

## SECTION 1 CHEMICAL PRODUCT AND IDENTIFICATION

**PRODUCT:** FIBEROCK® Brand Abuse-Resistant Panels VHI

**SYNONYM:** Fiber panels

**COMPANY:** **USG UK Ltd**  
1 Swan Road  
South West Industrial Estate  
Peterlee, Co. Durham  
SR8 2HS, England  
**Tel: 0191 5861121**

## SECTION 2 COMPOSITION, INFORMATION ON INGREDIENTS

Fiberock panels are primarily (>80%) composed of gypsum (Calcium Sulphate Dihydrate CaSO<sub>4</sub>•2H<sub>2</sub>O) (CAS 13397-24-3) with cellulose fibers(<15%) (CAS 9004-34-6) throughout the core. A minor amount (<2%) of paraffin wax (CAS 8002-74-2) is present. Trace levels (<1%) of crystalline silica (CAS 14808-60-7) may be associated with the gypsum. Respirable crystalline silica: IARC (International Agency for Research on Cancer): Group 1 carcinogen, NTP: Known human carcinogen. The concentration of respirable crystalline silica measured in bulk samples of USG gypsum was less than 0.1 wt.%. Industrial hygiene testing, following the NIOSH (U.S. National Institute of Occupational Safety and Health) Method 7500, did not detect respirable crystalline silica in dust created during the cutting of USG gypsum wallboard panels by both the recommended score and snap technique and with the use of a power saw in a 10ft by 10ft room.

## SECTION 3 HAZARD IDENTIFICATION

### EMERGENCY OVERVIEW

This product is not expected to produce any unusual hazards during normal use. Exposure to high dust levels may irritate the skin, eyes, nose, throat, or upper respiratory tract.

### ACUTE:

**Eyes:** Airborne dust or direct contact can cause mechanical irritation of eyes. If burning, redness, itching, pain or other symptoms persist or develop, consult physician.

**Skin:** No toxic effects from powdered gypsum are noticed where air contains contaminate to excess. This material exhibits some affinity for moisture, and frequent exposures may have a drying effect on the skin. Possible itching and irritation may be experienced. This may lead to dermatitis. No penetration of intact skin.

**Inhalation:** Inhalation of dust can irritate the nose, throat, and the upper respiratory tract. Persons subjected to large amounts of this dust will be forced to leave area because of nuisance conditions such as coughing, sneezing and nasal irritation. Labored breathing may occur after excessive inhalation. If respiratory symptoms persist, consult physician.

**Ingestion:** Unlikely to occur, but may cause gastric disturbances if swallowed. Gypsum is non-toxic; however, ingestion of a sufficient quantity could lead to mechanical obstruction of the gut, especially the pyloric region. See First Aid Measures - Ingestion (Section 4).

### CHRONIC:

**Inhalation:** The concentration of respirable crystalline silica measured in bulk samples of USG gypsum was less than 0.1 Wt.%. Industrial hygiene testing, following the (U.S. National Institute of Occupational Safety and Health) Method 7500, did not detect respirable crystalline silica in dust created during the cutting of USG gypsum wallboard panels by both the recommended score and snap technique and with the use of a power saw in a 10ft by 10ft room.



FIBEROCK® fiber panels do not release respirable dust in their installed state and therefore do not present any known health hazards when installed and properly maintained.

Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer. The development of silicosis may increase the risks of additional health effects. The risk of developing silicosis is dependent upon the exposure intensity and duration. Exposures to respirable crystalline silica are not expected during the normal use of this product; however, actual levels must be determined by workplace hygiene testing.

**Eyes:** None known.

**Skin:** Prolonged and repeated exposure may dry skin and possibly lead to dermatitis.

**Ingestion:** No known effects.

**TARGET ORGANS:** Eyes, skin and respiratory system.

**PRIMARY ROUTES OF ENTRY:** Inhalation, eyes and skin contact.

**Label Information**

Classification: The product is not classified as hazardous under Chemicals Hazardous Information and Packaging for Supply (CHIPS 2000).

Risk Phrases: Irritating to eyes, respiratory system and skin (R36/37/38)

Safety Phrases: In case of insufficient ventilation, wear suitable respiratory equipment. Wear eye/face protection. (S38/39)

**SECTION 4**  
**FIRST AID MEASURES**

**FIRST AID PROCEDURES**

**Eyes:** Flush thoroughly with water for 15 minutes to remove particles. If irritation persists, consult physician.

**Skin:** Wash with mild soap and water. A commercially available hand lotion may be used to treat dry skin areas. If skin has become cracked, take appropriate action to prevent infection and promote healing. If irritation persists, consult physician.

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

**Ingestion:** No harmful effects expected. No specific recommendations. Calcium sulphate is nontoxic; however, ingestion of a sufficient quantity could lead to mechanical obstruction of the gut, especially the pyloric region. If gastric disturbance occurs, call physician. Drinking gelatin solutions or large volumes of water may delay setting.

**MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED:** Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

**SECTION 5**  
**FIRE FIGHTING MEASURES**

<b>General Fire Hazards:</b>	Not expected to burn.	<b>Auto Ignition:</b>	Not Applicable
<b>Extinguishing Media:</b>	Water or use extinguishing media appropriate for surrounding fire.	<b>Flammability Classification:</b>	Limited combustible
<b>Special Fire Fighting Procedures:</b>	Wear appropriate personal protective equipment (See section 8).	<b>Rate of Burning:</b>	Not Applicable
<b>Unusual Fire and Explosion Hazards:</b>	None		
<b>Hazardous Combustion Products:</b>	Above 1450° C - decomposes to calcium oxide (CaO) and sulfur dioxide (SO <sub>2</sub> ). Organic material in the panels can produce oxides of carbon.		
<b>Flash Point:</b>	None Known		
<b>Method Used:</b>	Not Applicable		
<b>Upper Flammable Limit (UFL):</b>	Not Applicable		
<b>Lower Flammable Limit (LFL):</b>	Not Applicable		

## SECTION 6 ACCIDENTAL RELEASE MEASURES

### CONTAINMENT PROCEDURES:

No special precautions. Wear appropriate personal protection (See Section 8). Collect the material from spillage and if not damaged or contained by foreign material, fiber panels may be reclaimed. Contain the spill by keeping it dry and away from incompatibles (See Section 10).

### CLEAN-UP PROCEDURES:

Use normal clean up procedures. Wear appropriate protective equipment. If dry, shovel or sweep up material from spillage and place collected material into a container for recovery or waste disposal. Avoid dust generation. Avoid inhalation of dust and contact with eyes and skin. Maintain proper ventilation. If vacuum is used to collect dust, use an industrial vacuum cleaner with a high efficiency air filter. If sweeping is necessary, use dust suppressant. Do not use compressed air for clean up. These procedures will help minimize potential exposures. If washed down, may plug drains.

### EVACUATION PROCEDURES:

Not typically necessary

### SPECIAL INSTRUCTIONS:

None

## SECTION 7 HANDLING AND STORAGE

### HANDLING:

Avoid dust contact with eyes. Wear the appropriate eye protection against dust (See Section 8).

Avoid breathing dust. Wear the appropriate respiratory protection against dust in poorly ventilated areas and if TLV is exceeded (see Sections 2 and 8).

Minimize dust generation and accumulation. Use good safety and industrial hygiene practices.

When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end.

Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the jobsite.

Fiber panels are very heavy awkward loads posing the risk of severe back injury. Use proper lifting techniques.

### STORAGE:

Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities (see Section 10).

Protect product from physical damage.

Protect from weather and prevent exposure to sustained moisture.

Storing board flat may avoid potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Guidelines

#### A. General Product Information

No exposure limits are assigned to this mixture. If cutting or trimming with power equipment dust collectors and local ventilation must be used. Wear the appropriate personal protective equipment (see below) if airborne contaminant levels exceed the recommended exposure limits.

