \ come \ mainly \ from \ steel \ scrap.}$

MOLYBDENUM				ID: 7439-98-7
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library		HAZAF	RD SCREENING DATE: 2024-11-15 6:41:39
%: 0.0000 - 0.0500	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residual
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
МАМ	GHS - Japan			use respiratory irritation [Specific target Single exposure - Category 3]
SKI	GHS - Japan		H315 - Causes Category 2]	s skin irritation [Skin corrosion / irritation -
REP	GHS - New Zealand		Reproductive t	oxicity category 2
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATIO	Ν
None found				No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Impurities have multiple sources, but come mainly from steel scrap.

ALUMINUM					ID: 7429-90-5
	HAZARD DATA SOURCE: Ph	aros Chemical and Materials Lil	brary	HAZAF	RD SCREENING DATE: 2024-11-15 6:41:40
	%: 0.0000 - 0.0500	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residual

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]
МАМ	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
РНҮ	GHS - Japan	H261 - In contact with water releases flammable gas [Substances and mixtures, which in contact with water, emit flammable gases - Category 2]
РНҮ	GHS - Malaysia	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
РНҮ	GHS - Australia	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
РНҮ	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 v4.0 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

COBALT

ID: 7440-48-4

HAZARD DATA SOURCE:	Pharos Chemical and Materials Libra	HAZARD SCREENING DATE: 2024-11-15 6:41:41		
%: 0.0000 - 0.0200	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residual
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
CAN	EU - Annex VI CMRs		Carcinogen Ca on animal evide	ategory 1B - Presumed Carcinogen based ence
REP	EU - Annex VI CMRs		Reproductive 1	Foxicity - Category 1B
MUL	ChemSec - SIN List		CMR - Carcino	ogen, Mutagen &/or Reproductive Toxicant
CAN	CA EPA - Prop 65		Carcinogen	
CAN	МАК		Carcinogen Gr man	oup 2 - Considered to be carcinogenic for

CAN	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
RES	МАК	Sensitizing Substance Sah - Danger of airway & skin sensitization
CAN	IARC	Group 2a - Agent is probably Carcinogenic to humans
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
GEN	МАК	Germ Cell Mutagen 3a
CAN	GHS - Australia	H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]
REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
REP	GHS - Australia	H360F - May damage fertility [Reproductive toxicity - Category 1A or 1B]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H350 - May cause cancer [Carcinogenicity - Category 1A or 1B]
GEN	EU - GHS (H-Statements) Annex 6 Table 3-1	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
REP	EU - GHS (H-Statements) Annex 6 Table 3-1	H360F - May damage fertility [Reproductive toxicity - Category 1A or 1B]
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]
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
SKI	GHS - New Zealand	Skin sensitisation category 1
REP	GHS - New Zealand	Reproductive toxicity category 2
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]
GEN	EU - Annex VI CMRs	Mutagen - Category 2
МАМ	GHS - Australia	H330 - Fatal if inhaled [Acute toxicity (inhalation) - Category 1 or 2]
RES	GHS - Japan	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled [Respiratory sensitization - Category 1A]

МАМ	GHS - Japan	H330 - Fatal if inhaled [Acute toxicity (inhalation: dust, mist) - Category 1]
CAN	EU - REACH Annex XVII CMRs	Carcinogens: Category 1B
REP	EU - REACH Annex XVII CMRs	Reproductive toxicants: Category 1B
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 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 v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2024
		All 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
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

ANTIMONY, ELEMENTAL ID: 7440-36-				
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library		HAZAR	D SCREENING DATE: 2024-11-15 6:41:42
%: 0.0000 - 0.0100	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Impurity/Residual

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	МАК	Carcinogen Group 2 - Considered to be carcinogenic for man
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]
EYE	GHS - New Zealand	Eye irritation category 2
CAN	GHS - New Zealand	Carcinogenicity category 2
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 2
REP	GHS - New Zealand	Reproductive toxicity category 2
SKI	GHS - Korea	H314 - Causes severe skin burns and eye damage [Skin corrosion/irritation - Category 1]
AQU	GHS - Korea	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	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Certain Metals
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 v4.0 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 Children's Toy Products

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 LEEI	D®
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: All. CERTIFICATE URL:	ISSUE DATE: 2024-11-11 00:00:00 EXPIRY DATE:	CERTIFIER OR LAB: -
CERTIFICATION AND COMPLIANCE NOTES: Metals as well as powder-coated metals, plated or anodized metals are inherently nonemitting sources of		

CERTIFICATION AND COMPLIANCE NOTES: Metals as well as powder-coated metals, plated or anodized metals are inherently nonemitting sources of VOCs, as per LEED® v4.

