

SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

Product ID: Elemental Sulfur
Product Name: MP Sulfur, Multi-Purpose Sulfur, Prilled Sulfur, GreenSun ES 99.5%, Flour Sulfur, Dusting Sulfur, Sulphur, CSC Dusting Sulfur, AS-7, Sulfur Flake, Sulfur Flake Grinding, Solid Sulfur
Revision Date: Jun 27, 2016 **Date Printed:** Jun 27, 2016
Version: 2.0 **Supersedes Date:** Dec 11, 2015
Company Name: Martin Operating Partnership, L.P.
Address: P.O. Box 191, Kilgore, TX, US, 75663
Emergency Phone: CHEMTREC (800) 424-9300
Information Phone Number: 800-231-4595
Fax:
Product/Recommended Uses: Sulfur product

SECTION 2) HAZARDS IDENTIFICATION

Classification:

Skin Irritation - Category 2
Eye Irritation - Category 2A
Flammables solids Category 2

Pictograms:



Signal Word:

Warning

Hazardous Statements - Physical:

Flammable solid

Hazardous Statements - Health:

Causes skin irritation
Causes serious eye irritation

Precautionary Statements - General:

If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.

Precautionary Statements - Prevention:

Wash with soap and water thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof (electrical/ventilating/lighting) equipment.

Precautionary Statements - Response:

IF ON SKIN: Wash with plenty of water.

Specific treatment (see First-aid measures on this label).

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing. And wash it before reuse.

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.

In case of fire: Use dry chemical, foam, carbon dioxide to extinguish

Precautionary Statements - Storage:

No precautionary statement available.

Precautionary Statements - Disposal:

No precautionary statement available.

Hazard not otherwise classified (HNOC):

None

SECTION 3) COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0007704-34-9	SULFUR	90% - 100%
0007783-06-4	HYDROGEN SULFIDE	0.00% - 0.99%

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld to protect confidentiality.

SECTION 4) FIRST-AID MEASURES

Inhalation:

Remove source of exposure or move person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell or are concerned. Eliminate all ignition sources if safe to do so.

Skin Contact:

Take off immediately contaminated clothing. Rinse skin with water/shower (and mild soap) for 15-20 minutes or until product is removed. Store contaminated clothing under water and wash before re-use, or discard.

Eye Contact:

Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. If eye irritation persists: Get medical advice/attention.

Ingestion:

Rinse mouth. If you feel unwell or if concerned: Get medical advice/attention. Do not induce vomiting without advice from poison control center.

Most Important Symptoms/Effects, Acute and Delayed:

No data available

Indication of Immediate Medical Attention and Special Treatment Needed:

No data available

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Use dry chemical, foam or carbon dioxide to extinguish fire.

Unsuitable Extinguishing Media:

Water will turn to steam rapidly and too much water can cause splattering of the material into explosive type discharges.

Specific Hazards in Case of Fire:

Do not mix water with hot sulfur.

Fire may produce irritating and/or toxic gases.

Easily ignitable, combustible solid. Dust suspended in air ignites easily and can cause an explosion.

Hazardous in contact with oxidizing materials, forming explosive mixtures.

Sulfur burns with a pale blue flame that may be difficult to see in daylight.

Special Protective Actions:

Structural firefighters' protective clothing will only provide limited protection. Wear protective pressure self-contained breathing apparatus (SCBA).

Care should always be exercised in dust/mist areas.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure:

Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material.

Stay upwind; keep out of low areas.

Flammable/combustible material.

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Small/Large spill: With clean shovel place material into clean, dry container and cover loosely; move containers from spill area. If liquid spill, take up with sand or other noncombustible absorbent material and place into containers for later disposal.

Prevent entry into waterways, sewers, basements or confined areas.

Collect product and contaminated soil and water.

Recommended equipment:

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.

Personal Precautions:

Powders, dusts, shavings, borings, turnings or cuttings may explode or burn with explosive violence. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Use explosive proof equipment.

Avoid inhalation of dust and contact with skin and eyes.

Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains/surface waters/ groundwater. Retain and dispose of contaminated wash water.

SECTION 7) HANDLING AND STORAGE

General:

Wash hands after use.

Do not get in eyes, on skin or on clothing.

