



Safety Data Sheet

Report Date 14-Sep-17

Page 1 of 5

1. Identification

Product Name : WETTABLE SULPHUR
Synonyms : Agricultural Sulfur
Product Use : Fungicide
Manufacturer/Supplier : Helena Chemical Company
Address : 225 Schilling Blvd. Collierville, TN 38017
General Information : 901-761-0050
Transportation Emergency Number : CHEMTREC:800-424-9300

2. Hazard Identification



Signal Word : Warning
Skin Irritation : Causes skin irritation
Eye Irritation : Causes eye irritation
Acute Toxicity Oral : LD50 >2,500 mg/kg (rat) (acute toxicity estimate)
Acute Toxicity Dermal : >,1222 mg/kg (rabbit) (acute toxicity estimate)

Hazard Categories : Oral/Dermal/Inhalation Tox-5/4/5; Eye/Skin Irr-2B/2; Flammable Solid-2; Corrosive to metals-1

Hazard Statement : May be harmful if swallowed
Harmful in contact with skin
May be harmful if inhaled
Causes eye irritation
Causes skin irritation
Flammable solids
May be corrosive to metals

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Sulphur	7704-34-9	90.00
Inert Ingredients	Non-hazardous	10.00

4. First Aid Measures

Eye : Immediately flush eyes with plenty of water for 15 minutes, while holding upper and lower lid apart to ensure rinsing of entire eye surface and lids. Do not use boric acid. For severe irritation, seek medical attention, preferably with an ophthalmologist.

Skin : Wash skin thoroughly with mild soap and water. Wash exposed clothing separately before reuse.

Inhalation : Move 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, call 911 or an ambulance and give artificial respiration. Seek medical attention.

Ingestion : Seek medical attention. Induce vomiting. If vomiting does not occur, give fluids again. If vomiting has not occurred within 20 minutes, administer an additional dose of emetic. Do not give anything by mouth unconscious or convulsing.



Safety Data Sheet

Report Date 14-Sep-17

Page 2 of 5

Indication of Immediate Medical Attention and Special Treatment Needed : Individuals with known allergies to sulfide drugs may also have allergic reactions to elemental sulfur.

5. Fire Fighting Measures

- Extinguishing Media** : Use water fog, spray or regular foam. Do not use a direct stream of water as this could create sulfur dust clouds and cause an explosion or could move burning sulfur to adjacent areas.
- Specific Hazards Arising from the Chemical** : Emits sulfur oxide gases. Fire will rekindle until mass is cooled below 310 Deg. F. Cool surrounding areas with water fog to prevent re-igniting. Sulfur dust is highly flammable. Suspended in air, it will ignite by friction, static electricity, heat, etc.
- Special Fire Fight Proc** : Wear self-contained breathing apparatus and full protective clothing. Fire fighters exposed to contaminated smoke should be immediately relieved and checked for symptoms of exposure to toxic gases.

6. Accidental Release Measures

- Personal Precautions** : Avoid getting dust in eyes. Isolate spills or leak areas. Eliminate all sources of ignition, such as flares, sparks or flames, in the immediate area. No smoking. Ventilate closed spaces before entering.
- Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Use NIOSH-approved dust respirator if airborne concentrations exceed exposure limits. Eyewash and emergency shower should be available in work area.
- Emergency Procedures** : Do not allow runoff to enter lakes or waterways.
- Methods and Materials for Containment and Cleanup** : For minor spills from torn bags or ruptured containers, repair container, collect spilled material and place in a suitable container. Avoid creating dust. Gently 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 cleanup is complete.

7. Handling and Storage

- Precautions for Safe Handling** : All handling and conveying equipment should be properly grounded and bonded. Be careful not to create dust. Avoid any conditions that might tend to create a dust explosion. 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, when available, to reduce sparking. Maintain adequate ventilation in all areas.
- Conditions for Safe Storage** : Containers should be stored in a cool, dry, well-ventilated area. Keep container tightly closed. Store away from flammable materials, sources of heat, flames and sparks. Separate from chlorates, nitrates and other oxidizing agents. Exercise due caution to prevent damage to or leakage from containers.

8. Exposure Controls / Personal Protection

- TLV/PEL** : No TLV or PEL established for sulfur. For respirable dust not otherwise regulated, OSHA has established a PEL of 5 mg/m3.
- Appropriate Engineering Controls** : Maintain adequate ventilation in all areas.



