Armstrong MetalWorks Tin (Metallaire)
by Armstrong World Industries

CLASSIFICATION: 09 5670

PRODUCT DESCRIPTION: Classic tin ceiling system is available in multiple patterns as well as acoustical options. Key Features: • Industry's only extra microperforated panels • 9/16” Tegular panels reduce visibility of suspension system • Variety of standard color and pattern options in Lay-in, Tegular or Nail-up sizes • 18” x 18” MetalWorks Tegular panels available for Metaphors Coffers • Wide range of decorative accessories

Section 1: Summary

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
☐ Considered
☐ Partially Considered
☐ Not Considered

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

Characterized
☐ Yes ☐ No

Percent Weight and Role Provided?
☐ Yes ☐ No

Screened
☐ Yes ☐ No

Using Priority Hazard Lists with Results Disclosed?
☐ Yes ☐ No

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
ARMSTRONG METALWORKS TIN (METALLAIRE) | STEEL | NoGS | LT-P1
TIN | LT-P1 | TITANIUM DIOXIDE | LT-1 | CAN | END CALCIUM SULFATE, 1, 2-HYDRATE, POWDER | LT-UNK | TRIGLYCIDYL ISOCYANurate (TGIC) | LT-1 | RES | GEN | MAM | SKI | EYE | MUL | TRIGLYCIDYL ISOCYANurate (TGIC) | LT-1 | RES | GEN | MAM | SKI | EYE | MUL | BARIUM SULFATE | BM-2 | CAN | CHROMIUM | LT-P1 | RES | END | SKI | CHROMIUM (III) OXIDE | LT-P1 | SKI |

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:
Residuals / impurities in select raw materials are quantitatively measured and are displayed in the HPD when greater than 100ppm.

VOC CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE

See Section 3 for additional listings.

VOC emissions: ClearChem Standard BkA-CC-01.3
LCA: Environmental Product Declaration (EPD) by UL - Industry Generic

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?
☐ Yes
☐ No

PREPARER: Self-Prepared

VERIFIER: 

VERIFICATION #: 

SCREENING DATE: 2018-06-18
PUBLISHED DATE: 2018-06-18
EXPIRY DATE: 2021-06-18
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)

ARMSTRONG METALWORKS TIN (METALLAIRE)

**PRODUCT THRESHOLD:** 100 ppm  
**RESIDUALS AND IMPURITIES CONSIDERED:** Yes

**RESIDUALS AND IMPURITIES NOTES:** Residuals / impurities in select raw materials are quantitatively measured and are displayed in the HPD when greater than 1000 ppm.

**OTHER PRODUCT NOTES:** This HPD (or this Google Portico entry) is provided solely for the intended recipient in connection with its assessment of products and for no other purpose. In providing information, AWI expresses no opinion and makes no representations as to the applicability, suitability, accuracy or completeness of the declaration form, or the standards, rules, classifications, warnings or criteria utilized or referenced therein. Information provided herein is qualified in the entirety by reference to the applicable product Safety Data Sheet (SDS) which can be located at www.armstrongceilings.com, as well as by the additional ingredient information provided for specified substances. Please refer to the Armstrong Commercial Ceilings website for more information on this product.

STEEL

<table>
<thead>
<tr>
<th>%: 90.0000 - 99.0000</th>
<th>GS: NoGS</th>
<th>RC: Both</th>
<th>NANO: No</th>
<th>ROLE: Base Material</th>
</tr>
</thead>
</table>

**HAZARDS:**

None Found  
**AGENCY(IES) WITH WARNINGS:**

No warnings found on HPD Priority lists

**SUBSTANCE NOTES:** Base Material

TIN

<table>
<thead>
<tr>
<th>%: 5.0000 - 10.0000</th>
<th>GS: LT-P1</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>ROLE: Coating</th>
</tr>
</thead>
</table>

**HAZARDS:**

None Found  
**AGENCY(IES) WITH WARNINGS:**

No warnings found on HPD Priority lists

**SUBSTANCE NOTES:** In Coating

TIN

<table>
<thead>
<tr>
<th>%: 5.0000 - 10.0000</th>
<th>GS: LT-P1</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>ROLE: Coating</th>
</tr>
</thead>
</table>

**HAZARDS:**

None Found  
**AGENCY(IES) WITH WARNINGS:**

No warnings found on HPD Priority lists
### Titanium Dioxide

**ID:** 13463-67-7  
**%:** 1.0000 - 5.0000  
**GS:** LT-1  
**RC:** None  
**NANO:** No  
**ROLE:** Pigment

**HAZARDS:**
- **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

**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

**SUBSTANCE NOTES:** TiO2 - Titanium Dioxide is bound within the coating and is not inhalable. Accordingly, it is excluded from regulatory hazard lists. It is not in a respirable form in the final product.

