

#### Safety Data Sheet

Date of issue: 01/04/2016 Revision date: 08/20/2020 Version: 1.0

#### **SECTION 1: Identification**

#### Identification

Product form : Mixture

Trade name : Lilly Miller Sulfur Dust

Synonyms : EPA Reg. No.: 802-16, 100099282, UPC #: 0-70624-50609-7

#### Recommended use and restrictions on use

Recommended use : Fungicide. Insecticide.

Restrictions on use Avoid contact with eyes and clothing. Keep out of reach of children. Do not inhale. Keep away

from heat, sparks and flame.

#### 1.3. **Supplier**

Lilly Miller Brands

1000 Parkwood Circle, Suite 700 Atlanta, GA 30339 - United States

www.lillymiller.com

#### **Emergency telephone number**

: 1-800-265-0761 **Emergency number** 

1-800-424-9300 - CHEMTREC

1-703-527-3887 - CHEMTREC - Outside North America - Collect Calls Accepted

#### SECTION 2: Hazard(s) identification

#### Classification of the substance or mixture

#### **GHS US classification**

Flammable solids Category 1 Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2A

Combustible Dust

Flammable solid Causes skin irritation Causes serious eye irritation

May form combustible dust concentrations in air

#### 2.2. GHS Label elements, including precautionary statements

#### **GHS US labeling**

Hazard pictograms (GHS US)



GHS02



Signal word (GHS US) Danger

Hazard statements (GHS US) May form combustible dust concentrations in air

Flammable solid Causes skin irritation Causes serious eye irritation

Precautionary statements (GHS US) Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smokina.

Ground/Bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment. Wash hands, forearms and face thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN: Wash with plenty of water.

If skin irritation occurs: Get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse. In case of fire, use water fog, CO2, foam or dry powder to extinguish.

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#### 2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification

: Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

#### **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%
Sulfur	(CAS-No.) 7704-34-9	90
Kaolin	(CAS-No.) 1332-58-7	< 8
Non-hazardous and/or does not meet criteria for classification	(CAS-No.) N/A	Balance

#### **SECTION 4: First-aid measures**

#### 4.1. Description of first aid measures

First-aid measures after inhalation

: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact

: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact

: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice and attention.

First-aid measures after ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting unless directed to do so by medical personnel.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact

: Causes skin irritation.

Symptoms/effects after eye contact

: Causes serious eye irritation.

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

Treat symptomatically.

#### **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media

: Use water fog, foam, carbon dioxide, or dry chemical.

Unsuitable extinguishing media

: Avoid heavy hose streams.

#### 5.2. Specific hazards arising from the chemical

Fire hazard

: Fire conditions may produce toxic sulphur dioxide gas. It is heavier than air and may not disperse from the scene of the fire readily.

Explosion hazard

: Dust cloud can be ignited by a spark. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Reactivity

This material is friable and can create small dust particles during any handling, processing, and transfer operations. This material can form explosive dust/air suspensions that are ignitable under some conditions.

#### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions

: Combustible dust - use low-pressure medium fog streams to avoid dust clouds. Ventilate closed spaces before entering. Eliminate ignition sources. Move containers away from the fire area if this can be done without risk.

Protection during firefighting

: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Protective equipment

: Avoid contact with skin, eyes and clothing. Wear suitable protective equipment.

**Emergency procedures** 

: Evacuate unnecessary personnel. No flames, no sparks. Eliminate all sources of ignition.

Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray.

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#### 6.1.2. For emergency responders

Protective equipment

: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: Exposure controls/personal protection.

**Emergency procedures** 

: Contain spill and monitor for excessive dust accumulation. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ventilate closed spaces before entering. Turn off electric power to area. As an immediate precautionary measure, isolate spill or leak area for at least 100 meters (330 feet) in all directions. Evacuate area.

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up

: Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Nonsparking tools should be used. Sweep or scoop spills, dispose of any unusable material in approved landfill. Use appropriate PPE.

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling

: Avoid contact with skin, eyes and clothing. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Ensure good ventilation of the work station. Avoid dust formation. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Provide local exhaust or general room ventilation. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures

Do not eat, drink or smoke when using this product. Always wash hands after handling the product

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Keep only in original container. Store in a well-ventilated place. Keep cool. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Incompatible materials

: Heat, sparks, open flame. Strong oxidizers. Copper, copper alloys, steel, chlorates, nitrates.

#### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Kaolin (1332-58-7)		
ACGIH	ACGIH TWA (mg/m³)	2 mg/m³ (Respirable fraction. The value is for particulate matter containing no asbestos and < 1% crystalline silica)

#### 8.2. Appropriate engineering controls

Appropriate engineering controls

: It is recommended that dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

Environmental exposure controls

: Avoid release to the environment.

#### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Protective gloves

#### Eye protection:

Safety glasses

#### Skin and body protection:

If prolonged exposure is anticipated, it is recommended for handlers to wear appropriate clothing to prevent skin contact.

#### Respiratory protection:

No respiratory protection needed under normal use conditions. In case of insufficient ventilation, use NIOSH approved respiratory protection.

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#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Yellow colored lumps, crystals, powder, or formed shape

Color : Yellow

Odor : Odorless or faint odor of rotten eggs

Odor threshold : No data available pH : Not applicable

Melting point : 118-120 °C (244-248 °F)

Freezing point : Not applicable
Boiling point : 444 °C (832 °F)
Flash point : Not applicable
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : Flammable solid

Vapor pressure : 8 mmHg at 246°C (475°F) 1 mmHg at 183.8°C (362.8°F)

Relative vapor density at 20 °C : No data available
Relative density : 2.07 @ 21.1 °C (70 °F)

Bulk density : Lumps: 75-115 lbs. /ft3 Powder: 33-80 lbs. /ft3

Solubility : Miscible

Partition coefficient n-octanol/water (Log Pow) : No data available

Auto-ignition temperature : Not applicable

Decomposition temperature : Does not decompose

Viscosity, kinematic : Not applicable

Viscosity, dynamic : Not applicable

Evaluation limits : Not applicable

Explosion limits : Not applicable
Explosive properties : Combustible dust
Oxidizing properties : Not applicable

#### 9.2. Other information

No additional information available

#### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

This material is friable and can create small dust particles during any handling, processing, and transfer operations. This material can form explosive dust/air suspensions that are ignitable under some conditions.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur. May form combusitble dust concentrations in the air.

#### 10.4. Conditions to avoid

Avoid dust formation. Heat. No flames, no sparks. Eliminate all sources of ignition.

#### 10.5. Incompatible materials

Strong oxidizing agents. Heat. Copper, copper alloys, steel, chlorates, nitrates.

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Oxides of sulfur gases will be produced by burning sulfur.

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## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Sulfur (7704-34-9)		
LD50 oral rat	> 5050 mg/kg	
LD50 dermal rat	> 2020 mg/kg	
LC50 inhalation rat (mg/l)	> 5.49 mg/l/4h	

GHS-US Properties	Classification
Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration hazard	Not classified

#### Potential health effects

Inhalation

Acute : Exposure to dust may cause nasal and respiratory irritation.

Chronic : Repeated or prolonged inhalation of dust may cause respiratory irritation.

Skin

Acute : Causes skin irritation.

Eye

Acute : Causes eye irritation.

Ingestion

Acute : Under normal conditions of use, no health effects are expected. If ingested, may cause gastrointestinal irritation,

nausea, diarrhea.

Mutagenicity: Not classified.Carcinogenicity: Not classified.Reproductive Effects: Not classified.

## **SECTION 12: Ecological information**

#### 12.1. Toxicity

Sulfur (7704-34-9)		
LC50 Acute fish 1	866 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])	
LC50 Acute fish 2	< 14 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])	
LC50 Acute fish 3	> 180 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])	

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

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#### 12.5. Other adverse effects

No additional information available

## **SECTION 13: Disposal considerations**

#### 13.1. Disposal methods

Product/Packaging disposal recommendations

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

## **SECTION 14: Transport information**

	UN number	Proper Shipping Name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	NA1350	Bulk packaging only: Sulfur	9	III	Not applicable
IMDG	UN1350	Sulphur	4.1	III	Not applicable
IATA	UN1350	Sulphur	4.1	III	Not applicable

Other Information

: Solid sulfur is not regulated if transported in non-bulk packaging (less than 400 kg (882 lbs.)per package), or if formed to a specific shape, such as prills, granules, pellets, pastilles, or flakes (49 CFR 172.102, Special Provision 30).

#### **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

#### Sulfur (7704-34-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### FIFRA Labelling

EPA Registration Number 802-16

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

below. The pesticide label also includes other important information, including directions for use.		
FIFRA Signal word	Caution	
FIFRA Precautionary Statement	KEEP OUT OF REACH OF CHILDREN.	
FIFRA Hazards to Humans and Domestic Animals	Causes moderate eye irritation. Harmful if inhaled, absorbed through skin, or swallowed. Avoid breathing dust. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.	
FIFRA First Aid	IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor immediately for treatment advice. respiration, preferably mouth-to-mouth, if possible.  IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. IF INHALED: Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.	
FIFRA Environmental Hazards	DO NOT apply directly to water. DO NOT contaminate water when disposing of rinsate or equipment washwater.	

#### 15.2. US State regulations

No additional information available

#### **SECTION 16: Other information**

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Revision date	: 20 August 2020

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SDS US (GHS HazCom 2012) - CGP

The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.

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