

Safety Data Sheet



1: Identification

1.1: Product Identifier

Product Name: CaCl₂
Product Number(s): 1CACL2-0004F
CAS Number: 10043-52-4
SDS Document Number: 000040

1.2: Recommended Uses and Restrictions

Recommended Uses
Manufacture of substances

Restrictions
Not for food or drug use.

1.3: Supplier Contact Information

APL Engineered Materials, Inc.
2401 N. Willow Rd.
Urbana, IL 61802
Phone: 217-367-1340
Fax: 217-367-9084

1.4: Emergency Phone Number

International: +01-813-248-0585
United States: 800-255-3924

2: Hazards Identification

2.1: Classifications

Eye Damage/Irritation - Category 2A

2.2: GHS Label Elements

Pictograms



Signal Word: Warning

Hazard Statements

H319: Causes serious eye irritation.

Precautionary Statements

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves, clothing and glasses.

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.

2.3: Hazards Not Otherwise Classified or Not Covered by GHS

None.

2.4: Amount(s) of substances with unknown toxicity

None

3: Composition/Information on Ingredients

3.1: .Ingredient	.Weight%	.Formula	.CAS Number	.Mol Wt	.EC Number
CaCl2	100	CaCl2	10043-52-4	110.98	233-140-8

3.2: Other Hazardous components

none

3.3: Trade Secret Disclaimer

none

3.4: Synonyms

Calcium Chloride

4: First Aid Measures

4.1: First Aid

General

Consult with physician and provide this Safety Data Sheet

Remove person from area of exposure and remove any contaminated clothing

In contact with eyes

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

Seek medical attention if irritation develops or persists

In contact with skin

Wash thoroughly with soap and plenty of water. Remove all contaminated clothing for proper laundering. Seek medical attention if irritation develops or persists.

If swallowed

If conscious and alert, rinse mouth and drink 2-4 cupfuls of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical aid.

If inhaled

Remove from exposure to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid.

If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

4.2: Most important symptoms and effects; acute and delayed

Causes serious eye irritation.

4.3: Indication of any immediate medical attention and special treatment needed

no data available

5: Fire Fighting Measures

5.1: Fire extinguishing media

water or alcohol-resistant foam
carbon dioxide
dry chemical

5.2: Specific hazards arising from the substance or mixture

hydrochloric acid and hydrochloric acid fumes
calcium oxide

5.3: Special protective equipment and precautions for firefighters.

Wear self contained breathing apparatus for fire fighting if necessary

6: Accidental Release Measures

6.1: Personal precautions, protective equipment, and emergency procedures.

Ensure adequate ventilation.
Evacuate personnel to safe areas.
For personal protection see section 8.
Use personal protective equipment.
Avoid breathing dust.
Avoid dust formation.

6.2: Methods and materials for containment and cleaning up.

Keep in suitable, closed containers for disposal.
Sweep up and shovel.

6.3: Environmental precautions

Do not let product enter drains.

6.4: Disposal

See section 13.
Dispose of in accordance with local regulations.

7: Handling and Storage

7.1: Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed.
Avoid formation of dust and aerosols.
See precautionary statements in section 2.2.
Avoid contact with skin and eyes.

7.2: Conditions for safe storage

Store under inert gas.
Store away from moisture.
Store in a dry and well-ventilated place.
Keep container tightly closed.

7.3: Incompatibilities

bromine trifluoride
strong acids

8: Exposure Controls/Personal Protection

8.1: Control parameters

OSHA permissible exposure limit (PEL)

not listed

ACGIH threshold limit value (TLV)

not listed

NIOSH recommended exposure limit (REL)

not listed

8.2: Engineering controls

Use adequate ventilation to keep airborne concentrations low

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower

8.3: Personal protective equipment

Eyes

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

Skin

Wear appropriate, chemical-resistant protective gloves to prevent skin exposure.

Clothing

Wear appropriate protective clothing to prevent skin exposure

Respirator

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149.
Always use a NIOSH or European Standard EN 149 approved respirator when necessary

9: Physical and Chemical Properties

9.a: Appearance

State: Solid

Form: powder or spheres

Color: White

9.b: Odor: odorless

9.c: Odor threshold: no data available

9.d: pH: no data available

9.e: Melting point / freezing point: 772 °C (1,422 °F)

9.f: Initial boiling point and range: 1,670 °C (3,038 °F)

9.g: Flashpoint: no data available

9.h: Evaporation rate: no data available

9.i: Flammability (solid, gas): no data available

9.j: Upper/lower flammability or explosive limits: no data available

9.k: Vapor pressure: 0.01 hPa (0.01 mmHg) at 20 °C (68 °F)

9.l: Vapor density: no data available

9.m: Relative density: 2.150 g/cm³

- 9.n: Water Solubility: 81.3 g/100 g at 25 ° C
9.o: Partition coefficient: n-octanol/water: no data available
9.p: Auto-ignition temperature: no data available
9.q: Decomposition temperature: no data available
9.r: Viscosity: no data available