### Calcium Sulfate, 1,2-Hydrate, Powder

**ID:** 7778-18-9  
**%:** 0.1000 - 1.0000  
**GS:** LT-UNK  
**RC:** None  
**NANO:** No  
**ROLE:** Coating

**HAZARDS:**

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

**SUBSTANCE NOTES:** This ingredient is bound within the coating and is not inhalable. Accordingly, it is excluded from regulatory hazard lists. It is not in a respirable form in the final product.

### Triglycidyl Isocyanurate (TGIC)

**ID:** 2451-62-9  
**%:** 0.1000 - 1.0000  
**GS:** LT-1  
**RC:** None  
**NANO:** No  
**ROLE:** Coating

**HAZARDS:**
- **RESPIRATORY:** AOEC - Asthmagens  
  Asthmagen (Rs) - sensitizer-induced
- **GENE MUTATION:** EU - SVHC Authorisation List  
  Mutagenic - Candidate list
- **MAMMALIAN:** EU - GHS (H-Statements)  
  H301 - Toxic if swallowed
- **SKIN SENSITIZE:** EU - GHS (H-Statements)  
  H317 - May cause an allergic skin reaction
- **EYE IRRITATION:** EU - GHS (H-Statements)  
  H318 - Causes serious eye damage
- **MAMMALIAN:** EU - GHS (H-Statements)  
  H331 - Toxic if inhaled
- **GENE MUTATION:** EU - GHS (H-Statements)  
  H340 - May cause genetic defects
- **GENE MUTATION:** EU - REACH Annex XVII CMRs  
  Mutagen Category 2 - Substances which should be regarded as if they are Mutagenic to man

**SUBSTANCE NOTES:**

Armstrong MetalWorks Tin (Metallaire)  
hprepository.hpd-collaborative.org  
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<table>
<thead>
<tr>
<th>MULTIPLE</th>
<th>ChemSec - SIN List</th>
<th>CMR - Carcinogen, Mutagen &amp;/or Reproductive Toxicant</th>
</tr>
</thead>
<tbody>
<tr>
<td>MULTIPLE</td>
<td>German FEA - Substances Hazardous to Waters</td>
<td>Class 3 - Severe Hazard to Waters</td>
</tr>
<tr>
<td>RESPIRATORY</td>
<td>MAK</td>
<td>Sensitizing Substance Sah - Danger of airway &amp; skin sensitization</td>
</tr>
<tr>
<td>GENE MUTATION</td>
<td>Korea - GHS</td>
<td>Germ cell mutagenicity - Category 1 [H340 - May cause genetic defects]</td>
</tr>
<tr>
<td>GENE MUTATION</td>
<td>EU - Annex VI CMRs</td>
<td>Mutagen - Category 1B</td>
</tr>
<tr>
<td>GENE MUTATION</td>
<td>New Zealand - GHS</td>
<td>6.6A - Known or presumed human mutagens</td>
</tr>
<tr>
<td>GENE MUTATION</td>
<td>Japan - GHS</td>
<td>Germ cell mutagenicity - Category 1B</td>
</tr>
</tbody>
</table>

**SUBSTANCE NOTES:** This ingredient is bound within the coating and is not inhalable. Accordingly, it is excluded from regulatory hazard lists. It is not in a respirable form in the final product.

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**TRIGLYCIDYL ISOCYANURATE (TGIC)**

**ID:** 2451-62-9

**%:** 0.1000 - 1.0000  
**GS:** LT-1  
**RC:** None  
**NANO:** No  
**ROLE:** Coating

**HAZARDS:**

**RESPIRATORY**  
AOEC - Asthmagens  
Asthmagen (Rs) - sensitizer-induced

**GENE MUTATION**  
EU - SVHC Authorisation List  
Mutagenic - Candidate list

**MAMMALIAN**  
EU - GHS (H-Statements)  
H301 - Toxic if swallowed

**SKIN SENSITIZE**  
EU - GHS (H-Statements)  
H317 - May cause an allergic skin reaction

**EYE IRRITATION**  
EU - GHS (H-Statements)  
H318 - Causes serious eye damage

**MAMMALIAN**  
EU - GHS (H-Statements)  
H331 - Toxic if inhaled

**GENE MUTATION**  
EU - GHS (H-Statements)  
H340 - May cause genetic defects

**GENE MUTATION**  
EU - REACH Annex XVII CMRs  
Mutagen Category 2 - Substances which should be regarded as if they are Mutagenic to man

