

MSDS # 736.00

Sulfur**Section 1: Product and Company Identification****Sulfur****Synonyms/General Names:** N/A**Product Use:** For educational use only**Manufacturer:** Columbus Chemical Industries, Inc., Columbus, WI 53925.**24 Hour Emergency Information Telephone Numbers****CHEMTREC (USA): 800-424-9300****CANUTEC (Canada): 613-424-6666**

ScholarAR Chemistry; 5100 W. Henrietta Rd, Rochester, NY 14586; (866) 260-0501; www.Scholarchemistry.com

Section 2: Hazards Identification*Bright yellow powder, crystals, rolls, broken lumps; slight odor of rotten eggs.***CAUTION!** Combustible solid, flammable if finely powdered, keep away from all ignition sources.

Target organs: None known.

HMIS (0 to 4)

Health	0
Fire Hazard	2
Reactivity	0

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Section 3: Composition / Information on Ingredients

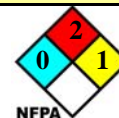
Sulfur (7704-34-9), >99%

Section 4: First Aid Measures*Always seek professional medical attention after first aid measures are provided.***Eyes:** Immediately flush eyes with excess water for 15 minutes, lifting lower and upper eyelids occasionally.**Skin:** Immediately flush skin with excess water for 15 minutes while removing contaminated clothing.**Ingestion:** Call Poison Control immediately. Rinse mouth with cold water. Give victim 1-2 tbsp of activated charcoal mixed with 8 oz water.**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration.**Section 5: Fire Fighting Measures**

IIIB Flammable solid. When heated to decomposition, emits acrid fumes of sulfur dioxide.

Protective equipment and precautions for firefighters: Use foam or dry chemical to extinguish fire.

Firefighters should wear full fire fighting turn-out gear and respiratory protection (SCBA). Cool container with water spray. Material is not sensitive to mechanical impact or static discharge.

**Section 6: Accidental Release Measures**

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove all ignition sources and ventilate area. Sweep up spill and place material in a dry container for disposal. See Section 13 for disposal information.

Section 7: Handling and Storage**Red****Handling:** Use with adequate ventilation and do not breathe dust or vapor. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly after handling.**Storage:** Store in Flammable Area [Red Storage] with other flammable materials and away from any strong oxidizers. Store in a cool, dry, well-ventilated, locked store room away from incompatible materials.**Section 8: Exposure Controls / Personal Protection**

Use ventilation to keep airborne concentrations below exposure limits. Have approved eyewash facility, safety shower, and fire extinguishers readily available. Wear chemical splash goggles and chemical resistant clothing such as gloves and aprons. Wash hands thoroughly after handling material and before eating or drinking. Use NIOSH-approved respirator with a dust cartridge.

Exposure guidelines: Sulfur: OSHA PEL: N/A and ACGIH TLV: N/A, STEL: N/A.

Section 9: Physical and Chemical Properties

Molecular formula	S.	Appearance	Yellow powder, crystals, or lumps.
Molecular weight	32.06.	Odor	slight odor of rotten eggs.
Specific Gravity	2.07 g/mL @ 20°C.	Odor Threshold	N/A.
Vapor Density (air=1)	N/A.	Solubility	Alcohol, organic solvents.
Melting Point	114°C.	Evaporation rate	N/A. (<i>Butyl acetate = 1</i>).
Boiling Point/Range	445°C.	Partition Coefficient	N/A. (<i>log P_{ow}</i>).
Vapor Pressure (20°C)	N/A.	pH	N/A.
Flash Point:	207°C (405°F).	LEL	3.3.
Autoignition Temp.:	232°C (450°F).	UEL	N/A.

N/A = Not available or applicable

Section 10: Stability and Reactivity

Avoid heat and ignition sources. Note: The melting point of this material is lower than the flash point. Use caution when heating.

Stability: Stable under normal conditions of use.

Incompatibility: Strong oxidizing agents, corrosive to copper and steel.

Shelf life: Indefinite if stored properly.

Section 11: Toxicology Information

Acute Symptoms/Signs of exposure: *Eyes:* Stinging pain, burns, watering of eyes, inflammation of eyelids and conjunctivitis.

Avoid looking at burning magnesium. *Skin:* Irritation, redness, burns. Powdered metal ignites readily on skin causing burns.

Ingestion: Nausea, vomiting and headache. *Inhalation:* Rapid irregular breathing, headache, burns to mucous membranes.

Chronic Effects: Repeated/prolonged skin contact may cause dryness or rashes.

Sensitization: none expected

Sulfur: LD50 [oral, rat]; 5,000 mg/kg; LC50 [rat]; Not Available; LD50 Dermal [rabbit]; Not Available

Material has not been found to be a carcinogen nor produce genetic, reproductive, or developmental effects.

Section 12: Ecological Information

Ecotoxicity (aquatic and terrestrial): Environmental hazard data not available.

Section 13: Disposal Considerations

Check with all applicable local, regional, and national laws and regulations. Local regulations may be more stringent than regional or national regulations. Small amounts of this material may be suitable for sanitary sewer or trash disposal.

Section 14: Transport Information

DOT Shipping Name:	Sulfur.	Canada TDG:	Sulfur.
DOT Hazard Class:	4.1, pg III.	Hazard Class:	4.1, pg III.
Identification Number:	UN1350.	UN Number:	UN1350.

Section 15: Regulatory Information

EINECS: Listed (231-722-6) .

WHMIS Canada: B4: Flammable solid.

TSCA: All components are listed or are exempt.

California Proposition 65: Not listed.

The product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Section 16: Other Information

Current Issue Date: January 23, 2009

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