Do not breathe vapors or mists.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

Eyewash stations and showers should be available in areas where this material is used and stored.

Ventilation Requirements:

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Use explosion-proof ventilation equipment.

Storage Room Requirements:

Empty containers may contain residue; observe all warnings and precautions listed for the product.

Store in tightly closed containers in cool, dry, well-ventilated area away from heat, sources of ignition and incompatibilities.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection:

Dust-proof goggles or safety glasses with side shields or vented/splash proof goggles. Contact lenses may absorb irritants. Particles may adhere to lenses and cause corneal damage.

Skin protection:

Avoid skin contact. Wear gloves impervious to conditions of use such as neoprene or nitrile gloves. Additional protection may be necessary to prevent skin contact including use of apron, face shield, boots or full body protection.

Respiratory protection:

If exposure limits are exceeded, NIOSH approved respiratory protection should be used. For higher concentrations, unknown concentrations, use a NIOSH approved air-supplied respirator.

Appropriate Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Control Parameters / Exposure Limits:

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Tables (Z1, Z2, Z3)	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen
HYDROGEN SULFIDE	20 ceiling		50ppm /10mins. once only if no other meas. exp. occurs.		1,2							

Chemical Name	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)	ACGIH Carcinogen	ACGIH Notations	ACGIH TLV Basis
HYDROGEN SULFIDE	1		5				URT irr; CNS impair

CNS - Central nervous system, impair - Impairment, irr - Irritation, URT - Upper respiratory tract

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	17.525 lb/gal
% Solids By Weight	99.500%
Specific Gravity	2.100
Appearance	Yellowish solid
Odor Threshold	N.A.
Odor Description	Rotten egg / sulfurous
pH	N.A.
Water Solubility	Insoluble
Flammability	Flash Point at or above 200 °F
Flash Point Symbol	N.A.
Flash Point	405 °F
Viscosity	N.A.
Lower Explosion Level	35 g/m3 as a dust
Upper Explosion Level	1,400 g/m3 as a dust
Vapor Pressure	N.A.
Vapor Density	N.A.
Freezing Point	N.A.
Melting Point	246 °F
Low Boiling Point	831 °F
High Boiling Point	N.A.
Auto Ignition Temp	491 °F
Decomposition Pt	N.A.
Evaporation Rate	Negligible
Partition Coefficient: n-Octanol/Water	N.A.

SECTION 10) STABILITY AND REACTIVITY

Stability:

Stable

Conditions to Avoid:

Avoid great heat, sparks, flame, build up of static electricity, contact with incompatible materials.

Hazardous Polymerization:

Will not occur.

Incompatible Materials:

Material may be corrosive to ferrous and mild steel materials. All handling and storage equipment should be constructed of stainless steel, aluminum, or poly-type materials. Powdered sulfur is subject to dust cloud explosions.

Incompatible with acids, alkalies, halogens, oxygen and strong oxidizing agents.

Forms explosive mixtures with oxidizing agents, ammonia, ammonium nitrate, chlorine dioxide, all inorganic perchlorates, sodium nitrate, and zinc.

Hazardous Decomposition Products:

Sulfur oxides, hydrogen sulfide.

SECTION 11) TOXICOLOGICAL INFORMATION

Likely route of exposure:

Inhalation, ingestion, skin absorption

Skin Corrosion/Irritation:

Causes skin irritation

Serious Eye Damage/Irritation:

Causes serious eye irritation

Respiratory/Skin Sensitization:

No Data Available

Germ Cell Mutagenicity:

No Data Available

Carcinogenicity:

No Data Available

Reproductive Toxicity:

No Data Available

Specific Target Organ Toxicity - Single Exposure:

No Data Available

Specific Target Organ Toxicity - Repeated Exposure:

No Data Available

Aspiration Hazard:

No Data Available

Acute Toxicity:

No data available.

0007783-06-4 HYDROGEN SULFIDE

LC50 (rats): 444 ppm; 4-hr exposure (10)

LC50 (mice): 673 ppm; 1-hr exposure (3)

LC50 (rats and mice): 1000 ppm; 15-30 min exposure (6, 12)

LC50 (female mice): 985 ppm; 15-30 min exposure (9)

0007704-34-9 SULFUR

LC50 (Mammal - species unspecified, Inhalation) : 1660 mg/m3, Toxic effects : Details of toxic effects not reported other than lethal dose value.