**MULTIPLE**  
ChemSec - SIN List  
CMR - Carcinogen, Mutagen &/or Reproductive Toxicant

**MULTIPLE**  
German FEA - Substances Hazardous to Waters  
Class 3 - Severe Hazard to Waters

**RESPIRATORY**  
MAK  
Sensitizing Substance Sah - Danger of airway & skin sensitization

**GENE MUTATION**  
Korea - GHS  
Germ cell mutagenicity - Category 1 [H340 - May cause genetic defects]

**GENE MUTATION**  
EU - Annex VI CMRs  
Mutagen - Category 1B

**GENE MUTATION**  
New Zealand - GHS  
6.6A - Known or presumed human mutagens

**GENE MUTATION**  
Japan - GHS  
Germ cell mutagenicity - Category 1B

**SUBSTANCE NOTES:** This ingredient is bound within the coating and is not inhalable. Accordingly, it is excluded from regulatory hazard lists.
**BARIUM SULFATE**

<table>
<thead>
<tr>
<th>%: 0.1000 - 1.0000</th>
<th>GS: BM-2</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>ROLE: Coating</th>
</tr>
</thead>
</table>

**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

**CANCER**

MAK

Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels

**SUBSTANCE NOTES:** This ingredient is bound within the coating and is not inhalable. Accordingly, it is excluded from regulatory hazard lists. It is not in a respirable form in the final product.

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**CHROMIUM**

<table>
<thead>
<tr>
<th>%: 0.0100 - 1.0000</th>
<th>GS: LT-P1</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>ROLE: Coating</th>
</tr>
</thead>
</table>

**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:** Coating

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**CHROMIUM (III) OXIDE**

<table>
<thead>
<tr>
<th>%: 0.0100 - 1.0000</th>
<th>GS: LT-P1</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>ROLE: Coating</th>
</tr>
</thead>
</table>

**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

**SKIN SENSITIZE**

MAK

Sensitizing Substance Sh - Danger of skin sensitization

**SUBSTANCE NOTES:** In Coating
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>Third Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicable Facilities:</td>
<td>all</td>
</tr>
<tr>
<td>Issue Date:</td>
<td>2017-11-08</td>
</tr>
<tr>
<td>Expiry Date:</td>
<td>2019-11-08</td>
</tr>
<tr>
<td>Certifier or Lab:</td>
<td>Berkeley Analytical</td>
</tr>
</tbody>
</table>

Certification and Compliance Notes:

- LCA

Environmental Product Declaration (EPD) by UL - Industry Generic

<table>
<thead>
<tr>
<th>Certifying Party:</th>
<th>Self-declared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicable Facilities:</td>
<td>all</td>
</tr>
<tr>
<td>Certificate URL:</td>
<td><a href="https://www.armstrongceilings.com/content/dam/armstrongceilings/commercial/north-america/epds/metalworks-epd.pdf">https://www.armstrongceilings.com/content/dam/armstrongceilings/commercial/north-america/epds/metalworks-epd.pdf</a></td>
</tr>
<tr>
<td>Issue Date:</td>
<td>2016-03-31</td>
</tr>
<tr>
<td>Expiry Date:</td>
<td>2020-03-31</td>
</tr>
<tr>
<td>Certifier or Lab:</td>
<td>UL Environment</td>
</tr>
</tbody>
</table>

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 (or this Google Portico entry) is provided solely for the intended recipient in connection with its assessment of products and for no other purpose. In providing information, AWI expresses no opinion and makes no representations as to the applicability, suitability, accuracy or completeness of the declaration form, or the standards, rules, classifications, warnings or criteria utilized or referenced therein. Information provided herein is qualified in the entirety by reference to the applicable product Safety Data Sheet (SDS) which can be located at www.armstrongceilings.com, as well as by the additional ingredient information provided for specified substances. Please refer to the Armstrong Commercial Ceilings website for more information on this product. More detail on this product can be found at https://www.armstrongceilings.com/commercial/en-us/commercial-ceilings-walls/metalworks-tin-ceiling-tiles.html
Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: Armstrong World Industries
ADDRESS: 2500 Columbia Avenue
LANCASTER PENNSYLVANIA 17603, United States
WEBSITE: 2500 Columbia Avenue
CONTACT NAME: Armstrong Techline
TITLE: Techline
PHONE: 8772767876
EMAIL: techline@armstrongceilings.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/toxicity
MUL Multiple hazards
NEU Neurotoxicity
OZO Ozone depletion
PBT Persistent Bioaccumulative Toxic
PHY Physical Hazard (reactive)
REP Reproductive toxicity
RES Respiratory sensitivity
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

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.