LCA	Environmental Product Declaration (EPD) by CSA - Product Specific		
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: The steel mills are located in Contrecoeur (QC) and the rolling mills are located in Contrecoeur (QC) and Longueuil (QC). All facilities are in Canada. CERTIFICATE URL: https://www.csaregistries.ca/GHG_VR_Listing/EPD_ProjectDetail? ProjectId=1086	ISSUE DATE: 2024-09-25 00:00:00 EXPIRY DATE: 2029-09-24 00:00:00	CERTIFIER OR LAB: CSA Group	

CERTIFICATION AND COMPLIANCE NOTES: Product Specific EPD for Steel Rebar and Mechant Bar Quality produced by ArcelorMittal Long Products Canada. The EPD was prepared by Vertima inc., verified by Lindita Bushi and published by CSA Group. EPD registration number is 5021-0982.

🛨 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

Rebar is produced in accordance with the following standards:

- CSA G30.18 Carbon Steel Bars for Concrete Reinforcement, grade 400R/400W and 500W and 600W.
- ASTM A615 Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement, grade GR60 and GR80.
- ASTM A706 Standard Specification for Deformed and Plain Low-alloy Steel Bars for Concrete Reinforcement, grade GR60 and GR80.

Merchant Bar Quality is produced in accordance with the following standards:

- CSA G40.21 General Requirements for Rolled or Welded Structural Quality Steel, grade 44W, 50W, 55W and 60W.
- ASTM A36 Standard Specification for Carbon Structural Steel.
- ASTM A572 Standard Specification for High-Strenght Low-Allo Columbium-Vanadium-Structural Steel, grade 50 type 1 and 2, as well as grade 65.
- ASTM F1554 Standard Specification for Anchor Bolts, Steel 36, 55 and 105-ksi Yield Strength, grade 36 and 55.

MANUFACTURER INFORMATION

MANUFACTURER: ArcelorMittal Long Products Canada ADDRESS: 3900 route des Aciéries

Contrecoeur, Quebec J0L 1C0 COUNTRY: Canada

WEBSITE: www.long-canada.arcelormittal.com CONTACT NAME: Yan Gadoury TITLE: Technical service manager PHONE: (450) 587-6427 EMAIL: yan.gadoury@arcelormittal.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 CAN Cancer DEV Developmental toxicity END Endocrine activity EYE Eye irritation/corrosivity GEN Gene mutation GLO Global warming LAN Land toxicity MAM Mammalian/systemic/organ toxicity MUL Multiple NEU Neurotoxicity NF Not found on Priority Hazard Lists OZO Ozone depletion PBT Persistent, bioaccumulative, and toxic PHY Physical hazard (flammable or reactive)
REP Reproductive
RES Respiratory sensitization
SKI Skin sensitization/irritation/corrosivity
UNK Unknown

LT-P1 List Translator Possible 1 (Possible Benchmark-1) LT-1 List Translator 1 (Likely Benchmark-1) LT-UNK List Translator Benchmark Unknown NoGS No GreenScreen.

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

GreenScreen (GS)

PreC Pre-consumer recycled contentPostC Post-consumer recycled contentUNK Inclusion of recycled content is unknownNone Does not include recycled content

BM-4 Benchmark 4 (prefer-safer chemical)

BM-3 Benchmark 3 (use but still opportunity for improvement)

BM-2 Benchmark 2 (use but search for safer substitutes) **BM-1** Benchmark 1 (avoid - chemical of high concern)

BM-U Benchmark Unspecified (due to insufficient data)

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 TranslatorTM, 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

CONCRETE REINFORCING BAR/REBAR & MERCHANT BAR QUALITY

for compliance with the HPD standard noted.