Material Safety Data Sheet
Potassium bisulfate

ACC# 01837

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Potassium bisulfate  
**Catalog Numbers:** AC207750000, AC207755000, P193-500, P193NHL  
**Synonyms:** Potassium hydrogen sulphate; Sulfuric acid, monopotassium 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

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7646-93-7</td>
<td>Potassium bisulfate</td>
<td>98+</td>
<td>231-594-1</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: white crystals.  
**Danger!** Causes burns by all exposure routes. Causes respiratory tract irritation. Hygroscopic (absorbs moisture from the air).  
**Target Organs:** Respiratory system, gastrointestinal system, eyes, skin.

**Potential Health Effects**

**Eye:** Causes eye burns.  
**Skin:** Causes skin burns. May be harmful if absorbed through the skin.  
**Ingestion:** Causes gastrointestinal tract burns. May be harmful if swallowed.  
**Inhalation:** Causes respiratory tract irritation. Causes chemical burns to the respiratory tract.  
**Chronic:** No information found.

Section 4 - First Aid Measures
**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

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

**Ingestion:** Do not induce vomiting. Get medical aid immediately. Call a poison control center.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

**Notes to Physician:** Treat symptomatically and supportively.

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**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.

**Extinguishing Media:** Use foam, dry chemical, or carbon dioxide.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not available.

**Explosion Limits, Lower:** N/A

**Upper:** N/A

**NFPA Rating:** (estimated) Health: 3; Flammability: 1; Instability: 1

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**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. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

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**Section 7 - Handling and Storage**

**Handling:** Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use only in a chemical fume hood.

**Storage:** Store in a cool, dry place. Store in a tightly closed container. Corrosives area. Store protected from moisture.

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**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 only under a chemical fume hood.

**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
</table>

http://fscimage.fishersci.com/msds/01837.htm
OSHA Vacated PELs: Potassium bisulfate: 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 respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Crystals
Appearance: white
Odor: odorless
pH: 1(50g/L aq.sol.(20°C))
Vapor Pressure: Not available.
Vapor Density: Not available.
Evaporation Rate: Not available.
Viscosity: Not available.
Boiling Point: Not available.
Freezing/Melting Point: 214 deg C
Decomposition Temperature: > 210 deg C
Solubility: 490 g/L (20°C)
Specific Gravity/Density: 2.24 g/cm³
Molecular Formula: HKO₄S
Molecular Weight: 136.16

Section 10 - Stability and Reactivity

Chemical Stability: Hygroscopic: absorbs moisture or water from the air.
Conditions to Avoid: Incompatible materials, dust generation, excess heat, exposure to moist air or water.
Incompatibilities with Other Materials: Strong bases, strong oxidizing agents, alcohols.
Hazardous Decomposition Products: Oxides of sulfur.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: 
CAS# 7646-93-7: TS7200000
LD₅₀/LC₅₀: 
CAS# 7646-93-7:

http://fscimage.fishersci.com/msds/01837.htm
Oral, rat: LD50 = 2340 mg/kg;

Carcinogenicity:
CAS# 7646-93-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.
Teratogenicity: No information available.
Reproductive Effects: No information available.
Mutagenicity: No information available.
Neurotoxicity: No information available.
Other Studies:

Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.
Environmental: No information available.
Physical: No information available.
Other: Do not empty into drains.

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

<table>
<thead>
<tr>
<th></th>
<th>US DOT</th>
<th>Canada TDG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping Name</td>
<td>POTASSIUM HYDROGEN SULFATE</td>
<td>POTASSIUM HYDROGEN SULFATE</td>
</tr>
<tr>
<td>Hazard Class</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>UN Number</td>
<td>UN2509</td>
<td>UN2509</td>
</tr>
<tr>
<td>Packing Group</td>
<td>II</td>
<td>II</td>
</tr>
</tbody>
</table>

Section 15 - Regulatory Information

US FEDERAL

TSCA
CAS# 7646-93-7 is listed on the TSCA inventory.

Health & Safety Reporting List

http://fscimage.fishersci.com/msds/01837.htm
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.

**CERCLA Hazardous Substances and corresponding RQs**
None of the chemicals in this material have an RQ.

**SARA Section 302 Extremely Hazardous Substances**
None of the chemicals in this product have a TPQ.

**SARA Codes**
CAS # 7646-93-7: immediate.

**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# 7646-93-7 can be found on the following state right to know lists: New Jersey.

**California Prop 65**
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:**
C

**Risk Phrases:**
R 34 Causes burns.
R 37 Irritating to respiratory system.

**Safety Phrases:**
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**WGK (Water Danger/Protection)**
CAS# 7646-93-7: 1

**Canada - DSL/NDSL**
CAS# 7646-93-7 is listed on Canada's DSL List.

**Canada - WHMIS**
This product has a WHMIS classification of E.
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**
CAS# 7646-93-7 is listed on the Canadian Ingredient Disclosure List.

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**Section 16 - Additional Information**

**MSDS Creation Date:** 2/27/1998  
**Revision #6 Date:** 2/18/2008

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.