SECTION 1 : Identification of the substance/mixture and of the supplier

Product name: Calcium Sulfate, Dihydrate

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25230

Recommended uses of the product and uses restrictions on use:

Manufacturer Details:
Aquaphoenix Scientific
9 Barnhart Drive, Hanover, PA 17331

Supplier Details:
Fisher Science Education
15 Jet View Drive, Rochester, NY 14624

Emergency telephone number:
Fisher Science Education    Emergency Telephone No.: 800-535-5053

SECTION 2 : Hazards identification

Classification of the substance or mixture:
Not classified for physical or health hazards under GHS.

Hazard statements:
Precautionary statements:
If medical advice is needed, have product container or label at hand
Keep out of reach of children
Read label before use

Combustible Dust Hazard:
May form combustible dust concentrations in air (during processing).

Other Non-GHS Classification:

SECTION 3 : Composition/information on ingredients

Ingredients:

Created by Global Safety Management, Inc. - Tel: 1-813-435-5161 - www.gsmsds.com
Calcium Sulfate, Dihydrate

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists.

After skin contact: Wash off with soap and plenty of water. Seek medical advice if discomfort or irritation persists.

After eye contact: Rinse or flush exposed eye gently using water for 15-20 minutes. Protect unexposed eye. Remove contact lenses while rinsing. Seek medical attention if irritation persists or concerned.

After swallowing: Never give anything by mouth to an unconscious person. Rinse mouth thoroughly. Do not induce vomiting. Seek medical attention if irritation, discomfort, or vomiting persists.

Most important symptoms and effects, both acute and delayed:


Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician.

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam. Follow Chemical Hygiene Plan.

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors. Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment: Wear protective eyeware, gloves, and clothing.

Additional information (precautions): Fire Fighting Instructions: Use normal procedures. Use protective clothing. Use NIOSH approved breathing equipment. Use spark-proof tools and explosion-proof equipment.

SECTION 6 : Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Keep product and empty container away from heat and sources of ignition. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Use spark-proof tools and explosion-proof equipment.

Environmental precautions:

Prevent from reaching drains, sewer, or waterway. Collect contaminated soil for characterization per Section 13.

Methods and material for containment and cleaning up:

Sweep up and containerize for disposal. Collect liquids using vacuum or by use of absorbents. Place into properly labeled containers for recovery or disposal. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. If necessary use trained response staff or contractor. If artificial respiration is necessary use...
NIOSH-approved breathing apparatus.

Reference to other sections:

SECTION 7 : Handling and storage

Precautions for safe handling:
Avoid contact with eyes, skin, and clothing. Dust deposits should not be allowed to accumulate on surfaces. Dust may form an explosive mixture if sufficient concentration is released into the atmosphere. Do not inhale gases, fumes, dust, mist, vapor, and aerosols. Follow Chemical Hygiene Plan. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Do not eat, drink, smoke, or use personal products when handling chemical substances. Use only in well-ventilated areas.

Conditions for safe storage, including any incompatibilities:
Keep container tightly closed in a cool, dry, and well-ventilated area. Keep away from food, beverages, and feed sources. Keep product and empty container away from heat and sources of ignition. Protect from freezing and physical damage.

SECTION 8 : Exposure controls/personal protection

Control Parameters:
10101-41-4, Calcium Sulfate, Dihydrate, ACGIH 10 mg/m³ TWA (inhalable fraction, listed under Calcium sulfate)

Appropriate Engineering controls:
It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Use spark-proof tools and explosion-proof equipment.

Respiratory protection:
Normal ventilation is adequate. Fire Fighting Instructions: Use normal procedures. Use protective clothing. Use NIOSH approved breathing equipment. When necessary use NIOSH approved breathing equipment.

Protection of skin:
Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Wear protective clothing according to the concentration and amount of the dangerous substance at the specific workplace.

Eye protection:
Safety glasses with side shields or goggles.

General hygienic measures:
Wash hands before breaks and at the end of work. Wash hands and exposed skin with soap and plenty of water. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Remove contaminated clothing and shoes. Wash contaminated clothing.

SECTION 9 : Physical and chemical properties

<table>
<thead>
<tr>
<th>Appearance (physical state,color):</th>
<th>White solid</th>
<th>Explosion limit lower:</th>
<th>No Information</th>
<th>Explosion limit upper:</th>
<th>No Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor:</td>
<td>Odorless</td>
<td>Vapor pressure:</td>
<td>Not Applicable</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Calcium Sulfate, Dihydrate

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor threshold</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>pH-value</td>
<td>7 (5% aqueous sol.)</td>
</tr>
<tr>
<td>Melting/Freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flash point (closed cup)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flammability (solid,gaseous)</td>
<td>No Information</td>
</tr>
<tr>
<td>Density</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Relative density</td>
<td>No Information</td>
</tr>
<tr>
<td>Solubilities</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Auto/Self-ignition temperature</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>140°C</td>
</tr>
<tr>
<td>Viscosity</td>
<td>a. Kinematic: Not Applicable</td>
</tr>
<tr>
<td></td>
<td>b. Dynamic: Not Applicable</td>
</tr>
<tr>
<td>Relative density</td>
<td>No Information</td>
</tr>
<tr>
<td>Melting/Freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not Applicable</td>
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<td>a. Kinematic: Not Applicable</td>
</tr>
<tr>
<td></td>
<td>b. Dynamic: Not Applicable</td>
</tr>
</tbody>
</table>

SECTION 10 : Stability and reactivity

Reactivity:
- **Chemical stability:** Stable under normal conditions.
- **Possible hazardous reactions:**
- **Conditions to avoid:** Incompatible materials, excess heat, and dust formation
- **Incompatible materials:** Strong oxidizers.
- **Hazardous decomposition products:** Sulphur oxides.

SECTION 11 : Toxicological information

**Acute Toxicity:**
- **Oral:** APS, LD50 orl-rat: 3000mg/kg

**Chronic Toxicity:** No additional information.

**Corrosion Irritation:** No additional information.

**Sensitization:** No additional information.

**Single Target Organ (STOT):** No additional information.

**Numerical Measures:** No additional information.

**Carcinogenicity:** No additional information.

**Mutagenicity:** No additional information.

**Reproductive Toxicity:** No additional information.

SECTION 12 : Ecological information

**Ecotoxicity Persistence and degradability:** Readily degradable in the environment.

**Bioaccumulative potential:**
- **Mobility in soil:** -0.2

**Other adverse effects:**
SECTION 13 : Disposal considerations

Waste disposal recommendations:
Offer surplus and non-recyclable solutions to a licensed disposal company. Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Keep in suitable closed containers for disposal. Product or containers must not be disposed together with household garbage. Consult federal, state, provincial, and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product. Contact a licensed professional waste disposal service to dispose of this material.

SECTION 14 : Transport information

UN-Number
UN proper shipping name
Transport hazard class(es)
Packing group:
Environmental hazard:
Transport in bulk:
Special precautions for user:

SECTION 15 : Regulatory information

United States (USA)
SARA Section 311/312 (Specific toxic chemical listings):
SARA Section 313 (Specific toxic chemical listings):
None of the ingredients is listed
RCRA (hazardous waste code):
None of the ingredients is listed
TSCA (Toxic Substances Control Act):
10101-41-4 This chemical is not listed on the TSCA because it is a hydrate.
CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):
None of the ingredients is listed

Proposition 65 (California):
Chemicals known to cause cancer:
None of the ingredients is listed
Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed
Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed
Chemicals known to cause developmental toxicity:
None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):
Calcium Sulfate, Dihydrate

10101-41-4 This chemical is not listed on Canada DSL.

**Canadian NPRI Ingredient Disclosure list (limit 0.1%)**: None of the ingredients is listed

**Canadian NPRI Ingredient Disclosure list (limit 1%)**: None of the ingredients is listed

### SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

**GHS Full Text Phrases:**

**Abbreviations and acronyms:**
IMDG: International Maritime Code for Dangerous Goods
PNEC: Predicted No-Effect Concentration (REACH)
CFR: Code of Federal Regulations (USA)
SARA: Superfund Amendments and Reauthorization Act (USA)
RCRA: Resource Conservation and Recovery Act (USA)
TSCA: Toxic Substances Control Act (USA)
NPRI: National Pollutant Release Inventory (Canada)
DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
DNEL: Derived No-Effect Level (REACH)

**Effective date**: 12.19.2014
**Last updated**: 03.19.2015