SAFETY DATA SHEET

1. Identification
Product identifier Halcyon™ Acoustical Ceiling Panels
Other means of identification
  SDS number 41808410001
  Additional Products Halcyon™ Foil-Back, Planks, Logix and Halcyon™ Canopies
  Synonyms Fiberglass Ceiling Panels/Tiles
Recommended use Interior use.
Recommended restrictions Use in accordance with manufacturer’s recommendations.

Manufacturer/Importer/Supplier/Distributor information
  Company name USG Interiors, LLC
  Address 550 West Adams Street
  Chicago, Illinois 60661-3637
  Telephone 1-800-874-4968
  Website www.usg.com
  Emergency phone number 1-800-507-8899

2. Hazard(s) identification
Physical hazards Not classified.
Health Hazards Not classified.
OSHA defined hazards Not classified.

Label elements
  Hazard symbol None.
  Signal word None.
  Hazard statement None.

Precautionary statement
  Prevention Observe good industrial hygiene practices.
  Response Get medical attention/advice if you feel unwell.
  Storage Store as indicated in Section 7.
  Disposal Dispose of in accordance with local, state, and federal regulations.

Hazard(s) not otherwise classified (HNOC) None known.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous filament glass fiber</td>
<td>65997-17-3</td>
<td>&gt; 70</td>
</tr>
<tr>
<td>Aluminum hydroxide</td>
<td>21645-51-2</td>
<td>&lt; 10</td>
</tr>
<tr>
<td>Limestone</td>
<td>1317-65-3</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>&lt; 5</td>
</tr>
</tbody>
</table>

Composition comments
All concentrations are in percent by weight unless ingredient is a gas. Product is composed of continuous fibers that do not qualify as respirable.

Raw materials and/or coatings in this product contain small amounts of titanium dioxide, which has been classified as possibly carcinogenic to humans by the International Agency for Research on Cancer (IARC). However, per IARC “no significant exposure to primary particles of titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as in paints” (1). See Section 16 for further information.
4. First-aid measures

Inhalation
Remove to fresh air. Leave the area of exposure and remain away until coughing and other symptoms subside. Other measures are usually not necessary; however if conditions warrant, contact physician.

Skin contact
Direct, prolonged or repeated contact with the skin may cause irritation. Rinse area with plenty of water. Get medical attention if irritation develops and persists.

Eye contact
Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion
This product is not intended to be ingested or eaten. If gastric disturbance occurs, call physician.

Most important symptoms/effects, acute and delayed
Mechanical irritation of skin, eyes and respiratory system.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically.

General information
Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media
Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media
Not applicable.

Specific hazards arising from the chemical
Not a fire hazard.

Special protective equipment and precautions for firefighters
Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
See Section 8 of the SDS for Personal Protective Equipment.

Methods and materials for containment and cleaning up
No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.

7. Handling and storage

Precautions for safe handling
Avoid contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Store in a cool, dry, well-ventilated place. Keep away from incompatible materials, open flames and high temperatures. Keep away from moisture. Protect product from physical damage.

8. Exposure controls/personal protection

Occupational exposure limits
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limestone (CAS 1317-65-3)</td>
<td>PEL</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>PEL</td>
<td>15 mg/m³</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum hydroxide (CAS 21645-51-2)</td>
<td>TWA</td>
<td>1 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>Continuous filament glass fiber (CAS 65997-17-3)</td>
<td>TWA</td>
<td>1 fibers/cm³</td>
<td>Respirable fibers (length &gt; 5 µm &amp; aspect ratio ≥ 3:1)</td>
</tr>
</tbody>
</table>
US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous filament glass fiber (CAS 65997-17-3)</td>
<td>TWA</td>
<td>3 fibers/cm³</td>
<td>Respirable fibers (&lt; 3.5 µm in diameter &amp; ≥ 10 µm in length)</td>
</tr>
<tr>
<td>Limestone (CAS 1317-65-3)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Fiber, total</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 mg/m³</td>
<td>Respirable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg/m³</td>
<td>Total</td>
</tr>
</tbody>
</table>

Biological limit values
No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls
Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear approved safety goggles.

Skin protection

Hand protection
It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

Other
Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection
If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved air supplied air respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

Thermal hazards
None.

General hygiene considerations
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance

Physical state
Solid.

Form
Panel.

Color
White face with amber core

Odor
Low to no odor.

Odor threshold
Not applicable.

pH
Not applicable.

Melting point/freezing point
1470 °F (798.89 °C)

Initial boiling point and boiling range
Not applicable.

Flash point
Not applicable.

Evaporation rate
Not applicable.

Flammability (solid, gas)
Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)
Not applicable.

Flammability limit - upper (%)
Not applicable.

Explosive limit - lower (%)
Not applicable.
Explosive limit - upper (%)  
Not applicable.

Vapor pressure  
Not applicable.

Vapor density  
Not applicable.

Relative density  
0.05 - 0.06 (H2O=1 Approximately)

Solubility(ies)  
Solubility (water)  
Not soluble.

Partition coefficient (n-octanol/water)  
Not applicable.

Auto-ignition temperature  
Not applicable.

Decomposition temperature  
Not applicable.

Viscosity  
Not applicable.

Other information  
Bulk density  
3.4 - 4.3 lb/ft³

10. Stability and reactivity

Reactivity  
The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability  
Material is stable under normal conditions.

Possibility of hazardous reactions  
Hazardous polymerization does not occur.

Conditions to avoid  
Contact with incompatible materials.

Incompatible materials  
Strong oxidizing agents.

Hazardous decomposition products  
Carbon dioxide.

11. Toxicological information

Information on likely routes of exposure  
Inhalation  
Inhalation of dusts may cause respiratory irritation.

