1. Identification

Product identifier: Calcium Sulfate Feed Grade

Other means of identification:
- SDS number: 52000000034
- Additional products: Hydrous Calcium Sulfate
- Synonyms: Filler

Recommended use: Animal Feed.

Recommended restrictions: Use in accordance with manufacturer's recommendations.

Manufacturer/Importer/Supplier/Distributor information:
- Company name: United States Gypsum Company
- 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: Carcinogenicity Category 1A

OSHA defined hazards: Not classified.

Label elements:
- Signal word: Danger
- Hazard statement: May cause cancer.
- Precautionary statement:
  - Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.
  - Response: If exposed or concerned: Get medical advice/attention.
  - Storage: Store locked up.
  - 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>Calcium sulfate dihydrate</td>
<td>13397-24-5</td>
<td>&gt; 82</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline silica (Quartz)</td>
<td>14808-60-7</td>
<td>&lt; 0.75</td>
</tr>
</tbody>
</table>
Composition comments

All concentrations are in percent by weight unless ingredient is a gas.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 0.75%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

4. First-aid measures

Inhalation
Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. 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: Do not rub 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
Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.

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.

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

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
Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.

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

7. Handling and storage

Precautions for safe handling
Minimize dust production when mixing, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.

Conditions for safe storage, including any incompatibilities
Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.
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>Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)</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>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Impurities</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>0.3 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.1 mg/m³</td>
<td>Respirable.</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>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>
<tr>
<td></td>
<td></td>
<td>0.025 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Impurities</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>0.05 mg/m³</td>
<td>Respirable dust.</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 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.

Respiratory protection

Positive pressure, air-supplied respirator

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 separately from regular wash. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance

Calcium Sulfate Feed Grade
Physical state: Solid.
Form: Powder.
Color: White to off-white.
Odor: Low to no odor.
Odor 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.
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: 2.96 (H2O=1)
Solubility(ies):
  Solubility (water): 0.15 - 0.4 g/100 g (H2O)
Partition coefficient (n-octanol/water): Not applicable.
Auto-ignition temperature: Not applicable.
Decomposition temperature: 2642 °F (1450 °C)
Viscosity: Not applicable.
Other information:
  Bulk density: 55 - 70 lb/ft³
  Particle size: Varies.
  VOC (Weight %): 0 %

10. Stability and reactivity
Reactivity: The product is stable and non reactive under normal conditions of 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. Exposure to moisture.
Incompatible materials: Acids. Crystalline silica in contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires. Crystalline silica will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.
Hazardous decomposition products: Calcium oxides, carbon dioxide, and carbon monoxide.

11. Toxicological information
Information on likely routes of exposure:
Inhalation: Inhalation of dusts may cause respiratory irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
Skin contact: Under normal conditions of intended use, this product does not pose a skin hazard.
Eye contact: Direct contact with airborne particulates may cause temporary irritation.
Ingestion
May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics
Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.

Information on toxicological effects

Acute toxicity
Not expected to be a hazard under normal conditions of intended use.

Skin corrosion/irritation
Not a skin irritant.

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
Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity
Repeated and prolonged exposures to high levels of respirable crystalline silica may cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity
Crystalline silica (Quartz) (CAS 14808-60-7) 1 Carcinogenic to humans.

NTP Report on Carcinogens
Crystalline silica (Quartz) (CAS 14808-60-7) Known To Be Human Carcinogen.

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
Not classified. For detailed information, see section 16.

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

Chronic effects
Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

12. Ecological information

Ecotoxicity
The product components are 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</td>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td>(alternative CAS 10101-41-4) (CAS 13397-24-5)</td>
<td>Fish</td>
<td>LC50 Fathead minnow (Pimephales promelas) &gt; 1970 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability
Calcium sulfate dissolves in water forming calcium and sulfate ions.

Bioaccumulative potential
Bioaccumulation is not expected.

Mobility in soil
No data available.

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 a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200 (OSHA) and 8 CCR § 5194 (Cal/OSHA).

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

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

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - No
Delayed Hazard - Yes
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

US. Massachusetts RTK - Substance List
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Crystalline silica (Quartz) (CAS 14808-60-7)

US. New Jersey Worker and Community Right-to-Know Act
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Crystalline silica (Quartz) (CAS 14808-60-7)

US. Pennsylvania Worker and Community Right-to-Know Law
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Crystalline silica (Quartz) (CAS 14808-60-7)

US. Rhode Island RTK
Not regulated.

US. California Proposition 65
WARNING: This product contains chemicals known to the State of California to cause cancer.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance
Crystalline silica (Quartz) (CAS 14808-60-7)
<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>Yes</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

<table>
<thead>
<tr>
<th>Issue date</th>
<th>06-August-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision date</td>
<td>11-June-2015</td>
</tr>
<tr>
<td>Version #</td>
<td>02</td>
</tr>
</tbody>
</table>

Further information

Crystalline silica: Raw materials in this product may contain respirable crystalline silica. 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. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

NFPA Ratings:
- Health: 1
- Flammability: 0
- Physical hazard: 0

Hazard Scale: 0 = Minimal  1 = Slight  2 = Moderate  3 = Serious  4 = Severe

NFPA ratings

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.