USG Astro™ Acoustical Panels
by USG
CLASSIFICATION: 09 51 00
PRODUCT DESCRIPTION: Manufactured by USG Interiors, LLC. USG Astro® Acoustical Ceiling Panels are fine-textured, non-perforated and non-fissured panels that are designed for a high level of performance and aesthetics. They also offer mold and mildew resistance, sag-resistance and sound control

Section 1: Summary

Basic Method / Material Threshold

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

- USG ASTRO™ ACOUSTICAL PANELS
- MINERAL WOOL (BIOSOLUBLE, WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT GREATER THAN 18 % BY WEIGHT)
- LT-UNK
- PLASTER OF PARIS UNK
- KAOLIN CLAY LT-UNK
- STARCH LT-UNK
- CALCIUM CARBONATE BM-3
- TITANIUM DIOXIDE LT-1

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

CERTIFICATIONS AND COMPLIANCE
VOC emissions: GREENGUARD Certification - USG Astro™ Acoustical Panels
Other: Environmental Product Declaration - USG Astro™ Acoustical Panels

CONSISTENCY WITH OTHER PROGRAMS
No pre-checks completed or disclosed

VERIFIER: | PUBLISHED DATE: 2017-08-30
VERIFICATION #: | EXPIRY DATE: 2019-11-22

Yes | No

USG Astro Acoustical Panels
www.hpd-collaborative.org
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

### USG ASTRO™ ACOUSTICAL PANELS

**MATERIAL THRESHOLD:** Other  
**RESIDUALS AND IMPURITIES CONSIDERED:** Yes  
**RESIDUALS AND IMPURITIES NOTES:** Residuals/impurities considered at 1000 ppm.  
**OTHER PRODUCT NOTES:** Percent may change due to manufacturing variations.

**MINERAL WOOL (BIOSOLUBLE, WITH ALKALINE OXIDE AND ALKALI EARTH OXIDE CONTENT GREATER THAN 18 % BY WEIGHT)**  
ID: 65997-17-3  
%: 70.0000 - 78.0000  
GS: LT-UNK  
RC: None  
NANO: No  
ROLE: Core/Basemat  
HAZARDS: None Found  
AGENCY(IES) WITH WARNINGS: No warnings found on HPD Priority lists  
SUBSTANCE NOTES: The synthetic mineral wool fiber used in this product is exonerated from classification as a carcinogen in accordance with Note Q in the EU Commission Directive 97/69/EC. No residuals/impurities at 1000 ppm.

**PERLITE**  
ID: 93763-70-3  
%: 8.0000 - 9.0000  
GS: LT-UNK  
RC: None  
NANO: No  
ROLE: Filler/Basemat  
HAZARDS: None Found  
AGENCY(IES) WITH WARNINGS: No warnings found on HPD Priority lists  
SUBSTANCE NOTES: No residuals/impurities at 1000 ppm

**UNDISCLOSED**  
%: 6.0000 - 7.5000  
GS: UNK  
RC: None  
NANO: No  
ROLE: Thermoplastic binder  
HAZARDS: None Found  
AGENCY(IES) WITH WARNINGS: No warnings found on HPD Priority lists  
SUBSTANCE NOTES: Highest concern GreenScreen® score–LT-U, assigned by USG's Authorized GreenScreen Practitioner. CAS RN not in HPD automatic tool system. Polymer is considered non-hazardous, contains no reactive residuals, and has an oral LD50 > 5,000 mg/kg.

**STARCH**  
ID: 9005-25-8  
USG Astro Acoustical Panels  
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<table>
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<th>Substance</th>
<th>ID</th>
<th>%:</th>
<th>GS:</th>
<th>RC:</th>
<th>NANO:</th>
<th>ROLE:</th>
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<tr>
<td>PLASTER OF PARIS</td>
<td>26499-65-0</td>
<td>1.0000 - 1.4000</td>
<td>UNK</td>
<td>PreC</td>
<td>No</td>
<td>Filler/Basemat</td>
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<tr>
<td>KAOLIN CLAY</td>
<td>1332-58-7</td>
<td>0.8000 - 2.0000</td>
<td>LT-UNK</td>
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<td>No</td>
<td>Filler/Coating</td>
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<td>CALCIUM CARBONATE</td>
<td>471-34-1</td>
<td>0.8000 - 2.0000</td>
<td>BM-3</td>
<td>None</td>
<td>No</td>
<td>Filler/Coating</td>
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<tr>
<td>UNDISCLOSED</td>
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<td>0.2000 - 0.4000</td>
<td>LT-UNK</td>
<td>None</td>
<td>No</td>
<td>Binder/Coating</td>
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Hazard Information:

- **Plaster of Paris**: No warnings found on HPD Priority lists
- **Kaolin Clay**: Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
- **Undisclosed**: Proprietary ingredient. No residuals/impurities at 1000 ppm.

Substance Notes:

- Not derived from wheat. No residuals/impurities at 1000 ppm.
- No residuals/impurities at 1000 ppm.
- No residuals/impurities at 1000 ppm.
- No residuals/impurities at 1000 ppm.
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<thead>
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<th>0.1000 - 0.4000</th>
<th>GB</th>
<th>LT-1</th>
<th>RC</th>
<th>None</th>
<th>NANO</th>
<th>No</th>
<th>ROLE</th>
<th>Pigment/Coating</th>
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<tr>
<td>HAZARDS:</td>
<td>AGENCY(IES) WITH WARNINGS:</td>
<td>CANCER</td>
<td>US CDC - Occupational Carcinogens</td>
<td>Occupational Carcinogen</td>
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<tr>
<td>CANCER</td>
<td>MAK</td>
<td>Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value</td>
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<tr>
<td>CANCER</td>
<td>CA EPA - Prop 65</td>
<td>Carcinogen - specific to chemical form or exposure route</td>
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<tr>
<td>CANCER</td>
<td>IARC</td>
<td>Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources</td>
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**SUBSTANCE NOTES:** Since titanium dioxide is bound within the coating and not inhalable, it is excluded from several regulatory hazard lists. No residuals/impurities at 1000 ppm.

### 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

**CERTIFYING PARTY:** Third Party  
**APPLICABLE FACILITIES:** Cloquet, MN  
**CERTIFICATE URL:** http://productguide.ulenvironment.com/SearchResults.aspx?BrandID=1808

**GREENGUARD Certification - USG Astro™ Acoustical Panels**

**ISSUE DATE:** 2015-08-01  
**EXPIRY DATE:**  
**CERTIFIER OR LAB:** UL Environment

**CERTIFICATION AND COMPLIANCE NOTES:**

#### OTHER

**CERTIFYING PARTY:** Third Party  
**APPLICABLE FACILITIES:** Cloquet, MN  
**CERTIFICATE URL:** http://productguide.ulenvironment.com/SearchResults.aspx?BrandID=1808&CertificationID=15

**Environmental Product Declaration - USG Astro™ Acoustical Panels**

**ISSUE DATE:** 2013-09-01  
**EXPIRY DATE:**  
**CERTIFIER OR LAB:** UL Environment

**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

Ingredient specific notes are included in Section 2.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: USG
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PHONE: 1-800-USG4YOU
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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 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:
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.