Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

| Inventory Reporting Format | Threshold disclosed per | Residuals/Impurities | Are All Substances Above the Threshold Indicated?
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nested Materials Method</td>
<td>Material</td>
<td>Considered</td>
<td>Yes</td>
</tr>
<tr>
<td>Basic Method</td>
<td>Product</td>
<td>Partially Considered</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Considered</td>
<td></td>
</tr>
</tbody>
</table>

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>ARMSTRONG INVISACOUSTICS</td>
<td>MINERAL WOOL, BIOINSOLUBLE AND/OR WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT &gt; 18 % BY WEIGHT (MINERAL WOOL, BIOINSOLUBLE AND/OR WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT &gt; 18 % BY WEIGHT)</td>
<td>LT-UNK</td>
<td>CAN</td>
<td></td>
</tr>
<tr>
<td>PERLITE (PERLITE)</td>
<td>LT-UNK</td>
<td>LIMESTONE; CALCULIUM CARBONATE (POST-CONSUMER) (LIMESTONE; CALCULIUM CARBONATE (POST-CONSUMER))</td>
<td>LT-UNK</td>
<td>LIMESTONE; CALCULIUM CARBONATE (POST-CONSUMER) (LIMESTONE; CALCULIUM CARBONATE (POST-CONSUMER))</td>
</tr>
<tr>
<td>CELLULOSE PULP (CELLULOSE PULP)</td>
<td>NoGS</td>
<td>STARCH (STARCH)</td>
<td>LT-UNK</td>
<td>GLASS / MINERAL FIBER (POST-CONSUMER RECYCLED) (GLASS / MINERAL FIBER (POST-CONSUMER RECYCLED))</td>
</tr>
<tr>
<td>POLYVINYL ACETATE (PVA) (POLYVINYL ACETATE (PVA))</td>
<td>LT-UNK</td>
<td>DIATOMACEOUS EARTH (UNCALCINED) (DIATOMACEOUS EARTH (UNCALCINED))</td>
<td>LT-UNK</td>
<td>POLYVINYL ACETATE (PVA) (POLYVINYL ACETATE (PVA))</td>
</tr>
<tr>
<td>CAN SILICA, CHRISTOBALITE (SILICA, CHRISTOBALITE)</td>
<td>LT-UNK</td>
<td>TITANIUM DIOXIDE</td>
<td>LT-1</td>
<td>CAN</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE (TITANIUM DIOXIDE)</td>
<td>LT-1</td>
<td>END POLY(VINYL ALCOHOL) (POLY(VINYL ALCOHOL))</td>
<td>LT-UNK</td>
<td>MELANINE CYANURATE (MELANINE CYANURATE)</td>
</tr>
<tr>
<td>ETHYLENE/ACRYLIC ACID/VA COPOLYMER (ETHYLENE/ACRYLIC ACID/VA COPOLYMER)</td>
<td>NoGS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE

VOC emissions: CDPH Standard Method V1.1 (Section 01350/CHPS) - Classroom & Office scenario
Material content migration: ILFI Declare - LBC Compliant - Third Party Verified
LCA: Environmental Product Declaration (EPD) by UL - Industry Generic

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #: 2017-09-21
PUBLISHED DATE: 2017-10-24
EXPIRY DATE: 2020-09-21
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

### ARMSTRONG INVISACOUSTICS

**PRODUCT THRESHOLD:** 1000 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 1000ppm.

**OTHER PRODUCT NOTES:** For additional information, please visit the Armstrong website. www.armstrongceilings.com/InvisAcoustics(TM)

<table>
<thead>
<tr>
<th>MINERAL WOOL, BIOINSOLUBLE AND/OR WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT &gt; 18 % BY WEIGHT (MINERAL WOOL, BIOINSOLUBLE AND/OR WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT &gt; 18 % BY WEIGHT)</th>
<th>ID: 65997-17-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>%: 60.0000 - 80.0000</td>
<td>GS: LT-UNK</td>
</tr>
<tr>
<td>RC: Both</td>
<td>NANO: No</td>
</tr>
<tr>
<td>ROLE: Core material</td>
<td></td>
</tr>
</tbody>
</table>

**HAZARDS:**

- **CANCER**
  - EU - R-phrases
  - R40 - Limited Evidence of Carcinogenic Effects
- **CANCER**
  - EU - GHS (H-Statements)
  - H351 - Suspected of causing cancer

**SUBSTANCE NOTES:** Mineral fiber is not classified as a carcinogen by IARC, NTP, CA Proposition 65 or OSHA. The R40 and H351 phrases below are triggered by a special provision "Note Q", found only in the EU’s CLP Regulation.

