

CLASSIFICATION: 09 097 13.23 Finishes: Exterior Steel Coatings

created via: HPD Fillable Form

**PRODUCT DESCRIPTION:** Hot-dip galvanizing is the process of immersing steel in molten zinc. There are three types of zinc run in galvanizing kettles in North America. This HPD covers Prime Western Zinc, which is comprised of 98% zinc metal. When applied to the steel product, the zinc coating will account for approximately 2% of the final material weight. This HPD takes into account the 2% zinc coating as well as the base steel - making it a complete HPD for a hot-dip galvanized steel product processed in a kettle with prime western zinc.

 **Section 1: Summary**

**Basic Method/Product Threshold**

**CONTENT INVENTORY**

<b>Inventory Reporting Format</b>	<b>Threshold Level</b>	<b>Residuals/Impurities</b>	<i>Are All Substances Above the Threshold Indicated:</i>
<input type="radio"/> Nested Materials Method	<input type="radio"/> 100 ppm	<input checked="" type="radio"/> Considered	<b>Characterized</b> <input checked="" type="radio"/> Yes <input type="radio"/> No
<input checked="" type="radio"/> Basic Method	<input type="radio"/> 1,000 ppm	<input type="radio"/> Partially Considered	<i>Percent Weight and Role Provided?</i>
<b>Threshold Disclosed Per</b>	<input checked="" type="radio"/> Per GHS SDS	<input type="radio"/> Not Considered	<b>Screened</b> <input checked="" type="radio"/> Yes <input type="radio"/> No
<input checked="" type="radio"/> Material	<input type="radio"/> Per OSHA MSDS	Explanation(s) provided for Residuals/Impurities?	<i>Using Priority Hazard Lists with Results Disclosed?</i>
<input type="radio"/> Product	<input type="radio"/> Other	<input checked="" type="radio"/> Yes <input type="radio"/> No	<b>Identified</b> <input checked="" type="radio"/> Yes <input type="radio"/> No
			<i>Name and Identifier Provided?</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.

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

Steel, 98% - UNK, Not found on HPD Priority List  
 Zinc, 2% - UNK, Not found on HPD Priority List

Number of Greenscreen BM-4/BM-3 contents: UNK  
 Contents highest concern GreenScreen Benchmark or List translator Score: UNK  
 Nanomaterial: No contents are characterized as a nanomaterial

**INVENTORY AND SCREENING NOTES:**

Hot-dip galvanized coating comprises approximately only 2% of the final material weight. This HPD takes into account the 2% of Prime Western zinc coating as well as the base steel.

**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: N/A

**CONSISTENCY WITH OTHER PROGRAMS**  
 N/A

<b>Third Party Verified?</b>	<b>PREPARER:</b>	<b>SCREENING DATE:</b>
<input type="radio"/> Yes	<b>VERIFIER:</b>	<b>PUBLISHED DATE:</b>
<input checked="" type="radio"/> No	<b>VERIFICATION #:</b>	<b>EXPIRY DATE:</b>



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.hpdc-collaborative.org/hpd-2-1-standard](http://www.hpdc-collaborative.org/hpd-2-1-standard)

Hot-Dip Galvanized Steel -Prime Western Zinc

PRODUCT THRESHOLD: per GHS SDS

RESIDUALS AND IMPURITIES CONSIDERED: Considered

RESIDUALS/IMPURITIES NOTES:

Zinc per ASTM B 6 is the primary material used in the coating for hot-dip galvanized steel. Impurities are noted in ASTM B6.

OTHER PRODUCT NOTES:

Steel is the base material for the hot-dip galvanized coating.

