



## SAFETY DATA SHEET

### SECTION 01 - IDENTIFICATION

<b>Product Identifier</b>	SULFUR (PIECES)
<b>Other identification (Chemical name, Commercial name, Synonymous)</b>	SULFUR, SULPHUR, SOUFRE EN MORCEAUX
<b>Product code</b>	SP-0189
<b>Chemical formula</b>	S
<b>Molar weight</b>	32.06
<b>Recommended use and Restrictions on use</b>	For laboratory, school, commercial or industrial use. Not for medical or household use. Do not use for medical, food or household purposes.
<b>Supplier</b>	LABORATOIRE MAT 610, rue Adanac Québec G1C 7B7 418-660-8666 Mon-Fri 8h-16h www.labmat.com labmat@labmat.com
<b>Emergency phone</b>	418-660-8666 Mon-Fri 8h-16h CENTRE ANTI-POISON DU QUÉBEC 800-463-5060
<b>Date SDS</b>	2025-05-13

## SECTION 02 - HAZARDS IDENTIFICATION

### WHIMS CANADA

- Flammable solids - category 2
- Skin corrosion/irritation - Skin irritation - category 2

### PICTOGRAMS



### Signal Word

ATTENTION

### Hazards statements (H)

- Flammable solid
- Causes skin irritation

### Precautionary statements (P)

- Keep away from heat, sparks, open flames, hot surfaces. — No smoking.
- Ground and bond container and receiving equipment.
- Use explosion-proof equipment.
- Wear protective gloves (nitrile, butyle, neoprene), protective clothing and eye and face protection.
- In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.
- IF ON SKIN: Wash with plenty of water
- Specific treatment (see section 4 on the SDS on this label).
- If skin irritation occurs: Get medical attention.

### Other dangers

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

**Health** 2  
**Fire** 2  
**Reactivity** 0  
**Special danger**

## SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Component	No. CAS	% Weight
Sulfur	7704-34-9	<=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. 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 irritation. Irritation of the respiratory system. Skin sensitizer. Metabolic acidosis. Diarrhea. Ref. section 11.

### Immediate medical attention and special treatment, if necessary

Treat according to symptoms. Show this sheet to the attending physician.

## SECTION 05 - FIREFIGHTING MEASURES

<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable extinguishing media</b>	Do not use a jet of water.
<b>Combustion products</b>	Hydrogen sulfide. Hazardous combustion products formed under fire conditions: Sulfur oxides.
<b>Specific hazards of the dangerous product</b>	May form combustible dust concentrations in the air. May react violently with incompatible products (Ref Section 10).
<b>Special protective equipment and precautions for firefighters</b>	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

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

## SECTION 07 - HANDLING AND STORAGE

<b>Conditions for safe storage</b>	Store in a cool and dry place. Keep container tightly closed and store away from heat, water, moisture, and incompatible products (ref. section 10).
<b>Methods of handling</b>	Avoid contact with eyes, skin and clothing. Avoid ingestion and inhalation. 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
Sulfur	7704-34-9	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

<b>Physical state</b>	Solid
<b>Color</b>	Yellow
<b>Odour</b>	Odorless (rotten eggs if hydrocarbides present)
<b>Odour threshold</b>	Inodore
<b>Melting point and freezing point</b>	113-117°C
<b>Boiling point</b>	444°C
<b>Flammability</b>	Data not available
<b>Lower flammable / Explosive limit</b>	Data not available
<b>Upper flammable / Explosive limit</b>	Data not available
<b>Flash point</b>	160°C
<b>Auto-ignition temperature</b>	232 °C
<b>Decomposition temperature</b>	Data not available
<b>pH</b>	Data not available
<b>Kinematic viscosity</b>	Not applicable
<b>Solubility</b>	Insoluble in water. Soluble in benzene, carbon disulfide and toluene.
<b>Partition coefficient water/n-octanol</b>	Data not available
<b>Vapour pressure</b>	3.95X10 <sup>-6</sup> mm Hg at 30.4 °C
<b>Relative density</b>	1.96-2.07g/cm <sup>3</sup>
<b>Vapour density</b>	Data not available
<b>Particle characteristics</b>	Flakes ~ 1-4mm

## SECTION 10 - STABILITY AND REACTIVITY

<b>Reactivity</b>	May react violently with incompatible substances. Flammable product, may ignite with source of ignition, if temperature above flash point.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	May react violently with incompatible substances. May form combustible dust concentrations in the air.
<b>Conditions to avoid</b>	Avoid moisture. Avoid contact with incompatible materials. Avoid dust formation. Chocs sensitive.
<b>Incompatible materials</b>	Oxydants. Reducing agents. Metal oxides. Stainless. Copper. Metal powders. Hydrocarbides. Heat and humidity. Violent reaction with: Ammonia. Charcoal. Carbon black.
<b>Hazardous decomposition products</b>	Sulfur oxides. Hydrogen sulfide.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### SULFUR (PIECES)

<b>Routes of exposure</b>	Ingestion, inhalation, skin and eye contact.
<b>Acute exposition effects / symptoms:</b>	By exposure route below.
- Eyes	Irritation. Inflammation of the conjunctiva.
- Skin	Irritation Dermatitis.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Spasms. Cough. Dyspnoea. Headaches.
<b>Acute toxicity (Ingestion)</b>	Mucous membrane irritation. Gastrointestinal disorders. Cramps. Diarrhea. Headaches. Dizziness. Salivation. Sweating, Convulsions. Nausea and vomiting.
<b>Chronic exposure effects / symptoms</b>	Burning sensation. Dermatitis. Conjunctivitis. Headache. May cause: Skin sensitization. Skin allergy.
<b>DL50 (specify species and route of entry)</b>	LD50 Oral - Rat - >5000mg/kg. LD50 Dermal - Rabbit - >2000mg/kg.
<b>CL50 (specify species and route of entry)</b>	LC50 Inhalation - Rat - 4 h - > 9.23 mg/l.

## SECTION 12 - ECOLOGICAL INFORMATION

### SULFUR (PIECES)

<b>Ecotoxicity</b>	Toxicity to fish: LC50 - Danio rerio (zebra fish) - 866 mg/l; 96 h. Toxicity to daphnia and other aquatic invertebrates: EC0 - Daphnia magna (Water flea): > 10,000 mg/l; 24 h.
<b>Persistence and degradability</b>	Data not available.
<b>Bioaccumulative potential</b>	Data not available.
<b>Mobility in soil</b>	Data not available.
<b>Other adverse effects</b>	Data not available.

## SECTION 13 - DISPOSAL CONSIDERATIONS

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

## SECTION 14 - TRANSPORT INFORMATION

UN Number	1350
UN Proper shipping name	SOUFRE
Transport hazard class(es)	Solides inflammables 4.1
Packing group	III
Limited quantity index	5 kg
ERAP Index	-
Special precautions	33

## SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	- Flammable solids - category 2 - Skin corrosion/irritation - Skin irritation - category 2
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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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