

Material Safety Data Sheet

Effective Date: 23-JAN-2000
Product: LIME-SULFUR

I. IDENTIFICATION

Chemical Name: LIME SULFUR, CALCIUM POLYSULFIDE
Chemical Family: ELEMENT
Formula: (S)
Synonyms: NONE
CAS Number: SEE INGREDIENT STATEMENT, SECTION III.
EPA Number: 5905-518

II. PHYSICAL DATA

Boiling Point: NOT DETERMINED
Freezing Point: NOT DETERMINED
Spec Gravity: 1.280 GMS/CC
Vapor Pressure: NOT DETERMINED
Vapor Density: NOT DETERMINED
Solubility: SOLUBLE
Volatiles: NOT DETERMINED
Evaporation: NOT DETERMINED
Melting Point: NOT APPLICABLE
Appearance: DEEP RED-ORANGE, ODOR OF ROTTEN EGGS.

III. INGREDIENTS

Material	CAS Number	Percent	TLV	Hazard
CALCIUM POLYSULFIED, DERIVED FROM QUICKLIME (CAS # 01305-78-8) - 12.9% (TLV - 2 MG/M3); SULFUR (CAS # 07704-34-9) - 23.7%		29.00	8 PPM (EYE)	CORROSIVE TO EYES AND SKIN IRRITANT
INERT INGREDIENTS		71.00	NOT APPLICABLE	NOT APPLICABLE

IV. FIRE AND EXPLOSION HAZARD

Flash Point: NONCOMBUSTIBLE
Autoignition Temp: NOT APPLICABLE
Flammable Limit: NOT APPLICABLE
Extinguishing Media: SMALL FIRES; DRY CHEMICAL, WATER SPRAY OR FOAM.LARGE FIRES; WATER SPRAY, FOG OR FOAM.
Special Fire Fight Proc: USE POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS AND FULL FIRE FIGHTING CLOTHING.
AVOID STRAIGHT STREAMS OF WATER WHICH WILL

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SCATTER MOLTEN SULPHUR AND DUST.
Fire and Expl Hazard: SMOKE FROM FIRES INVOLVING THIS MATERIAL MAY PRESENT UNUSUAL HAZARDS. AVOID BREATHING SMOKE AND MIST. AVOID CONTACT WITH FALLOUT AND RUNOFF. MINIMIZE THE WATER USED IN FIGHTING FIRE.

V. HEALTH HAZARD

Carcinogen Information: NONE CURRENTLY KNOWN

ACUTE EFFECTS OF OVER EXPOSURE

Swallowing: MODERATELY TOXIC IF SWALLOWED; ABOUT 1 OUNCE OR MORE COULD BE FATAL TO A 150 POUND MAN. DECOMPOSITION OCCURS IN THE DIGESTIVE TRACT RELEASING HYDROGEN SULFIDE GAS (H₂S). LD₅₀ (RAT) 850 MG/KG.
Skin Absorption: CAUSES SKIN IRRITATION AND MAY PRODUCE SYSTEMIC TOXICITY BY SKIN ABSORPTION. ACUTE DERMAL LD₅₀ >2,000 MG/KG.
Inhalation: ACUTE INHALATION LC₅₀ = 4.0 MG/L.
Skin contact: CAUSES SKIN IRRITATION AND MAY PRODUCE SYSTEMIC TOXICITY BY SKIN ABSORPTION.
Eye Contact: CORROSIVE TO EYES AND CAUSES EYE IRRITATION AND DAMAGE.
Chronic Effects: SIGNS AND SYMPTOMS OF H₂S TOXICITY MAY INCLUDE HEADACHE, NAUSEA, VOMITING, DROWSINESS, AMNESIA, TREMORS, DEPRESSED RESPIRATION, CONVULSIONS, CYANOSIS AND DEATH DUE TO RESPIRATORY PARALYSIS.
Other Hazard: NONE CURRENTLY KNOWN.

