

Safety Data Sheet



1: Identification

1.1: Product Identifier

Product Name: Ca

Product Number(s): 1CA-0004F

CAS Number: 7440-70-2

SDS Document Number: 000037

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

United States: 800-255-3924

International: +01-813-248-0585

2: Hazards Identification

2.1: Classifications

Substances which, in contact with water, emit flammable gases - Category 2

2.2: GHS Label Elements

Pictograms



Signal Word: Danger

Hazard Statements

H261: In contact with water releases flammable gases.

Precautionary Statements

P223: Keep away from any possible contact with water, because of violent reaction and possible flash fire.

P231 + P232: Handle under inert gas. Protect from moisture.

P280: Wear protective gloves, clothing, and eyewear. face protection

P335 + P334: Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.

P370 + P378: In case of fire: Use dry chemical or class D metal agent for extinction.

P402 + P404: Store in a dry place. Store in a closed container.

P501: Dispose of contents/container to licensed disposal facility.

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
Ca	100	Ca	7440-70-2	40.08	231-179-5

3.2: Other Hazardous components

none

3.3: Trade Secret Disclaimer

none

3.4: Synonyms

Calcium

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

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

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

no data available

5: Fire Fighting Measures

5.1: Fire extinguishing media

- class D metal fire agent
- Do not use water
- dry chemical

5.2: Specific hazards arising from the substance or mixture

- 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.

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

6.2: Methods and materials for containment and cleaning up.

- Keep in suitable, closed containers for disposal.
- Collect with an intrinsically safe vacuum cleaner or by wet brushing.
- Sweep up and shovel.
- Do not flush with water or aqueous cleansing agents.

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

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

7.2: Conditions for safe storage

- Store in cool place.
- Store away from moisture.

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

7.3: Incompatibilities

moisture sensitive
strong oxidizing agents
alcohols
air sensitive

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: Pieces
Color: silver

9.b: Odor: no data available

9.c: Odor threshold: no data available

9.d: pH: no data available

9.e: Melting point / freezing point: 850 °C (1562 °F)

- 9.f: Initial boiling point and range: 1484 °C (2703 °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: no data available
- 9.l: Vapor density: no data available
- 9.m: Relative density: 1.54 g/mL at 25 °C (77 °F)
- 9.n: Water Solubility: reacts with water
- 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

Reacts violently with water

10.2: Chemical stability

Stable under recommended storage conditions.

10.3: Possibility of hazardous reactions

Reacts violently with water

10.4: Conditions to avoid

In the event of fire: see section 5
exposure to water

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
no data available

Acute toxicity - Dermal
no data available

Acute toxicity - Inhalation
No data available.

Skin corrosion/irritation

no data available
Eye damage/irritation
No data available.
Respiratory irritation
No data available.
Germ cell mutagenicity
no data available
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
No data available.
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

skin
ingestion

11.3: Symptoms of exposure

See section 4.2

11.4: Delayed and immediate effects of exposure

No data available

12: Ecological Information

12.1: Ecotoxicity

Toxicity to fish

No data available

Toxicity to daphnia and other aquatic invertebrates

No data available
Toxicity to algae/bacteria
No data available

12.2: Persistence and degradability

no data available

12.3: Bioaccumulative potential

no data available

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: 1401
Proper Shipping Name: Calcium
Packing Group: II
Shipping Class(es): 4.3
Marine Pollutant: No

14.2: IMDG

UN Number: 1401
Proper Shipping Name: CALCIUM
Packing Group: II
Shipping Class(es): 4.3
Marine Pollutant: No

14.3: IATA

UN Number: 1401
Proper Shipping Name: Calcium
Packing Group: II
Shipping Class(es): 4.3

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

Reactivity 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 contains materials listed on the New Jersey Right to Know list

Pennsylvania Right To Know Components -This product contains materials listed on the Pennsylvania Right to Know list

16: Additional Information

16.1: NFPA

Health: 0

Fire: 3

Reactivity: 1

Special: #

16.2: HMIS

Health: 0

Chronic:

Flammability: 3

Physical Hazard: 1

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

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