



# SAFETY DATA SHEET

[Required under safety and health regulations for shipping and handling]

Version: 2023

Date Updated: Jan 14, 2023

## SECTION 1. ----- PRODUCT AND COMPANY IDENTIFICATION -----

Product Name Calcium chloride, anhydrous  
 Product Code(s) CT1330 (CB0251)  
 Recommended Use For Laboratory Research Use Only  
 Not for Human or Animal Drug Use

Supplier Bio Basic Inc.  
 Address 20 Konrad Crescent, Markham, Ontario,  
 Canada, L3R 8T4  
 Telephone (905) 474 4493  
 Fax (905) 474 5794  
 For Chemical Emergency Phone# (416) 995 9730

## SECTION 2. ----- HAZARDS IDENTIFICATION -----

Classification of the substance or mixture

GHS Classification in accordance with Hazardous Products Regulations (HPR) (SOR/2015-17)

Eye irritation (Category 2A), H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

**Hazard statement(s)**

H319 Causes serious eye irritation.

Precautionary statement(s)

P264 Wash skin thoroughly after handling.

P280 Wear eye protection/ face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

## SECTION 3. ----- COMPOSITION/INFORMATION ON INGREDIENTS -----

Chemical Name	EC No.	CAS-No	Weight %
Calcium chloride	233-140-8	10043-52-4	<100

#### SECTION 4. ----- FIRST-AID MEASURES-----

##### **Description of first aid measures**

##### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

##### **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

##### **In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

##### **In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

##### **If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

##### **Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

##### **Indication of any immediate medical attention and special treatment needed**

No data available

#### SECTION 5. ----- FIRE FIGHTING MEASURES-----

##### **Extinguishing media**

##### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

##### **Special hazards arising from the substance or mixture**

Hydrogen chloride gas, Calcium oxide Not combustible.  
Ambient fire may liberate hazardous vapors.

##### **Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

##### **Further information**

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

#### SECTION 6. ----- ACCIDENTAL RELEASE MEASURES-----

##### **Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.  
For personal protection see section 8.

##### **Environmental precautions**

Do not let product enter drains.

##### **Methods and materials for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area.  
Avoid generation of dusts.

##### **Reference to other sections**

For disposal see section 13.

**SECTION 7. ----- HANDLING AND STORAGE-----**

**Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. See section 2.

**Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place.

Moisture sensitive. Keep in a dry place.

Storage class (TRGS 510): 11: Non Combustible Solids

**Specific end use(s)**

Apart from the uses mentioned no other specific uses are stipulated.

**SECTION 8. ----- EXPOSURE CONTROLS/PERSONAL PROTECTION-----**

**Control parameters**

**Components with workplace control parameters**

Components	CAS-No.	Value	Control parameters	Basis
Calcium chloride	10043-52-4	TWA	5 mg/m3	Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.

**Exposure controls**

**Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection**

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**

Do not let product enter drains.

## SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES -----

### Information on basic physical and chemical properties

- |   |                                      |
|---|--------------------------------------|
| a) Appearance                                   | Form: solid<br>Colour: white         |
| b) Odour  | odourless                            |
| c) Odour Threshold                              | No data available                    |
| d) pH   | 4.5 - 8.5 at 50 g/l at 20 °C (68 °F) |
| e) Melting point/freezing point                 | Melting point: 176 °C (349 °F) - dec |
| f) Initial boiling point and boiling range      | 100 °C 212 °F                        |
| g) Flash point                                  | ( )No data available                 |
| h) Evaporation rate                             | No data available                    |
| i) Flammability (solid, gas)                    | The product is not flammable.        |
| j) Upper/lower flammability or explosive limits | No data available                    |
| k) Vapour pressure                              | 0.01 hPa at 20 °C (68 °F)            |
| l) Vapour density                               | No data available                    |
| m) Relative density                             | No data available                    |
| n) Water solubility                             | 147 g/l at 20 °C (68 °F)             |
| o) Partition coefficient: n-octanol/water       | No data available                    |
| p) Auto-ignition temperature                    | No data available                    |
| q) Decomposition temperature                    | No data available                    |
| r) Viscosity                                    | No data available                    |
| s) Explosive properties                         | No data available                    |
| t) Oxidizing properties                         | No data available                    |

### Other safety information

No data available

## SECTION 10. ----- STABILITY AND REACTIVITY -----

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

Exothermic reaction with: boron trifluoride, vinylmethyl ether, Water.

Generates dangerous gases or fumes in contact with: Metals, Zinc.

**Conditions to avoid**

Exposure to moisture may affect product quality.

**Incompatible materials**

Strong acids, Borane/boron oxides, Zinc, Calcium oxide, Methyl vinyl ether, Strong oxidizing agents, Calcium chloride is attacked by bromine trifluoride

**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Hydrogen chloride gas, Calcium oxide  
Other decomposition products - No data available In the event of fire: see section 5

**SECTION 11. ----- TOXICOLOGICAL INFORMATION -----****Information on toxicological effects****Acute toxicity**

Symptoms: After uptake of large quantities:, Stomach/intestinal disorders.  
Symptoms: Possible damages:, mucosal irritations  
LD50 Dermal - Rabbit - > 5,000 mg/kg  
Remarks: (ECHA)

**Skin corrosion/irritation**

Skin - Rabbit  
Result: No skin irritation - 4 h (OECD Test Guideline 404)

**Serious eye damage/eye irritation**

Eyes - Rabbit  
Result: Moderate eye irritation (OECD Test Guideline 405)

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available  
Test Type: Ames test  
Result: negative  
Remarks: (anhydrous substance)  
(Lit.)

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available  
Acute oral toxicity - After uptake of large quantities:, Stomach/intestinal disorders, Nausea Acute inhalation toxicity - Possible damages:, mucosal irritations

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Additional Information**

RTECS: EV9810000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**SECTION 12. ----- ECOLOGICAL INFORMATION -----**

**Toxicity**

Toxicity to fish:LC50 - Lepomis macrochirus (Bluegill sunfish) - 10,650 mg/l - 96 h  
Remarks: (anhydrous substance)  
(IUCLID)

Toxicity to daphnia:  
and other aquatic static test EC50 - Daphnia magna (Water flea) - 144 mg/l - 48 h  
invertebrates  
Remarks: (anhydrous substance) (IUCLID)

Toxicity to algae IC50 - algae - 3,130 mg/l - 120 h  
Remarks: (anhydrous substance)  
(IUCLID)1

**Persistence and degradability**

No data available.

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**Other adverse effects**

Discharge into the environment must be avoided.

**SECTION 13. ----- DISPOSAL CONSIDERATIONS -----**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

**SECTION 14. ----- TRANSPORT INFORMATION -----**

**DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

**SECTION 15. ----- REGULATORY INFORMATION -----**

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

**SECTION 16. ----- OTHER INFORMATION-----**

Further information: no limited for paper copy, just for internal uses.  
For research use only. Not intended for human or animal diagnostic or therapeutic uses.

**Disclaimer**

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**Issuing Date:** 14-Aug-2019

**End of SDS**