

CLASSIFICATION: 08 11 00

created via: HPDC Online Builder

PRODUCT DESCRIPTION: This HPD covers welded steel frames manufactured by Métalec. Steel frames are made of 16 gauge galvanized steel. Product dimensions are 36" x 84" x 5¾". Métalec steel frames are compliant to ASTM A 653/A 653M, CAN/ULC - S104 - M80, UBC 7-2(1994), UL 10 (b), NFPA 252, NFPA 80, CSDMA, NAAMM, HMMA, ASTM E 152.

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method
- Basic Method

Threshold Disclosed Per

- Material
- Product

Threshold level

- 100 ppm
- 1,000 ppm
- Per GHS SDS
- Per OSHA MSDS
- Other

Residuals/Impurities

Residuals/Impurities Considered in 2 of 5 Materials

Explanation(s) provided for Residuals/Impurities?

- Yes No

Are All Substances Above the Threshold Indicated:

Characterized Yes No
Percent Weight and Role Provided?

Screened Yes No
Using Priority Hazard Lists with Results Disclosed?

Identified Yes No
Name and Identifier Provided?

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.

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

GALVANNEALED STEEL #1 [**IRON (IRON)** **LT-P1** | **END ZINC (ZINC)** **LT-P1** | **AQU** | **END** | **MUL** | **PHY MANGANESE (MANGANESE)** **LT-P1** | **END** | **MUL** | **REP NICKEL (NICKEL)** **LT-1** | **CAN** | **RES** | **SKI** | **MAM** | **MUL LEAD (LEAD)** **LT-1** | **MAM** | **DEL** | **CAN** | **PBT** | **REP** | **AQU** | **MUL** | **END** | **GEN CADMIUM (CADMIUM)** **LT-1** | **CAN** | **DEL** | **PBT** | **REP** | **AQU** | **MAM** | **GEN** | **MUL** | **END** | **PHY CHROMIUM (CHROMIUM)** **LT-P1** | **RES** | **END** | **SKI**] **WELDING MATERIAL** [**IRON (IRON)** **LT-P1** | **END MANGANESE (MANGANESE)** **LT-P1** | **END** | **MUL** | **REP SILICON (SILICON)** **LT-UNK** **CARBON (CARBON)** **LT-UNK** **SULFUR (SULFUR)** **LT-UNK** | **SKI COPPER (COPPER)** **LT-UNK** **PHOSPHORUS (PHOSPHORUS)** **BM-2** | **MAM** | **PHY GALVANIZED STEEL** [**IRON (IRON)** **LT-P1** | **END ZINC (ZINC)** **LT-P1** | **AQU** | **END** | **MUL** | **PHY MANGANESE (MANGANESE)** **LT-P1** | **END** | **MUL** | **REP CHROMIUM (CHROMIUM)** **LT-P1** | **RES** | **END** | **SKI NICKEL (NICKEL)** **LT-1** | **CAN** | **RES** | **SKI** | **MAM** | **MUL LEAD (LEAD)** **LT-1** | **MAM** | **DEL** | **CAN** | **PBT** | **REP** | **AQU** | **MUL** | **END** | **GEN CADMIUM (CADMIUM)** **LT-1** | **CAN** | **DEL** | **PBT** | **REP** | **AQU** | **MAM** | **GEN** | **MUL** | **END** | **PHY GALVANNEALED STEEL #2** [**STEEL (STEEL)** **NoGS** **ZINC (ZINC)** **LT-P1** | **AQU** | **END** | **MUL** | **PHY IRON (IRON)** **LT-P1** | **END**] **PAINT** [**BUTOXYPROPANOL (BUTOXYPROPANOL)** **LT-UNK** | **SKI** | **EYE TITANIUM DIOXIDE (TITANIUM DIOXIDE)** **LT-1** | **CAN** | **END**]

Number of Greenscreen BM-4/BM3 contents..... 0
Contents highest concern GreenScreen
Benchmark or List translator Score..... LT-1
Nanomaterial..... No

INVENTORY AND SCREENING NOTES:

Special Conditions materials are present in the product: metal alloy material, glass, reaction products, recycled content – mixtures, defined substances without identifier, plastics and polymers, mixed hardware and fasteners. Guidelines for reporting Special Conditions materials are still under development by HPDC and the manufacturer will update the HPD accordingly once these guidelines get published.