EMERGENCY AND FIRST AID PROCEDURES

Swallowing: ADMINISTER WATER FREELY AND INDUCE VOMITING BY STICKING FINGER DOWN THROAT. REPEAT UNTIL VOMIT FLUID IS CLEAR. OBTAIN MEDICAL ATTENTION IMMEDIATELY.
Skin: WASH SKIN THOROUGHLY WITH SOAP AND WATER. IF IRRITATION DEVELOPS, CONSULT A PHYSICIAN. LAUNDRER CLOTHING BEFORE REUSE.
Inhalation: MOVE VICTIM TO FRESH AIR. IF BREATHING BECOMES DIFFICULT, OBTAIN MEDICAL ATTENTION IMMEDIATELY.
Eyes: FLUSH EYES WITH WATER FOR 15 MINUTES, HOLDING EYELIDS OPEN. SEE A DOCTOR FOR FURTHER TREATMENT IMMEDIATELY.

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Notes to Physician: FOR SEVERE HYDROGEN SULFIDE POISONING, SUCCESSFUL TREATMENT HAS INVOLVED INITIAL INHALATION OF AMYL NITRITE PEARLS FOR 15 TO 30 SECONDS OF EACH MINUTE. UNTIL 10 ML OF A 3% SOLUTION OF SODIUM NITRITE CAN BE ADMINISTERED INTRAVENOUSLY AT 2.5 TO 5 ML PER MINUTE. THE NITRITE-INDUCED METHEMOGLOBINIS THOUGHT TO BIND THE TOXIC HYDROSULFIDE ION.-NO OSHA ESPOSURE STANDARD OR THRESHOLD LIMIT VALUE HAS BEEN ESTABLISHEDFOR THIS MATERIAL. HOWEVER, THE OSHA EXPOSURE STANDARD FOR HYDROGENSULFIDE (H2S) IS 20 PPM (A CEILING VALUE).

VI. REACTIVITY

Stability: Stable
Conditions to Avoid: PROTECT FROM SPARKS AND OPEN FLAMES.
Polymerization: Will Not Occur
Conditions to Avoid: NONE CURRENTLY KNOWN.
Incompatibility material: REACTS WITH ACIDIC MATERIAL SUCH AS VINEGAR, FERTILIZERS AND ACIDS TO PRODUCE HYDROGEN SULFIDE.
Hazardous Combustion: COMBUSTION FORMS CARBON DIOXIDE AND WATER VAPOR AND MAY PRODUCE OXIDES OF SULFUR.

VII. SPILL OR LEAK PROCEDURES

Spill or Leak Proc: ISOLATE SPILL AREA FROM HEAT AND FLAMES. COVER THE SPILL WITH CLAY OR SAND.SWEEP UP MATERIAL AND PLACE IN A CHEMICAL WASTE CONTAINER. FLUSH SPILL AREA WITH WATER, ABSORB AND PLACE IN SAME CONTAINERS WITH OTHER MATERIAL.
Waste Disposal Method: THIS MATERIAL MUST BE DISPOSED OF ACCORDING TO FEDERAL, STATE, OR LOCAL PROCEDURES UNDER THE RESOURCE CONSERVATION AND RECOVERY ACT.

VIII. SPECIAL PROTECTION INFORMATION

Respiration: USE A NIOSH/MSHA RESPIRATOR APPROVED FOR ORGANIC VAPORS.
Ventilation: USE ADEQUATE VENTILATION TO KEEP THE HYDROGEN SULFIDE CONCENTRATIONS BELOW THE EXPOSURE STANDARDS.
Gloves: CHEMICAL-RESISTANT
Eyes: CHEMICAL WORKERS GOGGLES.
Other: EMERGENCY SHOWER AND EYE WASH STATION,

Helena Chemical Company
PH: 901-761-0050
CHEMTREC: 800-424-9300

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

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

Mail inquiries to: 225 Schilling Blvd., Suite 300 Collierville, TN 38017
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