1. Identification

Product identifier

Technical Board

Other means of identification

USG Boral Wetstop™ Gypsum Plasterboard 9.5mm and 12.5mm * USG Boral Firestop™ Gypsum Plasterboard 12.5mm and 16mm * USG Boral Impactstop™ Gypsum Plasterboard 19mm * USG Boral Impactstop™ HD Gypsum Plasterboard 19mm * USG Boral SHEETROCK® Brand Synia Gypsum Plasterboard 9mm and 12mm * USG Boral SHEETROCK® Brand Synia MR Gypsum Plasterboard 9mm and 12mm * USG Boral SHEETROCK® StandardCORE with AirTough™ Technology Gypsum Plasterboard 9.5mm, 12.5mm and 16mm * USG Boral Firestop™ with AirTough™ Technology Gypsum Plasterboard 16mm * USG Boral Impactstop™ with AirTough™ Technology Gypsum Plasterboard 19mm * USG Boral Wetstop™ with AirTough™ Technology Gypsum Plasterboard 9.5mm and 12.5mm

Recommended use of the chemical and restrictions on use

Recommended use

Interior use.

Recommended restrictions

Use in accordance with manufacturer's recommendations.

Manufacturer/Importer/Supplier/Distributor information

USG Boral Pte Ltd

Distributor / Supplier

8 Boon Lay Way, # 02-06 Trade Hub 21, Singapore 609964

Address

+65 6272 9272

Telephone

+65 6278 5310

Fax

contact-us.sg@usgboral.com

E-mail

Emergency phone number

+65 6423 9119 (24 hours) Singapore General Hospital Drug and Poison Information Center

2. Hazards identification

GHS classification

Physical hazards

Not classified.

Health hazards

Not classified.

Environmental hazards

Not classified.

GHS label elements, including precautionary statements

Pictograms

None.

Signal word

None.

Hazard statements

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 waste and residues in accordance with local authority requirements.

Other hazards which do not result in classification

None known.

Supplemental information

None.

3. Composition/information on ingredients

Substance or mixture

Mixture

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS Number</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium sulfate dihydrate</td>
<td>(alternative CAS 10101-41-4)</td>
<td>13397-24-5</td>
<td>&gt; 85</td>
</tr>
<tr>
<td>Cellulose pulp</td>
<td></td>
<td>65996-61-4</td>
<td>5 - 10</td>
</tr>
</tbody>
</table>
Composition comments

All concentrations are in percent by weight. Occupational Exposure Limits for impurities are listed in Section 8.

The gypsum used to manufacture gypsum panels contains respirable crystalline silica averaging up to 0.4 percent by weight, depending on source and region, as indicated by bulk sampling methods. Industrial hygiene laboratory testing conducted at USG Boral on gypsum panels across the region using both personal and area sampling measured no detectable respirable crystalline silica when cutting the product by “score and snap”, hand saw or jig saw. Although the industrial hygiene testing results showed no detectable RCS, good work practices which minimize the extent of dust generation should be followed.

4. First-aid measures

Inhalation

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms persist.

Skin contact

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

Eye contact

Dust in the eyes: Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

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.

Fire fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

Special protective equipment and precautions for firefighters

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

Specific methods

Cool material exposed to heat with water spray and remove it if no risk is involved.

6. Accidental release measures

Precautions for safe handling

Avoid dust formation. See Section 8 of the SDS for Personal Protective Equipment.

Environmental precautions

Avoid discharge to drains, sewers, and other water systems.

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

Use work methods which minimise dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good 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 job site. Gypsum panels are very heavy, awkward loads posing the risk of severe back injury. Use proper lifting techniques.
Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. Gypsum Association literature (GA-801-07) recommends storing board flat to avoid damaging edges, warping the board and the 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.

8. Exposure controls/personal protection

Occupational exposure limits

Singapore. PELs. (Workplace Safety and Health (Permissible Exposure Levels of Toxic Substances) Order)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)</td>
<td>TWA</td>
<td>10 mg/m³</td>
</tr>
</tbody>
</table>

Impurities

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline silica (Quartz) (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.1 mg/m³</td>
<td>Respirable dust.</td>
</tr>
</tbody>
</table>

Control parameters/Occupational exposure limits

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>Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
</tbody>
</table>

Impurities

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline silica (Quartz) (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.025 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>

Appropriate engineering control measures

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimise 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 minimise 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 respirator must be worn.