Steel

ID: 12597-69-2

%: 98 GS: UNK RC: UNK NANO: No ROLE: Base

HAZARDS: None Found AGENCY(IES) WITH WARNINGS: No warnings found on the HPD Priority Lists

SUBSTANCE NOTES:

Steel is the most recycled material in the world. The Steel Recycling Institute reports 56.9% post-consumer recycled content and 31.4% pre-consumer recycled content. <https://ssabwebsitecdn.azureedge.net/-/media/files/en/americas/025-safety-data-sheet--steel-tube-structural-sds--ssab002-102018.pdf?m=20181107141843>

Prime Western Zinc

ID: 7440-66-6

%: 2 GS: UNK RC: UNK NANO: No ROLE: Coating

HAZARDS: None AGENCY(IES) WITH WARNINGS: No warnings found on the HPD Priority Lists

SUBSTANCE NOTES:

Correct hazard statements if any are listed in the SDS for Prime Western Zinc. General zinc health information can be found at the International Zinc Association's website at <http://www.zinc.org>. <https://www.teck.com/media/Zinc-with-controlled-Lead.pdf>

ID:

%, GS:, RC:, NANO:, ROLE:

HAZARDS: AGENCY(IES) WITH WARNINGS:

SUBSTANCE NOTES:

ID:

%, GS:, RC:, NANO:, ROLE:

HAZARDS: AGENCY(IES) WITH WARNINGS:

SUBSTANCE NOTES:



## Section 3: Certifications and Compliance

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

### VOC Emissions

### Not Applicable - No VOC Emissions

CERTIFYING PARTY:  
CERTIFIER OR LAB:  
APPLICABLE FACILITIES:  
CERTIFICATE URL:  
CERTIFICATION AND COMPLIANCE NOTES:

ISSUE DATE:  
EXPIRY DATE:

### Type of Certification

### Environmental Product Declaration for Hot-Dip Galvanized Structural Steel (LCA)

CERTIFYING PARTY: **Self-Declared**  
CERTIFIER OR LAB: **Underwriters Laboratory (EPD)**  
APPLICABLE FACILITIES: **Member names are available at [www.galvanizeit.org/galvanizers/](http://www.galvanizeit.org/galvanizers/)**  
CERTIFICATE URL:  
CERTIFICATION AND COMPLIANCE NOTES:

ISSUE DATE: **9/22/2016**  
EXPIRY DATE: **9/22/2021**

**Certification is for the Environmental Product Declaration (EPD) for Hot-Dip Galvanized Structural Steel. The EPD covers the Life Cycle Analysis (LCA) of hot-dip galvanizing.**

CERTIFYING PARTY:  
CERTIFIER OR LAB:  
APPLICABLE FACILITIES:  
CERTIFICATE URL:  
CERTIFICATION AND COMPLIANCE NOTES:

ISSUE DATE:  
EXPIRY DATE:

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## 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.*

Not Applicable

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HPD URL:

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:



## Section 5: General Notes



## Section 6: References

### MANUFACTURER INFORMATION

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MANUFACTURER: American Galvanizers Association

CONTACT NAME: Thomas Langill, Ph.D.

ADDRESS:

TITLE: Technical Director

6881 S. Holly Circle, Suite 108  
Centennial, CO 80112

PHONE: 720-361-4486

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WEBSITE: www.galvanizeit.org

### KEY

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**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

<b>AQU</b> Aquatic toxicity	<b>GLO</b> Global warming	<b>PHY</b> Physical Hazard (reactive)
<b>CAN</b> Cancer	<b>MAM</b> Mammalian/systemic/organ toxicity	<b>REP</b> Reproductive toxicity
<b>DEV</b> Developmental toxicity	<b>MUL</b> Multiple hazards	<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>OZO</b> Ozone depletion	<b>LAN</b> Land Toxicity
<b>GEN</b> Gene mutation	<b>PBT</b> Persistent Bioaccumulative Toxic	<b>NF</b> 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)

**UNK** 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

**Nano** Composed of nanoscale particles or nanotechnology

### Declaration Level

**Self-declared** Manufacturer's self-declaration (First Party)

**Independent Lab** Manufacturer's self-declaration using results from an independent lab

**Second Party** Verification by trade association or other interested party

**Third Party** Verification by independent certifier

**Applicable facilities** Manufacturing sites to which testing applies

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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 does not provide an assessment of health impacts throughout the product life cycle. It does not provide an assessment of exposure or risk associated with product handling or use. It also does not address potential health impacts of: (i) substances used or created during the manufacturing process unless they remain in the final product, or (ii) substances created after the product is delivered for end use (e.g., if the product burns, degrades, or otherwise changes chemical composition).

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

A disclosure completed in compliance with the HPD Open Standard is referred to as a "Health Product Declaration," or "HPD." 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 Open Standard noted.

HPD v2.0 created via: