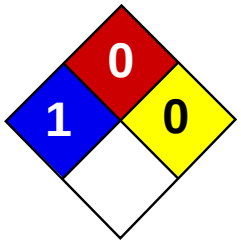

Health	1
Fire	0
Reactivity	0
Personal Protection	B

Material Safety Data Sheet

Calcium sulfate, anhydrous MSDS

Section 1: Chemical Product and Company Identification

Product Name: Calcium sulfate, anhydrous

Catalog Codes: SLC2974

CAS#: 7778-18-9

RTECS: WS6920000

TSCA: TSCA 8(b) inventory: Calcium sulfate, anhydrous

CI#: Not applicable.

Synonym: DRIERITE; karstenite; muriacite; anhydrous sulfate of lime; anhydrous gypsum

Chemical Name: Calcium Sulfate, Anhydrous

Chemical Formula: CaSO4

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Calcium sulfate, anhydrous	7778-18-9	100

Toxicological Data on Ingredients: Not applicable.

Section 3: Hazards Identification

Potential Acute Health Effects: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to lungs, upper respiratory tract. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. WARM water MUST be used. Get medical attention if irritation occurs.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available. Slightly explosive in presence of heat.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards:
Calcium Sulfate mixed with phosphorus will ignite at high temperatures. When primed at high temperature with potassium nitrate-calcium silicide mixture, calcium sulfate mixed with excess red phosphorus will burn.

Special Remarks on Explosion Hazards:
Contact with diazomethane causes an exothermic reaction which may lead to detonation. Many metal oxo-compounds (nitrates, oxides, and particulary sulfates) and sulfides are reduced violently or explosively (undergo a thermite reaction) on heating an intimate mixture with aluminum powder to a suitably high temperture to initiate the reaction. A violent or explosive reaction can occur upon heating when calcium sulfate is mixed with aluminum powder. Containers may explode when heated.

Section 6: Accidental Release Measures

Small Spill:
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:
Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions: Do not breathe dust. Keep away from incompatibles such as oxidizing agents, acids.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area. Hygroscopic

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses. Lab coat. Gloves (impervious).

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
TWA: 15 (mg/m3) from OSHA (PEL) [United States] Inhalation Total. TWA: 5 (mg/m3) [Quebec Canada]; 3 (mg/m3)[British Columbia Canada] Inhalation Respirable. TWA: 10 (mg/m3) from NIOSH [United States] Inhalation Total. TWA: 5 (mg/m3) from NIOSH [United States] Inhalation Respirable. TWA: 5 (mg/m3) from OSHA (PEL) [United States] Inhalation Respirable. TWA: 5 (mg/m3) [United Kingdom (UK)] Inhalation Respirable. TWA: 10 (mg/m3) [United Kingdom (UK)] Inhalation Total. TWA: 10 (mg/m3) from ACGIH (TLV) [United States] Inhalation Total. TWA: 10 STEL: 20 (mg/m3) [Canada] Inhalation Total.3 Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Crystals solid. Powdered solid.)

Odor: Odorless.

Taste: Not available.

Molecular Weight: 136.14 g/mole

Color:
White or white with varied colored (blue, gray or reddish) tinge

pH (1% soln/water): Not available.

Boiling Point: Not available.

Melting Point: 1450°C (2642°F)

Critical Temperature: Not available.

Specific Gravity: 2.96 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Very slightly soluble in cold water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Moisture, incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents, acids.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:
Incompatible with Diazomethane, aluminum, magnesium, phosphorous. The anhydrous form cannot set with water. Hygroscopic; keep container tightly closed.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals:
LD50: Not available. LC50: Not available.

Chronic Effects on Humans: May cause damage to the following organs: lungs, upper respiratory tract.

Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects: Skin: Causes skin irritation. Eyes: Causes eye irritation with out any adverse effects. May cause conjunctivitis. Inhalation: Causes respiratory tract and mucous membrane irritation. Symptoms may include coughing, rhinitis, laryngitis, pharyngitis, reactions of tracheal and bronchial membranes, sneezing, pneumonia, impaired of sense of smell and taste, bleeding from the nose, and labored breathing after excessive inhalation. Ingestion: May cause digestive tract irritation. Because it hardens quickly after absorbing moisture, its ingestion may result in obstruction, particularly of the pylorus. Chronic Potential Health Effects: Inhalation: Prolonged or repeated inhalation may produce unspecified effects on the lungs. Medical Conditions Generally Aggravated by Exposure: Pre-exisiting upper respiratory and lung diseases such as, but not limited to Bronchitis, Emphysema, and Asthma.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations:
Illinois toxic substances disclosure to employee act: Calcium sulfate, anhydrous Pennsylvania RTK: Calcium sulfate, anhydrous Minnesota: Calcium sulfate, anhydrous Massachusetts RTK: Calcium sulfate, anhydrous TSCA 8(b) inventory: Calcium sulfate, anhydrous

Other Regulations: EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC):
This product is not classified according to the EU regulations. Not applicable.

HMIS (U.S.A.):

Health Hazard: 1

Fire Hazard: 0

Reactivity: 0

Personal Protection: B

National Fire Protection Association (U.S.A.):

Health: 1

Flammability: 0

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves (impervious). Lab coat. Not applicable. Safety glasses.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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