Skin contact  
Direct, prolonged or repeated contact with the skin may cause irritation.

Eye contact  
Direct contact may cause mechanical irritation of the eyes.

Ingestion  
Under normal conditions of intended use, this material does not pose a risk to health. This product is not intended nor expected to be ingested or eaten.

Symptoms related to the physical, chemical and toxicological characteristics  
Mechanical irritation via inhalation or skin contact may cause coughing or difficulty breathing and/or skin redness and itching.

Information on toxicological effects  
Acute toxicity  
Low hazard.

Components  
Species  
Test Results

<table>
<thead>
<tr>
<th>Aluminum hydroxide (CAS 21645-51-2)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>7.6 mg/l, 1 Hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 0.888 mg/l, 4 Hours</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 15900 mg/kg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Titanium dioxide (CAS 13463-67-7)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>&gt; 2.28 mg/l, 4 Hours</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 11000 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation  
Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation
Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization
- Respiratory sensitization: Not a respiratory sensitizer.
- Skin sensitization: Not a skin sensitizer.

Germ cell mutagenicity
Not expected to be mutagenic.

Carcinogenicity
This material is not classified as a carcinogen by IARC, ACGIH, NTP or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity
Continuous filament glass fiber (CAS 65997-17-3) Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Reproductive toxicity
Not expected to be a reproductive hazard.

Specific target organ toxicity - single exposure
No data available, but none expected.

Specific target organ toxicity - repeated exposure
No data available, but none expected.

Aspiration hazard
Due to the physical form of the product it is not an aspiration hazard.

Further information
No other specific acute or chronic health impact noted.

12. Ecological information
Ecotoxicity
The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent releases can have a harmful or damaging effect on the environment.

Persistence and degradability
No data available.

Bioaccumulative potential
Bioaccumulation is not expected.

Mobility in soil
The product is not mobile in soil.

Other adverse effects
None expected.

13. Disposal considerations
Disposal instructions
Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

Local disposal regulations
Dispose of in accordance with local regulations.

Hazardous waste code
Not regulated.

Waste from residues / unused products
Dispose of in accordance with local regulations.

Contaminated packaging
Dispose of in accordance with local regulations.

14. Transport information
DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

15. Regulatory information
US federal regulations
This product is not hazardous according to OSHA 29CFR 1910.1200.

- TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
  Not regulated.

  Not listed.

- CERCLA Hazardous Substance List (40 CFR 302.4)
  Not listed.
Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
- Immediate Hazard - Yes
- Delayed Hazard - No
- Fire Hazard - No
- Pressure Hazard - No
- Reactivity Hazard - No

SARA 302 Extremely hazardous substance
- Not listed.

SARA 311/312 Hazardous chemical
- Yes

SARA 313 (TRI reporting)
- Not regulated.

Other federal regulations
- Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
  - Not regulated.
- Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
  - Not regulated.
- Safe Drinking Water Act (SDWA)
  - Not regulated.

US state regulations
- This product does not contain a chemical known to the State of California to cause cancer.
  - US. Massachusetts RTK - Substance List
    - Limestone (CAS 1317-65-3)
    - Titanium dioxide (CAS 13463-67-7)
  - US. New Jersey Worker and Community Right-to-Know Act
    - Limestone (CAS 1317-65-3)
    - Titanium dioxide (CAS 13463-67-7)
  - US. Pennsylvania Worker and Community Right-to-Know Law
    - Limestone (CAS 1317-65-3)
    - Titanium dioxide (CAS 13463-67-7)
  - US. Rhode Island RTK
    - Not regulated.
  - US. California Proposition 65
    - US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance
      - Titanium dioxide (CAS 13463-67-7)

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>No</td>
</tr>
</tbody>
</table>

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date: 06-October-2014
Revision date: 16-January-2019
Version #: 02
Further information

The International Agency for Research on Cancer (IARC) in June, 1987, categorized continuous filament glass fibers as not classifiable with respect to human carcinogenicity (Group 3). The evidence from human as well as animal studies was evaluated by IARC as insufficient to classify continuous filament glass fiber as a possible, probable, or confirmed cancer causing material. The ACGIH has established a TLV (Threshold Limit Value or recommended exposure limit) for continuous filament glass fiber of 1 fiber per cubic centimeter of air for respirable fibers and 5 mg per cubic meter of air for inhalable glass fiber dust. These levels were established to prevent mechanical irritation of the upper airways. IARC, NTP (US National Toxicology Program) and OSHA (US Occupational Safety and Health Administration) do not list continuous filament glass fibers as a carcinogen. As manufactured, continuous filament glass fibers in this product are not respirable. Continuous filament glass products that are chopped, crushed or severely mechanically processed during manufacturing or use may contain a very small amount of respirable particulate, some of which may be glass shards.

Titanium dioxide: Raw materials and/or coatings in this product contain small amounts of titanium dioxide. The International Agency for Research on Cancer (IARC) has determined that titanium dioxide is possibly carcinogenic to humans (Group 2B) based on inadequate evidence in humans and sufficient evidence in experimental animals. This conclusion relates to long-term inhalation exposure to high concentrations of pigmentary (powdered) or ultrafine titanium dioxide. However, no significant exposure to primary particles of titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as in paints. The available human studies do not suggest an association between occupational exposure to titanium dioxide and risk for cancer (1). The American Conference of Governmental Industrial Hygienists (ACGIH) has designated this chemical as not classifiable as a human carcinogen (A4). The US National Toxicology Program (NTP) has not listed this chemical in its report on carcinogens.

NFPA Ratings:
Health: 1
Flammability: 0
Physical hazard: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

List of abbreviations


References


Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.