



SAFETY DATA SHEET

SECTION 01 - IDENTIFICATION

Product Identifier	MAGNESIUM (POWDER)
Other identification (Chemical name, Commercial name, Synonymous)	MAGNESIUM POWDER ~200 MESH, MAGNÉSIUM MÉTALLIQUE EN POUDRE ~200 MAILLES
Product code	MR-0100
Chemical formula	Mg
Molar weight	24.31
Recommended use and Restrictions on use	For laboratory, school, commercial or industrial use. Not for medical or household use. Do not use for medical, food or household purposes.
Supplier	LABORATOIRE MAT 610, rue Adanac Québec Québec G1C 7B7 418-660-8666 Mon-Fri 8h-16h www.labmat.com labmat@labmat.com
Emergency phone	418-660-8666 Mon-Fri 8h-16h CENTRE ANTI-POISON DU QUÉBEC 800-463-5060
Date SDS	2025-12-16

SECTION 02 - HAZARDS IDENTIFICATION

WHIMS CANADA

- Pyrophoric solids - category 1
- Flammable solids - category 1
- Substances and mixtures which, in contact with water, emit flammable gases - category 1

PICTOGRAMS



Signal Word

DANGER

Hazards statements (H)

- Catches fire spontaneously if exposed to air
- Flammable solid
- In contact with water releases flammable gases which may ignite spontaneously

Precautionary statements (P)

- Keep away from heat, sparks, open flames, hot surfaces. — No smoking.
- Do not allow contact with air.
- Handle under inert gas. Protect from moisture
- In case of fire: Use a class D fire extinguisher or special powder for metal fires; do not use water to extinguish.
- IF ON SKIN: Immerse in cool water then wrap in wet bandages.
- Brush off loose particles from skin.
- Keep container tightly closed.
- Wear protective gloves (nitrile, butyle, neoprene), protective clothing and eye and face protection.
- Ground and bond container and receiving equipment.
- Use explosion-proof equipment.
- Do not allow contact with water
- Store in a dry place. Store in a closed container.
- Dispose of contents and container in accordance with local, regional and national regulations, or contact a specialist waste disposal company.

Other dangers

NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Significant; 4=Extreme)

Health 0
Fire 4
Reactivity 2
Special danger EAU

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Component	No. CAS	% Weight
Magnésium	7439-95-4	<=100%

SECTION 04 - FIRST AID MEASURE

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 contaminated 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, give water to drink. Induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.
Most important symptoms and effects (acute and delayed)	Main symptoms of high exposure: Skin, eye and respiratory system irritation. Abdominal pain. Headaches. Chemical burns of the skin, eyes and respiratory and digestive mucous membranes. Skin rash. Nausea and vomiting. Ref. section 11.
Immediate medical attention and special treatment, if necessary	Treat according to symptoms. Show this sheet to the attending physician. In case of poisoning, the following can be administered as an antidote: Calcium infusion.

SECTION 05 - FIREFIGHTING MEASURES

Suitable extinguishing media	Use only a class D fire extinguisher to extinguish the fire.
Unsuitable extinguishing media	Do not use water. Do not use carbon dioxide. Do not use foams. Do not use halon fire extinguishers.
Combustion products	Hazardous combustion products formed under fire conditions: Magnesium oxides.
Specific hazards of the dangerous product	Pyrophoric. May form combustible dust concentrations in the air. May react violently with incompatible products (Ref Section 10).
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

Personal precautions, protective equipment and emergency measures	Evacuate personnel to safe areas. Cut off all sources of ignition. Avoid the accumulation of charges electrostatic. Avoid dust formation. Avoid breathing dust. When handling, wear appropriate safety equipment (reference Section 8 for protective equipment to be used). Ensure a good ventilation. Use NIOSH cartridge respiratory protection if necessary or for larger spills.
Methods and materials for containment and cleaning up	Pick up with a shovel or broom, taking care not to scatter dust. Avoid contact with water. Dispose of residues in a container for disposal of hazardous materials. When handling, wear suitable safety equipment. Discharge into the environment must be avoided.

SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Store in a cool, dry, and well-ventilated place. Keep away from heat and sources of ignition. Keep away from sources of ignition - No smoking. Take measures to prevent the accumulation of electrostatic charges. Keep container tightly closed and store away from heat, water, moisture, and incompatible products (ref. section 10).
Methods of handling	Avoid contact with water. Keep away from heat and sources of ignition. Avoid the formation of dust. Avoid ingestion and inhalation. Avoid contact with eyes, skin and clothing. Wear personal protective equipment (ref. section 8) when handling. Always ensure good ventilation. Apply the usual standard hygiene rules: Wash your hands after use. Do not eat or drink during use.

