



Safety Data Sheet SoluPotasse®

SDS Number: TC02 Revision: September 16, 2024

Section 1: IDENTIFICATION

1.1 Product Name:	SoluPotasse®	
1.2 Other Identification:	Potassium sulfate	
Chemical Family:	Inorganic salt	
Formula:	K ₂ SO ₄	
1.3 Recommended Use of Chemical:	Fertilizer	
1.4 Manufacturer:	Tessenderlo Group NV (TKH) Bergstraat 32 B-3945 Ham, Belgium Tessenderlo Kerley, Inc. (602) 889-8300	
Information:		
1.5 Emergency Contact:	Tessenderlo Kerley, Inc. CHEMTREC	(800) 877-1737 (800) 424-9300 (Domestic) (703) 527-3887 (International)

Section 2: HAZARD(S) IDENTIFICATION

2.1 Hazard Classification:	Health	Eye Damage/Irritation	Category 1
	Physical	None	
2.2 Signal Word:	Danger		
2.3 Hazard Statement(s):	Causes serious eye damage.		



2.4 Symbol(s):

2.5 Precautionary Statement(s): **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing, Immediately call a poison control center/doctor/regional medical center.
Wear chemical goggles/full face shield.

2.6 Unclassified Hazard(s): None

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.
Sulfuric acid, dipotassium salt	Potassium sulfate	7778-80-5	231-915-5	>85
Potassium hydrogen sulfate	Potassium bisulfate	7646-93-7	231-594-1	= or <15

Section 4: FIRST AID MEASURES

4.1 Symptoms/Effects:

Acute: Eye contact may cause serious eye damage. Repeated or prolonged skin contact may cause skin irritation. Ingestion may irritate the gastrointestinal tract.

Chronic: No known chronic effects.

4.2 Eyes: Immediately flush with large quantities of water for 15 minutes. Hold eyelids apart during irrigation to ensure thorough flushing of the entire area of the eye and lids. Obtain immediate medical attention.

4.3 Skin: Immediately flush with large quantities of water. Remove contaminated clothing under a safety shower. Continue rinsing. Obtain medical attention if irritation occurs.

4.4 Ingestion: If victim is conscious, give 2 to 4 glasses of water and induce vomiting by touching finger to back of throat. Obtain medical attention.

4.5 Inhalation: Remove victim from contaminated atmosphere. If breathing is labored, administer oxygen. If breathing has ceased, clear airway and start CPR. Obtain immediate medical attention.

Section 5: FIRE FIGHTING MEASURES

5.1 Flammable Properties: (See Section 9, for additional flammable properties)

NFPA: Health - 1 Flammability - 0 Reactivity - 0

5.2 Extinguishing Media:

5.2.1 Suitable Extinguishing Media: Not flammable, use media suitable for combustibles involved in the fire.

5.2.2 Unsuitable Extinguishing Media: Not applicable.

5.3 Protection of Firefighters:

5.3.1 Specific Hazards Arising from the Chemical:

Physical Hazards: Avoid raising dust which is damaging to the eyes and respiratory tract.

Chemical Hazards: Heating or flames causes release of oxides of sulfur. Sulfur dioxide is highly irritating to the eyes, respiratory tract and moist skin.

5.3.2 Protective Equipment and Precautions for Firefighters:

Firefighters should wear self-contained breathing apparatus (SCBA) and full fire-fighting turnout gear. Keep containers/storage vessels in fire area cooled with water spray.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions: Use personal protective equipment specified in Section 8. Isolate the release area and deny entry to unnecessary, unprotected and untrained personnel.

6.2 Environmental Precautions: Keep out of "waters of the United States" because of potential aquatic toxicity.

6.3 Methods of Containment:

Small Release: Confine and absorb small releases with sand, earth or other inert absorbents.

Large Release: Stop release if safe to do so. Dike spill area with earth, sand or other inert absorbents to prevent runoff into surface waterways (potential aquatic toxicity), storm drains and sewers.

6.4 Method for Cleanup:

Small Release: Shovel up contained material and place in drums for disposal as a chemical waste or recycle as a fertilizer as the original product was intended.

Large Release: Recover as much of the spilled product as possible with shovel and brooms taking care not to create dust. Use material as originally

intended or dispose of as a chemical waste. Treat remaining material as a small release (above),

Section 7: HANDLING and STORAGE

7.1 Handling: Avoid contact with eyes. Use only in a well-ventilated area. Wash thoroughly after handling. Avoid prolonged or repeated breathing of dust. Avoid prolonged or repeated contact with the skin.

7.2 Storage: Store in well-ventilated areas. Do not store combustibles in the area of storage vessels. Keep away from any sources of heat or flame. Store totes and smaller containers out of direct sunlight at moderate temperatures. (See Section 10.5, for materials of construction)

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure Guidelines:

Chemical	OSHA PELs		ACGIH TLVs	
	TWA	STEL/C	TWA	STEL
Potassium sulfate	None	None	None	None
Potassium bisulfate	None	None	None	None
Particles, NOC (total dust)	15 mg/m ³	None	None	None

8.2 Engineering Controls: Use adequate exhaust ventilation to prevent inhalation of product dust. Keep eye wash/safety shower in areas where product is commonly handled.

8.3 Personal Protective Equipment (PPE):

8.3.1 Eye/Face Protection: Chemical goggles and full-face shield.

8.3.2 Skin Protection: Neoprene rubber gloves and apron should be worn to prevent repeated or prolonged contact with product. Wash contaminated clothing prior to reuse.

8.3.3 Respiratory Protection: Respiratory protection is required based on potential for exposure to product.

8.3.4 Hygiene Considerations: Common good industrial hygiene practices should be followed, such as washing thoroughly after handling and before eating or drinking.

