MATERIAL SAFETY DATA SHEET
Potassium sulfate

Section 1 - Chemical Product and Company Identification

MSDS Name: Potassium sulfate
Catalog Numbers: P/6960/53, P/6960/60, P/6960/65, P/7000/53, P/7000/60, P/7000/65
Synonyms: Dipotassium sulfate; Potassium sulfate (2:1); Sulfuric acid, dipotassium salt.
Company Identification: Fisher Scientific UK
Bishop Meadow Road, Loughborough
Leics. LE11 5RG
For information in Europe, call: (01509) 231166
Emergency Number, Europe: 01509 231166

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>%</th>
<th>EINECS#</th>
</tr>
</thead>
<tbody>
<tr>
<td>7778-80-5</td>
<td>Potassium sulfate</td>
<td>&gt;99</td>
<td>231-915-5</td>
</tr>
</tbody>
</table>

Hazard Symbols: None listed
Risk Phrases: None listed

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Not available

Potential Health Effects
Eye: Dust may cause mechanical irritation.
Skin: Low hazard for usual industrial handling.
Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.
Inhalation: Inhalation of dust may cause respiratory tract irritation.
Chronic: Not expected to be a chronic hazard.

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.
Skin: In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.
Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.
Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General As in any fire, wear a self-contained breathing apparatus in pressure-demand,
Information: MSHA/NIOSH (approved or equivalent), and full protective gear. Substance is noncombustible. Decomposes at high temperatures, resulting in toxic and corrosive products.

Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire.

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.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid breathing dust.

Storage: Store in a cool, dry place. Keep container closed when not in use.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

CAS# 7778-80-5:

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: Glove protection is not normally required.

Clothing: Protective garments not normally required.

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 respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Color: white

Odor: Odorless

pH: ~ 7 (aq soln)

Vapor Pressure: Not applicable.

Viscosity: Not available

Boiling Point: 1689 deg C @ 760 mmHg (3,072.20°F)

Freezing/Melting Point: 1067 deg C (1,952.60°F)

Autoignition Temperature: Not applicable

Flash Point: Not applicable.

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

Decomposition Temperature: Not available

Solubility in water: 110 g/l (20°C)

Specific Gravity/Density: 2.66 g/cm3

Molecular Formula: K2O4S
Molecular Weight: 174.26

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Dust generation.
Incompatibilities with Other Materials: No significant incompatibilities identified with common materials and contaminants.
Hazardous Decomposition Products: Oxides of sulfur, oxides of potassium.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 7778-80-5: TT5900000
LD50/LC50: RTECS: CAS# 7778-80-5: Oral, mouse: LD50 = 6600 mg/kg; Oral, rat: LD50 = 6600 mg/kg;
Carcinogenicity: Potassium sulfate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other: No information available.

Section 13 - Disposal Considerations

Products considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local authority or advice. Empty containers must be decontaminated before returning for recycling.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>IATA</th>
<th>IMO</th>
<th>RID/ADR</th>
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<tbody>
<tr>
<td>Not regulated as a hazardous material</td>
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</tr>
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</table>

Section 15 - Regulatory Information

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

US Federal
TSCA

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

Section 16 - Other Information

**MSDS Creation Date:** 12/12/1997  
**Revision #8 Date** 2/15/2008

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