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
Paper faced with gypsum core.

Physical state
Solid.

Form
Panel.

Colour
Grey to off-white.

Odour
Low to no odour.

Odour threshold
Not applicable.

pH
6 - 8

Melting point/freezing point
Not applicable.

Initial boiling point and boiling range
Not applicable.

Flash point
Not applicable.

Evaporation rate
Not applicable.

Flammability (solid, gas)
Not applicable.

Flammability limit - lower (%)
Not applicable.
Flammability limit - upper (%) Not applicable.
Explosive limit - lower (%) Not applicable.
Explosive limit – upper (%) Not applicable.
Vapour pressure Not applicable.
Vapour density Not applicable.
Relative density 2.32 (Gypsum)
Solubility(ies)
Solubility (water) Soluble (0.26 g/100 g H2O)
Partition coefficient (n-octanol/water) Not applicable.
Auto-ignition temperature Not applicable.
Decomposition temperature 1454.4 °C (2650 °F) (Core)
Viscosity Not applicable.
Other data
Bulk density 620 - 850 kg/m³
Explosive properties Not explosive.
Oxidising properties Not oxidising.
Particle size Varies.
VOC 0 (solid)

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 polymerisation does not occur.
Conditions to avoid Contact with incompatible materials.
Incompatible materials Strong oxidising agents. Strong acids.
Hazardous decomposition products In case of fire: Calcium oxides, carbon dioxide, and carbon monoxide.

11. Toxicological information
Information on likely routes of exposure
Inhalation Dust may irritate respiratory system. Prolonged inhalation may be harmful.
Skin contact Dust or powder may irritate the skin. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Eye contact Dust may irritate the eyes.
Ingestion May cause discomfort if swallowed.
Acute toxicity Not expected to be acutely toxic.
Symptoms Dusts may irritate the respiratory tract, skin and eyes.
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 sensitisation
Respiratory sensitisation Not a respiratory sensitiser.
Skin sensitisation This product is not expected to cause skin sensitisation.
Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity This product is not expected to increase the risk of cancer. Repeated and prolonged exposures to high levels of respirable crystalline silica may cause cancer. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

IARC Monographs. Overall Evaluation of Carcinogenicity
Crystalline silica (Quartz) (CAS 14808-60-7) 1 Carcinogenic to humans.
Reproductive toxicity This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure Not classified.
Specific target organ toxicity - repeated exposure
Not classified.

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

Chronic effects
Prolonged and repeated overexposure to dust can lead to pneumoconiosis. For detailed information, see section 16.

Other information
Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

12. Ecological information

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability
The product is not readily biodegradable.

Bioaccumulative potential
No data available for this product.

Mobility in soil
Expected to have low mobility in soil.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal methods/information
Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

Special precautions
Dispose of in accordance with local regulations.

14. Transport information

ADR
Not regulated as dangerous goods.

RID
Not regulated as dangerous goods.

ADN
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.

15. Regulatory information

Safety, health and environmental regulations specific for the product in question

Not regulated.

Chemical Weapons Prohibition (Act)
Not applicable.

Environmental Protection and Management (Hazardous Substances) Regulations
Not applicable.

Environmental Public Health Act
Not applicable.

Misuse of Drugs Act

Controlled Narcotic Drugs (Misuse of Drugs Act, First Schedule, Part I, II & III, as amended)
Not regulated.

Drug Precursors (Misuse of Drugs Act, Third Schedule, Parts I & II, as amended)
Not regulated.

Controlled Specified Drugs (Misuse of Drugs Act, Fourth Schedule, as amended)
Not regulated.

Temporarily Listed Drugs (Misuse of Drugs Act, Fifth Schedule, as amended)
Not regulated.

International regulations

Montreal Protocol
Not applicable.
16. Other information

References
IARC Monographs. Overall Evaluation of Carcinogenicity

Issued by
Company name
USG Boral Pte Ltd

Prepared by
USG Boral Pte Ltd

Title
USG Boral Pte Ltd

Further information
This product as sold and under normal conditions of intended use, does not present an inhalation, ingestion or skin hazard. However, individual user processes, (such as sanding, abrasive blasting, etc.) may result in the formation of dust and/or particulate that may present a variety of health hazards.

Disclaimer
USG Boral cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

Issue date
11-August-2020

Revision date
27-August-2020

Key/legend
TWA: Time Weighted Average.