**B. Component Exposure Limits**

OES - Occupational Exposure Standards

Calcium Sulphate Dihydrate

Total Inhalable 10mg/m<sup>3</sup> 8hrTWA

Respirable 4mg/m<sup>3</sup> 8hr TWA

MEL - Maximum Exposure Limit

Quartz (silica)

Total Inhalable 0.3mg/m<sup>3</sup> 8hr TWA

Refer to current edition of HSE (Health and Safety Executive ) EH40 "Occupational Exposure Limits".

Ventilate to keep exposures below recommended level. Good general ventilation is expected to be satisfactory to control airborne levels. Use local exhaust ventilation if necessary to control air contaminants.

**ENGINEERING CONTROLS:**

Good general ventilation should be sufficient to control airborne dust levels.

If user operations generate airborne dust, use ventilation to keep dust concentrations below permissible exposure limits (See Section 2).

Where general ventilation is inadequate, use process enclosures, local exhaust ventilation, or other engineering controls to control dust levels below permissible exposure limits (see Section 2).

**RESPIRATORY PROTECTION:**

When sawing or sanding product, use local exhaust system to control dust or wear a half face mask to EN149 Class FFP2s, if dust cannot be controlled.

**OTHER PERSONAL PROTECTIVE EQUIPMENT:**

**Eye/Face:** Wear eye protection (safety glasses or goggles) to avoid particulate irritation of the eye.

**Skin:** Gloves or protective clothing are usually not necessary but may be desirable in specific work situations. For brief contact, no precautions other than clean body-covering clothing should be needed. Wear gloves [chemical gloves are not necessary, there is no chemical irritation hazard] and protective clothing to prevent repeated or prolonged skin contact. Barrier creams or skin lotion may be applied to face, neck, wrist and hands when skin is exposed to help prevent drying of skin.

**General:** Selection of Personal Protective Equipment will depend on environmental working conditions and operations.

**SECTION 9**

**PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	Off white to tan board	<b>Odor</b>	Low to no odor
<b>Physical State</b>	Solid	<b>pH @ 25 ° C</b>	~ 7
<b>Vapor Pressure</b>	Not Applicable	<b>Vapor Density (Air = 1)</b>	Not Applicable
<b>Boiling Point</b>	Not Applicable	<b>Vapor Pressure (mm Hg)</b>	Not Applicable
<b>Freezing Point</b>	Not Applicable	<b>Evaporation Rate (BuAc = 1)</b>	Not Applicable
<b>Melting Point</b>	1450° C - decomposes	<b>Percent Volatile</b>	0
<b>Softening Point</b>	Not Applicable	<b>Particle Size</b>	Not Applicable
<b>Solubility (H<sub>2</sub>O)</b>	0.26/100g	<b>Molecular Weight</b>	~ 172
<b>Viscosity</b>	Not Applicable	<b>Bulk Density</b>	54-62 lb/ft <sup>3</sup>
<b>Specific Gravity (H<sub>2</sub>O = 1):</b>	2.32 – 2.96		

**SECTION 10**

**CHEMICAL STABILITY AND REACTIVITY**

**STABILITY:**

Stable in dry environments.

**CONDITIONS TO AVOID:**

Contact with incompatibles.

**INCOMPATIBILITY:**

None known.

**HAZARDOUS POLYMERIZATION:**

Will not occur.

**HAZARDOUS DECOMPOSITION:**

Above 1450° C - calcium oxide (CaO) and sulfur dioxide SO<sub>2</sub>. Oxides of carbon.



**SECTION 11**  
**TOXICOLOGICAL INFORMATION**

**ACUTE EFFECTS:**

Gypsum paste applied experimentally to the eyes of rabbits was not an irritant.

Gypsum dust particulate has shown an irritant action on mucous membranes of the respiratory tract and eyes.

There have been anecdotal reports of conjunctivitis, chronic rhinitis, laryngitis, pharyngitis, impaired sense of smell and taste, bleeding from the nose, and reactions of tracheal and bronchial membranes in exposed workers.

The sulphate ion has caused gastro-intestinal disturbance in humans following large oral doses.

Limited studies involving the repeated inhalation of an (unspecified) calcium sulphate failed to identify any particular target organs in monkeys, rats and hamsters.

No evidence of mutagenicity was found in Ames bacterial tests.

