



Safety Data Sheet Major 90™

SDS Number: CV3 Revision: August 26, 2022

Section 1: IDENTIFICATION

1.1 Product Name: Major 90™

1.2 Other Identification:

Chemical Family: Mixture

1.3 Recommended Use of Chemical: Fertilizer

1.4 Manufacturer: Tessengerlo Kerley, Inc.
2910 N. 44th Street, Suite 100
Phoenix, Arizona 85018
Information: (602) 889-8300

1.5 Emergency Contact: Tessengerlo Kerley, Inc. (800) 877-1737
CHEMTREC (800) 424-9300 (Domestic)
(703) 527-3887 (International)

Section 2: HAZARD(S) IDENTIFICATION

2.1 Hazard Classification:

Health	Acute dermal toxicity	Category 4
	Skin Irritation	Category 2
Physical	None	

2.2 Signal Word: **WARNING**

2.3 Hazard Statement(s): Harmful in contact with skin
Causes skin irritation



2.4 Symbol(s):

2.5 Precautionary Statement(s):

If on skin: Wash with plenty of water. Call a poison control center/doctor if you feel unwell. Take off contaminated clothing and wash it before use.

If skin irritation occurs: Get medical advice/attention.

Wash hands thoroughly after handling.

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

Dispose to an approved waste disposal site.

2.6 Unclassified Hazard(s):

Combustible Dust; Hydrogen sulfide (H₂S), a flammable and toxic gas, and other hazardous vapors may evolve and collect in the headspace of storage tanks, transport vessels and other enclosed containers. Contact with hot material can cause thermal burns which may result in permanent skin damage. Hot product may cause severe eye burns and/or blindness. Not classified as flammable but will burn. Accumulation of dust can create an explosion hazard.

2.7 Unknown Toxicity Ingredient: None

Section 3: COMPOSITION/INFORMATION on INGREDIENTS

3.1 Chemical Ingredients: (See Section 8 for exposure guidelines)

Chemical	Synonym, Common Name	CAS No.	EINECS No.	% by Wt.
Sulfur	Elemental sulfur	7704-34-9	231-722-6	90-95
Bentonite	Bentonite clay	1302-78-9	215-108-5	5-10

Section 4: FIRST AID MEASURES

4.1 Symptoms/Effects:

Acute: Respiratory irritation as burning sensation of the nose throat, coughing and/or difficulty breathing. Eye irritation as burning sensation, redness, swelling, blurred vision. Dermal irritation.

Chronic: No known chronic effects.

4.2 Eyes: Rinse immediately with large quantities of water, also under the eyelids, for at least 15 minutes. If irritation or redness develops, seek medical attention.

4.3 Skin: Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. Consult a physician.

- 4.4 Ingestion:** Rinse mouth with water and afterwards drink plenty of water. If feeling unwell get medical attention. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.
- 4.5 Inhalation:** Move to fresh air. Get medical attention if symptoms occur.

Section 5: FIRE FIGHTING MEASURES
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5.1 Flammable Properties: (See Section 9, for additional flammable properties)

NFPA: **Health - 1** **Flammability - 1** **Reactivity - 0**

5.2 Extinguishing Media:

5.2.1 Suitable Extinguishing Media: Water spray or fog preferred; if water not available use dry chemical, CO₂ or regular foam. Small fires may be smothered with sand.

5.2.2 Unsuitable Extinguishing Media: Do not scatter spilled material with high-pressure water streams.

5.3 Protection of Firefighters:

5.3.1 Specific Hazards Arising from the Chemical:

Physical Hazards: Avoid dust formation. Dust suspended in air is readily ignited by flames, static electricity or friction spark.

Chemical Hazards: Hazardous combustion products may include airborne solid and liquid particulates and gases. Hydrogen sulfide and sulfur oxides may be given off when this material is heated. Sulfur dioxide reacts with water to form sulfuric acid.

5.3.2: Protective Equipment and Precautions for Firefighters:

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight from a protected location or safe distance.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions: Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Take precautionary measures against static discharges. Wash thoroughly after handling. Ensure adequate ventilation.

6.2 Environmental Precautions: Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers.

6.3 Methods of Containment:

Small Release: Prevent solids from being washed into waterways with dikes or barriers.

Large Release: Prevent solids from being washed into waterways with dikes or barriers.

6.4 Method for Cleanup:

Small Release: Shovel into a suitable clearly marked container for disposal or reclamation in accordance with local regulations.

Large Release: Shovel into a suitable clearly marked container for disposal or reclamation in accordance with local regulations.

Section 7: HANDLING and STORAGE

7.1 Handling: Ensure adequate ventilation. Do not get in eyes. Avoid dust formation in confined areas. Keep away from open flames, hot surfaces and sources of ignition. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Dust tight castings should be equipped with explosion relief vents. Sparkless electrical equipment is recommended. Use non-sparking tools.

7.2 Storage: Keep in a dry, cool and well-ventilated place. Incompatible with oxidizing agents; acids.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Exposure Guidelines:**

Chemical	OSHA PELs		ACGIH TLVs	
	TWA	STEL	TWA	STEL
Sulfur	None	None	None	None
Bentonite	None	None	None	None
Particle, NOC (total dust)	15 mg/m ³	None	None	None

8.2 Engineering Controls: Showers, eyewash stations, ventilation systems

8.3 Personal Protective Equipment (PPE):

8.3.1 Eye/Face Protection: Safety glasses with side shield.

8.3.2 Skin Protection: Long sleeved clothing. Impervious gloves.

8.3.3 Respiratory Protection: Follow respiratory protection provided by OSHA regulations found in 29 CFR1910.134 if exposure limits are exceeded and/or irritation is experienced. Use a NIOSH/MSHA approved respirator.

