

HPD UNIQUE IDENTIFIER: 26129

CLASSIFICATION: 08 11 00 Metal Doors and Frames

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 5 3/4". 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	Threshold level	Residuals/Impurities	<i>All Substances Above the Threshold Indicated Are:</i>
<input checked="" type="radio"/> Nested Materials Method	<input type="radio"/> 100 ppm	Residuals/Impurities	Characterized <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No
<input type="radio"/> Basic Method	<input checked="" type="radio"/> 1,000 ppm	Considered in 3 of 5 Materials	% weight and role provided for all substances.
Threshold Disclosed Per	<input type="radio"/> Per GHS SDS	Explanation(s) provided	Screened <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No
<input type="radio"/> Material	<input type="radio"/> Other	for Residuals/Impurities?	<i>All substances screened using Priority Hazard Lists with results disclosed.</i>
<input checked="" type="radio"/> Product		<input checked="" type="radio"/> Yes <input type="radio"/> No	Identified <input type="radio"/> Yes Ex/SC <input checked="" type="radio"/> Yes <input type="radio"/> No
			<i>All substances disclosed by Name (Specific or Generic) and Identifier.</i>

**CONTENT IN DESCENDING ORDER OF QUANTITY**

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

**MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY**

**GREENSCREEN SCORE | HAZARD TYPE**

**GALVANNEALED STEEL (STEEL FRAME) [ IRON (IRON) LT-P1 | END CHROMIUM (CHROMIUM) LT-P1 | END | SKI | RES NICKEL (NICKEL) LT-1 | CAN | RES | MUL | SKI | MAM MANGANESE (MANGANESE) LT-P1 | END | MUL | REP ZINC (ZINC) LT-P1 | END | MUL | AQU | PHY ] 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 MOLYBDENUM LT-UNK COPPER (COPPER) LT-UNK PHOSPHORUS (PHOSPHORUS) BM-2 | MAM | PHY ZIRCONIUM LT-UNK | RES | PHY TITANIUM LT-UNK ALUMINUM BM-1 | END | RES | PHY ] GALVANNEALED STEEL (REINFORCEMENTS) [ IRON (IRON) LT-P1 | END ZINC (ZINC) LT-P1 | END | MUL | AQU | PHY NICKEL (NICKEL) LT-1 | CAN | RES | MUL | SKI | MAM CHROMIUM (CHROMIUM) LT-P1 | END | SKI | RES MANGANESE (MANGANESE) LT-P1 | END | MUL | REP ] GALVANNEALED STEEL (STRIKE REINFORCEMENT) [ IRON (IRON) LT-P1 | END CHROMIUM (CHROMIUM) LT-P1 | END | SKI | RES NICKEL (NICKEL) LT-1 | CAN | RES | MUL | SKI | MAM MANGANESE (MANGANESE) LT-P1 | END | MUL | REP ZINC (ZINC) LT-P1 | END | MUL | AQU | PHY ] PAINT [ TITANIUM DIOXIDE (TITANIUM DIOXIDE) LT-1 | CAN | END BUTOXYPROPANOL (BUTOXYPROPANOL) LT-UNK | SKI | EYE ]**

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

Contents highest concern GreenScreen

Benchmark or List translator Score ... BM-1

Nanomaterial ... No

**INVENTORY AND SCREENING NOTES:**

Special Conditions materials are present in the product: metal alloy material. Guidelines for reporting Metals (SCMetalAlloy/2020-08-06) were followed even though they are not yet in effect. The full metal alloy composition were reported.

**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: Vertima

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2021-09-23

PUBLISHED DATE: 2021-09-23

EXPIRY DATE: 2024-09-23

## 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 2.2, available on the HPDC website at: [www.hpdc-collaborative.org/hpd-2-2-standard](http://www.hpdc-collaborative.org/hpd-2-2-standard)

### GALVANNEALED STEEL (STEEL FRAME)

#: 92.3400

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

MATERIAL TYPE: Metal

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/m<sup>2</sup> per side.

OTHER MATERIAL NOTES: 18 Ga galvanized carbon steel sheets with a passivation surface treatment.

### IRON (IRON)

ID: 7439-89-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-09-23 12:28:00

#: 88.3000 - 100.0000 GS: LT-P1 RC: Both NANO: No SUBSTANCE ROLE: Structure component

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	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 0.14 to 1.2 wt.% in the final galvanized sheet. Steel may contain 22% pre consumer recycled content and 34% post consumer recycled content. Percent weight interval is used to cover product variability.

