SAFETY DATA SHEET

1. Identification

Product identifier

FireDefender® Blue Banded FS II MDF

Other means of identification

None.

Recommended use

Not available.

Recommended restrictions

Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

Manufacturer/Importer/Supplier/Distributor information

Company name: Georgia-Pacific Gypsum LLC
Address: 133 Peachtree Street, NE
Atlanta, GA 30303
Telephone: Technical Information 800.225.6119
(M)SDS Request 404.652.5119
E-mail: MSDSREQ@GAPAC.COM
Emergency phone number: Chemtrec - Emergency 800.424.9300

2. Hazard(s) identification

Emergency overview

This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous by downstream activities such as cutting, sanding, or otherwise working with this product that generate large amount of dusts. Those hazards associated with large amount of dusts are described below.

Physical hazards

Not classified.

Health hazards

Skin irritation Category 2
Eye irritation Category 2A
Sensitization, respiratory Category 1
Sensitization, skin Category 1A
Carcinogenicity Category 1A
Specific target organ toxicity, single exposure Category 3 respiratory tract irritation
Specific target organ toxicity, repeated exposure Category 1 (lung)

Environmental hazards

Not classified.

OSHA defined hazards

Not classified.

Label elements

Signal word: Danger
Hazard statement:
Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause cancer. Causes damage to organs (lung) through prolonged or repeated exposure.
Precautionary statement
Prevention:
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Wear respiratory protection.
Response: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center/doctor. If exposed or concerned: Get medical advice/attention. Specific treatment (see section 4 on the SDS).

Storage: Store away from incompatible materials (see Section 10 of the SDS).

Disposal: Dispose of contents/container in accordance with applicable regulations.

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

Supplemental information: None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>PELITE</td>
<td></td>
<td>93763-70-3</td>
<td>45 - 70</td>
</tr>
<tr>
<td>CALCIUM SULFATE DIHYDRATE</td>
<td></td>
<td>10101-41-4</td>
<td>10 - 30</td>
</tr>
<tr>
<td>SILICA, CRISTOBALITE</td>
<td></td>
<td>14464-46-1</td>
<td>3 - 7</td>
</tr>
<tr>
<td>SODIUM SILICATE (2.6&lt; MR &lt;=3.2)</td>
<td></td>
<td>1344-09-8</td>
<td>3 - 7</td>
</tr>
<tr>
<td>CRYSTALLINE SILICA (QUARTZ)*</td>
<td></td>
<td>14808-60-7</td>
<td>1 - 5</td>
</tr>
<tr>
<td>DIATOMACEOUS EARTH</td>
<td>DIATOMACEOUS EARTH</td>
<td>68855-54-9</td>
<td>1 - 5</td>
</tr>
<tr>
<td>SUCROSE</td>
<td></td>
<td>57-50-1</td>
<td>1 - 5</td>
</tr>
<tr>
<td>WOOD/WOOD DUST</td>
<td>Not Assigned</td>
<td></td>
<td>1 - 5</td>
</tr>
<tr>
<td>CELLULOSE</td>
<td></td>
<td>9004-34-6</td>
<td>0.5 - 1.5</td>
</tr>
<tr>
<td>METHYLENE BISPHENYL ISOCYANATE (MDI)</td>
<td></td>
<td>101-68-8</td>
<td>0.1 - 1</td>
</tr>
<tr>
<td>UREA, POLYMER WITH FORMALDEHYDE</td>
<td></td>
<td>9011-05-6</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

The specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Composition comments: *The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

4. First-aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Skin contact: Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion: Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed: Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Coughing. Discomfort in the chest. Difficulty in breathing. Shortness of breath. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed: Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information: IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.
5. Fire-fighting measures

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
None known.

Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
Firefighters should wear full protective clothing including self contained breathing apparatus.

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

General fire hazards
No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Avoid inhalation of dust from the spilled material. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Use personal protection recommended in Section 8. Keep unnecessary personnel away.

Methods and materials for containment and cleaning up
Minimize dust generation. Sweep up or gather material and place in an appropriate container for disposal. Utilize wet methods, if appropriate, to minimize dust. For waste disposal, see section 13 of the SDS.

