Material Safety Data Sheet
Potassium iodate

ACC# 19445

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Potassium iodate  
**Catalog Numbers:** AC196740000, AC196741000, AC196745000, AC201770000, AC201771000, AC201775000, AC418240000, AC418240050, AC418241000, 41824-5000, P253-100, P253-500  
**Synonyms:** Iodic acid, potassium 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>7758-05-6</td>
<td>Potassium iodate</td>
<td>100</td>
<td>231-831-9</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: white solid.  
**Danger!** Strong oxidizer. Contact with other material may cause a fire. May cause severe eye, skin and respiratory tract irritation with possible burns. May cause kidney damage. May cause central nervous system effects.  
**Target Organs:** Kidneys, central nervous system.

**Potential Health Effects**

**Eye:** May cause eye irritation. May cause conjunctivitis. May cause permanent corneal opacification.  
**Skin:** May cause severe irritation and possible burns.  
**Ingestion:** May cause burns to the gastrointestinal tract. May cause nausea, vomiting, and diarrhea, possibly with blood.  
**Inhalation:** May cause acute pulmonary edema, asphyxia, chemical pneumonitis, and upper airway obstruction caused by edema.  
**Chronic:** Prolonged or repeated skin contact may cause irritation. Prolonged or repeated exposure may cause gastrointestinal irritation and kidney damage. Chronic ingestion may cause central nervous system
failure. Effects may be delayed.

Section 4 - First Aid Measures

**Eyes:** Get medical aid. Immediately flush eyes with plenty of water for at least 15 minutes.
**Skin:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.
**Ingestion:** Do not induce vomiting. 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 and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.
**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. Strong oxidizer. Contact with other material may cause fire. Use water spray to keep fire-exposed containers cool. Use water with caution and in flooding amounts. This material is an explosion hazard when exposed to heat, mechanical shock, or friction. Containers may explode when heated. Runoff to sewer may create fire or explosion hazard.
**Extinguishing Media:** Contact professional fire-fighters immediately. Cool containers with flooding quantities of water until well after fire is out. For small fires, do NOT use dry chemicals, carbon dioxide, halon or foams. USE WATER ONLY. For large fires flood fire with water from a distance.
**Flash Point:** Not available.
**Autoignition Temperature:** Not available.
**Explosion Limits, Lower:** Not available.
**Upper:** Not available.
**NFPA Rating:** (estimated) Health: 2; Flammability: 0; Instability: 1; Special Hazard: OX

Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.
**Spills/Leaks:** Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Keep combustibles (wood, paper, oil, etc.) away from spilled material.

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 contact with eyes, skin, and clothing. Avoid contact with clothing and other combustible materials. Keep from contact with clothing and

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.

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

OSHA Vacated PELs: Potassium iodate: 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 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

Physical State: Solid
Appearance: white
Odor: odorless
pH: Not available.
Vapor Pressure: Not available.
Vapor Density: Not available.
Evaporation Rate: Not available.
Viscosity: Not available.
Boiling Point: Not available.
Freezing/Melting Point: 560 deg C
Decomposition Temperature: 560 deg C
Solubility: Soluble in water
Specific Gravity/Density: 3.89
Molecular Formula: KIO3
Molecular Weight: 214.00

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: High temperatures, dust generation.
Incompatibilities with Other Materials: Reducing agents, combustible materials, flammable liquids.
**Hazardous Decomposition Products:** Irritating and toxic fumes and gases, oxides of potassium, iodine.

**Hazardous Polymerization:** Has not been reported.

### Section 11 - Toxicological Information

**RTECS#:**
- CAS# 7758-05-6: NN1350000

**LD50/LC50:**
Not available.

**Carcinogenicity:**
CAS# 7758-05-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:**
No data available.

**Teratogenicity:**
No data available.

**Reproductive Effects:**
No data available.

**Mutagenicity:**
No data available.

**Neurotoxicity:**
No data available.

**Other Studies:**

### Section 12 - Ecological Information

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

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<tr>
<th></th>
<th><strong>US DOT</strong></th>
<th><strong>Canada TDG</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shipping Name:</strong></td>
<td>OXIDIZING SOLID, N.O.S.</td>
<td>OXIDIZING SOLID NOS (POTASSIUM IODATE)</td>
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<tr>
<td><strong>Hazard Class:</strong></td>
<td>5.1</td>
<td>5.1</td>
</tr>
<tr>
<td><strong>UN Number:</strong></td>
<td>UN1479</td>
<td>UN1479</td>
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<tr>
<td><strong>Packing Group:</strong></td>
<td>II</td>
<td>II</td>
</tr>
</tbody>
</table>

### Section 15 - Regulatory Information
US FEDERAL

TSCA
  CAS# 7758-05-6 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 # 7758-05-6: fire.

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# 7758-05-6 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:
  O

Risk Phrases:
  R 22 Harmful if swallowed.
  R 8 Contact with combustible material may cause fire.

Safety Phrases:
  S 17 Keep away from combustible material.

WGK (Water Danger/Protection)
  CAS# 7758-05-6: 1

Canada - DSL/NDSL
  CAS# 7758-05-6 is listed on Canada's DSL List.
Canada - WHMIS

This product has a WHMIS classification of C.
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

Section 16 - Additional Information

**MSDS Creation Date:** 12/12/1997  
**Revision #7 Date:** 2/15/2008

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.