8.3.4 Hygiene Considerations: Handle in accordance with good industrial hygiene and safety practice. Provide regular cleaning of equipment, work area and clothing.

Section 9: PHYSICAL and CHEMICAL PROPERTIES

9.1 Appearance:	light greenish tan solid
9.2 Odor:	Slight rotten egg/Sulphur odor
9.3 Odor Threshold:	No information available.
9.4 pH:	Not data available.
9.5 Melting Point/Freezing Point:	230-248°F (110-120°C)
9.6 Boiling Point:	833°F (445°C)
9.7 Flash Point:	370°F (188°C) (closed Cup)
9.8 Evaporation Rate:	No data available.
9.9 Flammability:	No data available.
9.10 Upper/Lower Flammability Limits:	35 g/m ³ in air (dust) LEL 1400 g/m ³ in air (dust) UEL
9.11 Vapor Pressure:	No data available.
9.12 Vapor Density:	No data available.
9.13 Relative Density:	2.07-2.11 (17.2 – 17.6 lbs/gal)
9.14 Solubility:	Insoluble in water
9.15 Partition Coefficient:	No data available.
9.16 Auto-ignition Temperature:	446°F (230°C)
9.17 Decomposition Temperature:	No data available.
9.18 Viscosity:	Not applicable

Section 10: STABILITY and REACTIVITY

10.1 Reactivity:	No dangerous reaction known under conditions of normal use.
10.2 Chemical Stability:	Stable under normal (ambient) pressure and temperature.
10.3 Possibility of Hazardous Reactions:	None under normal conditions. Fine dust dispersed in air may ignite.
10.4 Conditions to Avoid:	Dust formation. Exposure to air or humidity.
10.5 Incompatible Materials:	Acids, Oxidizing agents
10.6 Hazardous Decomposition Products:	Sulfur dioxide

Section 11: TOXICOLOGICAL INFORMATION

11.1 Oral:	Oral Rat LD ₅₀ : 8,437 mg/kg (sulfur) Oral Rat LD ₅₀ : >5,000 mg/kg (bentonite)
11.2 Dermal:	Dermal Rabbit LD ₅₀ : >2,000 mg/kg (sulfur)

11.3 Inhalation:	Inhalation Rat LC ₅₀ : >9.23 mg/l (4 hr) (sulfur)
11.4 Eyes:	Contact with sulfur dust may cause eye irritation.
11.5 Chronic/Carcinogenicity:	Not listed in NTP, IARC or by OSHA.
11.6 Teratology:	No data available.
11.7 Reproduction:	No data available.
11.8 Mutagenicity:	No data available.

Section 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity:	<p>Sulfur – Toxicity to fish LC50: 866 mg/L Brachydanio rerio 96 h static LC50: <14 mg/L Lepomis macrochirus 96 h static LC50: > 180 mg/L Oncorhynchus mykiss 96 h static</p> <p>Sulfur is not classified as an environmental hazard but may be hazardous to some aquatic organisms.</p> <p>Bentonite - Toxicity to fish LC50: 8.0-19.0 g/L Salmo gairdner 96 h LC50: 19000 mg/L Oncorhynchus mykiss 96 h static</p>
12.2 Persistence & Degradability:	Sulfur is a component of the environment and there is a natural cycle of oxidation and reduction reactions which transform sulfur into both organic and inorganic products. Sulfur is amenable to microbial utilization. Therefore, this material can be degraded by microorganisms and is regarded as inherently biodegradable.
12.3 Bioaccumulative Potential:	This product is not bioaccumulative.
12.4 Mobility in Soil:	Sulfur is not expected to be mobile in the soil. Sulfur is slowly converted to sulfate in soil by the action of autotrophic bacteria.
12.5 Other Adverse Effects:	None

Section 13: DISPOSAL CONSIDERATIONS

Consult federal, state and local regulations for disposal requirements.

Section 14: TRANSPORT INFORMATION

14.1 Basic Shipping Description:	
14.1.1 Proper Shipping Name:	Sulfur/Bentonite clay mixture (Not regulated as a dangerous good)

14.1.2 Hazard Classes:	NA
14.1.3 Identification Number:	NA
14.1.4 Packing Group:	NA
14.1.5 Hazardous Substance:	No
14.1.6 Marine Pollutant:	No

14.2 Additional Information:**14.2.1 Other DOT Requirements:**

14.2.1.1 Reportable Quantity: Not applicable

Section 15: REGULATORY INFORMATION

15.1 U.S. Federal Regulations:

15.1.1 OSHA: This product is considered hazardous under the criteria of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200).

15.1.2 TSCA: Product is contained in USEPA Toxic Substance Control Act Inventory.

15.1.3 CERCLA: Reportable Quantity – No

15.1.4 SARA Title III:

15.1.4.1 Extremely Hazardous Substance (EHS): No

15.1.4.2 Section 312 (Tier II) Ratings:	Immediate (acute)	Yes
	Fire	Yes
	Sudden Release	No
	Reactivity	No
	Delayed (chronic)	No

15.1.4.3 Section 313 (FORM R): Not applicable

15.1.5 RCRA: Not Applicable

15.1.6 CAA (Hazardous Air Pollutant/HAP): Not Applicable

15.2 International Regulations:**15.2.1 Canada:**

15.2.1.1 WHMIS: Considered hazardous under WHMIS.

15.2.1.2 DSL/NDSL: Yes, DSL

15.3 State Regulations:

15.3.1 CA Proposition 65: Not applicable

Section 16: OTHER INFORMATION

REVISIONS: This SDS was formatted to comply with the new Hazard Communication Standard dated March 26, 2012, by the Regulatory Affairs Department of Tessengerlo Kerley, Inc. 1/12/2021.
Updated Section 1. 3/15/2021
Updated logo only. 8/26/2022

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