LD<sub>50</sub>: Not Available for product.

LC<sub>50</sub>: Not Available for product.

**CHRONIC EFFECTS / CARCINOGENICITY:**

**Crystalline silica:** The concentration of respirable crystalline silica measured in bulk samples of USG gypsum was less than 0.1 Wt.%. Industrial hygiene testing, following the (U.S. National Institute of Occupational Safety and Health) Method 7500, did not detect respirable crystalline silica in dust created during the cutting of USG gypsum wallboard panels by both the recommended score and snap technique and with the use of a power saw in a 10ft by 10ft room. FIBEROCK® fiber panels do not release respirable dust in their installed state and therefore do not present any known health hazards when installed and properly maintained.

Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer. The development of silicosis may increase the risks of additional health effects. The risk of developing silicosis is dependent upon the exposure intensity and duration. Exposures to respirable crystalline silica are not expected during the normal use of this product; however, actual levels must be determined by workplace hygiene testing.

In June, 1997, IARC (International Agency for Research on Cancer): classified crystalline silica (quartz and cristobalite) as a human carcinogen. In making the overall evaluation, the IARC Working Group noted that carcinogenicity in humans was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs. IARC states that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1).

**SECTION 12**  
**ECOLOGICAL INFORMATION**

**ENVIRONMENTAL TOXICITY:** This product has no known adverse effect on the ecology. A large discharge directly into waterways would not be expected to kill aquatic life.

**Ecotoxicity Values:** Not determined.

**SECTION 13**  
**DISPOSAL CONSIDERATIONS**

**WASTE DISPOSAL METHOD:**

**A. General Product Information**

Dispose of material in accordance with Federal, State, Provincial, and Local regulations. Consult with environmental regulatory agencies for guidance on acceptable disposal practices. Never discharge directly into sewers or surface waters.

**B. Component Exposure Limits**

Dispose of material in accordance with Federal, State, Provincial, and Local regulations. Consult with environmental regulatory agencies for guidance on acceptable disposal practices. Never discharge directly into sewers or surface waters.



**SECTION 14**  
**TRANSPORT INFORMATION**

Material not restricted for transportation regulations

**Shipping Name** Same as product name.  
**Hazard Class:** Not classified  
**UN/NA #:** None. Not classified.  
**Packing Group:** None.  
**Label (s) Required:** Not applicable.  
**GGVSec/MDG-Code:** Not classified.  
**ICAO/IATA-DGR:** Not applicable.  
**RID/ADR:** None  
**ADNR:** None

**SECTION 15**  
**REGULATORY INFORMATION**

**A. General Product Information**

Classification: The product is not classified as hazardous under Chemicals Hazardous Information and Packaging for Supply (CHIPS 2000).

Risk Phrases: Irritating to eyes, respiratory system and skin (R36/37/38)

Safety Phrases: In case of insufficient ventilation, wear suitable respiratory equipment. Wear eye/face protection. (S38/39)

**B. Component Exposure Limits**

OES - Occupational Exposure Standards

Calcium Sulphate Dihydrate

Total Inhalable 10mg/m<sup>3</sup> 8hrTWA

Respirable 4mg/m<sup>3</sup> 8hr TWA

MEL - Maximum Exposure Limit

Quartz (silica)

Total Inhalable 0.3mg/m<sup>3</sup> 8hr TWA

Refer to current edition of HSE EH40 "Occupational Exposure Limits".

**SECTION 16**  
**OTHER INFORMATION**

These products should be used in accordance with the recommendations shown in USG current technical literature. This Material Safety Data Sheet should not be considered a replacement for the users own workplace risk assessment, which is a requirement of The Control of Substances Hazardous to Health (COSHH) Regulations 2002.

**For further information, contact:**

Ian Usher, Technical Manager

**USG (U.K.) Ltd.**

1 Swan Road

South West Industrial Estate

Peterlee, Co Durham

SR8 2HS, England

Phone: +44 (0)191 586 1121

END



**MATERIAL SAFETY DATA SHEET**  
**FIBEROCK® Brand Abuse-Resistant Panels**

MSDS # 54-060-001  
Page 7 of 7