Environmental precautions
Keep out of drains, sewers, ditches, and waterways.

7. Handling and storage

Precautions for safe handling
Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Do not breathe dust. Do not get this material in contact with eyes. Do not taste or swallow. Avoid prolonged exposure. Observe good industrial hygiene practices. Use only in well-ventilated areas. Wear appropriate NIOSH/MSHA approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.

Conditions for safe storage, including any incompatibilities
Store level and keep dry. Dewpoint or other conditions causing the presence of moisture can damage the product during storage. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

<table>
<thead>
<tr>
<th>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIATOMACEOUS EARTH (CAS 68855-54-9)</td>
<td>TWA</td>
<td>0.05 mg/m3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)</td>
<td>PEL</td>
<td>5 mg/m3</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>CELLULOSE (CAS 9004-34-6)</td>
<td>PEL</td>
<td>15 mg/m3</td>
<td>Total dust.</td>
</tr>
<tr>
<td>CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)</td>
<td>PEL</td>
<td>15 mg/m3</td>
<td>Total dust.</td>
</tr>
<tr>
<td>METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS 101-68-8)</td>
<td>Ceiling</td>
<td>0.2 mg/m3</td>
<td></td>
</tr>
<tr>
<td>SILICA, CRISTOBALITE (CAS 14464-46-1)</td>
<td>PEL</td>
<td>0.02 ppm</td>
<td>Respirable dust.</td>
</tr>
<tr>
<td>SUCROSE (CAS 57-50-1)</td>
<td>PEL</td>
<td>0.05 mg/m3</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>
### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Value (mg/m³)</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total dust</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

### US. OSHA Table Z-3 (29 CFR 1910.1000)

<table>
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<tr>
<th>Components</th>
<th>Value (mg/m³)</th>
<th>Type</th>
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</thead>
<tbody>
<tr>
<td>DIATOMACEOUS EARTH (CAS 68855-54-9)</td>
<td>1.1</td>
<td>TWA</td>
</tr>
<tr>
<td>PERLITE (CAS 93763-70-3)</td>
<td>5</td>
<td>TWA</td>
</tr>
<tr>
<td>WOOD/WOOD DUST</td>
<td>15</td>
<td>TWA</td>
</tr>
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</table>

### ACGIH

<table>
<thead>
<tr>
<th>Components</th>
<th>Value (mg/m³)</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERLITE (CAS 93763-70-3)</td>
<td>3</td>
<td>TWA</td>
</tr>
<tr>
<td>WOOD/WOOD DUST</td>
<td>1</td>
<td>TWA</td>
</tr>
</tbody>
</table>

### US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Value (mg/m³)</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)</td>
<td>10</td>
<td>TWA</td>
</tr>
<tr>
<td>CELLULOSE (CAS 9004-34-6)</td>
<td>10</td>
<td>TWA</td>
</tr>
<tr>
<td>CRISTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)</td>
<td>0.025</td>
<td>TWA</td>
</tr>
<tr>
<td>METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS 101-68-8)</td>
<td>0.005 ppm</td>
<td>TWA</td>
</tr>
<tr>
<td>PERLITE (CAS 93763-70-3)</td>
<td>10</td>
<td>TWA</td>
</tr>
<tr>
<td>SILICA, CRISTOBALITE (CAS 14464-46-1)</td>
<td>0.025</td>
<td>TWA</td>
</tr>
<tr>
<td>SUCROSE (CAS 57-50-1)</td>
<td>10</td>
<td>TWA</td>
</tr>
</tbody>
</table>

