CLASSIFICATION: 07 42 13.00 Thermal and Moisture Protection (insulated water barrier): Insulated Metal Roof Panels

PRODUCT DESCRIPTION: Insulated metal roof panels are comprised of an advanced urethane core sandwiched two pre-finished hot dipped galvanized steel panels, forming a single, all-in-one unit. The result is the most thermally efficient panel available. Finished panels are mounted to the buildings framework - outboard of the structural supports - providing continuous insulation with no thermal bridges for maximum thermal efficiency. Foam-core insulated metal roof panels sold under the Metl-Span brand including: CFR, LS-36 Roof, IBL

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.

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>SUBSTANCE</th>
<th>RESIDUAL OR IMPURITY</th>
<th>GREENSCREEN SCORE</th>
<th>HAZARD TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEEL [STEEL] NGGS</td>
<td>POLYURETHANE FOAMS [POLYURETHANE FOAMS (POLYURETHANE FOAMS) LT-UNK]</td>
<td>ZINC [ZINC (ZINC) LT-P1]</td>
<td>AQU</td>
<td>MUL</td>
</tr>
</tbody>
</table>

VOLATILE ORGANIC COMPOUND (VOC) CONTENT
VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE
VOC emissions: N/A

CONSISTENCY WITH OTHER PROGRAMS
No pre-checks completed or disclosed

Third Party Verified? Yes
PREPARER: Self-Prepared
VERIFIER: 
VERIFICATION #: 
SCREENING DATE: 2017-08-28
PUBLISHED DATE: 2018-01-25
EXPIRY DATE: 2020-08-28
## 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](http://www.hpd-collaborative.org/hpd-2-1-standard)

### STEEL

<table>
<thead>
<tr>
<th>%: 57.5000 - 82.5000</th>
<th>HPD URL:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRODUCT THRESHOLD:</strong> 1000 ppm</td>
<td><strong>RESIDUALS AND IMPURITIES CONSIDERED:</strong> No</td>
</tr>
<tr>
<td><strong>RESIDUALS AND IMPURITIES NOTES:</strong> There are no known residuals or impurities and there are none listed on their MSDS.</td>
<td></td>
</tr>
<tr>
<td><strong>OTHER MATERIAL NOTES:</strong> Galvalume or Galvanized (Hot Dipped) Sheet steel is used.</td>
<td></td>
</tr>
</tbody>
</table>

#### STEEL (STEEL)

<table>
<thead>
<tr>
<th>%: 57.5000 - 82.5000</th>
<th>GS: NoGS</th>
<th>RC: Both</th>
<th>NANO: No</th>
<th>ROLE: Protective barrier of galvanized steel coil</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HAZARDS:</strong> None Found</td>
<td><strong>AGENCY(IES) WITH WARNINGS:</strong> No warnings found on HPD Priority lists</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### POLYURETHANE FOAMS

<table>
<thead>
<tr>
<th>%: 17.0000 - 42.0000</th>
<th>HPD URL:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRODUCT THRESHOLD:</strong> 1000 ppm</td>
<td><strong>RESIDUALS AND IMPURITIES CONSIDERED:</strong> No</td>
</tr>
<tr>
<td><strong>RESIDUALS AND IMPURITIES NOTES:</strong> There are no known residuals or impurities and there are none listed on their MSDS.</td>
<td></td>
</tr>
<tr>
<td><strong>OTHER MATERIAL NOTES:</strong></td>
<td></td>
</tr>
</tbody>
</table>

#### POLYURETHANE FOAMS (POLYURETHANE FOAMS)

<table>
<thead>
<tr>
<th>%: 17.0000 - 42.0000</th>
<th>GS: LT-UNK</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>ROLE: Foam Core</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HAZARDS:</strong> None Found</td>
<td><strong>AGENCY(IES) WITH WARNINGS:</strong> No warnings found on HPD Priority lists</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### ZINC

<table>
<thead>
<tr>
<th>%: 0.2000 - 0.4000</th>
<th>HPD URL:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRODUCT THRESHOLD:</strong> 1000 ppm</td>
<td><strong>RESIDUALS AND IMPURITIES CONSIDERED:</strong> No</td>
</tr>
<tr>
<td><strong>CFR, LS-36, IBL:</strong> hpdrepository.hpd-collaborative.org</td>
<td></td>
</tr>
</tbody>
</table>

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### ZINC (ZINC)

<table>
<thead>
<tr>
<th>%</th>
<th>0.1000 - 0.3000</th>
<th>GS</th>
<th>LT-P1</th>
<th>RC</th>
<th>None</th>
<th>NANO</th>
<th>No</th>
<th>ROLE</th>
<th>Galvanitizion of steel coil</th>
</tr>
</thead>
</table>

