

# Material Safety Data Sheet

## Potassium Sulfate

ACC# 19590

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Potassium Sulfate

**Catalog Numbers:** S80147, S80147-1, NC9558018, NC9559248, P304 10, P304 3, P304 500, P304-10, P304-3, P304-500, P30410, P3043, P304500, P305 500, P305-500, P305500, P306300LB, XXKSO4SAMPLE, XXPSULF300LB

**Synonyms:** Potassium Sulfate; Potassium Sulfate (2:1); Sulfuric Acid Dipotassium Salt; Sulfuric Acid, Dipotassium Salt.

**Company Identification:**

Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410

**For information, call:** 201-796-7100

**Emergency Number:** 201-796-7100

**For CHEMTREC assistance, call:** 800-424-9300

**For International CHEMTREC assistance, call:** 703-527-3887

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
7778-80-5	Sulfuric acid dipotassium salt	100	231-915-5

**Hazard Symbols:** None listed.

**Risk Phrases:** None listed.

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: colorless or white. **Caution!** May cause eye and skin irritation. May cause respiratory and digestive tract irritation. The toxicological properties of this material have not been fully investigated.

**Target Organs:** None known.

#### Potential Health Effects

**Eye:** Dust may cause mechanical irritation.

**Skin:** May cause skin irritation.

**Ingestion:** Ingestion of large amounts may cause gastrointestinal irritation.

**Inhalation:** May cause respiratory tract irritation.

**Chronic:** Potassium poisoning may occur in rare cases of long exposure or ingestion.

## Section 4 - First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:** Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Persons with asthma may be at increased risk from exposure to this product. Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Substance is noncombustible.

**Extinguishing Media:** Use extinguishing media most appropriate for the surrounding fire. Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation. Clean up residual material by washing area with a 2-5% solution of soda ash.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid breathing dust, vapor, mist, or gas. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Avoid ingestion and inhalation.

**Storage:** Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits**

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Sulfuric acid dipotassium salt	none listed	none listed	none listed

**OSHA Vacated PELs:** Sulfuric acid dipotassium salt: No OSHA Vacated PELs are listed for this chemical.

**Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR §1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Crystals

**Appearance:** colorless or white

**Odor:** Odorless

**pH:** ca. 7

**Vapor Pressure:** negligible

**Vapor Density:** Not available.

**Evaporation Rate:** Negligible

**Viscosity:** Not available.

**Boiling Point:** 1689 deg C @ 760.00mm Hg

**Freezing/Melting Point:** 1067 deg C

**Autoignition Temperature:** Not applicable.

**Flash Point:** Not applicable.

**Decomposition Temperature:** Not available.

**NFPA Rating:** (estimated) Health: 1; Flammability: 0; Reactivity: 0

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**Solubility:** 110 g/l (20 c)

**Specific Gravity/Density:** 2.3320g/cm<sup>3</sup>

**Molecular Formula:** K<sub>2</sub>O<sub>4</sub>S

**Molecular Weight:** 174.26

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, dust generation, active metals.

**Incompatibilities with Other Materials:** Strong oxidizing agents, aluminum, magnesium, sodium, calcium.

**Hazardous Decomposition Products:** Oxides of sulfur, irritating and toxic fumes and gases, oxides of potassium.

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 7778-80-5: TT5900000

**LD50/LC50:**

CAS# 7778-80-5:

Oral, rat: LD50 = 6600 mg/kg;<br.

**Carcinogenicity:**

CAS# 7778-80-5: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

**Epidemiology:** No information available.

**Teratogenicity:** No information available.

**Reproductive Effects:** No information available.

**Neurotoxicity:** No information available.

**Mutagenicity:** No information available.

**Other Studies:** No data available.</br.

## Section 12 - Ecological Information

**Ecotoxicity:** No data available. No information available.

**Environmental:** This chemical has no biological oxygen demand, and it will not cause oxygen depletion in aquatic systems. It has a low potential to affect aquatic systems. If diluted with water, this chemical released directly or indirectly into the environment is not expected to have a significant impact.

**Physical:** No information available.

**Other:** No information available.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

## Section 14 - Transport Information

	US DOT	IATA	RID/ADR	IMO	Canada TDG
<b>Shipping Name:</b>	No information available.				No information available.

<b>Hazard Class:</b>					
<b>UN Number:</b>					
<b>Packing Group:</b>					

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 7778-80-5 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

#### SARA

#### Section 302 (RQ)

None of the chemicals in this material have an RQ.

#### Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

#### Section 313

No chemicals are reportable under Section 313.

#### Clean Air Act:

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

#### Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

#### STATE

CAS# 7778-80-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California No Significant Risk Level: None of the chemicals in this product are listed.

### European/International Regulations

#### European Labeling in Accordance with EC Directives

#### Hazard Symbols:

Not available.

#### Risk Phrases:

#### Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

#### WGK (Water Danger/Protection)

CAS# 7778-80-5: 1

#### Canada

CAS# 7778-80-5 is listed on Canada's DSL List. CAS# 7778-80-5 is listed on Canada's DSL List.

This product has a WHMIS classification of D2B.

CAS# 7778-80-5 is not listed on Canada's Ingredient Disclosure List.

### **Exposure Limits**

## Section 16 - Additional Information

**MSDS Creation Date:** 12/12/1997

**Revision #4 Date:** 8/02/2000

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.*