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: CPDH Standard Method - Not tested

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

- Yes
- No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2018-02-20

PUBLISHED DATE: 2018-02-20

EXPIRY DATE: 2021-02-20

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 2.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-standard

GALVANNEALED STEEL #1

#: 92.3400

HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: According to the manufacturer, Lead and Cadmium are present in trace amount, generally inferior to 1 ppm in steel products. These impurities are coming from the sourced iron ore. Passivation surface treatment with a chromic acid solution leaves a total chromium residual of 11 to 27 mg/m² per side.

OTHER MATERIAL NOTES: 16 Ga galvanized carbon steel sheets with a passivation surface treatment.

IRON (IRON)

ID: 7439-89-6

#: 87.4400 - 100.0000 GS: LT-P1 RC: None NANO: No ROLE: Main element and part of galvanneal coating

HAZARDS:

AGENCY(IES) WITH WARNINGS:

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES: Iron is the main element for carbon steel. It is also present in the Galvanneal coating at 11% or between 0.24 and 1.2 w% in the final galvanized sheet.

ZINC (ZINC)

ID: 7440-66-6

#: 1.7600 - 8.8000 GS: LT-P1 RC: None NANO: No ROLE: Galvanneal coating

HAZARDS:

AGENCY(IES) WITH WARNINGS:

ACUTE AQUATIC

EU - GHS (H-Statements)

H400 - Very toxic to aquatic life

CHRON AQUATIC

EU - GHS (H-Statements)

H410 - Very toxic to aquatic life with long lasting effects

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

PHYSICAL HAZARD (REACTIVE)

EU - GHS (H-Statements)

H250 - Catches fire spontaneously if exposed to air

PHYSICAL HAZARD (REACTIVE)

EU - GHS (H-Statements)

H260 - In contact with water releases flammable gases which may ignite spontaneously

SUBSTANCE NOTES: Galvanneal is composed of 88% zinc and 11% iron according to the manufacturer.

MANGANESE (MANGANESE)

ID: 7439-96-5

#: 0.0000 - 2.0000

GS: LT-P1

RC: None

NANO: No

ROLE: Alloying element

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1B

SUBSTANCE NOTES: See Other Material Notes.

NICKEL (NICKEL)

ID: 7440-02-0

#: 0.0000 - 0.2000

GS: LT-1

RC: None

NANO: No

ROLE: Alloying element

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	IARC	Group 2b - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
RESPIRATORY	AOEC - Asthmagens	Asthmagen (ARs) - sensitizer-induced - inhalable forms only
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
ORGAN TOXICANT	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES: See Other Material Notes.

LEAD (LEAD)

ID: 7439-92-1

#: Impurity/Residual

GS: LT-1

RC: None

NANO: No

ROLE: Impurity/Residual

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
MAMMALIAN	EU - R-phrases	R20 - Harmful by Inhalation (gas or vapor or dust/mist)
DEVELOPMENTAL	EU - R-phrases	R61 - May cause harm to the unborn child
DEVELOPMENTAL	G&L - Neurotoxic Chemicals	Developmental Neurotoxicant