### CHROMIUM (CHROMIUM)

ID: 7440-47-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-09-23 12:28:10

#: 0.0000 - 0.6500 GS: LT-P1 RC: None NANO: No SUBSTANCE ROLE: Alloy element

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES: Chromium is an alloying element in carbon steel as well as a residual coming from the passivation surface treatment of galvanized steel sheets. See all material notes for further details. Percent weight interval is used to cover product variability.

### NICKEL (NICKEL)

ID: 7440-02-0

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-09-23 12:28:11

#: 0.0000 - 0.2500 GS: LT-1 RC: None NANO: No SUBSTANCE ROLE: Alloy element

HAZARD TYPE	AGENCY AND LIST TITLES	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
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
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
SKI	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction [Skin sensitization - Category 1]
CAN	EU - GHS (H-Statements)	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]

SUBSTANCE NOTES: Percent weight interval is used to cover product variability.

### MANGANESE (MANGANESE)

ID: 7439-96-5

HAZARD TYPE	AGENCY AND LIST TITLES	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]

SUBSTANCE NOTES: Percent weight interval is used to cover product variability.

### ZINC (ZINC)

ID: 7440-66-6

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b> HAZARD SCREENING DATE: <b>2021-09-23 12:28:12</b>		
HAZARD TYPE	AGENCY AND LIST TITLES	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]

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-09-23 12:28:12**

GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Galvanizing**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
AQU	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
PHY	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
PHY	EU - GHS (H-Statements)	H260 - In contact with water releases flammable gases which may ignite spontaneously [Substances and mixtures which, in contact with water, emit flammable gases - Category 1]

SUBSTANCE NOTES: Galvanneal is composed of 88% zinc and 11% iron according to the manufacturer. Percent weight interval is used to cover product variability.

#### WELDING MATERIAL

%: 3.8000

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

MATERIAL TYPE: Metal

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

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2021-09-23 12:27:59

%: 90.0000 - 100.0000

GS: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Structure component

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: Percent weight interval is used to cover product variability and keep exact material composition confidential.

#### MANGANESE (MANGANESE)

ID: 7439-96-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2021-09-23 12:28:02

%: 1.4000 - 1.9000

GS: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Alloy element

HAZARD TYPE	AGENCY AND LIST TITLES	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]

SUBSTANCE NOTES: Percent weight interval is used to cover product variability and keep exact material composition confidential.

**SILICON (SILICON)**

ID: 7440-21-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-09-23 12:28:03**%: **0.8000 - 1.2000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Alloy element**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Percent weight interval is used to cover product variability and keep exact material composition confidential.

**CARBON (CARBON)**

ID: 7440-44-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-09-23 12:28:04**%: **0.1000 - 0.2000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Alloy element**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Percent weight interval is used to cover product variability and keep exact material composition confidential.

**SULFUR (SULFUR)**

ID: 7704-34-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-09-23 12:28:13**%: **0.0000 - 0.1000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Alloy element**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKI	EU - GHS (H-Statements)	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]

SUBSTANCE NOTES: Percent weight interval is used to cover product variability and keep exact material composition confidential.

**MOLYBDENUM**

ID: 7439-98-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-09-21 21:25:48**%: **0.0000 - 0.3000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Alloy element**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Percent weight interval is used to cover product variability and keep exact material composition confidential.

**COPPER (COPPER)**

ID: 7440-50-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-09-23 12:28:13**%: **0.0000 - 0.5000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Alloy element**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Percent weight interval is used to cover product variability and keep exact material composition confidential.

**PHOSPHORUS (PHOSPHORUS)**

ID: 7723-14-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-09-23 12:28:12**%: **0.0000 - 0.1000** GS: **BM-2** RC: **None** NANO: **No** SUBSTANCE ROLE: **Alloy element**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
MAM	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances
PHY	EU - GHS (H-Statements)	H228 - Flammable solid [Flammable solids - Category 1 or 2]

SUBSTANCE NOTES: Percent weight interval is used to cover product variability and keep exact material composition confidential.

