Material Safety Data Sheet
Potassium Bisulfite

Section 1 - Chemical Product and Company Identification

MSDS Name: Potassium Bisulfite
Catalog Numbers: LC18770
Synonyms: Potassium metabisulfite.
Company Identification: LabChem Inc
200 William Pitt Way
Pittsburgh, PA 15238
Company Phone Number: (412) 826-5230
Emergency Phone Number: (800) 424-9300
CHEMTREC Phone Number: (800) 424-9300

Section 2 – Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name:</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>16731-55-8</td>
<td>Potassium bisulfite</td>
<td>100</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

Emergency Overview

Appearance: Slight yellow crystalline powder.
Danger! Corrosive. Causes eye and skin burns. Causes digestive and respiratory tract burns. Moisture sensitive. 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 or tightness in the chest.
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.

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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 water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:**
Call a poison control center. 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:**
Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation.

**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 water spray, dry chemical, carbon dioxide, or chemical foam.

**Autoignition Temperature:**
Not applicable

**Flash Point:**
Not applicable

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

**Explosion Limits:**
Lower: n/a  Upper: n/a

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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. 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</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium bisulfite</td>
<td>not listed</td>
<td>not listed</td>
<td>not listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs:
Potassium bisulfite: 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 gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Crystalline powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>White-slight yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight sulfur dioxide odor</td>
</tr>
<tr>
<td>pH</td>
<td>3.5 - 4.5 @ 5% aq. soln</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Freezing/Melting Point</td>
<td>190°C</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>450 g/L @ 20°C</td>
</tr>
<tr>
<td>Specific Gravity/Density</td>
<td>Not available</td>
</tr>
</tbody>
</table>
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Molecular Formula:  K2O5S2
Molecular Weight:  222.33

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.

Section 11 - Toxicological Information

RTECS:
CAS# 16731-55-8: TT4920000.

LD50/LC50:
Not available

Carcinogenicity:
CAS# 16731-55-8 is not listed as a carcinogen 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:
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.

Section 12 - Ecological Information

No information found.

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.
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Section 14 - Transport Information

US DOT
Shipping Name: Not Regulated
Hazard Class: 
UN Number: 
Packing Group: 

Section 15 - Regulatory Information

US Federal
TSCA:
CAS# 16731-55-8 is listed on the TSCA inventory.
SARA Reportable Quantities (RQ):
None of the chemicals in this material have an RQ.
CERCLA/SARA Section 313:
No chemicals are reportable under Section 313.
OSHA - Highly Hazardous:
None of the chemicals in this product are considered highly hazardous by OSHA.

US State
State Right to Know:
CAS# 16731-55-8 is not present on state lists from California, Pennsylvania, Minnesota, Massachusetts, Florida, or New Jersey.
California Regulations:
None

European/International Regulations
Canadian DSL/NDSL:
CAS# 16731-55-8 is listed on Canada’s DSL List.
Canada Ingredient Disclosure List:
CAS# 16731-55-8 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: November 12, 2007
Revision Date: December 3, 2007

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