## Section 1: Summary

### Basic Method / Product Threshold

**CONTENT INVENTORY**

<table>
<thead>
<tr>
<th>Inventory Reporting Format</th>
<th>Threshold level</th>
<th>Residuals/Impurities</th>
<th>Are All Substances Above the Threshold Indicated?</th>
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</thead>
<tbody>
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<td>Nested Materials Method</td>
<td>100 ppm</td>
<td>Considered</td>
<td>Yes</td>
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<tr>
<td>Basic Method</td>
<td>1,000 ppm</td>
<td>Partially Considered</td>
<td>No</td>
</tr>
<tr>
<td>Per GHS SDS</td>
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<td>No</td>
</tr>
<tr>
<td>Per OSHA MSDS</td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td>Yes</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.

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

<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>ULTIMA FIREGUARD</td>
<td>MINERAL WOOL (BIOINSOLUBLE, WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT GREATER THAN 18 % BY WEIGHT)</td>
<td>LT-UNK</td>
<td>CAN</td>
<td>Ø</td>
</tr>
<tr>
<td>ULTIMA FIREGUARD</td>
<td>KAOLIN CLAY</td>
<td>LT-UNK</td>
<td>CAN</td>
<td>Ø</td>
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<tr>
<td>ULTIMA FIREGUARD</td>
<td>PERLITE (PERLITE)</td>
<td>LT-UNK</td>
<td>CAN</td>
<td>Ø</td>
</tr>
<tr>
<td>ULTIMA FIREGUARD</td>
<td>CELLULOSE PULP</td>
<td>LT-UNK</td>
<td>CAN</td>
<td>Ø</td>
</tr>
<tr>
<td>ULTIMA FIREGUARD</td>
<td>STARCH</td>
<td>LT-UNK</td>
<td>CAN</td>
<td>Ø</td>
</tr>
<tr>
<td>ULTIMA FIREGUARD</td>
<td>CLAY</td>
<td>LT-UNK</td>
<td>CAN</td>
<td>Ø</td>
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<tr>
<td>ULTIMA FIREGUARD</td>
<td>LIMESTONE; CALCIUM CARBONATE</td>
<td>LT-UNK</td>
<td>CAN</td>
<td>BM-3</td>
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<td>CALCIUM CARBONATE</td>
<td>LT-UNK</td>
<td>CAN</td>
<td>BM-3</td>
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<td>DOLomite</td>
<td>LT-UNK</td>
<td>CAN</td>
<td>BM-2</td>
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<td>CAN</td>
<td>BM-2</td>
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<tr>
<td>ULTIMA FIREGUARD</td>
<td>POLYVINYL ACETATE (PVA)</td>
<td>LT-UNK</td>
<td>CAN</td>
<td>BM-2</td>
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<tr>
<td>ULTIMA FIREGUARD</td>
<td>CLAY</td>
<td>LT-UNK</td>
<td>CAN</td>
<td>BM-2</td>
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<tr>
<td>ULTIMA FIREGUARD</td>
<td>FIBERGLASS</td>
<td>LT-UNK</td>
<td>CAN</td>
<td>BM-2</td>
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<tr>
<td>ULTIMA FIREGUARD</td>
<td>CAN</td>
<td>POLY(VINYL ALCOHOL)</td>
<td>LT-UNK</td>
<td>BM-2</td>
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<td>ULTIMA FIREGUARD</td>
<td>MELAMINE CYANURATE</td>
<td>BM-1</td>
<td>UNDISCLOSED</td>
<td>BM-2</td>
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<td>ULTIMA FIREGUARD</td>
<td>RES</td>
<td>TITANIUM DIOXIDE</td>
<td>LT-1</td>
<td>CAN</td>
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<td>ULTIMA FIREGUARD</td>
<td>END</td>
<td>QUARTZ</td>
<td>LT-1</td>
<td>CAN</td>
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<td>CAN</td>
<td>SILICA, AMORPHOUS</td>
<td>LT-1</td>
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<td></td>
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<td>ALUMINA TRIHYDRATE</td>
<td>BM-3</td>
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<tr>
<td>ULTIMA FIREGUARD</td>
<td></td>
<td>RES</td>
<td>ETHYLENE COPOLYMER</td>
<td>NGS</td>
</tr>
</tbody>
</table>

**VOLATILE ORGANIC COMPOUND (VOC) CONTENT**

VOC Content data is not applicable for this product category.

**CERTIFICATIONS AND COMPLIANCE**

See Section 3 for additional listings.