Section 9: PHYSICAL and CHEMICAL PROPERTIES

9.1 Appearance: Colorless to white crystalline powder.

9.2 Odor: None

9.3 Odor Threshold: Not applicable

9.4 pH: 2.9 (1% solution)

9.5 Melting Point/Freezing Point:	1953°F (1067°C)
9.6 Boiling Point:	3072°F (1689°C)
9.7 Flash Point:	Not applicable
9.8 Evaporation Rate:	Not determined
9.9 Flammability:	Not applicable
9.10 Upper/Lower Flammability Limits:	Not applicable
9.11 Vapor Pressure:	Not applicable
9.12 Vapor Density:	Not applicable
9.13 Relative Density:	1.21 (loose density) 1.46 (struck density)
9.14 Solubility:	120 g/l @20°C (1.00 lb/gal@68°F)
9.15 Partition Coefficient:	Not applicable
9.16 Auto-ignition Temperature:	Not applicable
9.17 Decomposition Temperature:	Not determined
9.18 Viscosity:	Not determined

Section 10: STABILITY and REACTIVITY

10.1 Reactivity:	Substance has acid reactions.
10.2 Chemical Stability:	This product is stable under normal (ambient) temperature and pressure.
10.3 Possibility of Hazardous Reactions:	In molten state: reacts violently with (some) metals.
10.4 Conditions to Avoid:	Avoid raising dust. Keep away from flames or high heat
10.5 Incompatible Materials:	No data available
10.6 Hazardous Decomposition Products:	Oxides of sulfur.

Section 11: TOXICOLOGICAL INFORMATION

11.1 Oral:	Oral Rat LD ₅₀ : >2,000 mg/kg bw (OECD 425) (potassium sulfate) Oral Rat LD ₅₀ : 2,340 mg/kg (potassium bisulfate) Oral Rat LD ₅₀ : 6,600 mg/kg (potassium sulfate) Intraperitoneal Rat LD ₅₀ : 1,250 mg/kg (potassium sulfate)
11.2 Dermal:	Dermal Rat LD ₅₀ : >2,000 mg/kg bw (OECD 402) (potassium sulfate) Subcutaneous Guinea pig LD ₁₀ : 3 gm/kg (potassium sulfate)
11.3 Inhalation:	Inhalation Rat LD ₅₀ : >1.2mg/l, 4 hr. exposure (potassium sulfate)
11.4 Eyes:	Eye 4 hr. exp. (OECD437) "Serious eye damage"
11.5 Chronic/Carcinogenicity:	Not listed in NTP, IARC or by OSHA.
11.6 Teratology:	No data available.

- 11.7 Reproduction:** Development toxicity NOAEL Rat (male): ≥ 1500 mg/kg bw/day (28 days) (potassium sulfate)
Development toxicity NOAEL Rate (female): ≥ 1500 mg/kg bw/day (53 days) (potassium sulfate)
Fertility NOAEL (male/female): ≥ 1500 mg/kg bw/day (28 day) (potassium sulfate)
- 11.8 Mutagenicity (in vitro):** Chinese hamster ovary (CHO) – negative (potassium sulfate)
Mouse (lymphoma L5178Y cells) – negative (potassium sulfate)
Bacteria (S.typhimurium) – negative (potassium sulfate)
Escherichia coli – negative (potassium sulfate)

Section 12: ECOLOGICAL INFORMATION

- 12.1 Ecotoxicity:** Fish Acute toxicity, Pimephales promelas, LC₅₀: 680 mg/l, 96 hr. fresh water (Potassium sulfate).
Fish Acute Toxicity, Lecuciscus idus, LC₅₀: 3,500 mg/l, (Potassium bisulfate).
Crustacea Acute Toxicity, Daphnia Magna, LC₅₀: 720 mg/l, 48 hr., fresh water (Potassium sulfate).
- 12.2 Persistence & Degradability:** Not applicable
- 12.3 Bioaccumulative Potential:** No data available.
- 12.4 Mobility in Soil:** Low potential for adsorption in soil.

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:	Potassium sulfate powder (Not regulated by DOT).
14.1.2 Hazard Classes:	Not applicable
14.1.3 Identification Number:	Not applicable
14.1.4 Packing Group:	Not applicable
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
14.2.1.2 Placard(s):	Not applicable
14.2.1.3 Label(s):	Not applicable

14.2.2 USCG Classification: Not classified

14.2.3 International Transportation:

14.2.3.1 IMO: Not regulated

14.2.3.2 IATA: Not regulated

14.2.3.3 TDG (Canada): Not regulated

14.2.3.4 ADR (Europe): Not regulated

14.2.3.5 ADG (Australia): Not regulated

14.2.4 Emergency Response Guide: No applicable

14.2.5 ERAP - Canada: Not applicable

14.2.6 Special Precautions: None

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	No
	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: Not determined

15.2.1.2 DSL/NDSL:

Potassium sulfate is on DSL
 Potassium bisulfate is on DSL

15.3 State Regulations:**15.3.1 CA Proposition 65:**

Not applicable

Section 16: OTHER INFORMATION

REVISIONS: This SDS was reformatted to comply with the new Hazard Communication Standard dated March 26, 2012, by the Regulatory Affairs Department of Tessenderlo Kerley, Inc. 11/30/2017.
 Minor administrative changes in Section 1 2/9/2018.
 Updated sections 1, 8, 9, 10, 11. 5/14/2018
 Minor administrative changes. 5/15/2018
 Logo change only. 1/3/2020.
 Removed outdated logos. 9/16/2024.

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