**ZIRCONIUM**

ID: 7440-67-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-09-21 21:28:06**%: **0.0000 - 0.1000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Alloy element**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
PHY	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
PHY	EU - GHS (H-Statements)	H260 - In contact with water releases flammable gases which may ignite spontaneously [Substances and mixtures which, in contact with water, emit flammable gases - Category 1]

SUBSTANCE NOTES: Percent weight interval is used to cover product variability and keep exact material composition confidential.

**TITANIUM**

ID: 7440-32-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-09-21 21:26:50**%: **0.0000 - 0.1000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Alloy element**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Percent weight interval is used to cover product variability and keep exact material composition confidential.

**ALUMINUM**

ID: 7429-90-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-09-21 21:26:19**%: **0.0000 - 0.1000** GS: **BM-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Alloy element**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
-------------	------------------------	----------

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
PHY	EU - GHS (H-Statements)	H228 - Flammable solid [Flammable solids - Category 1 or 2]
PHY	EU - GHS (H-Statements)	H261 - In contact with water releases flammable gases [Substances and mixtures which, in contact with water, emit flammable gases - Category 2 or 3]

SUBSTANCE NOTES: Percent weight interval is used to cover product variability and keep exact material composition confidential.

### GALVANNEALED STEEL (REINFORCEMENTS)

#: 3.3800

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

MATERIAL TYPE: Metal

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. The surface is passivated (dry). Surface treatment is less than 0.5% of the part weight; hence below the declaration threshold.

OTHER MATERIAL NOTES: Lock and hinges reinforcement are made of galvaneal steel.

### IRON (IRON)

ID: 7439-89-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-09-23 12:28:01

#: 87.8000 - 100.0000

GS: LT-P1

RC: Both

NANO: No

SUBSTANCE ROLE: Structure component

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: See Other Material Notes. Steel may contain 14-22% pre consumer recycled content and 19-34% post consumer recycled content. Percent weight interval is used to cover product variability.

### ZINC (ZINC)

ID: 7440-66-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-09-23 12:28:10

#: 0.0000 - 8.8000

GS: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Galvanizing



HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
AQU	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
PHY	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
PHY	EU - GHS (H-Statements)	H260 - In contact with water releases flammable gases which may ignite spontaneously [Substances and mixtures which, in contact with water, emit flammable gases - Category 1]

SUBSTANCE NOTES: See Other Material Notes. According to the manufacturer, zinc coating weight can be up to 10w% of total steel weight. Since we do not have specific data, we are using the full range of 0% to 10%. Percent weight interval is used to cover product variability.

## NICKEL (NICKEL)

ID: 7440-02-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-09-23 12:28:09**

?: **0.0000 - 0.2000**

GS: **LT-1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Alloy element**

HAZARD TYPE	AGENCY AND LIST TITLES	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
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
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
SKI	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction [Skin sensitization - Category 1]
CAN	EU - GHS (H-Statements)	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]

SUBSTANCE NOTES: Percent weight interval is used to cover product variability.

### CHROMIUM (CHROMIUM)

ID: 7440-47-3

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2021-09-23 12:28:08</b>		
#: <b>0.0000 - 0.6000</b>	GS: <b>LT-P1</b>	RC: <b>None</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Alloy element</b>
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor		
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization		
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced		

SUBSTANCE NOTES: Percent weight interval is used to cover product variability.

### MANGANESE (MANGANESE)

ID: 7439-96-5

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2021-09-23 12:28:08</b>		
#: <b>0.0000 - 2.1000</b>	GS: <b>LT-P1</b>	RC: <b>None</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Alloy element</b>

HAZARD TYPE	AGENCY AND LIST TITLES	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]

SUBSTANCE NOTES: Percent weight interval is used to cover product variability.  
**GALVANNEALED STEEL (STRIKE REINFORCEMENT)** %: 0.4700

PRODUCT THRESHOLD: 1000 ppm RESIDUALS AND IMPURITIES CONSIDERED: Yes MATERIAL TYPE: Metal

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

### IRON (IRON)

ID: 7439-89-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-09-23 12:28:00**

%: **88.3000 - 100.0000** GS: **LT-P1** RC: **Both** NANO: **No** SUBSTANCE ROLE: **Structure component**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	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. Steel may contain 22% pre consumer recycled content and 34% post consumer recycled content. Percent weight interval is used to cover product variability.

