Section 1: Summary

CONTENT INVENTORY

<table>
<thead>
<tr>
<th>Inventory Reporting Format</th>
<th>Threshold Disclosed Per</th>
<th>Residuals/Impurities</th>
<th>Are All Substances Above the Threshold Indicated:</th>
</tr>
</thead>
<tbody>
<tr>
<td>O Nested Materials Method</td>
<td>O Material</td>
<td>O Considered</td>
<td>Yes</td>
</tr>
<tr>
<td>O Basic Method</td>
<td>O Product</td>
<td>O Partially Considered</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Residuals/Impurities:
- Considered
- Partially Considered
- Not Considered

Are All Substances Above the Threshold Indicated:
- Yes
- No

Number of Greenscreen BM-4/BM-3 contents: UNK

Contents highest concern GreenScreen Benchmark or List translator Score: UNK

Nanomaterial:

INVENTORY AND SCREENING NOTES:

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

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 | | | |
Zinc, 2% - UNK | | | |

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

Product Name: Hot-Dip Galvanized Steel - High Grade/Special High Grade Zinc
Health Product Declaration v2.1
created via: HPD Fillable Form

Product Name: Hot-Dip Galvanized Steel - High Grade/Special High Grade Zinc
Health Product Declaration v2.1
created via: HPD Fillable Form
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

### Hot-Dip Galvanized Steel - Special High Grade Zinc

<table>
<thead>
<tr>
<th>PRODUCT THRESHOLD:</th>
<th>RESIDUALS AND IMPURITIES CONSIDERED:</th>
</tr>
</thead>
<tbody>
<tr>
<td>per GHS SDS</td>
<td>Considered</td>
</tr>
</tbody>
</table>

**RESIDUALS/IPURITIES 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.

<table>
<thead>
<tr>
<th>Substance</th>
<th>ID: 12597-69-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td></td>
</tr>
<tr>
<td>%: 98</td>
<td></td>
</tr>
<tr>
<td>HAZARDS:</td>
<td>None Found</td>
</tr>
<tr>
<td>GS: UNK</td>
<td></td>
</tr>
<tr>
<td>RC: UNK</td>
<td></td>
</tr>
<tr>
<td>NANO: No</td>
<td></td>
</tr>
<tr>
<td>ROLE: Base</td>
<td></td>
</tr>
</tbody>
</table>

**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.


### High Grade or Special High Grade Zinc

<table>
<thead>
<tr>
<th>PRODUCT THRESHOLD:</th>
<th>RESIDUALS AND IMPURITIES CONSIDERED:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID: 7440-66-6</td>
<td></td>
</tr>
</tbody>
</table>

**RESIDUALS/IPURITIES NOTES:**
Steel is the base material for the hot-dip galvanized coating.

**OTHER PRODUCT NOTES:**
Steel is the base material for the hot-dip galvanized coating.

<table>
<thead>
<tr>
<th>Substance</th>
<th>ID:</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Grade or Special High Grade Zinc</td>
<td></td>
</tr>
<tr>
<td>%: 2</td>
<td></td>
</tr>
<tr>
<td>HAZARDS:</td>
<td>None</td>
</tr>
<tr>
<td>GS: UNK</td>
<td></td>
</tr>
<tr>
<td>RC: UNK</td>
<td></td>
</tr>
<tr>
<td>NANO: No</td>
<td></td>
</tr>
<tr>
<td>ROLE: Coating</td>
<td></td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:**
Correct hazard statements if any are listed in the SDS for Special High Grade 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-Metal-2018-SDS-.pdf

---

Product Name Hot-Dip Galvanized Steel - High Grade/Special High Grade Zinc
## 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

<table>
<thead>
<tr>
<th>Certifying Party</th>
<th>Issue Date</th>
<th>Expiry Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Applicable - No VOC Emissions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

- **Certifying Party:** Underwriters Laboratory (EPD)
- **Type of Certification:** Self-Declared
- **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.**

- **Member names are available at www.galvanizeit.org/galvanizers/**

---

**Table:**

<table>
<thead>
<tr>
<th>Certifying Party</th>
<th>Issue Date</th>
<th>Expiry Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Table:**

<table>
<thead>
<tr>
<th>Certifying Party</th>
<th>Issue Date</th>
<th>Expiry Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Table:**

<table>
<thead>
<tr>
<th>Certifying Party</th>
<th>Issue Date</th>
<th>Expiry Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Table:**

<table>
<thead>
<tr>
<th>Certifying Party</th>
<th>Issue Date</th>
<th>Expiry Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Table:**

<table>
<thead>
<tr>
<th>Certifying Party</th>
<th>Issue Date</th>
<th>Expiry Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Table:**

<table>
<thead>
<tr>
<th>Certifying Party</th>
<th>Issue Date</th>
<th>Expiry Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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

HPD URL:

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Section 5: General Notes
MANUFACTURER INFORMATION

| MANUFACTURER: | American Galvanizers Association |
| ADDRESS: | 6881 South Holly Circle, Suite 108 Centennial, CO 80112 |
| CONTACT NAME: | Thomas Langill, Ph.D. |
| TITLE: | Technical Director |
| PHONE: | 720-361-4486 |
| EMAIL: | aga@galvanizeit.org |
| WEBSITE: | www.galvanizeit.org |

KEY

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

GreenScreen (GS)

- **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 (insufficient data to benchmark)
- **LT-P1** List Translator Possible Benchmark 1
- **LT-1** List Translator Likely Benchmark 1
- **LT-UNK** List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
- **NoGS** Unknown (no data on List Translator Lists)

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

- **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.