Other: International Living Future Institute - Ultima FireGuard Declare Label

**CONSISTENCY WITH OTHER PROGRAMS**

No pre-checks completed or disclosed

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**Third Party Verified?**

- **PREPARER:** Self-Prepared
- **VERIFIER:**
- **VERIFICATION #:**

**SCREENING DATE:** 2017-09-21
**PUBLISHED DATE:** 2017-09-21
**EXPIRY DATE:** 2020-09-21
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)

### ULTIMA FIREGUARD

**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 1000 ppm.

**OTHER PRODUCT NOTES:** None

### MINERAL WOOL (BIOINSOLUBLE, WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT GREATER THAN 18 % BY WEIGHT)

**ID:** 65997-17-3  
**%:** 30.0000 - 70.0000  
**GS:** LT-UNK  
**RC:** None  
**NANO:** No  
**ROLE:** Core

**HAZARDS:**

**CANCER**  
EU - R-phrases: R40 - Limited Evidence of Carcinogenic Effects  
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 and for which the applicability to the provided products is neither certain nor adopted by the manufacturer. The world’s leading institute on carcinogen classification, the International Agency for Research on Cancer (IARC) has determined that there is insufficient evidence to classify this material as carcinogenic. The EU’s CLP Regulation focused on creating criteria to characterize biosolubility, but did not provide data to support a causal relationship between the EU test method and actual carcinogenicity.

### KAOLIN CLAY

**ID:** 1332-58-7  
**%:** 10.0000 - 30.0000  
**GS:** LT-UNK  
**RC:** None  
**NANO:** No  
**ROLE:** Core

**HAZARDS:**

**CANCER**  
MAK: Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

**SUBSTANCE NOTES:** MAK denotes German occupational exposure.

### PELITE (PERLITE)

**ID:** 93763-70-3  
**%:** 5.0000 - 25.0000  
**GS:** LT-UNK  
**RC:** None  
**NANO:** No  
**ROLE:** Filler

**HAZARDS:**
CELLULOSE PULP

**%:** 1.0000 - 10.0000  
**ID:** 65996-61-4  
**ROLE:** Binder

**HAZARDS:**

None Found

**AGENCY(IES) WITH WARNINGS:**

None Found  
No warnings found on HPD Priority lists

**SUBSTANCE NOTES:** None

STARCH

**%:** 1.0000 - 10.0000  
**ID:** 9005-25-8  
**ROLE:** Core

**HAZARDS:**

None Found

**AGENCY(IES) WITH WARNINGS:**

None Found  
No warnings found on HPD Priority lists

**SUBSTANCE NOTES:** None

CLAY

**%:** 1.0000 - 10.0000  
**ID:** 1332-58-7  
**ROLE:** Filler

**HAZARDS:**

CANCER  
MAK  
Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

**SUBSTANCE NOTES:** None

LIMESTONE; CALCULUM CARBONATE

**%:** 1.0000 - 5.0000  
**ID:** 1317-65-3  
**ROLE:** Filler

**HAZARDS:**

None Found

**AGENCY(IES) WITH WARNINGS:**

None Found  
No warnings found on HPD Priority lists

**SUBSTANCE NOTES:** None

CALCIUM CARBONATE

**%:** 1.0000 - 5.0000  
**ID:** 471-34-1  
**ROLE:** Filler

**HAZARDS:**

None Found

**AGENCY(IES) WITH WARNINGS:**

None Found  
No warnings found on HPD Priority lists

**SUBSTANCE NOTES:** None
### HAZARDS:

None Found

**None warnings found on HPD Priority lists**

### SUBSTANCE NOTES:

Calcium Carbonate used in this product is not regulated as a hazardous substance. Calcium Carbonate used in this product is not a registered pesticide under FIFRA. Calcium Carbonate is not registered as a persistent material.

#### DOLOMITE

- **ID:** 16389-88-1
- **%:** 0.5000 - 5.0000
- **GS:** NoGS
- **RC:** None
- **NANO:** No
- **ROLE:** Filler

None Found

None warnings found on HPD Priority lists

#### STARCH

- **ID:** 9005-27-0
- **%:** 0.5000 - 5.0000
- **GS:** NoGS
- **RC:** None
- **NANO:** No
- **ROLE:** Binder

None Found

None warnings found on HPD Priority lists

#### POLYVINYL ACETATE (PVA)

- **ID:** 9003-20-7
- **%:** 0.1000 - 1.0000
- **GS:** LT-UNK
- **RC:** None
- **NANO:** No
- **ROLE:** Binder

None Found

None warnings found on HPD Priority lists

#### CLAY

- **ID:** 92704-41-1
- **%:** 0.1000 - 1.0000
- **GS:** LT-UNK
- **RC:** None
- **NANO:** No
- **ROLE:** Filler

None Found

None warnings found on HPD Priority lists

#### FIBERGLASS

- **ID:** 65997-17-3
- **%:** 0.1000 - 5.0000
- **GS:** LT-UNK
- **RC:** None
- **NANO:** No
- **ROLE:** Fiber Core

None Found

None warnings found on HPD Priority lists
HAZARDS:

CANCER
EU - R-phrases
R40 - Limited Evidence of Carcinogenic Effects

CANCER
EU - GHS (H-Statements)
H351 - Suspected of causing cancer

SUBSTANCE NOTES: This ingredient 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)

ID: 9002-89-5

%: 0.1000 - 5.0000
GS: LT-UNK
RC: None
NANO: No
ROLE: Binder

HAZARDS:

None Found
No warnings found on HPD Priority lists

SUBSTANCE NOTES: None

MELAMINE CYANURATE

ID: 37640-57-6

%: 0.1000 - 5.0000
GS: BM-1
RC: None
NANO: No
ROLE: Adhesive

HAZARDS:

None Found
No warnings found on HPD Priority lists

SUBSTANCE NOTES: None

UNDISCLOSED

%: 0.1000 - 0.2000
GS: BM-2
RC: None
NANO: No
ROLE: Fire Retardant

HAZARDS:

RESPIRATORY
AOEC - Asthmagens
Asthmagen (ARs) - sensitizer-induced - inhalable forms only

SUBSTANCE NOTES: This ingredient has been screened and no hazards are reported.