**HAZARDS:**

**ACUTE AQUATIC**
- EU - R-phrases: R50 - Very Toxic to Aquatic Organisms
- 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

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

**ENDOCRINE**
- TEDX - Potential Endocrine Disruptors: Potential Endocrine Disruptor

**PHYSICAL HAZARD (REACTIVE)**
- EU - GHS (H-Statements): H250 - Catches fire spontaneously if exposed to air
- EU - GHS (H-Statements): H260 - In contact with water releases flammable gases which may ignite spontaneously

**SUBSTANCE NOTES:**

### TITANIUM DIOXIDE

<table>
<thead>
<tr>
<th>%</th>
<th>0.0900 - 0.1600</th>
</tr>
</thead>
</table>

**PRODUCT THRESHOLD:**
- 1000 ppm

**RESIDUALS AND IMPURITIES CONSIDERED:**
- No

**RESIDUALS AND IMPURITIES NOTES:**
- There are no known residuals or impurities and there are none listed on their MSDS.

**OTHER MATERIAL NOTES:**

### TITANIUM DIOXIDE (TITANIUM DIOXIDE)

<table>
<thead>
<tr>
<th>%</th>
<th>0.0200 - 0.0700</th>
<th>GS</th>
<th>LT-1</th>
<th>RC</th>
<th>None</th>
<th>NANO</th>
<th>No</th>
<th>ROLE</th>
<th>Coil pre-coat component (pigment)</th>
</tr>
</thead>
</table>

**HAZARDS:**

**CANCER**
- US CDC - Occupational Carcinogens: Occupational Carcinogen
- CA EPA - Prop 65: Carcinogen - specific to chemical form or exposure route
- IARC: Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources
- TEDX - Potential Endocrine Disruptors: Potential Endocrine Disruptor
- MAK: Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value
### POLYVINYLIDENE FLUORIDE (1, 1-DIFLUOROETHENE)

**PRODUCT THRESHOLD:** 1000 ppm  
**RESIDUALS AND IMPURITIES CONSIDERED:** No  
**RESIDUALS AND IMPURITIES NOTES:** There are no known residuals or impurities and there are none listed on their MSDS.

**OTHER MATERIAL NOTES:**

<table>
<thead>
<tr>
<th>POLYVINYLIDENE FLUORIDE (1, 1-DIFLUOROETHENE HOMOPOLYMER)</th>
<th>ID: 24937-79-9</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 0.0000 - 0.0800</td>
<td>GS: LT-UNK</td>
</tr>
<tr>
<td>RC: None</td>
<td>NANO: No</td>
</tr>
<tr>
<td>ROLE: Coil pre-coat component (binder)</td>
<td></td>
</tr>
</tbody>
</table>

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

**SUBSTANCE NOTES:**

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### POLYESTER

**PRODUCT THRESHOLD:** 1000 ppm  
**RESIDUALS AND IMPURITIES CONSIDERED:** No  
**RESIDUALS AND IMPURITIES NOTES:** There are no known residuals or impurities and there are none listed on their MSDS.

**OTHER MATERIAL NOTES:**

<table>
<thead>
<tr>
<th>POLYESTER (POLYESTER)</th>
<th>ID: 113669-95-7</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 0.0000 - 0.0600</td>
<td>GS: NoGS</td>
</tr>
<tr>
<td>RC: None</td>
<td>NANO: No</td>
</tr>
<tr>
<td>ROLE: Coil pre-coat component (binder)</td>
<td></td>
</tr>
</tbody>
</table>

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

**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**  
**N/A**

**CERTIFYING PARTY:** Self-declared  
**APPLICABLE FACILITIES:** All  
**CERTIFICATE URL:**

<table>
<thead>
<tr>
<th>CERTIFYING PARTY</th>
<th>ISSUE DATE</th>
<th>EXPIRY DATE</th>
<th>CERTIFIER OR LAB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-declared</td>
<td>2017-01-18</td>
<td></td>
<td>N/A</td>
</tr>
</tbody>
</table>

**CERTIFICATION AND COMPLIANCE NOTES:**

CFR, LS-36, IBL

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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.

No accessories are required for this product.

Section 5: General Notes

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: Metl-Span
ADDRESS: 1720 Lakepointe Dr Suite 101
Lewisville TX 75057, USA
WEBSITE: metlspan.com

CONTACT NAME: Amanda Storer
TITLE: Marketing Brand Manager
PHONE: 972-221-6656
EMAIL: ajstorer@metlspan.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
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 Unspec ed (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

#### 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

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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 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.