

Material Safety Data Sheet / Safety Data sheet

Calcium Metal

Section 1: Chemical Product Identifier and Synonyms

Product Name: Calcium Metal

UN Number: 1401

CAS Number: 7440-70-2

Synonym:

Chemical Formula: Ca

Section 2: Composition and Information on Ingredients

Composition

Name	CAS Number:	% By Weight
Calcium Metal	7440-70-2	>100%

Toxicology Data On Ingredients: Calcium Metal LD50: Not Available. LC50: Not Available

Section 3: Hazards Identification

Potential Acute Health Effects:

Irritating to the skin and eyes on contact. Inhalation will cause irritation to the lungs and mucus membrane. Irritation to the eyes will cause watering and redness. Reddening, scaling, and itching are characteristics of skin inflammation. Follow safe industrial hygiene practices and always wear protective equipment when handling this compound.

Potential Chronic Health Effects:

This product has no known chronic effects. Repeated or prolonged exposure to this compound is not known to aggravate medical conditions.

Section 4: First Aid Measures

Eye Contact:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

Skin Contact:

In case of contact, flush skin with water. Wash clothing before reuse. Call a physician if irritation occurs.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion:

If swallowed, call a physician immediately.

Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not available.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances: Material readily reacts with water generating flammable and/or explosive hydrogen gas. Do not expose to air and fire.

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Do not use water. Use approved class D extinguishers or smother with dry sand, dry ground limestone or dry clay.

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Flammable Solid.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures**Small Spill:**

Utilize recommended protective clothing and equipment. Clean spills in a manner that does not disperse dust into the air. Spill area can be washed with water. Collect wash water for approved disposal. Keep from entering water or ground water.

Large Spill:

Stop dust cloud by covering with sand/earth. Scoop solid spill into closing containers. See "Material-handling" for suitable container materials. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

Section 7: Handling and Storage

Precautions:

Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Avoid raising dust. Keep away from naked flames/heat. Observe strict hygiene. Keep container tightly closed. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

Storage:

Store at ambient temperature. Keep out of direct sunlight. Store in a dry area. Keep container in a well-ventilated place. Meet the legal requirements.

Section 8: Exposure Controls / Personal Protection

Engineering Controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide adequate general and local exhaust ventilation.

Personal Protection:

Safety glasses. Gloves. Protective clothing. Dust production: dust mask with filter type P3.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid.

Odour: Odourless.

Taste: Not available.

Molecular Weight: 40.08 g/mole

Colour: Silver to White.

pH (1% soln/water): Not available.

Boiling Point: 1484°C

Melting Point: 842°C

Critical Temperature: Not available.

Specific Gravity: 1.54 (Water = 1)

Vapour Pressure: Not available.

Vapour Density: Not available.

Volatility: Not available.

Odour Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Reacts with Water

Section 10: Stability and Reactivity Data

Stability: The product is stable under normal conditions.

Instability Temperature: Not available.

Conditions of Instability: Excessive temperatures (see Incompatibilities)

Incompatibility with various substances: Acids, Strong Oxidizing Agents, Alcohols, Sensitive To Air and Moisture

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Not available.

Section 11: Toxicological Information

Routes of Entry: Eye contact. Inhalation. Ingestion.

Toxicity to Animals: (LD50): Not available. LC50: Not available.

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans: Slightly hazardous in case of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation: Not available.

Toxicity of the Products of Biodegradation: The products of degradation are as toxic as the original product.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Information

Waste Disposal: Dispose of in accordance with local regulations

Section 14: Transport Information

DOT Classification: CLASS 4

Identification: Calcium UN:1401 PG: II

Special Provisions for Transport: Not available.

Section 15: Regulatory Information

Regulations: Labelling according to Regulation (EC) No 1272/2008.

Section 16: Other Information

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials. The author will not be held liable for any damage or injury caused by this product and does not obviate the requirement for end users to carry out their own workplace and specific use risk assessment.

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