TITANIUM DIOXIDE

ID: 13463-67-7

%: 0.0100 - 1.0000
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
### CANCER MAK

Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value.

### ENDOCRINE TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

### SUBSTANCE NOTES:
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.

### QUARTZ

**ID:** 14808-60-7

<table>
<thead>
<tr>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>GS</td>
<td>LT-1</td>
</tr>
<tr>
<td>RC</td>
<td>None</td>
</tr>
<tr>
<td>NANO</td>
<td>No</td>
</tr>
<tr>
<td>ROLE</td>
<td>Filler</td>
</tr>
</tbody>
</table>

**HAZARDS:**

- **CANCER** US CDC - Occupational Carcinogens
  - Occupational Carcinogen

- **CANCER** CA EPA - Prop 65
  - Carcinogen - specific to chemical form or exposure route

- **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** IARC
  - Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources

- **CANCER** New Zealand - GHS
  - 6.7A - Known or presumed human carcinogens

- **CANCER** Australia - GHS
  - H350 - May cause cancer

**SUBSTANCE NOTES:** Quartz 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.

### SILICA, AMORPHOUS

**ID:** 7631-86-9

<table>
<thead>
<tr>
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<tbody>
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</tr>
<tr>
<td>RC</td>
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</tr>
<tr>
<td>NANO</td>
<td>No</td>
</tr>
<tr>
<td>ROLE</td>
<td>Filler</td>
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</tbody>
</table>

**HAZARDS:**

- **CANCER** Japan - GHS
  - Carcinogenicity - Category 1A

**SUBSTANCE NOTES:** Since 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.

### ALUMINA TRIHYDRATE

**ID:** 21645-51-2

<table>
<thead>
<tr>
<th>%</th>
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<tbody>
<tr>
<td>GS</td>
<td>BM-2</td>
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<tr>
<td>RC</td>
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</tr>
<tr>
<td>NANO</td>
<td>No</td>
</tr>
<tr>
<td>ROLE</td>
<td>Filler</td>
</tr>
</tbody>
</table>

**HAZARDS:**

- **RESPIRATORY** AOEC - Asthmagens
  - Asthmagen (ARs) - sensitizer-induced - inhalable forms only
### ETHYLENE COPOLYMER

<table>
<thead>
<tr>
<th>%:</th>
<th>0.0100 - 1.0000</th>
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<tbody>
<tr>
<td>GS</td>
<td>NoGS</td>
</tr>
<tr>
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<td>None</td>
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<tr>
<td>NANO</td>
<td>No</td>
</tr>
<tr>
<td>ROLE</td>
<td>Adhesive</td>
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</tbody>
</table>

**HAZARDS:**

None Found

**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>CERTIFYING PARTY:</th>
<th>Third Party</th>
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<tbody>
<tr>
<td>ISSUE DATE:</td>
<td>2016-07-20</td>
</tr>
<tr>
<td>EXPIRY DATE:</td>
<td>2018-07-20</td>
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<tr>
<td>CERTIFIER OR LAB:</td>
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**CERTIFICATION AND COMPLIANCE NOTES:**


**CERTIFICATE URL:**


#### LCA

<table>
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<td>CERTIFIER OR LAB:</td>
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**CERTIFICATION AND COMPLIANCE NOTES:**

Environmental Product Declaration for Ultima FireGuard

**CERTIFICATE URL:**


#### OTHER

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**CERTIFICATION AND COMPLIANCE NOTES:**

International Living Future Institute - Ultima FireGuard Declare Label

**CERTIFICATE URL:**

https://access.living-future.org/ultima%C2%AE-ceiling-panels

**CERTIFICATION AND COMPLIANCE NOTES:**

Armstrong Commercial Ceilings Ultima FireGuard

www.hpd-collaborative.org

HPD v2.1 created via HPDC Builder Page 7 of 9
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.

ARMSTRONG SUSPENSION SYSTEMS

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:
Armstrong Suspension Systems

Section 5: General Notes

This HPD 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.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: Armstrong World Industries
ADDRESS: 2500 Columbia Ave.
Lancaster PA 17609, USA
WEBSITE: www.armstrongceilings.com

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/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/irritation/irritation
LAN Land Toxicity
NF Not found on Priority Hazard Lists

GreenScreen (GS)
BM-4 Benchmark 4 (prefer-safer chemical)

LT-P1 List Translator Possible Benchmark 1
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.