CANCER	US EPA - IRIS Carcinogens	(1986) Group B2 - Probable human Carcinogen
CANCER	IARC	Group 2a - Agent is probably Carcinogenic to humans
CANCER	IARC	Group 2b - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity
PBT	US EPA - Priority PBTs (NWMP)	Priority PBT
PBT	WA DoE - PBT	PBT
REPRODUCTIVE	CA EPA - Prop 65	Reproductive Toxicity - Female
REPRODUCTIVE	CA EPA - Prop 65	Reproductive Toxicity - Male
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
PBT	US EPA - Priority PBTs (PPT)	Priority PBT
PBT	US EPA - Toxics Release Inventory PBTs	PBT
PBT	OSPAR - Priority PBTs & EDs & equivalent concern	PBT - Chemical for Priority Action
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1
DEVELOPMENTAL	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity
REPRODUCTIVE	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Reproductive Toxicity
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
CHRON AQUATIC	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
DEVELOPMENTAL	EU - GHS (H-Statements)	H360Df - May damage the unborn child. Suspected of damaging fertility
REPRODUCTIVE	EU - GHS (H-Statements)	H360FD - May damage fertility. May damage the unborn child
DEVELOPMENTAL	EU - GHS (H-Statements)	H362 - May cause harm to breast-fed children
REPRODUCTIVE	EU - REACH Annex XVII CMRs	Toxic to Reproduction Category 1 - Substances known to impair fertility or cause Developmental Toxicity in humans
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
REPRODUCTIVE	New Zealand - GHS	6.8A - Known or presumed human reproductive or developmental toxicants
REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1A
GENE MUTATION	MAK	Germ Cell Mutagen 3a
REPRODUCTIVE	EU - Annex VI CMRs	Reproductive Toxicity - Category 1A
CANCER	Korea - GHS	Carcinogenicity - Category 1 [H350 - May cause cancer]
REPRODUCTIVE	Korea - GHS	Reproductive toxicity - Category 1 [H360 - May damage fertility or the unborn child]

CADMIUM (CADMIUM)

ID: 7440-43-9

%: Impurity/Residual	GS: LT-1	RC: None	NANO: No	ROLE: Impurity/Residual
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
CANCER	US EPA - IRIS Carcinogens			(1986) Group B1 - Probable human Carcinogen
CANCER	IARC			Group 1 - Agent is Carcinogenic to humans
CANCER	CA EPA - Prop 65			Carcinogen
DEVELOPMENTAL	CA EPA - Prop 65			Developmental toxicity
PBT	US EPA - Priority PBTs (NWMP)			Priority PBT
REPRODUCTIVE	CA EPA - Prop 65			Reproductive Toxicity - Male
CANCER	US CDC - Occupational Carcinogens			Occupational Carcinogen
CANCER	US NIH - Report on Carcinogens			Known to be a human Carcinogen
CANCER	EU - SVHC Authorisation List			Carcinogenic - Candidate list
PBT	OSPAR - Priority PBTs & EDs & equivalent concern			PBT - Chemical for Priority Action
PBT	OR DEQ - Priority Persistent Pollutants			Priority Persistent Pollutant - Tier 1
ACUTE AQUATIC	EU - GHS (H-Statements)			H400 - Very toxic to aquatic life
CHRON AQUATIC	EU - GHS (H-Statements)			H410 - Very toxic to aquatic life with long lasting effects
MAMMALIAN	EU - GHS (H-Statements)			H330 - Fatal if inhaled
GENE MUTATION	EU - GHS (H-Statements)			H341 - Suspected of causing genetic defects
CANCER	EU - GHS (H-Statements)			H350 - May cause cancer
REPRODUCTIVE	EU - GHS (H-Statements)			H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child
ORGAN TOXICANT	EU - GHS (H-Statements)			H372 - Causes damage to organs through prolonged or repeated exposure
CANCER	EU - REACH Annex XVII CMRs			Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man
MULTIPLE	ChemSec - SIN List			CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
ENDOCRINE	TEDX - Potential Endocrine Disruptors			Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters			Class 3 - Severe Hazard to Waters
CANCER	MAK			Carcinogen Group 1 - Substances that cause cancer in man
CANCER	Korea - GHS			Carcinogenicity - Category 1 [H350 - May cause cancer]
CANCER	EU - Annex VI CMRs			Carcinogen Category 1B - Presumed Carcinogen based on animal evidence

GENE MUTATION	New Zealand - GHS	6.6A - Known or presumed human mutagens
CANCER	New Zealand - GHS	6.7A - Known or presumed human carcinogens
REPRODUCTIVE	New Zealand - GHS	6.8A - Known or presumed human reproductive or developmental toxicants
GENE MUTATION	MAK	Germ Cell Mutagen 3a
CANCER	Malaysia - GHS	H350 - May cause cancer
CANCER	Australia - GHS	H350 - May cause cancer
CANCER	Japan - GHS	Carcinogenicity - Category 1A
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air

SUBSTANCE NOTES: See Residuals and Impurities Notes.

CHROMIUM (CHROMIUM)

ID: 7440-47-3

%: **0.0000 - 0.6000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Alloying element and Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
RESPIRATORY	AOEC - Asthmagens	Asthmagens (ARs) - sensitizer-induced - inhalable forms only
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: Chromium is an alloying element in carbon steel as well as a residual coming from the passivation surface treatment of galvanneal steel sheets. See all material notes for further details.

WELDING MATERIAL

%: **3.8000**

HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities not identified by manufacturer.

OTHER MATERIAL NOTES: The welding material used for the welding process is a carbon steel-based wire.

IRON (IRON)

ID: 7439-89-6

%: **97.6400** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Main element**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: See Other Material Notes.

MANGANESE (MANGANESE)

ID: 7439-96-5

%: 1.4400	GS: LT-P1	RC: None	NANO: No	ROLE: Alloying element
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HAZARDS:	AGENCY(IES) WITH WARNINGS:
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ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
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MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
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REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1B
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SUBSTANCE NOTES: See Other Material Notes.

SILICON (SILICON)

ID: 7440-21-3

%: 0.8200	GS: LT-UNK	RC: None	NANO: No	ROLE: Alloying element
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HAZARDS:	AGENCY(IES) WITH WARNINGS:
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None Found	No warnings found on HPD Priority lists
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SUBSTANCE NOTES: See Other Material Notes.

CARBON (CARBON)

ID: 7440-44-0

%: 0.0650	GS: LT-UNK	RC: None	NANO: No	ROLE: Alloying element
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HAZARDS:	AGENCY(IES) WITH WARNINGS:
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None Found	No warnings found on HPD Priority lists
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SUBSTANCE NOTES: See Other Material Notes.

SULFUR (SULFUR)

ID: 7704-34-9

%: 0.0150	GS: LT-UNK	RC: None	NANO: No	ROLE: Alloying element
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HAZARDS:	AGENCY(IES) WITH WARNINGS:
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SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
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SUBSTANCE NOTES: See Other Material Notes.

COPPER (COPPER)

ID: 7440-50-8

%: 0.0120	GS: LT-UNK	RC: None	NANO: No	ROLE: Alloying element
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HAZARDS:	AGENCY(IES) WITH WARNINGS:
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None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Other Material Notes.

PHOSPHORUS (PHOSPHORUS)

ID: 7723-14-0

#: **0.0080** GS: **BM-2** RC: **None** NANO: **No** ROLE: **Alloying element**

HAZARDS: AGENCY(IES) WITH WARNINGS:

MAMMALIAN US EPA - EPCRA Extremely Hazardous Substances Extremely Hazardous Substances

PHYSICAL HAZARD (REACTIVE) EU - GHS (H-Statements) H228 - Flammable solid

SUBSTANCE NOTES: See Other Material Notes.

GALVANIZED STEEL

#: **3.3800**

HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: According to the manufacturer, Lead and Cadmium are present in trace amount, generally inferior to 1 ppm in steel products. These impurities are coming from the sourced iron ore.

OTHER MATERIAL NOTES: Hinges reinforcements and fasteners are made of galvanized steel.

IRON (IRON)

ID: 7439-89-6

#: **77.5000 - 100.0000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Main element**

HAZARDS: AGENCY(IES) WITH WARNINGS:

ENDOCRINE TEDX - Potential Endocrine Disruptors Potential Endocrine Disruptor

SUBSTANCE NOTES: See Other Material Notes.

ZINC (ZINC)

ID: 7440-66-6

#: **0.6000 - 20.0000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Galvanizing element**

HAZARDS: AGENCY(IES) WITH WARNINGS:

ACUTE AQUATIC EU - GHS (H-Statements) H400 - Very toxic to aquatic life

CHRON AQUATIC EU - GHS (H-Statements) H410 - Very toxic to aquatic life with long lasting effects

ENDOCRINE TEDX - Potential Endocrine Disruptors Potential Endocrine Disruptor

MULTIPLE German FEA - Substances Hazardous to Waters Class 2 - Hazard to Waters

PHYSICAL HAZARD (REACTIVE) EU - GHS (H-Statements) H250 - Catches fire spontaneously if exposed to air

SUBSTANCE NOTES: See Other Material Notes. According to the manufacturer, zinc coating weight can be up to 20w% of total steel weight. Since we do not have specific data, we are using the full range of 0.6% (15 g/m² per face) to 20% (500 g/m² per face).

MANGANESE (MANGANESE)ID: **7439-96-5**

#: **0.0000 - 1.8000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Alloying element**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

REPRODUCTIVE

Japan - GHS

Toxic to reproduction - Category 1B

SUBSTANCE NOTES: See Other Material Notes.

CHROMIUM (CHROMIUM)ID: **7440-47-3**

#: **0.0000 - 0.5000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Alloying element**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

RESPIRATORY

AOEC - Asthmagens

Asthmagen (ARs) - sensitizer-induced - inhalable forms only

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SKIN SENSITIZE

MAK

Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: See Other Material Notes.

NICKEL (NICKEL)ID: **7440-02-0**

#: **0.0000 - 0.2000** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Alloying element**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

IARC

Group 1 - Agent is Carcinogenic to humans

CANCER

IARC

Group 2b - Possibly carcinogenic to humans

CANCER

CA EPA - Prop 65

Carcinogen

CANCER

US CDC - Occupational Carcinogens

Occupational Carcinogen

CANCER

US NIH - Report on Carcinogens

Reasonably Anticipated to be Human Carcinogen

RESPIRATORY

AOEC - Asthmagens

Asthmagen (ARs) - sensitizer-induced - inhalable forms only

SKIN SENSITIZE

EU - GHS (H-Statements)

H317 - May cause an allergic skin reaction

CANCER	EU - GHS (H-Statements)	H351 - Suspected of causing cancer
ORGAN TOXICANT	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
RESPIRATORY	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES: See Other Material Notes.

LEAD (LEAD)

ID: 7439-92-1

%: Impurity/Residual	GS: LT-1	RC: None	NANO: No	ROLE: Impurity/Residual
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
MAMMALIAN	EU - R-phrases			R20 - Harmful by Inhalation (gas or vapor or dust/mist)
DEVELOPMENTAL	EU - R-phrases			R61 - May cause harm to the unborn child
DEVELOPMENTAL	G&L - Neurotoxic Chemicals			Developmental Neurotoxicant
CANCER	US EPA - IRIS Carcinogens			(1986) Group B2 - Probable human Carcinogen
CANCER	IARC			Group 2a - Agent is probably Carcinogenic to humans
CANCER	IARC			Group 2b - Possibly carcinogenic to humans
CANCER	CA EPA - Prop 65			Carcinogen
DEVELOPMENTAL	CA EPA - Prop 65			Developmental toxicity
PBT	US EPA - Priority PBTs (NWMP)			Priority PBT
PBT	WA DoE - PBT			PBT
REPRODUCTIVE	CA EPA - Prop 65			Reproductive Toxicity - Female
REPRODUCTIVE	CA EPA - Prop 65			Reproductive Toxicity - Male
CANCER	US NIH - Report on Carcinogens			Reasonably Anticipated to be Human Carcinogen
PBT	US EPA - Priority PBTs (PPT)			Priority PBT
PBT	US EPA - Toxics Release Inventory PBTs			PBT
PBT	OSPAR - Priority PBTs & EDs & equivalent concern			PBT - Chemical for Priority Action
PBT	OR DEQ - Priority Persistent Pollutants			Priority Persistent Pollutant - Tier 1
DEVELOPMENTAL	US NIH - Reproductive & Developmental Monographs			Clear Evidence of Adverse Effects - Developmental Toxicity
REPRODUCTIVE	US NIH - Reproductive & Developmental Monographs			Clear Evidence of Adverse Effects - Reproductive Toxicity
ACUTE AQUATIC	EU - GHS (H-Statements)			H400 - Very toxic to aquatic life
CHRON AQUATIC	EU - GHS (H-Statements)			H410 - Very toxic to aquatic life with long lasting effects

