

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 05/29/2015

Reviewed on 05/29/2015

Identification**Product identifier**

- **Trade name:** Liver of Sulphur Extended Life Gel (XL Gel)
- **Product Code:** 45.686, 45.687
- **Relevant identified uses of the substance or mixture and uses advised against**
XL Gel is used to patina metals such as silver, copper, bronze and metal clay. For professional use only. Keep away from children.
- **Product description** Liver of Sulphur gel solution used to patina metals.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Grobet File Company of America, LLC
750 Washington Avenue
Carlstadt, NJ 07072
Phone: 201-939-6700
- **Emergency telephone number:** ChemTel: 800-255-3924

Classification of the substance or mixture

GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2B H320 Causes eye irritation.

Label elements**GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS07

Signal word Warning**Hazard statements**

Causes skin and eye irritation.

Precautionary statements

Wear protective gloves.

Wash thoroughly after handling.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If on skin: Wash with plenty of water.

Take off contaminated clothing and wash it before reuse.

(Contd. on page 2)

Liver of Sulfur
717007

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 05/29/2015

Reviewed on 05/29/2015

Trade name: Liver of Sulphur Extended Life Gel (XL Gel)

- **Unknown acute toxicity:**
100 percent of the mixture consists of ingredient(s) of unknown toxicity.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 1
Fire = 0
Reactivity = 0

- **HMS-ratings (scale 0 - 4)**



HEALTH 1 Health = 1
FIRE 0 Fire = 0
REACTIVITY 0 Reactivity = 0

- **Hazard(s) not otherwise classified (HNOC):** None known

Preparation, stability, reactivity and other hazards:

- **Chemical characterization: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

Dangerous Components:		
10294-66-3	Potassium Thiosulfate Hydrated ⚠ Acute Tox. 3, H301; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320; Combustible Dust	15-35%
37488-75-8	Potassium Trisulfide ⚠ Acute Tox. 3, H301; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320; Combustible Dust	5-10%
	Trade Secret	60-90%

Physical description:

- **Description of first aid measures**
- **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist.
In case of unconsciousness, place patient securely on side position for transportation.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation occurs, consult a doctor.
- **After eye contact:**
Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If swallowed and symptoms occur, consult a doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

Disposal, incineration and other hazards:

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture**
If incinerated, product will release the following toxic fumes: Oxides of Carbon, Potassium and Sulfur.

(Contd. on page 3)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 05/29/2015

Reviewed on 05/29/2015

Trade name: Liver of Sulphur Extended Life Gel (XL Gel)

- **Advice for firefighters:**
- **Protective equipment:**
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Avoid contact with skin, eyes and clothing.

Keep people at a distance and stay upwind.

- **Environmental precautions:**

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

- **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

Dispose of the collected material according to regulations.

- **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

- **Handling:**

- **Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- **Information about protection against explosions and fires:** No special measures required.

- **Conditions for safe storage, including any incompatibilities**

Store away from strong acids, strong bases, strong oxidizing agents, strong reducing agents, alogens, halogenated organic compounds, carbonated waters, acid salts, combustible materials, and reactive metals (Zinc & Aluminum) and their alloys (Brass, etc.).

- **Storage:**

- **Requirements to be met by storerooms and receptacles:** No special requirements.

- **Information about storage in one common storage facility:** Not required.

- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.

- **Specific end use(s)** No further relevant information available.

- **Additional information about design of technical systems:** No further data; see section 7.

- **Control parameters**

- **Components with occupational exposure limits:**

Trade Secret

PEL	Long-term value: 15* 5** mg/m ³ mist; *total dust **respirable fraction
-----	---

TLV	TLV withdrawn-insufficient data human occup. exp.
-----	---

- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.

(Contd. on page 4)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 05/29/2015

Reviewed on 05/29/2015

Trade name: Liver of Sulphur Extended Life Gel (XL Gel)**· Exposure controls****· Personal protective equipment:****· General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing and wash before reuse.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Breathing equipment:

Not required.

Use suitable respiratory protective device in case of insufficient ventilation.

· Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Select glove material based on penetration times, rates of diffusion and degradation.

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

· Eye protection:

Tightly sealed goggles

· Body protection:

Protective work clothing

* Information on basic physical and chemical properties

· Information on basic physical and chemical properties**· General Information****· Appearance:****Form:**

Gel

Color:

Black

· Odor:

Sulphurous

· Odor threshold:

Not determined.

· pH-value:

Not determined.

