

MATERIAL SAFETY DATA SHEET

FIRST CHOICE DUSTING SULFUR

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SECTION 4 FIRE AND EXPLOSION HAZARD DATA (continued)

Fire and explosion hazards:

The primary hazard in handling solid sulfur is that sulfur suspended in air ignites easily and results in explosion in confined areas. Ignition can be caused by heat sources, friction and static electricity developed by the movement of sulfur dust in air. Even coarse granules of sulfur may create sufficient dust with small particle sizes to cause an explosion. A small explosion creates further dust disturbances which may ignite, resulting in a larger explosion and ignition of the sulfur pile itself.

Firefighting techniques:

Combustion of sulfur generates toxic sulfur dioxide which is irritating to the respiratory tract and may cause breathing difficulty and pulmonary edema. Symptoms may be delayed several hours or longer depending upon exposure. As in any fire, prevent human exposure to smoke, fumes or products of combustion. Evacuate nonessential personnel from the fire area. Firefighters should wear full face self-contained breathing apparatus and impervious clothing such as gloves, hoods, suits and rubber boots. Use a water fog to extinguish fires involving this material. Solid streams of water should not be used because of the possibility of dispersing dust clouds of sulfur in air, possibly causing an explosion. Cool surrounding area with a water fog to prevent re-ignition. Fires will rekindle before the mass is cooled down below 310°F (154°C).

SECTION 5 REACTIVITY DATA

Stability:

Stable under normal conditions.

Incompatibility:

Sulfur may explode violently upon contact with strong oxidizing agents such as nitrates and chlorates. Upon contact with alkaline materials, it will undergo chemical change at moderate rates. Corrosive to copper and copper alloys. In the presence of water, sulfur will attack steel. Carbon steel is a preferred material of construction for process equipment.

Hazardous decomposition products:

Combustion products: Sulfur oxides.

Hazardous polymerization:

Will not occur.

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SECTION 6 HEALTH HAZARD ASSESSMENT

General:

This description of physical, chemical and toxicological properties and handling advice is based on experimental results and past experience. It is intended as a starting point for the development of health and safety procedures.

Ingestion:

The acute oral LD50 in rat is probably above 5 g/kg. A single dose of this product is practically nontoxic by ingestion.

Eye contact:

Sulfur dust is an eye irritant. This material is likely to irritate human eyes following contact.

Skin contact:

No irritation is likely to develop following contact with human skin.

Skin absorption:

This product will probably not be absorbed through human skin.

Inhalation:

Particulates of this material can irritate respiratory passages.

Other effects of overexposure:

No other adverse clinical effects have been associated with exposures to this material.

First aid procedures:

General: If a known exposure occurs or is suspected, immediately start the recommended procedures below. Simultaneously contact a Poison Center, a physician or the nearest hospital. Inform the person contacted of the type and extent of exposure, describe the victim's symptoms, and follow the advice given.

Skin: Wash material off the skin with plenty of soap and water. If redness, itching or a burning sensation develops, get medical attention.

Eyes: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If redness, itching, or a burning sensation develops, have eyes examined and treated by medical personnel.

Ingestion: Give 1 or 2 glasses of water to drink and induce vomiting by sticking finger down throat. Repeat until vomitus is clear. Refer person to medical personnel. (Never give anything by mouth to an unconscious person).

Inhalation: Remove victim to fresh air. If a cough or other respiratory symptoms develop, consult medical personnel.

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SECTION 7 SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:

Make sure all personnel involved in the spill cleanup follow good industrial hygiene practices. Small spills can be handled routinely. Use adequate ventilation and wear respirator or dust mask to prevent inhalation. Wear suitable protective clothing and eye protection to prevent skin and eye contact. Use the following procedures:

1. Sweep or shovel up spilled material using a natural fiber broom and/or aluminum shovel to reduce sparking.
2. Be careful not to create dust as an explosion could result.
3. Place sweepings in appropriate chemical waste container.
4. Seal container and dispose of in an approved facility.
5. Flush spill area with detergent and water to remove any residue.
6. Large spills should be handled according to a predetermined plan. Part of this action plan should include firefighting technique. In case of emergency call, day or night, 800-424-9300 (Chemtrec).

Disposal method:

Discarded product is not a hazardous waste under RCRA, 40 CFR 261.

Container disposal:

Empty container retains product residue. Observe all hazard precautions. Do not distribute, make available, furnish or reuse empty container except for storage and shipment of original product. Remove all product residue and puncture or otherwise destroy empty container before disposal.

SECTION 8 SPECIAL PROTECTION INFORMATION

TLV^(R) or suggested control value:

No ACGIH TLV or OSHA PEL is assigned. Minimize exposure in accordance with good hygiene practice.

Ventilation:

If needed, use local exhaust to minimize exposures.

Respiratory protection:

If needed, use MSHA-NIOSH approved respirator for dusts, mists and fumes whose TLV is greater than 0.05 mg/m³.

Protective clothing:

Impervious gloves and apron.

Eye protection:

Chemical tight goggles.

Other protective equipment:

Eyewash station in work area.

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SECTION 9 SPECIAL PRECAUTIONS OR OTHER COMMENTS

Special precautions or other comments:

Follow procedures specified in the National Fire Protection Association Codes and Standards for handling combustible dusts. Maintain good housekeeping to avoid dust buildup. Prevent eye contact. Avoid breathing particulates. Containers should be stored in a cool, dry, well-ventilated area. Store away from flammable materials, sources of heat, flame, sparks and foodstuffs. Exercise due caution to prevent damage to or leakage from the container. Avoid any conditions that might tend to create a dust explosion. Maintain good housekeeping practices to minimize dust buildup and dispersion. Separate from chlorates, nitrates and oxidizing agents.

SECTION 10 REGULATORY INFORMATION

TSCA (Toxic Substances Control Act) Regulations, 40 CFR 710:

All ingredients are on the TSCA Section 8 (b) Inventory.

CERCLA and SARA Regulations (40 CFR 355, 370, and 372):

This product does not contain any chemicals subject to the reporting requirements of SARA Section 313.

State Regulations:

California Proposition 65: No warnings are necessary.

The information herein is given in good faith
but no warranty, expressed or implied, is made.

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