



Centre Anti-Poison pour le Québec: (800) 463-5060
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SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier		Product Use	
CALCIUM (TURNINGS)		Laboratory use	
Chemical formula		Product code	Molar weight
Ca		CR-0899	40,08
Chemical name / Commercial name / Synonymous			
CALCIUM METAL, CRYSTALLINE, CALCICAT			
Supplier's name		Address-Street	
Laboratoire MAT		610, Adanac Street	
City		Province	
Québec		Québec	
Postal code	Internet	Phone number	
G1C 7B7	www.labmat.com	418-660-8666 / 800-890-8666	
Emergency phone		CENTRE ANTI-POISON DU QUÉBEC 800-463-5060	
Date SDS		SDS Prepared by	E-Mail
7/29/2020		Laboratoire MAT	labmat@labmat.com

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Substances and mixtures which, in contact with water, emit flammable gases category 2
Signal Word	DANGER
Hazards statements (H)	H261 In contact with water releases flammable gases.
Precautionary statements (P)	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/protective clothing/eye protection/face protection. P370 + P378 In case of fire: Use special powder for metal fires; do not use water for extinction. P402 + P404 Store in a dry place. Store in a closed container. P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	Health 2 Fire 3 Reactivity 2 Special danger EAU

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Calcium	7440-70-2	<=100

SECTION 04 - FIRST AID MEASURES

Eye contact	Wash eyes with large amounts of water for at least 15 minutes while holding eyelids apart to rinse eyes. If irritation persists, seek medical attention.
Skin contact	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
Inhalation	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
Ingestion	If the person is conscious, rinse the mouth with water. Never give anything by mouth to an unconscious person. Consult a physician.
Most important symptoms and effects (acute and delayed)	Ref. section 11.
Immediate medical attention and special treatment, if necessary	In case of medical consultation, keep this sheet available.
General advice	Show this safety data sheet to the doctor in attendance.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	Yes
Ignition conditions	Heat, sparks and open flame. Sensitive to air.
Suitable extinguishing media	Use a Class D fire extinguisher or special powder for metal fires. Dry powder.
Unsuitable extinguishing media	Do not use water.
Hazardous combustion / decomposition products	Hazardous decomposition products formed under fire conditions. - Calcium oxide. Releases hydrogen (a flammable gas) on contact with water.
Special fire and explosion hazards	May react violently with incompatible products (Ref Section 10). This metal reacts strongly with water to release hydrogen, a flammable and explosive gas.
Special protective equipment and precautions for firefighters	Discard incompatible substances if this can be done without risk. Firefighters should be equipped with standard protective equipment, fireproof clothing, face mask, gloves, protective boots and, where appropriate, self-contained breathing apparatus.

SECTION 06 - ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up / Personnel precautions, protective equipment	Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapours, mist or gas. Use personal protective equipment. Pick up with a shovel or broom, taking care not to scatter dust. Avoid contact with water. Dispose of residues in a container provided for the disposal of hazardous materials. Do not let product enter drains.
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SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Store in a cool, dry place. Keep container tightly closed and store away from heat, moisture, and incompatible products. Never allow product to get in contact with water during storage. Handle and store under inert gas. Air sensitive.
Methods of handling	Provide appropriate exhaust ventilation at places where dust or vapor is formed. Keep away from sources of ignition - No smoking. Keep away from moisture. Avoid contact with the skin, eyes and clothes. Avoid contact with water. Wear personal protective equipment when handling. Always ensure good ventilation. Transport according to TDG (ref Section 14)

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Control	Value	Basis
Calcium (granule)	7440-70-2	TLV, TWA, STEL	No data available	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TLV, TWA, STEL	No data available	Canada. British Columbia OEL
		TLV, TWA, STEL	No data available	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

Ventilation	Fan.
Respiratory	If the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
Gloves	Handle with gloves.
Eyes	Safety goggles with safety shutters.
Shoes	Safety shoes.
Clothing	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Engineering control	Have safety showers and eyewash stations in the workplace in case of an emergency and a ventilation system to maintain the level of concentrations in the air below the exposure limit values.

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid.
Appearance	Turnings-silver
Odour	inodore.
Odour threshold	Data not available
pH	14.
Melting point / Freezing point	845°C
Initial boiling point	1484 °C (2.703°F) - lit-
Boiling range	Data not available
Flash point	Data not available
Evaporation rate	Data not available
Flammability	Yes
Lower flammable / Explosive limit	Data not available
Upper flammable / Explosive limit	Data not available
Vapour pressure	10 mmHg @ 983°C-
Vapour density	Data not available
Relative density	1.54g/cm ³
Solubility	Soluble dans l'ammoniaque liquide.
Partition coefficient water/n-octanol	Data not available
Auto-ignition temperature	Data not available
Decomposition temperature	Data not available
Viscosity	Data not available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Non-reactive under normal conditions.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Stable under normal conditions. Reacts violently with water.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Reacts violently with water Sensitive to moisture and air.
Incompatible material	Strong oxidizing agents. Ammoniac. Water. Alcohols. Halogens. Oxygen.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - Calcium oxide. Releases hydrogen (a flammable gas) on contact with water.

SECTION 11 - TOXICOLOGICAL INFORMATION

CALCIUM (GRANULES)

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation.
- Skin	Irritation and dermatitis.
- Inhalation	Extremely destructive to the tissues of the mucous membranes and the upper respiratory system. Spasms, inflammation and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.
Acute toxicity (Ingestion)	May be harmful if swallowed.
Chronic exposure effects / symptoms	Burning sensation, cough, laryngitis, shortness of breath, headache, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Data not available. LD50 Dermal - Data not available.
CL50 (specify species and route of entry)	LC50 - Inhalation - Data not available.

SECTION 12 - ECOLOGICAL INFORMATION

Available ecological information	No
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SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Method	Dispose of contents / container in accordance with local / regional / national / international regulations / or contact a specialist waste disposal company.
Contaminated Packaging	Dispose of as unused product.

SECTION 14 - TRANSPORT INFORMATION

UN Number	1401
UN Proper shipping name	CALCIUM
Transport hazard class(es)	4.3 Substances which, on contact with water, emit
Packing group	II
Limited quantity index	0,5kg
ERAP Index	3000
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Substances and mixtures which, in contact with water, emit flammable gases category 2
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SECTION 16 - OTHER INFORMATION

Further information

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. Laboratoire MAT Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

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