Calcium Chloride, Anhydrous

Product Name: Calcium Chloride, Anhydrous
Common Synonyms: N/A
Chemical Family: Calcium Compounds
Formula: CaCl₂
Formula Wt.: 110.99
CAS No.: 10043-52-4
NIOSH/RTECS No.: EU98000000
Product Use: Laboratory Reagent
Product Codes: 1311

PRECAUTIONARY LABELING

BAKER SAF-T-DATA+ System

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>REACTIVITY</th>
<th>CONTACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLIGHT</td>
<td>NONE</td>
<td>NONE</td>
<td>MODERATE</td>
</tr>
</tbody>
</table>

Laboratory Protective Equipment
- Goggles
- Lab coat

U.S. Precautionary Labeling

WARNING!

CAUSES IRRITATION. MAY CAUSE EYE BURNS.
Avoid contact with eyes, skin, clothing. Avoid breathing dust. Keep in tightly closed container. Use with adequate ventilation. Wash thoroughly after handling.

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PRECAUTIONARY LABELING (CONTINUED)

International Labeling

Avoid contact with eyes. After contact with skin, wash immediately with plenty of water. Keep container tightly closed.

SAF-T-DATA* Storage Color Code: Orange (general storage)

SECTION II - COMPONENTS

Component           CAS No.     Weight %  OSHA/PEL  ACGIH/TLV
Calcium Chloride    10043-52-4  96-100     N/E       N/E

SECTION III - PHYSICAL DATA

Boiling Point: N/A  vapor Pressure (mmHg): N/A
Melting Point: 772°C (1421°F)  Vapor Density (air=1): N/A
(at 760 mm Hg)  Evaporation Rate: N/A
Specific Gravity: 2.15  % Volatiles by Volume: 0
(H₂O=1)  (21°C)
Solubility(H₂O): Appreciable (>10%)  Physical State: Solid
pH: N/A
Odor Threshold (ppm): N/A
Coefficient Water/Oil Distribution: N/A

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SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Closed Cup): N/A
Autoignition Temperature: N/A
Flammable Limits: Upper - N/A  Lower - N/A

Fire Extinguishing Media
Use extinguishing media appropriate for surrounding fire.

Special Fire-Fighting Procedures
Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode.

Unusual Fire & Explosion Hazards
None identified.

Toxic Gases Produced
hydrogen chloride

Explosion Data-Sensitivity to Mechanical Impact
None identified.

Explosion Data-Sensitivity to Static Discharge
None identified.

SECTION V - HEALTH HAZARD DATA

Threshold Limit Value (TLV/TWA): Not Established
Short-Term Exposure Limit (STEL): Not Established
Permissible Exposure Limit (PEL): Not Established

Toxicity of components

Oral Rat LD₅₀ for Calcium Chloride  1000 mg/kg
Intraperitoneal Rat LD₅₀ for Calcium Chloride  264 mg/kg
Subcutaneous Rat LD₅₀ for Calcium Chloride  2630 mg/kg
Intravenous Mouse LD₅₀ for Calcium Chloride  42 mg/kg

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SECTION V - HEALTH HAZARD DATA (CONTINUED)

Carcinogenicity: NTP: No  IARC: No  Z List: No  OSHA Reg: No

Carcinogenicity
None identified.

Reproductive Effects
None identified.

Effects of Overexposure

INHALATION: irritation of upper respiratory tract
SKIN CONTACT: prolonged contact may cause irritation
EYE CONTACT: irritation, may cause burns
SKIN ABSORPTION: none identified
INGESTION: gastrointestinal irritation
CHRONIC EFFECTS: none identified

Target Organs
eyes

Medical Conditions Generally Aggravated by Exposure
none identified

Primary Routes of Entry
ingestion, inhalation, skin contact, eye contact

Emergency and First Aid Procedures

INGESTION: CALL A PHYSICIAN. If swallowed, if conscious, give large amounts of water. Induce vomiting.

INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

SKIN CONTACT: In case of contact, flush skin with water.

EYE CONTACT: In case of eye contact, immediately flush with plenty of water for at least 15 minutes.
SARA/TITLE III HAZARD CATEGORIES and LISTS

Acute: Yes  Chronic: Yes  Flammability: No  Pressure: No  Reactivity: No

Extremely Hazardous Substance: No  CERCLA Hazardous Substance: No  SARA 313 Toxic Chemicals: No  TSCA Inventory: Yes

SECTION VI - REACTIVITY DATA

Stability: Stable  Hazardous Polymerization: Will not occur

Conditions to Avoid: moisture

Incompatibles: most common metals, water, aluminum

Decomposition Products: hydrogen chloride

SECTION VII - SPILL & DISPOSAL PROCEDURES

Steps to be Taken in the Event of a Spill or Discharge

Wear self-contained breathing apparatus and full protective clothing. With clean shovel, carefully place material into clean, dry container and cover; remove from area. Flush spill area with water.

Disposal Procedure

Dispose in accordance with all applicable federal, state, and local environmental regulations.

SECTION VIII - INDUSTRIAL PROTECTIVE EQUIPMENT

Ventilation: Use adequate general or local exhaust ventilation to keep fume or dust levels as low as possible.

Respiratory Protection: None required where adequate ventilation conditions exist. If airborne concentration is high, use an appropriate respirator or dust mask.
SECTION VIII - INDUSTRIAL PROTECTIVE EQUIPMENT (CONTINUED)

Eye/Skin Protection: Safety goggles, uniform, rubber gloves are recommended.

SECTION IX - STORAGE AND HANDLING PRECAUTIONS

SAF-T-DATA Storage Color Code: Orange (general storage)

Storage Requirements
Keep container tightly closed. Suitable for any general chemical storage area.

Special Precautions
Material is hygroscopic.

SECTION X - TRANSPORTATION DATA AND ADDITIONAL INFORMATION

Domestic (D.O.T.)

Proper Shipping Name: Chemicals, n.o.s. (Non-regulated)

International (I.M.O.)

Proper Shipping Name: Chemicals, n.o.s. (Non-regulated)
Marine Pollutants: No

AIR (I.C.A.O.)

Proper Shipping Name: Chemicals, n.o.s. (Non-regulated)

U.S. Customs Harmonization Number: 28272000003

N/A = Not Applicable or Not Available
N/E = Not Established

The information in this Material Safety Data Sheet meets the requirements of the United States OCCUPATIONAL SAFETY AND HEALTH ACT and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and the Canadian WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM. This document is intended only as a guide to the appropriate precautionary handling of the material by a person trained in, or supervised by a person trained
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in, chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes.

Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, Baker cannot warn of all of the potential dangers of use or interaction with other chemicals or materials. Baker warrants that the chemical meets the specifications set forth on the label.

BAKER DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREFUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR PURPOSE.

The user should recognize that this product can cause severe injury and even death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Baker will periodically revise this Material Safety Data Sheet.

Note: CHEMTREC, CANUTEC, and NATIONAL RESPONSE CENTER emergency telephone numbers are to be used ONLY in the event of CHEMICAL EMERGENCIES involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to Customer Service (1-800-JTBAKER) for assistance.

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Approved by Quality Assurance Department.