Material Safety Data Sheet
Potassium metabisulfite

ACC# 19450

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Potassium metabisulfite  
**Catalog Numbers:** AC418270000, AC418270250, AC418275000, P197-500, P269-12, P269-212, P269-500  
**Synonyms:** Potassium pyrosulfate; Dipotassium disulfate.  
**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>
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<tbody>
<tr>
<td>16731-55-8</td>
<td>Potassium metabisulfite</td>
<td>97+</td>
<td>240-795-3</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: slightly yellow crystalline powder.  
**Warning!** Eye contact may result in permanent eye damage. Causes eye and respiratory tract irritation. Contact with acids liberates toxic gas.  
**Target Organs:** Respiratory system, eyes.

**Potential Health Effects**  
**Eye:** Causes redness and pain. Causes severe burning pain and redness of the conjunctiva. Risk of serious damage to eyes.  
**Skin:** May cause skin irritation. May be harmful if absorbed through the skin. May cause reddening of the skin.  
**Ingestion:** May cause irritation of the digestive tract. May be harmful if swallowed. May cause worsening of asthma in asthmatics. Individuals sensitive to sulfides may experience stomach upset, tightness in the chest, or  
**Inhalation:** Causes respiratory tract irritation. May be harmful if inhaled. May cause respiratory difficulty and coughing.
**Chronic:** Repeated or prolonged exposure may cause allergic reactions in sensitive individuals.

### 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.

**Skin:** Get medical aid. 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.

**Inhalation:** Remove from exposure and move to fresh air immediately. 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 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 water spray, dry chemical, carbon dioxide, or chemical foam.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

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

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 2; Flammability: 1; Instability: 1

### 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. Do not let this chemical enter the environment.

### Section 7 - Handling and Storage

**Handling:** Use with adequate ventilation. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.

**Storage:** Store in a cool, dry place. Keep away from acids. Keep containers tightly closed.

### 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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium metabisulfite</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:** Potassium metabisulfite: 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.

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**Section 9 - Physical and Chemical Properties**

**Physical State:** Crystalline powder  
**Appearance:** white - slightly yellow  
**Odor:** sulfur dioxide odor - slight  
**pH:** 3.5 - 4.5 @ 5% aq. soln.  
**Vapor Pressure:** Not available.  
**Vapor Density:** Not available.  
**Evaporation Rate:** Not available.  
**Viscosity:** Not available.  
**Boiling Point:** Not available.  
**Freezing/Melting Point:** 190 deg C (dec.)  
**Decomposition Temperature:** Not available.  
**Solubility:** 450 g/L @ 20°C  
**Specific Gravity/Density:** Not available.  
**Molecular Formula:** K2O5S2  
**Molecular Weight:** 222.33

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**Section 10 - Stability and Reactivity**

**Chemical Stability:** Contact with acids liberates toxic gas, Sulfur oxides.  
**Conditions to Avoid:** Incompatible materials, dust generation, temperatures above 150°C.  
**Incompatibilities with Other Materials:** Oxidizing agents, acids, sodium nitrate, sodium nitrite.  
**Hazardous Decomposition Products:** Sulfur oxides (SOx), including sulfur oxide and sulfur dioxide.  
**Hazardous Polymerization:** Will not occur.

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**Section 11 - Toxicological Information**

**RTECS#:**  
**CAS#** 16731-55-8: TT4920000  
**LD50/LC50:**

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http://fscimage.fishersci.com/msds/19450.htm
Carcinogenicity: CAS# 16731-55-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: According to IARC, there is inadequate evidence for the carcinogenicity in humans of metabisulfites.

Teratogenicity: No information found

Reproductive Effects: In laboratory studies, potassium metabisulfite has caused reduced weight gain in newborn rats. TDLo = 35 gm/kg.

Mutagenicity: In experimental systems, potassium metabisulfite has been observed to cause unscheduled DNA synthesis in rats when administered orally at a dose of 400 mg/kg.

Neurotoxicity: No information found

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

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<tr>
<th></th>
<th>US DOT</th>
<th>Canada TDG</th>
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<tbody>
<tr>
<td>Shipping Name:</td>
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<tr>
<td>UN Number:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packing Group:</td>
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</tbody>
</table>

Section 15 - Regulatory Information

US FEDERAL

TSCA

http://fscimage.fishersci.com/msds/19450.htm
CAS# 16731-55-8 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.

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 # 16731-55-8: 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# 16731-55-8 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

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:
XI
Risk Phrases:
R 31 Contact with acids liberates toxic gas.
R 37 Irritating to respiratory system.
R 41 Risk of serious damage to eyes.

Safety Phrases:
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 39 Wear eye/face protection.
S 50A Do not mix with acids.

WGK (Water Danger/Protection)
CAS# 16731-55-8: 1

Canada - DSL/NDSL
CAS# 16731-55-8 is listed on Canada's DSL List.

Canada - WHMIS
This product has a WHMIS classification of D1B, D2B.
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# 16731-55-8 is listed on the Canadian Ingredient Disclosure List.

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**Section 16 - Additional Information**

**MSDS Creation Date:** 12/12/1997  
**Revision #6 Date:** 10/10/2007

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.