

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.22.2018

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Calcium Metal,

SECTION 1: Identification

Product identifier

Product name: Calcium Metal,

Product code: S25216A

Recommended use of the product and restriction on use

Relevant identified uses: Not determined or not applicable.

Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer:

Supplier:

AquaPhoenix Scientific

860 Gitts Run Road

Hanover

PA 17331

(717) 632-1291

Fisher Science Education

6771 Silver Crest Road

Nazareth

PA 18064

800 955-1177

Emergency telephone number:

United States

Emergency Telephone No.: 800-255-3924

SECTION 2: Hazard(s) identification

GHS classification:

Substance and mixture, which in contact with water, emit flammable gas 2

Combustible dust

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H261 In contact with water releases flammable gas

H900 May form combustible dust concentrations in air

Precautionary statements:

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

P280 Wear protective gloves/protective clothing/eye protection/face protection

P231+P232 Handle under inert gas. Protect from moisture

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

P370+P378 In case of fire: Use agents recommended in section 5 for extinction

P501 Dispose of contents and container as instructed in Section 13

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

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| Identification | Name | Weight % |
|--------------------------|---------|----------|
| CAS number: 7440-70-2 | Calcium | 100 |

Additional Information: None

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position

Maintain an unobstructed airway

Get medical advice/attention if you feel unwell

After skin contact:

Rinse affected area with soap and water

If symptoms develop or persist, seek medical attention

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes

If symptoms develop or persist, seek medical attention

After swallowing:

Rinse mouth thoroughly

Seek medical attention if irritation, discomfort, or vomiting persists

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not applicable.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Not determined or not applicable.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

Unsuitable extinguishing media:

Do not use water as an extinguisher

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Contact with water emits flammable gas

Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:

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Carbon monoxide and carbon dioxide may form upon combustion
Heating causes a rise in pressure, risk of bursting and combustion

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation
Ensure air handling systems are operational
Wear protective eye wear, gloves and clothing

Environmental precautions:

Should not be released into the environment

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing
Sweep or scoop up solid material while minimizing dust generation
Dispose of contents / container in accordance with local regulations

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Use only with adequate ventilation.
Do not eat, drink, smoke or use personal products when handling chemical substances.
Avoid generating/breathing dust.
Do not expose material to water.

Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed.
Keep container dry.
Store in a cool, well-ventilated area.
Store away from water.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

No occupational exposure limits noted for the ingredient(s).

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.
Biological monitoring may also be appropriate for some substances.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

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Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

General hygienic measures:

Avoid contact with skin, eyes and clothing.

Wash hands before breaks and at the end of work.

Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

| | |
|---|----------------------------------|
| Appearance | Silver-white crystals |
| Odor | Not determined or not available. |
| Odor threshold | Not determined or not available. |
| pH | Not determined or not available. |
| Melting point/freezing point | 845 °C |
| Initial boiling point/range | 1484 °C |
| Flash point (closed cup) | Not determined or not available. |
| Evaporation rate | Not determined or not available. |
| Flammability (solid, gas) | Not determined or not available. |
| Upper flammability/explosive limit | Not determined or not available. |
| Lower flammability/explosive limit | Not determined or not available. |
| Vapor pressure | 10 mmHg at 983 °C |
| Vapor density | Not determined or not available. |
| Density | Not determined or not available. |
| Relative density | Not determined or not available. |
| Solubilities | Decomposes. |
| Partition coefficient (n-octanol/water) | Not determined or not available. |
| Auto/Self-ignition temperature | Not determined or not available. |
| Decomposition temperature | Not determined or not available. |
| Dynamic viscosity | Not determined or not available. |
| Kinematic viscosity | Not determined or not available. |
| Explosive properties | Not determined or not available. |
| Oxidizing properties | Not determined or not available. |

Other information

| | |
|------------------|-------------------|
| Specific gravity | 1.54 at 20 °C/4°C |
|------------------|-------------------|

SECTION 10: Stability and reactivity

Reactivity:

Reacts violently in contact with water.

Chemical stability:

Stable under normal conditions of use and storage.

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Possibility of hazardous reactions:

Contact with water emits flammable gas.

Conditions to avoid:

Avoid exposure to water.

Incompatible materials:

Strong oxidizing agents, strong acids and bases.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Skin corrosion/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Serious eye damage/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

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Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available.

Other information: No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.


SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

| | |
|--------------------------------------|---|
| UN number | UN1401 |
| UN proper shipping name | Calcium |
| UN transport hazard class(es) | 4.3  |
| Packing group | II |
| Environmental hazards | None |
| Special precautions for user | None |

International Maritime Dangerous Goods (IMDG)

| | |
|------------------|--------|
| UN number | UN1401 |
|------------------|--------|


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| | |
|--------------------------------------|---|
| UN proper shipping name | Calcium |
| UN transport hazard class(es) | 4.3  |
| Packing group | II |
| Environmental hazards | None |
| Special precautions for user | None |

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

| | |
|--------------------------------------|---|
| UN number | UN1401 |
| UN proper shipping name | Calcium |
| UN transport hazard class(es) | 4.3  |
| Packing group | II |
| Environmental hazards | None |
| Special precautions for user | None |

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

| | | |
|-----------|---------|--------|
| 7440-70-2 | Calcium | Listed |
|-----------|---------|--------|

Significant New Use Rule (TSCA Section 5): Not determined.

Export notification under TSCA Section 12(b): Not determined.

SARA Section 311/312 hazards:

| | | | | |
|-------|---------|------|----------|----------|
| Acute | Chronic | Fire | Pressure | Reactive |
| No | No | No | No | Yes |

SARA Section 302 extremely hazardous substances: Not determined.

SARA Section 313 toxic chemicals:

| | | |
|-----------|---------|------------|
| 7440-70-2 | Calcium | Not Listed |
|-----------|---------|------------|

CERCLA: Not determined.

RCRA: Not determined.

Section 112(r) of the Clean Air Act (CAA): Not determined.

Massachusetts Right to Know:

| | | |
|-----------|---------|--------|
| 7440-70-2 | Calcium | Listed |
|-----------|---------|--------|

New Jersey Right to Know:

| | | |
|-----------|---------|--------|
| 7440-70-2 | Calcium | Listed |
|-----------|---------|--------|

New York Right to Know:

| | | |
|-----------|---------|--------|
| 7440-70-2 | Calcium | Listed |
|-----------|---------|--------|

Pennsylvania Right to Know:

| | | |
|-----------|---------|--------|
| 7440-70-2 | Calcium | Listed |
|-----------|---------|--------|

California Proposition 65: None of the ingredients are listed.

SECTION 16: Other information

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Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered 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 materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 3-0-2

HMIS: 3-0-2

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End of Safety Data Sheet