

Note: This template provides the minimum information elements for an SDS required by Schedule 1 of the Hazardous Products Regulations (HPR) (WHMIS 2015)

Safety Data Sheet

Microscopic Sulphur

SECTION 1. IDENTIFICATION

Product Identifier: Microscopic Sulfur
Family Name: Element - Sulfur
Trade Name & Synonyms: Wetttable Sulphur
Chemical Name: Sulfur (Sulphur)
CAS Number: 7704-34-9
Registration Number: PCP# 873
Recommended Use: Spraying for the control of scab, brown rot, and etc..
Restrictions on Use: Keep away from heat, sparks or open flames.
Initial Supplier: N.M. Bartlett Inc.
4509 Bartlett Rd
Beamsville, ON Canada
L3J 0Z1
(905)563-8261
Emergency Telephone Number: CANUTEC (613) 996-6666

SECTION 2. HAZARD IDENTIFICATION

Classification
Label Elements



SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration	Common name / Synonyms	Other identifiers
Sulphur	7704-34-9	92%	Wetttable Sulfur	

SECTION 4. FIRST AID MEASURES

Inhalation:

Prolonged inhalation may cause irritation of the respiratory tract. Breathing of dust may aggravate asthma and other pulmonary disease. Individuals with known allergies to sulfide drugs may also have allergic reactions to elemental sulfur dust. Maintain adequate ventilation in area where dust is present. Wear dust masks and use NIOSH/MSHA approved dust respirator if airborne concentrations exceed exposure limits. Move patient to fresh air. Watch for

signs of allergic reaction. Use a bronchodilator inhaler if directed by asthma patient. Keep victim warm and quiet. If not breathing, clear airway and start mouth to mouth resuscitation. If heart has stopped beating, start cardiopulmonary resuscitation (CPR). **GET MEDICAL ATTENTION.**

Skin Contact:

No adverse effects. Skin irritation may be aggravated in persons with existing skin lesions. Wash exposed clothing separately before reuse.

Eye Contact:

Sulfur dust is an eye irritant. Avoid contact with eyes, especially contact wearers. Wear safety glasses. In case of contact, immediately flush eyes with plenty of water for a minimum of 15 minutes. Hold upper and lower lids apart to insure rinsing of the entire eye surface and lids. Do not use boric acid to rinse with; sulfur is an acid irritant. **FOR SEVERE IRRITATION, GET MEDICAL ATTENTION,** preferably and ophthalmologist.

Ingestion:

Ingested sulfur is converted to sulfides in the gastrointestinal tract and ingestion of 10 to 20 grams has caused irritation of the GI tract and renal injury. Individuals with known allergies to sulfide drugs may also have allergic reactions to elemental sulfur. Swallowing large amounts may cause nausea and vomiting. Do not eat sulfur. For large amounts ingested, if the victim is conscious and alert, give two or more glasses of water to drink. If available, give one tablespoon of Syrup of Ipecac to induce vomiting. If vomiting does occur, give fluids again. If vomiting has not occurred in twenty minutes, the same dose of Syrup of Ipecac may be repeated one additional time. Alternatively, vomiting may be induced by touching the back of the throat with a finger. Do not give anything by mouth to an unconscious or convulsing person. **GET MEDICAL ATTENTION.**

SECTION 5. FIRE - FIGHTING MEASURES

0 =Least 1=Slight 2=Moderate 3=High 4=Extreme

Hazard Rating:

Acute Health = 1

Fire = 1

Reactivity = 0

Contact = 1

Extinguishing Media: Water fog, spray alcohol-resistant foam, dry chemical, or carbon dioxide. Do not use a direct water stream.

Suitable Extinguishing Media: Water fog, or regular foam. Do not use stream of water.

Unsuitable Extinguishing Media: Do not use solid streams of water, which could create sulfur dust clouds and cause an explosion or move burning sulfur to adjacent areas.

Fire and Explosion Hazards: Fire will rekindle until mass is cooled below 310°C(154°C). Cool surrounding areas with water fog to prevent re-igniting. Cool containers, tank cars, or trailer loads with flooding quantities of water until well after fire is out. Sulfur dust is **HIGHLY FLAMMABLE.** Sulfur dust clouds may explode.

Expose Hazards: Prevent human exposure to smoke, fumes, or products of combustion (sulfur oxide gases). If large fire evacuates people downwind from fire. Isolate and evacuate for 2 miles in all directions. Evacuate nonessential personnel from the fire area.