---

### PELRITE (PERLITE)

**ID:** 93763-70-3

<table>
<thead>
<tr>
<th>%: 10.0000 - 20.0000</th>
<th>GS: LT-UNK</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>ROLE: Filler</th>
</tr>
</thead>
</table>

**HAZARDS:**

- **None Found**
  - No warnings found on HPD Priority lists

**SUBSTANCE NOTES:** None

---

### LIMESTONE; CALCIUM CARBONATE (POST-CONSUMER) (LIMESTONE; CALCIUM CARBONATE (POST-CONSUMER))

**ID:** 1317-65-3

<table>
<thead>
<tr>
<th>%: 7.0000 - 10.0000</th>
<th>GS: LT-UNK</th>
<th>RC: Both</th>
<th>NANO: No</th>
<th>ROLE: Filler</th>
</tr>
</thead>
</table>

**HAZARDS:**

- **None Found**
  - No warnings found on HPD Priority lists
<table>
<thead>
<tr>
<th>Substance</th>
<th>ID</th>
<th>% Range</th>
<th>GS</th>
<th>RC</th>
<th>NANO</th>
<th>ROLE</th>
<th>HAZARDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIMESTONE; CALCIUM CARBONATE (POST-CONSUMER)</td>
<td>1317-65-3</td>
<td>7.0000 - 10.0000</td>
<td>LT-UNK</td>
<td>Both</td>
<td>No</td>
<td>Filler</td>
<td>None Found</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No warnings found on HPD Priority lists</td>
</tr>
<tr>
<td>CELLULOSE PULP (CELLULOSE PULP)</td>
<td>65996-61-4</td>
<td>5.0000 - 10.0000</td>
<td>NoGS</td>
<td>Both</td>
<td>No</td>
<td>filler and binder</td>
<td>None Found</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No warnings found on HPD Priority lists</td>
</tr>
<tr>
<td>STARCH (STARCH)</td>
<td>9005-25-8</td>
<td>5.0000 - 10.0000</td>
<td>LT-UNK</td>
<td>PostC</td>
<td>No</td>
<td>Binder</td>
<td>None Found</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No warnings found on HPD Priority lists</td>
</tr>
<tr>
<td>GLASS / MINERAL FIBER (POST-CONSUMER RECYCLED)</td>
<td>65997-17-3</td>
<td>1.0000 - 5.0000</td>
<td>LT-UNK</td>
<td>Both</td>
<td>No</td>
<td>Fiber core in facing material</td>
<td>None Found</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No warnings found on HPD Priority lists</td>
</tr>
<tr>
<td>POLYVINYL ACETATE (PVA) (POLYVINYL ACETATE (PVA))</td>
<td>9003-20-7</td>
<td>0.1000 - 1.0000</td>
<td>LT-UNK</td>
<td>None</td>
<td>No</td>
<td>Binder</td>
<td>None Found</td>
</tr>
</tbody>
</table>
### DIATOMACEOUS EARTH (UNCALCINED) (DIATOMACEOUS EARTH (UNCALCINED))

<table>
<thead>
<tr>
<th>%: 0.1000 - 1.0000</th>
<th>GS: LT-P1</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>ROLE: Filler</th>
</tr>
</thead>
</table>

**HAZARDS:**

- Agency(ies) with warnings:
  - CANCER: Japan - GHS
  - Carcinogenicity - Category 1A

**SUBSTANCE NOTES:** None

### SILICA, CHRISTOBALITE (SILICA, CHRISTOBALITE)

<table>
<thead>
<tr>
<th>%: 0.1000 - 1.0000</th>
<th>GS: LT-1</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>ROLE: Filler</th>
</tr>
</thead>
</table>