Safety Data Sheet

Report Date 14-Sep-17

Page 3 of 5

Personal Protective Equipment : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Use NIOSH-approved dust respirator if airborne concentrations exceed exposure limits. Eyewash and emergency shower should be available in work area.

9. Physical and Chemical Properties

Odor/Appearance : Solid yellow powder; faint odor of rotten eggs.
Flash Point, °F : 207 Deg. C. (closed cup)
Boiling Point, °F : 832 Deg. F.
Melting Point(Freezing point), °C : 244 Deg. F. (melting point)
Vapor Pressure, mm Hg @ 20 °C : 1 mmHg @ 183.8 Deg. C.
Vapor Density : No data available
Solubility in Water : Insoluble
Molecular Formula : Not applicable, formulated mixture.
Density, g/mL @ 25 °C : 33-80 lbs/cu.ft. (powder)
Evaporation Rate(Butyl Acetate = 1) : No data available
Octanol/Water Partition Coefficient : No information found
pH : No data available
Flammable Limits (approximate volume % in air) : UEL=6.38% (v); LEL=0.17% (v)
Auto-ignition Temperature : 464 Degrees F.
Decomposition temperature : Does not decompose

10. Stability and Reactivity

Reactivity : Oxidizing agents may react violently.
Chemical Stability : Stable
Hazardous Decomposition Products : Oxides of sulfur gases produced by burning sulfur.
Hazardous Polymerization : Will not occur
Conditions to Avoid : Avoid dust formation; keep from heat sources, sparks, and open flames. Avoid exposure to air or moisture.
Incompatible Materials : Oxidizing agents, copper, copper alloys, steel, chlorates, nitrates and acids.

11. Toxicological Information

Acute Toxicity (Oral LD50) : >2,500 mg/kg (rat)(acute toxicity estimate). May be harmful if swallowed.
Acute Toxicity (Dermal LD50) : >1,222 mg/kg (rabbit)(acute toxicity estimate). Harmful in contact with skin.
Acute Toxicity Inhalation LC50 : 6.9 mg/L (rat)(acute toxicity estimate). May be harmful if inhaled.
Likely Routes of Exposure : Skin absorption, eye, inhalation, ingestion
Skin Irritation : Causes skin irritation.
Eye Irritation : Causes eye irritation.
Skin Sensitization : No information available
Carcinogenic : Not listed by IARC, NTP or OSHA.
Chronic Effects : No information found
Other Hazards : No information found

12. Ecological Information

Ecotoxicity : No data available



Safety Data Sheet

Report Date **14-Sep-17**

Page 4 of 5

Persistence and Degradability : No data available
Bioaccumulative Potential : No data available
Mobility in Soil : No data available
Other Adverse Effects : No data available

13. Disposal Considerations

Waste Disposal Method : This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.

14. Transport Information

UN Proper Shipping Name : Not regulated by DOT if shipped in non-bulk packages. Regulated if shipped by air (IATA) or water (IMDG).
Transport Hazard Class : None
UN Identification Number : None
Packaging Group : None
Environmental Hazards : Not a Marine Pollutant per Appendix B to 49 CFR 172.101.
Transport in Bulk : If shipped by ground (DOT) in bulk package, ship as: NA1350, Sulfur, 9, PG III "ERG # 171"
Special Precautions for Transportation : If shipped by air (IATA) or water (IMDG), ship as: UN1350, Sulfur, 4.1, PG III
Freight Classification : Pesticides, NOI, Fungicides, Other than Poison (NMFC Item 155050, Sub 11, Class 70)

15. Regulatory Information

National Fire Protection Association Rating :

Health: 2 Fire: 2 Reactivity: 1
Rating Level: (4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

S.A.R.A Title III Hazard Classification (Yes/No) :

Immediate(Acute) Health: Y
Delayed (Chronic) Health: N
Sudden Release of Pressure: N
Fire: Y
Reactive: N

FIFRA Information : This Chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

EPA Registration Number : 5905-289
FIFRA Signal Word : Caution
FIFRA Label Statement : Keep out of reach of children.
FIFRA Label Statement : Causes moderate eye irritation.
FIFRA Label Statement : Harmful if absorbed through skin.
FIFRA Label Statement : Avoid contact with eyes, skin or clothing.
FIFRA Label Statement : Wash thoroughly with soap after handling.
FIFRA Label Statement : No additional label statements.
FIFRA Label Statement : No additional label statements.



Safety Data Sheet

Report Date **14-Sep-17**

Page 5 of 5

16. Other Information

Data of Preparation/Revision : 14-September-2017