(Contd. on page 5)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 05/29/2015

Reviewed on 05/29/2015

Trade name: Liver of Sulphur Extended Life Gel (XL Gel)

- **Change in condition**
- Melting point/Melting range:** Not determined.
- Boiling point/Boiling range:** 290 °C (554 °F)
- **Flash point:** 190 °C (374 °F)
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:** 400 °C (752 °F)
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not self-igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
- Lower:** 0.9 Vol %
- Upper:** Not determined.
- **Vapor pressure @ 20 °C (68 °F):** 0.1 hPa
- **Density @ 20 °C (68 °F):** 1.4 g/cm³ (11.683 lbs/gal)
- **Relative density** Not determined.
- **Vapor density** Not determined.
- **Evaporation rate** Not determined.
- **Solubility in / Miscibility with Water:** Fully miscible.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
- Dynamic:** Not determined.
- Kinematic:** Not determined.
- **Other information** No further relevant information available.

* **Additional information:**

- **Reactivity** No further relevant information available.
- **Chemical stability** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:**
Strong acids, strong bases, strong oxidizing agents, strong reducing agents, alogens, halogenated organic compounds, carbonated waters, acid salts, combustible materials, and reactive metals (Zinc & Aluminum) and their alloys (Brass, etc.).
- **Hazardous decomposition products:**
No dangerous decomposition products known.
Oxides of Carbon, Potassium and Sulfur.

(Contd. on page 6)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 05/29/2015

Reviewed on 05/29/2015

Trade name: Liver of Sulphur Extended Life Gel (XL Gel)**11. Toxicological information**

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

Trade Secret		
Oral	LD50	12600 mg/kg (rat)
Dermal	LD50	>10000 mg/kg (rabbit)
Inhalative	LC50/96 hours	>50.000 mg/l (Trout)

- **Primary irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.

- **on the eye:**

Irritating effect.

Causes serious eye irritation.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)
None of the ingredients are listed.
· NTP (National Toxicology Program)
None of the ingredients are listed.
· OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients are listed.

*** 12. Ecotoxicological information**

- **Toxicity** The hazards for the aquatic environment are unknown.
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Not known to be hazardous to water.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

*** 13. Environmental fate and behavior**

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:**
Dispose of as unused product.

(Contd. on page 7)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 05/29/2015

Reviewed on 05/29/2015

Trade name: Liver of Sulphur Extended Life Gel (XL Gel)

Disposal must be made according to official regulations.

12. Environmental Information

- **UN-Number**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es)**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class** Non-Regulated Material
- **Packing group**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:** Not applicable.
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** -

13. Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- Sara

• **Section 355 (extremely hazardous substances):**
None of the ingredients are listed.

• **Section 313 (Specific toxic chemical listings):**
None of the ingredients are listed.

• **TSCA (Toxic Substances Control Act):**
All ingredients are listed.

• **California Proposition 65**

• **Chemicals known to cause cancer:**
None of the ingredients are listed.

• **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients are listed.

• **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients are listed.

• **Chemicals known to cause developmental toxicity:**
None of the ingredients are listed.

• **Carcinogenic categories**

• **EPA (Environmental Protection Agency)**
None of the ingredients are listed.

• **TLV (Threshold Limit Value established by ACGIH)**
None of the ingredients are listed.

• **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients are listed.

• **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 8)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 05/29/2015

Reviewed on 05/29/2015

Trade name: Liver of Sulphur Extended Life Gel (XL Gel)**Hazard pictograms**

GHS07

Signal word Warning**Hazard statements**

Causes skin and eye irritation.

Precautionary statements

Wear protective gloves.

Wash thoroughly after handling.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If on skin: Wash with plenty of water.

Take off contaminated clothing and wash it before reuse.

National regulations:

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

State Right to Know

	Trade Secret	60-90%
10294-66-3	Potassium Thiosulfate Hydrated ⚠ Acute Tox. 3, H301; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320; Combustible Dust	15-35%
37488-75-8	Potassium Trisulfide ⚠ Acute Tox. 3, H301; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320; Combustible Dust	5-10%
	Trade Secret	70%

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

Date of preparation / last revision 05/29/2015 / -**Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
 ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 ACGIH: American Conference of Governmental Industrial Hygienists
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)
 LC50: Lethal concentration, 50 percent

(Contd. on page 9)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 05/29/2015

Reviewed on 05/29/2015

Trade name: Liver of Sulphur Extended Life Gel (XL Gel)

LD50: Lethal dose, 50 percent
Acute Tox. 3: Acute toxicity, Hazard Category 3
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
*** Data compared to the previous version altered.**