Advice for Firefighters: Firemen exposed to contaminated smoke should be immediately relieved and checked for symptoms of exposure for toxic gases. This should not be mistaken for heat exhaustion or smoke inhalation. Seek medical attention immediately.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Protective Equipment:

Maintain adequate ventilation and wear a respirator or a dust mask to prevent inhalation. Wear suitable, protective clothing and safety glasses to prevent skin and eye irritation from dust.

Personal Precautions:

Clean up all minor spills or leaks. Repair and maintain any contaminated equipment.

Emergency Procedures:

Isolate spills or leak areas immediately. Eliminate all source of ignition, such as flares, sparks, or flames, in the immediate area. No smoking. Ventilate closed spaces before entering.

Environmental Precautions:

Do not allow runoff to enter lakes or waterways.

Methods and Materials for Containment and Cleanup:

Gently sweep or shovel up spilled material using a natural fiber broom and/or aluminum shovel to prevent sparking, to avoid creating a dust cloud. Place sweepings in an appropriate chemical waste container for reclaiming or disposal in an approved facility. Wash spill site after clean-up is complete.

SECTION 7. HANDLING AND STORAGE

Conditions for Safe Storage:

Containers should be stored in a cool, dry, well-ventilated area. Keep container tightly closed. Store away from flammable materials, source of heat, flame and sparks. Separate from chlorates, nitrates and other oxidizing agents. Exercise due caution to prevent damage to or leakage from container.

Explosion Hazard:

Avoid any conditions that might tend to create a dust explosion. Be careful not to create dust. Maintain good housekeeping practices to minimize dust build-up and dispersion. Eliminate sources of ignition. Keep away from heat, sparks and flames. Use nonferrous tools to reduce sparking. Sweep or shovel up spilled material using a natural fiber broom and/or aluminum shovel to prevent sparking. Maintain adequate ventilation in all areas.

Small or Large Spills:

No flares or flames in area. No smoking. Danger of dust explosion near sparks. Sweep or shovel up spilled material using a natural fiber broom and/or aluminum shovel to prevent sparking. Place sweepings in an appropriate chemical waste container for reclaiming or disposal in an approved facility. Wash spill site after clean up is complete. Wear protective clothing during clean up: safety glasses, rubber gloves, impervious clothing, dust mask or respirator.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Individual Protection:



Appropriate

Engineering Controls:

Maintain adequate ventilation in all areas. No flares or flames and be careful not to create dust. Eliminate sources of ignition.

Measures

Eye/Face Protection:

Wear suitable, protective eye safety glasses to prevent irritation from dust.

Skin Protection:

Wear protective clothing to help prevent skin irritation from dust. Wash skin thoroughly after handling and before eating or smoking. Wash contaminated clothing apart before reuse.

Respiratory Protection:

Wear dust masks and use NIOSH/MSHA approved dust respirator if airborne concentrations exceed expose limits.

Hands:

Wash hands thoroughly after handling and before eating or smoking.

Environmental Exposure Controls:

Follow best practice for site management and disposal of waste. Avoid release to the environment.

General Industrial Hygiene Considerations:

Use protective equipment in all situations where exposure is at risk. Maintain good housekeeping habits to reduce dust accumulation and dispersal. Reduce ignition sources. Use non-flammable tools to reduce ignition. Use a natural fiber broom or aluminum shovel to sweep or shovel up spilled materials to reduce sparks. Ensure proper ventilation in all areas.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow powder

Physical State: Solid, Powder form

Odour: Odorless, or faint odor of rotten eggs

Odour Threshold: Not available

pH: Not available

Melting Point and Freezing Point: 118-120°C (244-248°F)

Initial Boiling Point and Boiling Range: 832 °F (444°C)

Flash Point: 405°F (207.2°C) Closed Cup

Evaporation Rate: Not available

Flammability (solid, gas): May form combustible dust concentration in air
Upper and Lower Flammability or Explosive Limit: Upper: 6.38% (v) Lower: 0.17% (v)
Vapour Pressure: 8mmHg at 246°C (475°F) 1mmHg at 183.8°C (362.8°C)
Vapour Density: Not available
Relative Density (water = 1): Not available
Solubility in Water: Insoluble
Auto-ignition Temperature: 240°C (464°F)
Purity: 99.5% Min.
Bulk Density: Lumps 75: 115 lbs./ft **Powder:** 33-80 lbs./ft
Extinguishing Media: Water fog, spray, or regular foam. Do not use a direct water stream.
Burning Sulphur: Decomposes into TOXIC sulfur oxide gasses such as: Sulfur dioxide & Hydrogen sulfide.
Viscosity: Not applicable
Decomposition Temperature: Does not decompose
Specific Gravity: 2.07 @ 70°F