### US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Value (mg/m³)</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)</td>
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<td>TWA</td>
</tr>
<tr>
<td>CELLULOSE (CAS 9004-34-6)</td>
<td>10</td>
<td>TWA</td>
</tr>
<tr>
<td>CRISTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)</td>
<td>10</td>
<td>TWA</td>
</tr>
<tr>
<td>DIATOMACEOUS EARTH (CAS 68855-54-9)</td>
<td>6</td>
<td>TWA</td>
</tr>
<tr>
<td>METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS 101-68-8)</td>
<td>0.2 ppm</td>
<td>Ceiling</td>
</tr>
<tr>
<td>PERLITE (CAS 93763-70-3)</td>
<td>0.02 ppm</td>
<td>TWA</td>
</tr>
<tr>
<td>SILICA, CRISTOBALITE (CAS 14464-46-1)</td>
<td>10</td>
<td>TWA</td>
</tr>
<tr>
<td>SUCROSE (CAS 57-50-1)</td>
<td>10</td>
<td>TWA</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>WOOD/WOOD DUST</td>
<td>TWA</td>
<td>1 mg/m³</td>
<td>Dust.</td>
</tr>
</tbody>
</table>

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

**Exposure guidelines**
Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

**Appropriate engineering controls**
When sawing, sanding, drilling, or routing this product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**
Wear safety glasses with side shields (or goggles). Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

**Skin protection**

**Hand protection**
For prolonged or repeated skin contact use suitable protective gloves.

**Other**
Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA’s PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).

**Respiratory protection**
A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA’s respirator standard (29 CFR 1910.134) and ANSI’s standard for respiratory protection (Z88.2).

**Thermal hazards**
Not applicable.

**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. Keep away from food and drink.

### 9. Physical and chemical properties

**Appearance**
Composite core door panel

**Physical state**
Solid.

**Form**
Solid.

**Color**
Blue

**Odor**
Odorless

**Odor threshold**
Not available.

**pH**
7 - 9

**Melting point/freezing point**
2642 °F (1450 °C) estimated

**Initial boiling point and boiling range**
Not applicable.

**Flash point**
Not applicable.

**Evaporation rate**
Not available.

**Flammability (solid, gas)**
Not available.

**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**
Not available.

**Solubility(ies)**
Solubility (water)
Not available.
Partition coefficient (n-octanol/water) Not available.
Auto-ignition temperature Not applicable.
Decomposition temperature Not available.
Viscosity Not applicable.
Other information
   Explosive properties Not explosive.
   Oxidizing properties Not oxidizing.

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 No dangerous reaction known under conditions of normal use.
Conditions to avoid Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
Incompatible materials Acids.
Hazardous decomposition products May include and are not limited to: calcium oxide and sulfur dioxide.

11. Toxicological information
Information on likely routes of exposure
   Inhalation May cause irritation to the respiratory system. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Prolonged inhalation may be harmful.
   Skin contact Causes skin irritation. May cause an allergic skin reaction.
   Eye contact Causes serious eye irritation.
   Ingestion Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Coughing. Discomfort in the chest. Difficulty in breathing. Shortness of breath. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects
Acute toxicity

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 1581 mg/kg</td>
</tr>
<tr>
<td>METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS 101-68-8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>&gt; 10000 mg/kg</td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td></td>
<td>0.178 mg/l</td>
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<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 10000 mg/kg</td>
</tr>
<tr>
<td>SODIUM SILICATE (2.6&lt; MR &lt;=3.2) (CAS 1344-09-8)</td>
<td></td>
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</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>4640.0001 mg/kg</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>1153 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation Causes skin irritation.

Material name: FireDefender® Blue Banded FS II MDF
5298 Version #: 04 Revision date: November-05-2018 Issue date: May-20-2015
Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization
May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin sensitization
May cause an allergic skin reaction.

Germ cell mutagenicity
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity
Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure.

Wood dust generated from sawing, sanding or machining this product may cause nasal dryness, irritation, coughing and sinusitis. The International Agency for Research on Cancer (IARC), and National Toxicology Program (NTP) classifies wood dust as a carcinogen. This classification is based on the increased occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with exposure to wood dust. The evaluation noted insufficient evidence to associate cancers of the oropharynx, hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon, or rectum with exposure to wood dust.

