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SA-50 BRAND WETTABLE OR DUSTING SULFUR

Manufacturer's Name & Address

Southern Agricultural Insecticides, Inc.

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Chemtrec: 1-800-424-9300

I NOMENCLATURE

Product Name: SA-50 BRAND WETTABLE OR DUSTING SULFUR EPA REG. NO. 829-163

Chemical Family: Elemental sulfur (S)

II INGREDIENTS

Sulfur 90.0%. CAS No. 7704-34-9 TLV Not established

Note: Nuisance dust limit should govern exposure OSHA PEL 15 mg/m³ Respirable dust 5 mg/m³

CARCINOGENICITY: ingredients listed NTP, IARC, OSHA **None** NFPA Ratings: Health 2, Flammability 1, Reactivity 0.

III PHYSICAL & CHEMICAL PROPERTIES

Boiling Point: (sulfur) 831°F /444.6° C Density: (bulk) Lumps 75-115 lb/ft ³ Powder 33-80 lb/ft³

Vapor Pressure: (mmHg)<0.0001@ 68°F Melting point 230°F

Reactivity in Water: Negligible Solubility In Water: negligible (product disperses in water)

Appearance/Odor: Yellow to tan coarsely ground solid, sulfur odor.

IV FIRE AND EXPLOSION

Flash point 405°F/207°C Flammable Limits: (g/m3) Lel 3.3 Uel 46

Auto ignition Temp (dust in air) 478-511°F Extinguishing Media: Water fog (preferred)

Special Fire Fighting Procedures: Personnel should remain upwind. Do not breathe smoke. Combustion of sulfur generates toxic sulfur dioxide which is irritating to the respiratory tract. Symptoms may be delayed several hours or longer, depending on exposure. Firemen should wear self contained breathing apparatus (air-pac) and full protective clothing. Use water fog to extinguish burning material and to cool surrounding material. Use of solid streams should be avoided due to the possibility of causing dust clouds in air. Fires will rekindle before mass has cooled to below 310° F

The primary hazard in handling solid sulfur is that sulfur dust suspended in the air easily explodes. A small explosion creates further dust clouds which can create a chain of explosions.

V FIRST AID

EYE EXPOSURE: Flush eyes for 15 minutes with a gentle stream of water, lifting upper and lower lids occasionally while flushing. Get medical attention if irritation persists.

SKIN EXPOSURE: Remove contaminated clothing and wash all exposed skin surfaces thoroughly with soap and water. If irritation develops see a physician.

If SWALLOWED: Immediately give large quantities of water and induce vomiting. Repeat by giving water and inducing vomiting until fluid is clear. Do not induce vomiting or give anything by mouth to an unconscious or convulsing person. Contact a physician.

INHALATION: Remove victim from contaminated atmosphere. Seek medical attention if irritation occurs or breathing is difficult.

SYMPTOMS of OVEREXPOSURE: May cause irritation of eyes, mucous membranes, respiratory tract and skin. Allergenic response can occur.

VI REACTIVITY

STABILITY: In the absence of reactive contaminants, stable under normal storage conditions.

MATERIALS TO AVOID: Strong oxidizing agents. Sulfur can explode violently ,with contact with strong oxidizing agents such as nitrates and chlorates. Upon contact with alkaline materials, it will undergo chemical change at moderate rates. Moist sulfur is corrosive to copper and copper alloys, and to steel..

HAZARDOUS DECOMPOSITION PRODUCTS: On burning, sulfur dioxide is formed.

Sulfur can react with hydrocarbons to form hydrogen sulfide and carbon disulfide.

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VII TOXICOLOGY

Sulfur is essentially non toxic either through ingestion, inhalation, or skin contact. Prolonged inhalation may cause irritation to mucous membranes. Sulfur dust is an eye irritant.

Oral LD $_{50}$ (Rats) >5050 mg/Kg Dermal LD $_{50}$ (Rats) >2020 mg/Kg Inhalation LC $_{50}$ >5.49 mg/L air concentration

VIII SPILL OR LEAK PROCEDURES:

SPILLS: Eliminate ignition sources. Refer to Special Precautions section for protective clothing. Sweep up or shovel using a natural fiber broom and/or an aluminum shovel to prevent sparking. Avoid creating dust. Flush spill area with detergent and water. Do not leave residue that can create dusty conditions.

WASTE DISPOSAL: Residue that can not be used according to label instructions or reprocessed, should be disposed of according to local, State, and Federal regulations.

CONTAINER DISPOSAL: Completely empty bag into application equipment, then dispose in sanitary landfill, or by incineration, or if allowed by state and local authorities by burning. If burned stay out of smoke.

IX SPECIAL PROTECTION:

Because of the explosive properties of sulfur dust suspended in the air it is essential to avoid unnecessary sulfur dust such as spills and broken bags. In the presence of sulfur dust all sources of ignition should be eliminated including smoking. Handle out of doors or with good ventilation. If permissible airborne contamination limits might be exceeded wear a NIOSH approved respirator. Avoid all possible air contamination by sulfur for industrial hygiene and possible explosive considerations.

Wear body covering work clothes, hat, long sleeved shirt, long pants, safety glasses with side shields or goggles, and shoes plus socks. Remove and launder contaminated clothing. Wash thoroughly after handling Use nonferrous tools to avoid sparking.

When product is applied by power duster keep ignition sources away from the dust stream.

X STORAGE;

Store in a cool, dry, well ventilated area. Do not put broken or leaking containers into storage. Maintain good housekeeping. Do not allow loose sulfur to accumulate. Store separately from flammable materials, oxidizers and oxidizer containing fertilizers, chlorates, nitrates and sources of heat, flame, sparks and foodstuffs.

XI REGULATORY

TSCA listed as CAS Reg. No. 7704=34-9

CERCLA not subject to reporting if spilled. Recommend contacting state & local authorities.

Sara Title III: Sections 311/312 classified as a delayed health hazard

DOT: Proper shipping name Sulfur For domestic surface shipments of non bulk packaging :Special Provision #30

Hazard: Label-none, Placard-none, RQ-none, Hazardous material notation on shipping papers-none

Shipping name Sulfur NMFC 179900, Sub 1, Sulfur OT crude in bags

This information relates solely to the designated product and does not make consideration for combinations with other materials. This information is given without warranty or representation. Information is based on data we believe to be correct as of the date hereof. This information is furnished solely for your consideration, investigation, and verification. Before using any product READ THE LABEL.