

SAFETY DATA SHEET

Revision Date 03/11/2018

1. PRODUCT AND COMPANY IDENTIFICATION

Product name Liver of Sulfur
Product Code: SOL-600.04
Distributed by: Eurotool, Inc.

Emergency Phone #: ChemTel 365/24/7
US/Canada toll free: 1-800-255-3924
All other locales: + 1 813-248-0585
Collect calls are accepted.

2. HAZARDS IDENTIFICATION

Target Organs: Lungs

GHS Classification

Acute Toxicity, Oral (Category 3)

Specific Organ Toxicity – single exposure, respiratory tract irritant (Category 3)

Skin Irritation (Category 2)

Serious Eye Irritation (Category 2)

GHS Label elements, including precautionary statements

Pictogram



Signal Word Warning

Hazard statement(s)

H303 May be harmful if swallowed.
H315 Causes skin irritation.
H320 Causes eye irritation.
H333 May be harmful if inhaled.
H335 May cause respiratory irritation.

Precautionary statement(s)

P261 Avoid breathing dust/fumes/mist.
P264 Wash hands, face and clothing after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well ventilated area.
P280 Wear protective gloves/clothing/eye protection/face protection.
P304 & P340 If inhaled remove person to fresh air and keep comfortable for breathing.
P305 & P351 If in eyes, rinse cautiously with water for several minutes.
P338 Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a poison center/doctor if you feel unwell.

HMIS Classification

Health hazard: 2
Contact: 1
Flammability 2
Physical hazards: 2
Personal B

NFPA Classification:

Health hazard: 2
Reactivity: 0
Flammability: 2

Dust may form a flammable mixture in air. Substance may burn in a very hot fire and give off irritating vapors.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms:	Liver of Sulfur, Sulfurated potassa, hepar sulfuris	
Component		Concentration
Potassium Trisulfide		
CAS-No.	37488-75-8	25%
Potassium Thiosulfate Hydrated		
CAS-No.	10294-66-3	75%

4. FIRST AID MEASURES

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion:

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

Skin Contact:

Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

Fire:

Flammable solid. Dust may form explosive mixtures with air.

Explosion:

Not considered to be an explosion hazard. Contact with acids or steam may produce flammable, explosive, poisonous hydrogen sulfide.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. Sealed containers may rupture when heated.

6. ACCIDENTAL RELEASE MEASURES

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.

7. HANDLING AND STORAGE

Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product. Do NOT attempt to clean empty containers since residue is difficult to remove. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, sparks, flame, static electricity or other sources of ignition: they may explode and cause injury or death.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Airborne Exposure Limits:

None established.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate

respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	Yellow-brown to brown lumps.
Colour	Yellow-brown to brown lumps.

Safety data

pH	no data available
Melting/ freezing point	no data available
Boiling point	no data available
Vapour pressure	no data available
Density	no data available
Water solubility	Soluble in water.
Relative vapor density	no data available
Odour	Rotten egg, sulfide odor
Evaporation Rate	no data available

10. STABILITY AND REACTIVITY

Stability:

Stable under ordinary conditions of use and storage. May air-oxidize. Decomposes on exposure to air forming free sulfur and potassium carbonate.

Hazardous Decomposition Products:

Burning may produce sulfur oxides.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Oxidizing agents, halogens and halogenated organic compounds, acids, alcohols, strong reducing agents, carbonated waters, acid salts, combustible materials, most common metals, zinc, aluminum. Avoid air, heat, flame, sources of ignition, dusting.

Conditions to Avoid:

Dusting, air, heat, flames, ignition sources and incompatibles.

11. TOXICOLOGICAL INFORMATION

No LD50/LC50 information found relating to normal routes of occupational exposure.

-----\Cancer Lists\-----	-----		
	---NTP Carcinogen---		
Ingredient	Known	Anticipated	IARC Category
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Potassium Trisulfide (37488-75-8)	No	No	None
Potassium Thiosulfate Hydrated (10294-66-3)	No	No	None

12. ECOLOGICAL INFORMATION

Environmental Fate:

No information found.

Environmental Toxicity:

No information found.

13. DISPOSAL CONSIDERATIONS

Dispose of container and unused contents in accordance with federal, state and local requirements.

14. TRANSPORT INFORMATION

DOT: Not Regulated Chemicals n.o.s. (Sulfurated Potash)

IMDG: Not Regulated Chemicals n.o.s. (Sulfurated Potash)

IATA: Not Regulated Chemicals n.o.s. (Sulfurated Potash)

15. REGULATORY INFORMATION

-----\Chemical Inventory Status - Part 1\-----

Ingredient TSCA EC Japan Australia

Potassium Trisulfide (37488-75-8) Yes Yes Yes No

Potassium Thiosulfate Hydrated (10294-66-3) Yes Yes Yes Yes

-----\Chemical Inventory Status - Part 2\-----

--Canada--

Ingredient Korea DSL NDSL Phil.

Potassium Trisulfide (37488-75-8) Yes Yes No No

Potassium Thiosulfate Hydrated (10294-66-3) Yes Yes No Yes

-----\Federal, State & International Regulations - Part 1\-----

-SARA 302- -SARA 313-

Ingredient RQ TPQ List Chemical Catg.

Potassium Trisulfide (37488-75-8) No No No No

Potassium Thiosulfate Hydrated (10294-66-3) No No No No

-----\Federal, State & International Regulations - Part 2\-----

-RCRA- -TSCA-

Ingredient CERCLA 261.33 8(d)

Potassium Trisulfide (37488-75-8) No No No

Potassium Thiosulfate Hydrated (10294-66-3) No No No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No

SARA 311/312: Acute: Yes Chronic: No Fire: Yes Pressure: No

Reactivity: No (Mixture / Solid)

Australian Hazchem Code: None allocated.

Poison Schedule: None allocated.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. OTHER INFORMATION

Label Hazard Warning:

WARNING! FLAMMABLE SOLID. HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. DUST MAY FORM FLAMMABLE OR EXPLOSIVE MIXTURE WITH AIR.

Label Precautions:

Keep away from heat, sparks and flame.

Keep container closed.

Use only with adequate ventilation.

Avoid breathing dust.

Avoid contact with eyes, skin and clothing.

Wash thoroughly after handling.

Label First Aid:

If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. In all cases, get medical attention.

Further information:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sentury Reagents, Inc., shall not be held liable for any damage resulting from handling or from contact with the above product.