10: Stability and Reactivity

- 10.1: Reactivity
no data available
- 10.2: Chemical stability
Stable under recommended storage conditions.
- 10.3: Possibility of hazardous reactions
no data available
- 10.4: Conditions to avoid
exposure to water
In the event of fire: see section 5
- 10.5: Incompatible materials
See section 7.3.
- 10.6: Hazardous decomposition products
In the event of fire: see section 5.2
Other decomposition products - no data available

11: Toxicological Information

- 11.1: Toxicity data
- Acute toxicity - Oral
LD50 Oral - rat - 2,301 mg/kg.
- Acute toxicity - Dermal
no data available
- Acute toxicity - Inhalation
No data available.
- Skin corrosion/irritation
Not corrosive / irritant.
- Eye damage/irritation
Causes eye irritation
- Respiratory irritation
No data available.
- Germ cell mutagenicity
Tests showed no mutagenic effects.
- Reproductive toxicity
no data available

Specific organ toxicity - single exposure

No data available.

Specific organ toxicity - repeated exposure

No data available.

Aspiration hazard

No data available.

Additional information

RTECS: EV9800000

ACGIH carcinogenicity

The ACGIH has not identified any component of this product present at levels greater than or equal to 0.1% as a probable, possible or confirmed human carcinogen.

IARC carcinogenicity

The IARC has not identified any component of this product present at levels greater than or equal to 0.1% as a probable, possible or confirmed human carcinogen.

NTP carcinogenicity

The NTP has not identified any component of this product present at levels greater than or equal to 0.1% as a probable, possible or confirmed human carcinogen.

OSHA carcinogenicity

OSHA has not identified any component of this product present at levels greater than or equal to 0.1% as a probable, possible or confirmed human carcinogen.

11.2: Routes of exposure

oral

skin

eyes

See section 2.2

11.3: Symptoms of exposure

See section 4.2

11.4: Delayed and immediate effects of exposure

To the best of our knowledge the toxicological properties have not been thoroughly investigated.

12: Ecological Information

12.1: Ecotoxicity

Toxicity to fish

LC50 - *Lepomis macrochirus* - 10,650 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates

EC50 - *Daphnia magna* (Water flea) - 2,400 mg/l - 48 h

Toxicity to algae/bacteria

No data available

12.2: Persistence and degradability

does not biodegrade

12.3: Bioaccumulative potential

does not bioaccumulate

12.4: Mobility in soil
no data available

12.5: Other effects
no data available

13: Disposal Considerations

13.1: Waste treatment methods
No data available

13.2: Safe handling
See section 7.1 .

13.3: Product disposal
Contact a licensed professional waste disposal service to dispose of this material.

13.4: Packaging disposal
Dispose of as unused product.

14: Transport Information

14.1: DOT(US)
UN Number: Not a dangerous good
Proper Shipping Name:
Packing Group:
Shipping Class(es): 0
Marine Pollutant: No

14.2: IMDG
UN Number: Not a dangerous good
Proper Shipping Name:
Packing Group:
Shipping Class(es): 0
Marine Pollutant: No

14.3: IATA
UN Number: Not a dangerous good
Proper Shipping Name:
Packing Group:
Shipping Class(es): 0

14.4: Special Shipping Precautions
None

15: Regulatory Information

15.1: TSCA inventory
This material is listed on the TSCA inventory.

15.2: SARA 302 components

This material is not subject to the reporting requirements of SARA Title III, Section 302.

15.3: SARA 313 components

This material is not subject to the reporting requirements of SARA Title III, Section 313.

15.4: SARA 313/312 hazards

Acute health hazard.

15.5: Other information

California Prop. 65 Components - This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Massachusetts Right To Know Components - This product does not contain materials listed on the Massachusetts Right to Know list

New Jersey Right To Know Components -This product does not contain materials listed on the New Jersey Right to Know list

Pennsylvania Right To Know Components -This product does not contain materials listed on the Pennsylvania Right to Know list

16: Additional Information

16.1: NFPA

Health: 2

Fire: 0

Reactivity: 0

Special:

16.2: HMIS

Health: 2

Chronic:

Flammability: 0

Physical Hazard: 0

16.3: Disclaimers

The information herein is believed to be accurate and reliable as of the date compiled. However, APL Engineered Materials, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information on this data sheet or any use of the product based upon this information.

For industrial use only. Not for drug, household or other uses

16.4: References

Information contained on this SDS sheet was obtained from some or all of the following sources: American Conference of Governmental Industrial Hygienists (ACGIH), TLVs and BEIs; National Institute for Occupational Safety and Health (NIOSH), Pocket Guide to Chemical Hazards; European Chemicals Agency, <http://echa.europa.eu/>; The National Institute of Health, U.S National Library of Medicine, TOXNET, Toxicology Data Network; and the Registry of Toxic Effects of Chemical Substances (RTECS) database.

16.5: Version

Preparation Date: 5/22/2015

Revision Date: 5/22/2015

Version Number: GHS 1.0