DEVELOPMENTAL	EU - GHS (H-Statements)	H360Df - May damage the unborn child. Suspected of damaging fertility
REPRODUCTIVE	EU - GHS (H-Statements)	H360FD - May damage fertility. May damage the unborn child
DEVELOPMENTAL	EU - GHS (H-Statements)	H362 - May cause harm to breast-fed children
REPRODUCTIVE	EU - REACH Annex XVII CMRs	Toxic to Reproduction Category 1 - Substances known to impair fertility or cause Developmental Toxicity in humans
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
REPRODUCTIVE	New Zealand - GHS	6.8A - Known or presumed human reproductive or developmental toxicants
REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1A
GENE MUTATION	MAK	Germ Cell Mutagen 3a
REPRODUCTIVE	EU - Annex VI CMRs	Reproductive Toxicity - Category 1A
CANCER	Korea - GHS	Carcinogenicity - Category 1 [H350 - May cause cancer]
REPRODUCTIVE	Korea - GHS	Reproductive toxicity - Category 1 [H360 - May damage fertility or the unborn child]

SUBSTANCE NOTES: See Residuals and Impurities Notes.

CADMIUM (CADMIUM)

ID: 7440-43-9

#: Impurity/Residual	GS: LT-1	RC: None	NANO: No	ROLE: Impurity/Residual
HAZARDS:	AGENCY(IES) WITH WARNINGS:			
CANCER	US EPA - IRIS Carcinogens			(1986) Group B1 - Probable human Carcinogen
CANCER	IARC			Group 1 - Agent is Carcinogenic to humans
CANCER	CA EPA - Prop 65			Carcinogen
DEVELOPMENTAL	CA EPA - Prop 65			Developmental toxicity
PBT	US EPA - Priority PBTs (NWMP)			Priority PBT
REPRODUCTIVE	CA EPA - Prop 65			Reproductive Toxicity - Male
CANCER	US CDC - Occupational Carcinogens			Occupational Carcinogen
CANCER	US NIH - Report on Carcinogens			Known to be a human Carcinogen
CANCER	EU - SVHC Authorisation List			Carcinogenic - Candidate list
PBT	OSPAR - Priority PBTs & EDs & equivalent concern			PBT - Chemical for Priority Action
PBT	OR DEQ - Priority Persistent Pollutants			Priority Persistent Pollutant - Tier 1
ACUTE AQUATIC	EU - GHS (H-Statements)			H400 - Very toxic to aquatic life

CHRON AQUATIC	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
MAMMALIAN	EU - GHS (H-Statements)	H330 - Fatal if inhaled
GENE MUTATION	EU - GHS (H-Statements)	H341 - Suspected of causing genetic defects
CANCER	EU - GHS (H-Statements)	H350 - May cause cancer
REPRODUCTIVE	EU - GHS (H-Statements)	H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child
ORGAN TOXICANT	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure
CANCER	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CANCER	Korea - GHS	Carcinogenicity - Category 1 [H350 - May cause cancer]
CANCER	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
GENE MUTATION	New Zealand - GHS	6.6A - Known or presumed human mutagens
CANCER	New Zealand - GHS	6.7A - Known or presumed human carcinogens
REPRODUCTIVE	New Zealand - GHS	6.8A - Known or presumed human reproductive or developmental toxicants
GENE MUTATION	MAK	Germ Cell Mutagen 3a
CANCER	Malaysia - GHS	H350 - May cause cancer
CANCER	Australia - GHS	H350 - May cause cancer
CANCER	Japan - GHS	Carcinogenicity - Category 1A
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air

SUBSTANCE NOTES: See Residuals and Impurities Notes.

GALVANNEALED STEEL #2

%: 0.4700

HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: Information from manufacturer not available.