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

WORKPLACE CONTROL PARAMETERS

Component	CAS-No.	Value
Magnesium	7439-95-4	No occupational exposure limits established by region-specific regulators - Quebec, Alberta, Ontario, British Columbia.

Respiratory

If work under the hood is not possible, or if the permissible levels are exceeded, use NIOSH cartridge respiratory protection, or an air-supplied respirator.

Gloves

Handle with protective gloves. Suggested material: Nitrile. Butyl. Neoprene. The type, thickness and length of the glove must be chosen according to the use, the concentration of the product, as well as the duration of use. Replace gloves regularly for better protection.

Eyes

Safety goggles with safety shutters.

Shoes

Use safety shoes.

Clothes

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

Use fan. 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
Color	Silver grey
Odour	Data not available
Odour threshold	Data not available
Melting point and freezing point	648°C
Boiling point	1100°C
Flammability	Yes
Lower flammable / Explosive limit	Data not available
Upper flammable / Explosive limit	Data not available
Flash point	636°C
Auto-ignition temperature	510°C
Decomposition temperature	Data not available
pH	Metal with alkaline properties
Kinematic viscosity	Not applicable
Solubility	Decomposes in acids. Insoluble in water.
Partition coefficient water/n-octanol	Data not available
Vapour pressure	1.0 mm @ 621°C
Relative density	1.0 g/cm ³
Vapour density	Data not available
Particle characteristics	~140-200 MESH

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	May react violently with incompatible substances.
Chemical stability	Moisture sensitive. Air sensitive.
Possibility of hazardous reactions	May form combustible dust concentrations in the air. May react violently with incompatible substances.
Conditions to avoid	Avoid moisture. Exposure to air. Avoid contact with incompatible materials. Heat, flames and sparks.
Incompatible materials	Oxydants. Halogens. Hydrofluoric acid. Acids. Hydrofluoric acid. May form hydrogen (an explosive gas) with: Water. Can form an explosive mixture with: Stannic oxide. Chlorates and perchlorates. Peroxides. Oxydes. Nitric acid. Burns with: Fluorine. Chlorine. Violent reaction with: Halogenated organics. Acids. Acid chlorides. Ammonium nitrate. Arsenic. Carbonates. Phosphates. Copper sulfate. Mercury oxide.
Hazardous decomposition products	Magnesium oxides. Hydrogen gas (explosive).

SECTION 11 - TOXICOLOGICAL INFORMATION

MAGNESIUM (POWDER)

Routes of exposure	Ingestion and inhalation.
Acute exposition effects / symptoms:	By exposure route below. Symptoms may be more severe with fine granulometry.
- Eyes	Irritation. Pain. Causes serious eye damage.
- Skin	Causes skin burns. Skin eruptions. Blisters.
- Inhalation	Cough. Sore throat. Shortness of breath.
Acute toxicity (Ingestion)	Abdominal pain. Diarrhea. Nausea and vomiting. Dysphagia. Headaches. Burning sensation in the mouth.
Chronic exposure effects / symptoms	Pulmonary edema. Cardiovascular disorders. Hypotension. Hypermagnésémie. Electrolyte disorders. Digestive problems. Vasodilation. Redness. Burning sensation.
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

MAGNESIUM (POWDER)

Ecotoxicity	Data not available.
Persistence and degradability	Data not available.
Bioaccumulative potential	Data not available.
Mobility in soil	Data not available.
Other adverse effects	Data not available.

SECTION 13 - DISPOSAL CONSIDERATIONS

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

SECTION 14 - TRANSPORT INFORMATION

UN Number	1418
UN Proper shipping name	MAGNESIUM EN POUDRE
Transport hazard class(es)	Matières hydroréactives 4.3 Matières sujettes à l'inflammation spontanée 4.2
Packing group	II
Limited quantity index	0 kg
ERAP Index	-
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA

- Pyrophoric solids - category 1
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SECTION 16 - OTHER INFORMATION

CNESST: Commission des normes, de l'équité et de la santé et sécurité au travail

NIH: National institute of health (U.S. National Library of Medicine)

ECHA: Agence Européenne de Chimie

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

VECD: Valeur d'exposition courte durée

VEMP: Valeur d'exposition moyenne pondérée

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TLV : Threshold limit value

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

RSST: Règlement sur la santé et sécurité au travail (Québec)

INRS: l'Institut national de recherche et de sécurité pour la prévention des accidents du travail et des maladies professionnelles (France)

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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