### CHROMIUM (CHROMIUM)

ID: 7440-47-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-09-21 21:19:15**

%: **0.0000 - 0.6500** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Alloy element**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SKI	MAK	Sensitizing Substance Sh - Danger of skin sensitization
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced

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. Percent weight interval is used to cover product variability.

### NICKEL (NICKEL)

ID: 7440-02-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-09-21 21:19:14**

%: **0.0000 - 0.2500** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Alloy element**

HAZARD TYPE	AGENCY AND LIST TITLES	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
RES	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
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
SKI	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction [Skin sensitization - Category 1]
CAN	EU - GHS (H-Statements)	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]

SUBSTANCE NOTES: Percent weight interval is used to cover product variability.

### MANGANESE (MANGANESE)

ID: 7439-96-5

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2021-09-21 21:19:14</b>		
#: <b>0.0000 - 2.2000</b>	GS: <b>LT-P1</b>	RC: <b>None</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Alloy element</b>
HAZARD TYPE	AGENCY AND LIST TITLES	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]		

SUBSTANCE NOTES: Percent weight interval is used to cover product variability.

### ZINC (ZINC)

ID: 7440-66-6

HAZARD SCREENING METHOD: <b>Pharos Chemical and Materials Library</b>		HAZARD SCREENING DATE: <b>2021-09-21 21:19:13</b>		
#: <b>0.0000 - 8.8000</b>	GS: <b>LT-P1</b>	RC: <b>None</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Galvanizing</b>

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
AQU	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
PHY	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air [Pyrophoric liquids; Pyrophoric solids - Category 1]
PHY	EU - GHS (H-Statements)	H260 - In contact with water releases flammable gases which may ignite spontaneously [Substances and mixtures which, in contact with water, emit flammable gases - Category 1]

**PAINT** SUBSTANCE NOTES: Galvanneal is composed of 88% zinc and 11% iron according to the manufacturer. Percent weight interval is used to cover product variability.

PRODUCT THRESHOLD: 1000 ppm      RESIDUALS AND IMPURITIES CONSIDERED: No      MATERIAL TYPE: Polymeric Material

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).

**TITANIUM DIOXIDE (TITANIUM DIOXIDE)**

ID: 13463-67-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-09-23 12:28:03**

#: **1.0000 - 10.0000** GS: **LT-1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Pigment**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources
CAN	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
CAN	EU - GHS (H-Statements)	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]

SUBSTANCE NOTES: Percent weight interval is used to cover product variability and keep exact material composition confidential.

**BUTOXYPROPANOL (BUTOXYPROPANOL)**

ID: 5131-66-8

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2021-09-23 12:28:02**

#: **1.0000 - 5.0000** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Solvent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKI	EU - GHS (H-Statements)	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
EYE	EU - GHS (H-Statements)	H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]

SUBSTANCE NOTES: Percent weight interval is used to cover product variability and keep exact material composition confidential.

### 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: 2021-09-	EXPIRY DATE:	CERTIFIER OR LAB: -
APPLICABLE FACILITIES: -	21		
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.

**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**

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

**KEY**

**Hazard Types**

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

**GreenScreen (GS)**

<b>BM-4</b> Benchmark 4 (prefer-safer chemical)	<b>LT-1</b> List Translator 1 (Likely Benchmark-1)
<b>BM-3</b> Benchmark 3 (use but still opportunity for improvement)	<b>LT-UNK</b> List Translator Benchmark Unknown (the chemical is present on at least one GreenScreen Specified List, but the information contained within the list did not result in a clear mapping to a LT-1 or LTP1 score.)
<b>BM-2</b> Benchmark 2 (use but search for safer substitutes)	<b>NoGS</b> No GreenScreen.
<b>BM-1</b> Benchmark 1 (avoid - chemical of high concern)	
<b>BM-U</b> Benchmark Unspecified (due to insufficient data)	
<b>LT-P1</b> List Translator Possible 1 (Possible Benchmark-1)	

**Recycled Types**

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

**Other Terms:**

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

**Inventory Methods:**

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

**Nano** Composed of nano scale particles or nanotechnology  
**Third Party Verified** Verification by independent certifier approved by HPDC  
**Preparer** Third party preparer, if not self-prepared by manufacturer  
**Applicable facilities** Manufacturing sites to which testing applies

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

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

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

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

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