OTHER MATERIAL NOTES: Strike reinforcement is made of another galvanized steel. The galvanneal coating was estimated at 10w% max of total steel sheet weight.

STEEL (STEEL)

ID: 12597-69-2

%: 90.0000 - 100.0000

GS: NoGS

RC: None

NANO: No

ROLE: Main material

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: See Other Material Notes.

ZINC (ZINC)

ID: 7440-66-6

#: 0.0000 - 9.0000 GS: LT-P1 RC: None NANO: No ROLE: Galvanneal coating

HAZARDS: AGENCY(IES) WITH WARNINGS:

ACUTE AQUATIC EU - GHS (H-Statements) H400 - Very toxic to aquatic life

CHRON AQUATIC EU - GHS (H-Statements) H410 - Very toxic to aquatic life with long lasting effects

ENDOCRINE TEDX - Potential Endocrine Disruptors Potential Endocrine Disruptor

MULTIPLE German FEA - Substances Hazardous to Waters Class 2 - Hazard to Waters

PHYSICAL HAZARD (REACTIVE) EU - GHS (H-Statements) H250 - Catches fire spontaneously if exposed to air

PHYSICAL HAZARD (REACTIVE) EU - GHS (H-Statements) H260 - In contact with water releases flammable gases which may ignite spontaneously

SUBSTANCE NOTES: See Other Material Notes.

IRON (IRON)

ID: 7439-89-6

#: 0.0000 - 1.0000 GS: LT-P1 RC: None NANO: No ROLE: Galvanneal coating

HAZARDS: AGENCY(IES) WITH WARNINGS:

ENDOCRINE TEDX - Potential Endocrine Disruptors Potential Endocrine Disruptor

SUBSTANCE NOTES: See Other Material Notes.

PAINT

#: 0.0000 - 0.1000

HPD URL: N/A

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: Residuals or impurities not identified by manufacturer.

OTHER MATERIAL NOTES: Water-based acrylic paint for metal products. Only ingredients presented in the SDS are disclosed in the HPD given that the amount of paint is below the disclosure threshold (1,000 ppm).

BUTOXYPROPANOL (BUTOXYPROPANOL)

ID: 5131-66-8

#: 1.0000 - 5.0000 GS: LT-UNK RC: None NANO: No ROLE: Ingredient

HAZARDS:	AGENCY (IES) WITH WARNINGS:	
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation

SUBSTANCE NOTES: See Other Material Notes.

TITANIUM DIOXIDE (TITANIUM DIOXIDE)

ID: 13463-67-7

HAZARDS:	AGENCY (IES) WITH WARNINGS:	
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CANCER	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CANCER	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value

SUBSTANCE NOTES: See Other Material 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	CPDH Standard Method - Not tested		
CERTIFYING PARTY: Self-declared	ISSUE DATE: 2017-12-	EXPIRY DATE:	CERTIFIER OR LAB: -
APPLICABLE FACILITIES: -	01		
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.

No accessories are required for this product.

Section 5: General Notes

This HPD does not cover steel frames with thermal breakage.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **MÉTALEC**
ADDRESS: **2150, rue Léon-Hamel**
Quebec City Quebec G1N 4L2, Canada
WEBSITE: **www.metalec.com**

CONTACT NAME: **Claude Harton**
TITLE: **General Manager**
PHONE: **1-877-683-2431**
EMAIL: **charton@metalec.com**

KEY

OSHA MSDS Occupational Safety and Health Administration Material Safety Data Sheet
GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Hazard Types

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

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-P1 List Translator Possible Benchmark 1
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-1 List Translator Likely Benchmark 1
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS Unknown (no data on List Translator Lists)
BM-U Benchmark Unspecified (insufficient data to benchmark)	

Recycled Types

PreC Preconsumer (Post-Industrial)
PostC Postconsumer
Both Both Preconsumer and Postconsumer
Unk Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms

Inventory Methods:

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

Nano Composed of nano scale particles or nanotechnology

Third Party Verified Verification by independent certifier approved by HPDC

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

Applicable facilities Manufacturing sites to which testing applies

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

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

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

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

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.