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability: Stable under storage conditions
Reactivity: No data available
Hazardous Polymerization: No data available
Conditions to Avoid: Keep from heat sources, sparks and open flames. Avoid moisture. Minimize dust.
Incompatible Materials: No data available
Hazardous Decomposition Products: Hazardous decomposition products formed under fire conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

x Inhalation x Skin contact x Eye contact x Ingestion

Acute Toxicity

LC50

LD50 (oral)

LD50 (dermal)

Oral LD (Rats)->5050 mg/kg body weight

Dermal LD (Rats)->2020 mg/kg body weight

Inhalation @ 90% LC (Rats)->5.49 mg/L air concentration

Skin Corrosion / Irritation: Slightly irritating

Serious Eye Damage / Irritation: Minimal irritation in non-washed eyes

Signs and Symptoms: Nose or throat irritation, coughing, chest discomfort, asthma, difficulty breathing

Overexposure: Nausea, vomiting, stinging eye irritation, skin irritation, hives

Inhalation: Prolonged inhalation may cause irritation of respiratory tract. Breathing of dust may aggravate asthma and other pulmonary diseases

Eye Contact: Sulfur dust is an eye irritant

Skin Contact: No adverse effects, skin irritation may be aggravated with existing skin lesions

Ingestion: Ingested sulfur is converted to sulfides in the gastrointestinal tract, and ingestion of 10 to 20 grams has caused irritation of the GI tract and renal injury. Large swallowing's have the potential to induce nausea and vomiting.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Carcinogenicity, Teratogenicity, Mutagenicity: This product does not contain any ingredient designed by NTP, IARC, or OSHA as a problem human carcinogen.

Exposed Limits: No exposure limits have been established.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity: Not available

Persistence and Degradability: Not available

Bioaccumulative Potential: Not available

Mobility in Soil: Not available

Degradation: No data available

Other Adverse Effects: Not available

SECTION 13. DISPOSAL CONSIDERATIONS

Product Waste:

Dispose of content and/or container in accordance with local, regional, national and international regulations.

Packaging Waste:

Dispose of content and/or container in accordance with local, regional, national and international regulations.

SECTION 14. TRANSPORT INFORMATION

Solid sulfur is not regulated if transported in non-bulk packaging (less than 400kg per package). Formed Sulphur such as Flakes or Pastille, and powdered Sulphur packaged in containers smaller than 400 kg are not TDG regulated.

WHMIS: This product is not a WHMIS controlled substance

Class B: Flammable and Combustible material

Division 4: Flammable Solid

Bulk Packaging: Powdered Sulphur Only

Shipping Name: Sulphur

Hazard Class: 4.1 (Flammable Solid)

ID Number: UN1350

Packing Group: III

Label: Class 4 Flammable Solid

Placard: Class 4 (Flammable Solid)

Shipping Description: UN1350, Sulphur, 4.1, III

Hazard Substance/Rq: Not applicable

Export

IMDG: Powdered all Sulphur – all packages

Shipping Name: Sulphur

Hazard Class: 4.1 (Flammable Solid)

ID Number: UN1350

Packing Group: III

Label: Class 4 Flammable Solid

Placard: Class 4 (Flammable Solid)

Shipping Description: UN1350, Sulphur, 4.1, III

Hazard Substance/Rq: Not applicable

Hazard Classes: Powdered sulfur packaging over 400kg (880lbs) only



SECTION 15. REGULATORY INFORMATION

Environmental:

No Canadian Federal standards. This product, or all components, is listed on the Domestic substances list, as required under the Canadian Environmental Protection Act.

Biodegradability: Not applicable

Formed Sulphur such as Flakes or Pastille, and powdered Sulphur packaged in containers Smaller than 400 kg- This product is not a WHMIS controlled substance.

TDG: These products are not regulated.

SECTION 16. OTHER INFORMATION

For additional information, contact your technical Sales Representative. For additional Health & Safety information, call N.M. Bartlett Inc. at 905-563-8261.

The information contained herein is based on the data available to us and is believed to be correct. However, N.M. Bartlett makes no warranty, expressed or implied, regarding the accuracy of this data or the results to be obtained from the use thereof.

N.M. Bartlett assumes no responsibility for injury from the use of the product described herein.

Date of Latest Revision: April 16, 2024