



J.T. Baker Inc.  
222 Red School Lane  
Phillipsburg, NJ 08865

24-Hour Emergency Telephone 908-859-2151  
National Response Center 800-424-8802  
Chemtrec 800-424-9300

National Response In Canada  
CANUTEC 613-996-6666  
Outside U.S. and Canada  
Chemtrec 202-483-7616

**MATERIAL SAFETY DATA SHEET**

FICHE  
SIGNALÉTIQUE

HOJAS DE DATOS  
DE SEGURIDAD

NOTE: CHEMTREC, CANUTEC and National Response Center emergency 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.

C0357 -04  
Effective: 03/09/92

Calcium Chloride, Anhydrous

Page: 1  
Issued: 07/10/93

J.T. BAKER INC., 222 Red School Lane, Phillipsburg, NJ 08865

SECTION I - PRODUCT IDENTIFICATION

Product Name: Calcium Chloride, Anhydrous  
Common Synonyms: N/A  
Chemical Family: Calcium Compounds  
Formula: CaCl<sub>2</sub>  
Formula Wt.: 110.99  
CAS No.: 10043-52-4  
NIOSH/RTECS No.: EU9800000  
Product Use: Laboratory Reagent  
Product Codes: 1311

PRECAUTIONARY LABELING

BAKER SAF-T-DATA\* System

HEALTH <b>1</b> SLIGHT	FLAMMABILITY <b>0</b> NONE	REACTIVITY <b>0</b> NONE	CONTACT <b>2</b> MODERATE
------------------------------	----------------------------------	--------------------------------	---------------------------------

Laboratory Protective Equipment



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.



J.T. Baker Inc.  
222 Red School Lane  
Phillipsburg, NJ 08865

24-Hour Emergency Telephone 908-859-2151  
National Response Center 800-424-8802  
Chemtrec 800-424-9300

National Response In Canada  
CANUTEC 613-996-6666  
Outside U.S. and Canada  
Chemtrec 202-483-7616

**MATERIAL SAFETY DATA SHEET**

FICHE  
SIGNALÉTIQUE

HOJAS DE DATOS  
DE SEGURIDAD

**NOTE:** CHEMTREC, CANUTEC and National Response Center emergency 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.

C0357 -04  
Effective: 03/09/92

Calcium Chloride, Anhydrous

Page: 2  
Issued: 07/10/93

=====

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

=====

<u>Component</u>	<u>CAS No.</u>	<u>Weight %</u>	<u>OSHA/PEL</u>	<u>ACGIH/TLV</u>
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)  
(at 760 mm Hg)

Vapor Density (air=1): N/A

Specific Gravity: 2.15  
(H<sub>2</sub>O=1)

Evaporation Rate: N/A

Solubility(H<sub>2</sub>O): Appreciable (>10%)

% Volatiles by Volume: 0  
(21°C)

pH: N/A

Odor Threshold (ppm): N/A

Physical State: Solid

Coefficient Water/Oil Distribution: N/A

Appearance & Odor: White granules. Odorless.



J.T. Baker Inc.  
222 Red School Lane  
Phillipsburg, NJ 08865

24-Hour Emergency Telephone 908-859-2151  
National Response Center 800-424-8802  
Chemtrec 800-424-9300

National Response In Canada  
CANUTEC 613-996-6666  
Outside U.S. and Canada  
Chemtrec 202-483-7616

**MATERIAL SAFETY DATA SHEET**

FICHE  
SIGNALÉTIQUE

HOJAS DE DATOS  
DE SEGURIDAD

**NOTE:** CHEMTREC, CANUTEC and National Response Center emergency 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.

C0357 -04  
Effective: 03/09/92

Calcium Chloride, Anhydrous

Page: 3  
Issued: 07/10/93

=====  
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 LD <sub>50</sub> for Calcium Chloride	1000 mg/kg
Intraperitoneal Rat LD <sub>50</sub> for Calcium Chloride	264 mg/kg
Subcutaneous Rat LD <sub>50</sub> for Calcium Chloride	2630 mg/kg
Intravenous Mouse LD <sub>50</sub> for Calcium Chloride	42 mg/kg



J.T. Baker Inc.  
222 Red School Lane  
Phillipsburg, NJ 08865

24-Hour Emergency Telephone 908-859-2151  
National Response Center 800-424-8802  
Chemtrec 800-424-9300

National Response In Canada  
CANUTEC 613-996-6666

Outside U.S. and Canada  
Chemtrec 202-483-7616

**MATERIAL SAFETY DATA SHEET**

FICHE  
SIGNALÉTIQUE

HOJAS DE DATOS  
DE SEGURIDAD

**NOTE:** CHEMTREC, CANUTEC and National Response Center emergency 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.

C0357 -04  
Effective: 03/09/92

Calcium Chloride, Anhydrous

Page: 4  
Issued: 07/10/93

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.



J.T. Baker Inc.  
 222 Red School Lane  
 Phillipsburg, NJ 08865

24-Hour Emergency Telephone 908-859-2151  
 National Response Center 800-424-8802  
 Chemtrec 800-424-9300

National Response In Canada  
 CANUTEC 613-996-6666

Outside U.S. and Canada  
 Chemtrec 202-483-7616

**MATERIAL SAFETY DATA SHEET**

FICHE  
 SIGNALÉTIQUE

HOJAS DE DATOS  
 DE SEGURIDAD

**NOTE:** CHEMTREC, CANUTEC and National Response Center emergency 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.

C0357 -04  
 Effective: 03/09/92

Calcium Chloride, Anhydrous

Page: 5  
 Issued: 07/10/93

=====  
 SECTION V - HEALTH HAZARD DATA (CONTINUED)  
 =====

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.



J.T. Baker Inc.  
 222 Red School Lane  
 Phillipsburg, NJ 08865

24-Hour Emergency Telephone 908-859-2151  
 National Response Center 800-424-8802  
 Chemtrec 800-424-9300

National Response In Canada  
 CANUTEC 613-996-6666

Outside U.S. and Canada  
 Chemtrec 202-483-7616

**MATERIAL SAFETY DATA SHEET**

FICHE  
 SIGNALÉTIQUE

HOJAS DE DATOS  
 DE SEGURIDAD

**NOTE:** CHEMTREC, CANUTEC and National Response Center emergency 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.

C0357 -04  
 Effective: 03/09/92

Calcium Chloride, Anhydrous

Page: 6  
 Issued: 07/10/93

=====  
 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

Continued on Page: 7

0020



J.T. Baker Inc.  
 222 Red School Lane  
 Phillipsburg, NJ 08865

24-Hour Emergency Telephone 908-859-2151  
 National Response Center 800-424-8802  
 Chemtrec 800-424-9300

National Response In Canada  
 CANUTEC 613-996-6666

Outside U.S. and Canada  
 Chemtrec 202-483-7616

**MATERIAL SAFETY DATA SHEET**

FICHE  
 SIGNALÉTIQUE

HOJAS DE DATOS  
 DE SEGURIDAD

**NOTE:** CHEMTREC, CANUTEC and National Response Center emergency 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.

C0357 -04  
 Effective: 03/09/92

Calcium Chloride, Anhydrous

Page: 7  
 Issued: 07/10/93

=====  
 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 HEREUNDER, 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.

---  
 COPYRIGHT 1993 J.T.BAKER INC.  
 \* TRADEMARKS OF J.T.BAKER INC.

===  
 Approved by Quality Assurance Department.