



Product Information (203) 740-3471 / Emergency Assistance CHEMTREC 1-800-424-9300

**MATERIAL SAFETY DATA SHEETS**

**SECTION I  
PRODUCT AND COMPANY IDENTIFICATION**

**Product: Potassium sulfate**

**This MSDS is valid for all grades and catalog #'s**

Synonyms: Sulfuric acid dipotassium salt; sal polychrestum;  
Acid potassium sulfate; Dipotassium sulfate;

Formula: K<sub>2</sub>SO<sub>4</sub>

Manufacturer: PHARMCO-AAPER

58 Vale Road

Brookfield, Connecticut 06804, USA

Phone (203) 740-3471

Fax (203) 740-3481

1101 Isaac Shelby Drive

Shelbyville, KY 40065

Phone (502) 633-0650

Fax (502) 633-0685

Emergency Contact:

CHEMTREC 1-800-424-9300

**SECTION II  
COMPOSITION /INFORMATION ON INGREDIENTS**

% by Material CAS # TLV/PE LC50/LD50  
weight L

% by weight	Material	CAS #	TLV/PE L	LC50/LD50
100	Potassium Sulfate	7778-80-5	Not available.	ORAL (LD50): Acute: 6600 mg/kg [Rat]. 6600 mg/kg [Mouse]. 6600 mg/kg [Guinea pig].

**SECTION III  
HAZARDS IDENTIFICATION**

**Potential Acute Health Effects:** Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

**Potential Chronic Health Effects:**

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available.

Repeated or prolonged exposure is not known to aggravate medical condition.

**SECTION IV  
FIRST AID**

Obtain medical attention for all cases of over-exposure.

**Eye Contact:** Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

**Skin Contact:** Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

**Hazardous Skin Contact:** Not available.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Hazardous Inhalation:** Not available.

**Ingestion:** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

**Hazardous Ingestion:** Not available.

**SECTION V  
FIRE FIGHTING MEASURES**

**Fire:**

Flammability of the Product: Non-flammable.

Auto-Ignition temperature: Not applicable.

Flash point: Not applicable.

Flammable limits: Not applicable.

Products of Combustion: Not available.

**Fire Hazards:** Not applicable.

**Explosion Hazards:** Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

**Fire Extinguishing Media:** Not applicable.

**Special Information:** Not available.

**SECTION VI  
SPILL/ACCIDENTAL RELEASE MEASURES**

**Small Spill:** Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:** Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

**SECTION VII  
HANDLING AND STORAGE**

**Precautions:** Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the container or the label.

**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.

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**SECTION VIII  
EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Engineering Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:** Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill:** Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Not available.

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**SECTION IX  
PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State/Appearance:** Solid. (Crystals solid. Granular solid. Powdered solid.)

**Molecular Weight:** 174.26 g/mole

**Odor:** Odorless.

**Taste:** Bitter. Saline.

**Color:** White.

**pH (1% Solution in Water):** Not available.

**Boiling Point:** 1689°C (3072.2°F)

**Melting Point:** 1067°C (1952.6°F)

**Critical Temperature:** Not available.

**Specific Gravity:** 2.66 (Water = 1)

**Vapor Pressure (mm Hg):** Not applicable.

**Vapor Density (Air=1):** Not available.

**Volatility:** Not available.

**Odor Threshold:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Water/Oil Dist. Coefficient:** Not available.

**Ionicity (in water):** Not available.

**Dispersion Properties:** See solubility in water.

**Solubility:** Soluble in cold water. Solubility in Water: 1 g dissolves in 8.3 ml water; 1 gram dissolves in 4 ml boiling water. Solubility in Glycerol: 1 gram dissolves in 75 ml Glycerol. Practically insoluble in saturated solution of ammonium sulfate. Insoluble in alcohol, acetate, carbon disulfide.

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**SECTION X  
STABILITY/REACTIVITY INFORMATION**

**Stability:** The product is stable.

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MSDS 632, Rev 1.1, 07/08, MSZ

Potassium Sulfate / Page 2 of 2

**Instability Temperature:** Not available.

**Conditions of Instability:** Incompatible materials

**Incompatibilities:** Not available.

**Corrosivity:** Non-corrosive in presence of glass.

**Special Information:** Incompatible with aluminum, magnesium, calcium, sodium.

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**SECTION XI  
TOXICOLOGICAL INFORMATION**

**Routes of Entry:** Inhalation. Ingestion.

**Toxicity to Animals:** Acute oral toxicity (LD50): 6600 mg/kg [Guinea pig].

**Chronic Effects on Humans:** Not available.

**Other Toxic Effects on Humans:** Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

**Special Information on Toxicity to Animals:** Not available.

**Special Information on Chronic Effects/Toxicity on Humans:** Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: May cause eye irritation. Inhalation: May cause respiratory tract irritation. Possible nuisance dust effect of sneezing or coughing. Ingestion: Ingestion of large doses causes gastrointestinal tract disturbances and irritation. It can have a purging or laxative effect.

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**SECTION XII  
ECOLOGICAL INFORMATION**

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:** Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The product itself and its products of degradation are not toxic.

**Special Information on Products of Biodegradation:** Not available.

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**SECTION XIII  
DISPOSAL CONSIDERATIONS**

**Waste Disposal:** Recycle to process, if possible. Consult your local or regional authorities.

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**SECTION XIV  
TRANSPORTATION INFORMATION**

**DOT Classification:** DOT Not a DOT controlled material (United States).

**UN:** Not applicable.

**Special Provisions for Transport:** Not applicable.

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**SECTION XV  
REGULATORY INFORMATION**

**Federal and State Regulations:** Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302, 304, 311 and 312). Components present in this product at a level which could require reporting under the statute are: **NONE** Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual report

release of toxic chemicals that appear in 40 CFR 372 (used for SARA 313). This information must be included in all MSDSs that are copied and distributed for this material.

Components present in this product at a level which could require reporting under the statute are: **NONE**

Pennsylvania Right-To-Know, Hazardous substance List, Hazardous Substances and Special hazardous Substances on the list must be identified when present in products.

Components present in this product at a level which could require reporting under the statute are: **NONE**

Massachusetts Right-To-Know, Substance List (MSL)

Hazardous Substances and Extraordinarily Hazardous Substances on the MSL must be identified when present in products. Components present in this product at a level which could require reporting under the statute are: **NONE**

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release of quantities of Hazardous Substances equal or greater than the reportable quantities (RQs) in 40 CFR 302.4. Components present in this product at a level which could require reporting under the statute are: **NONE**

**Other Classifications:**

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC): This product is not classified according to the EU regulations.

**Protective Equipment:** Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

**References:** Not available.

**Other Special Considerations:** Major Uses: Reagent in analytical chemistry; gypsum cements; Fertilizer for chloride-sensitive crops; accelerator in wallboard; agent in manufacturing of glass; cathartic; agent for dental materials; food additive

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The information contained herein is based on data considered to be accurate based on the material as packaged. However, no warranty is expressed regarding the accuracy of these data or the results to be obtained from the use thereof. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It is the user's obligation to determine the conditions of safe use of the product. While this MSDS is based on technical data judged to be reliable, PHARMCO-AAPER assumes not responsibility for the completeness or accuracy of the information contained herein.