IARC Monographs. Overall Evaluation of Carcinogenicity

CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7) 1 Carcinogenic to humans.
METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS 101-68-8) 3 Not classifiable as to carcinogenicity to humans.
SILICA, CRISTOBALITE (CAS 14464-46-1) 1 Carcinogenic to humans.
WOOD/WOOD DUST (CAS Not Assigned) 1 Carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7) Cancer

US. National Toxicology Program (NTP) Report on Carcinogens

CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7) Known To Be Human Carcinogen.
WOOD/WOOD DUST (CAS Not Assigned) Known To Be Human Carcinogen.

Reproductive toxicity
This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -
single exposure
May cause respiratory irritation.

Specific target organ toxicity -
repeated exposure
Causes damage to organs (lung) through prolonged or repeated exposure.

Aspiration hazard
Not an aspiration hazard.

Chronic effects
Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

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.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fathead minnow (Pimephales promelas) &gt; 1970 mg/l, 96 hours</td>
</tr>
<tr>
<td>CRystalline SILICA (QUARTZ)* (CAS 14808-60-7)</td>
<td></td>
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</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Zebra danio (Danio rerio) &gt; 10000 mg/l, 96 Hours OECD SIDS</td>
</tr>
<tr>
<td>METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS 101-68-8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fish &gt; 1000 mg/kg, 14 days</td>
</tr>
</tbody>
</table>
Components Test Results

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM SILICATE (2.6&lt; MR &lt;=3.2) (CAS 1344-09-8)</td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50 Water flea (Ceriodaphnia dubia)</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50 Western mosquitofish (Gambusia affinis)</td>
</tr>
</tbody>
</table>

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential

- Partition coefficient n-octanol / water (log Kow)
  - SUCROSE: -3.7

Mobility in soil
No data available.

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 instructions
Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

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

Contaminated packaging
Not available.

14. Transport information

DOT
Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not available.

15. Regulatory information

US federal regulations
This product is not hazardous in the form in which it is sold and shipped by the manufacturer. However, the large amount of dusts generated by downstream activities such as cutting, sanding, or otherwise working with this product is considered hazardous and is regulated under the Hazard Communication Standard 29 CFR 1910.1200.

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

TSCA Chemical Action Plans, Chemicals of Concern
- METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS 101-68-8)
  - Methylene Diphenyl Diisocyanate (MDI) And Related Compounds Action Plan [RIN 2070-ZA15]

CERCLA Hazardous Substance List (40 CFR 302.4)
- METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS 101-68-8)
  - Listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)
- CRystalline silica (quartz)* (CAS 14808-60-7)
  - Cancer
  - Lung effects
  - Immune system effects
  - Kidney effects

Superfund Amendments and Reauthorization Act of 1986 (SARA)
- SARA 302 Extremely hazardous substance
  - Not listed.
- SARA 311/312 Hazardous chemical
  - Yes
Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or skin sensitization
Carcinogenicity
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>% by wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHYLENE BISPHENYL ISOCYANATE (MDI)</td>
<td>101-68-8</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS 101-68-8)

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

California Proposition 65

WARNING: This product can expose you to chemicals including CRYSTALLINE SILICA (QUARTZ)*, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance
CRISTALLINE SILICA (QUARTZ)* (CAS 14808-60-7) Listed: October 1, 1988
FORMALDEHYDE (CAS 50-00-0) Listed: January 1, 1988
WOOD/WOOD DUST (CAS Not Assigned) Listed: December 18, 2009

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))
CRISTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)
METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS 101-68-8)
SILICA, CRISTOBALITE (CAS 14464-46-1)

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>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A “Yes” indicates that all components of this product comply 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: May-20-2015
Revision date: November-05-2018
Version #: 04
HMIS® ratings
Health: 2*
Flammability: 1
Physical hazard: 0

NFPA ratings
Health: 2
Flammability: 1
Instability: 0
Disclaimer

This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.

Revision information

Identification: Recommended restrictions
Composition / Information on Ingredients: Disclosure Overrides
Composition/information on ingredients: Composition comments
Exposure controls/personal protection: Occupational exposure limits
Regulatory information: California Proposition 65
Regulatory information: US federal regulations
GHS: Classification