SECTION 12) ECOLOGICAL INFORMATION

Toxicity:

Sulfur is not classified as environmentally hazardous, but this does not eliminate the possibility that excessive or large spills can have harmful or damaging effects on the environment.

Persistence and Degradability:

No Data Available.

Bioaccumulative Potential:

No Data Available.

Mobility in Soil:

No Data Available.

Other Adverse Effects:

No Data Available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal:

Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

SECTION 14) TRANSPORT INFORMATION

U.S. DOT Information:

Status: Not Regulated
DOT UN/NA Number: N/A
Proper Shipping Name: Sulfur (formed solid)
Hazard Class: N/A
Packing Group: N/A
Hazardous Substance (RQ): N/A
Note / Special Provision Exempt from requirements (49CFR172.102, Special Provision 30)

International Shipments:

Status: Not Regulated
UN Number: N/A
Proper Shipping Name: SULPHUR (FORMED SOLID)
Hazard Class: N/A
Packing Group: N/A
Hazardous Substance (RQ): N/A
Note / Special Provision The IMDG Code excludes sulfur when formed to a specific shape such as prills, granules, pellets, pastilles or flakes from the definition of SULFUR UN 1350 (Special Provision 242)

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0007704-34-9	SULFUR	90% - 100%	SARA312,TSCA,TX_ESL,TX_TCEQ
0007783-06-4	HYDROGEN SULFIDE	0.00% - 0.99%	SARA312,SARA313,TSCA,TX_ESL,TX_TCEQ,ACGIH,OSHA

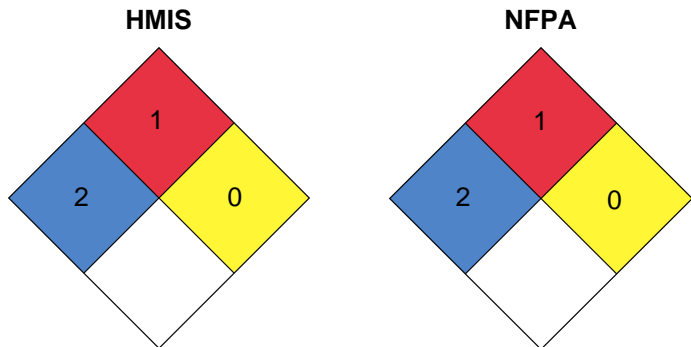
SECTION 16) OTHER INFORMATION INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS


Glossary:

ACGIH: American Conference of governmental Industrial Hygienists; ANSI: American National Standards Institute; Canadian TDG: Canadian Transportation of Dangerous Goods; CAS: Chemical Abstract Service; Chemtrec: Chemical Transportation Emergency Center (US); CHIP: Chemical Hazard Information and Packaging; DSL: Domestic Substances List; EC: Equivalent Concentration; EH40 (UK): HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA: Emergency Planning and Community Right-To-Know Act; HMIS: Hazardous Material Information Service; LC: Lethal Concentration; LD: Lethal Dose; NFPA: National Fire Protection Association; OEL: Occupational Exposure Limits; OSHA: Occupational Safety and Health Administration, US Department of Labor; PEL: Permissible Exposure Limit; SARA (Title III): Superfund Amendments and Reauthorization Act; SARA 313: Superfund Amendments and Reauthorization Act, Section 313; SCBA: Self-Contained Breathing Apparatus; STEL: Short Term Exposure Limit; TLV: Threshold Limit Value; TSCA: Toxic Substances Control Act Public Law 94-469; TWA: Time Weighted Value; US DOT: US Department of Transportation; WHMIS: Workplace Hazardous Materials Information System

Additional Information:

Martin Sulfur can not guarantee the technical analysis and chemical components of Sulfur as it may vary depending on the chemical components of the raw material and are not reflected in this document. Consult analysis sheets for technical information.



Chronic : 

Version 2.0:

Revision Date: Jun 27, 2016

Changes made on: Section 1, Section 3, and Section 5.

Please contact the supplier for further information on the version history

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