**HAZARDS:**

- 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 1 - Agent is carcinogenic to humans - inhaled from occupational sources
  - CANCER: US NIH - Report on Carcinogens
  - Known to be Human Carcinogen (respirable size - occupational setting)
  - CANCER: MAK
  - Carcinogen Group 1 - Substances that cause cancer in man
  - CANCER: New Zealand - GHS
  - 6.7A - Known or presumed human carcinogens
  - CANCER: Japan - GHS
  - Carcinogenicity - Category 1A
  - CANCER: Australia - GHS
  - H350 - May cause cancer

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

### CALCIUM CARBONATE (CALCIUM CARBONATE)

<table>
<thead>
<tr>
<th>%: 0.1000 - 1.0000</th>
<th>GS: BM-3</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>ROLE: Filler</th>
</tr>
</thead>
</table>

**HAZARDS:**

- None found

**SUBSTANCE NOTES:** None
### TITANIUM DIOXIDE (TITANIUM DIOXIDE)

**ID:** 13463-67-7  
**%:** 0.1000 - 1.0000  
**GS:** LT-1  
**RC:** None  
**NANO:** No  
**ROLE:** Pigment  

**HAZARDS:**  
**AGENCY(IES) WITH WARNINGS:**  
- **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  
- **ENDOCRINE**  
  - TEDX - Potential Endocrine Disruptors  
  - Potential Endocrine Disruptor  
- **CANCER**  
  - MAK  
  - Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value  

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

### POLY(VINYL ALCOHOL) (POLY(VINYL ALCOHOL))

**ID:** 9002-89-5  
**%:** 0.1000 - 1.0000  
**GS:** LT-UNK  
**RC:** None  
**NANO:** No  
**ROLE:** Binder  

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

**SUBSTANCE NOTES:** None

### MELAMINE CYANURATE (MELAMINE CYANURATE)

**ID:** 37640-57-6  
**%:** 0.1000 - 1.0000  
**GS:** BM-1  
**RC:** None  
**NANO:** No  
**ROLE:** Adhesive  

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

**SUBSTANCE NOTES:** None

### ETHYLENE/ACRYLIC ACID/VA COPOLYMER (ETHYLENE/ACRYLIC ACID/VA COPOLYMER)

**ID:** 26713-18-8  
**%:** 0.1000 - 1.0000  
**GS:** NoGS  
**RC:** None  
**NANO:** No  
**ROLE:** Adhesive  

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

**SUBSTANCE NOTES:** None
### 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>Certification and Compliance Notes</th>
<th>Certifying Party</th>
<th>Applicable Facilities</th>
<th>Certificate URL</th>
<th>Issue Date</th>
<th>Expiry Date</th>
<th>Certifier or Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDPH Standard Method V1.1 (Section 01350/CHPS) - Classroom &amp; Office scenario</td>
<td>Self-declared</td>
<td>all</td>
<td><a href="http://www.armstrongceilings.com/commceilingsna/products/ceilings/invisacoustics.com">http://www.armstrongceilings.com/commceilingsna/products/ceilings/invisacoustics.com</a></td>
<td>2017-10-01</td>
<td>2019-10-01</td>
<td>Berkeley Analytical</td>
</tr>
</tbody>
</table>

#### Material Content Migration

<table>
<thead>
<tr>
<th>Certification and Compliance Notes</th>
<th>Certifying Party</th>
<th>Applicable Facilities</th>
<th>Certificate URL</th>
<th>Issue Date</th>
<th>Expiry Date</th>
<th>Certifier or Lab</th>
</tr>
</thead>
</table>

#### LCA

<table>
<thead>
<tr>
<th>Certification and Compliance Notes</th>
<th>Certifying Party</th>
<th>Applicable Facilities</th>
<th>Certificate URL</th>
<th>Issue Date</th>
<th>Expiry Date</th>
<th>Certifier or Lab</th>
</tr>
</thead>
</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.

No accessories are required for this product.

### Section 5: General Notes

Armstrong InvisAcoustics
hpdrepository.hpd-collaborative.org

HPD v2.1 created via HPDC Builder Page 6 of 8
Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: Armstrong World Industries
ADDRESS: 2500 Columbia Avenue
Lancaster PA 17603, USA
WEBSITE: http://www.armstrongceilings.com/commceilingsna/products/ceilings/metalworks-blades-classics/_/N-cZ1z1416u?
Ntt=metalworks+blades

CONTACT NAME: Armstrong Technical Services
TITLE: Techline
PHONE: 1-877-276-7876
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/irritation
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

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
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.