**MATERIAL SAFETY DATA SHEET**

**Potassium iodide**

**MSDS Name:** Potassium iodide

**Chemical Name:** Potassium iodide

**CAS#**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>% EINECS#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium iodide</td>
<td>100 231-656-4</td>
</tr>
</tbody>
</table>

**SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS**

**SECTION 3 - HAZARDS IDENTIFICATION**

**Emergency Overview**

**Appearance:** Colorless or white.

**Caution:** May cause respiratory tract irritation. May cause eye and skin irritation. May cause gastrointestinal irritation with nausea, vomiting, and diarrhea. May cause fetal effects.

**Target Organs:** None.

**Potential Health Effects**

**Eye:** Causes eye irritation.

**Skin:** May cause skin irritation. Chronic ingestion of iodides during pregnancy has resulted in fetal death, severe goiter, and cretinoid appearance of the newborn.

**Inhalation:** May cause respiratory tract irritation.

**Chronic Exposure:** Long-term exposure to potassium iodide can lead to iodism characterized by salivation, nasal discharge, sneezing, conjunctivitis, fever, laryngitis, bronchitis, stomatitis, and skin rash. Chronic ingestion of iodides during pregnancy has resulted in fetal death, severe goiter, and cretinoid appearance of the newborn.

**FIRST AID MEASURES**

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical aid.

**Skin:** Wash skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

**Ingestion:** If victim is conscious and alert, give 2-4 cupsfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:** Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

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

**FIRE FIGHTING MEASURES**

**General Information:** Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products.

**Extinguishing Media:**

**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.

**HANDLING AND STORAGE**

**Handling:** Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

**Storage:** Store in cool, dry, well-ventilated area away from incompatible substances.

**EXPOSURE CONTROLS, PERSONAL PROTECTION**

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

**Environmental Exposure Limits**

**OSHA Vacated PELs:**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium iodide</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

**PERSONAL PROTECTIVE EQUIPMENT**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eyes and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective clothing 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 389. Always use a NIOSH or European Standard EN149 approved respirator when necessary.

**PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State:** Solid

**Appearance:** Colorless or white

**Odor:** Odorless

**pH:** 7 to 9

**Vapor Pressure:** Not available

**Vapor Density:** Not available

**Evaporation Rate:** Not available

**Viscosity:** Not available

**Boiling Point:** 242.6 deg F

**Freezing/Melting Point:** 125.6 deg F

**Decomposition Temperature:** Not available

**Solubility:** Soluble in water

**Specific Gravity/Density:** 3.13

**Molecular Formula:** I2

**Molecular Weight:** 156.0828

**STABILITY AND REACTIVITY**

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, light, moisture.

**Incompatibilities with Other Materials:** Incompatible with alkaline materials, strong oxidizing agents, hydrogen bromide, hydrogen chloride, hydrogen fluoride, nitrogen, and nitric acid.

**Health Hazards:** Health hazard.
perchlorate.

Hazardous Decomposition Products:
Oxides of potassium, iodine.
Hazardous Polymerization: Has not been reported.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTCE#: 7681-11-0: TT2875000
LD50/AC30:
Not available.
Carcinogenicity:
Potassium iodide -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology:
No data available.

Teratogenicity:
Iodine salts can cause deformity, illness, and death of a fetus.

Reproductive Effects:
No data available.

Neurotoxicity:
No data available.

Mutagenicity:
No data available.

Other Studies:
No data available.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecotoxicity:
This chemical is expected to cause little oxygen depletion in aquatic systems. This chemical has a moderate potential to affect aquatic organisms.

Environmental Fate:
If diluted with a large amount of water, this chemical released directly or indirectly into the environment is not expected to have a significant impact.

Physical/Chemical:
No information found.

Other:
No information found.

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Dispose of in a manner consistent with federal, state, and local regulations.

RCRA D-Series Maximum Concentration of Contaminants:
None listed.

RCRA D-Series Chronic Toxicity Reference Levels: None listed.

RCRA F-Series: None listed.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT:
No information available.

IMO:
No information available.

IATA:
No information available.

RID/ADR:
No information available.

Canadian TDG:
No information available.

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL

TSCA:
CAS # 7681-11-0 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.

SARA

Section 302 (IQ)
None of the chemicals in this material are on an IQ.

Section 302 (TPQ)
None of the chemicals in this product have a TPQ.

SARA Codes:
CAS # 7681-11-0: acute, chronic.

Section 313:
No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA.

OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.

STATE:
Potassium iodide is not present on state lists from CA, PA, MN, MA, FL, or NJ.

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: Not available.
Risk Phrases:
Safety Phrases:

WGK (Water Danger/Protection):
CAS # 7681-11-0 is listed on Canada’s DSL/NDSL List.

Denotes this product has a WHMIS classification of D2A.
CAS # 7681-11-0 is not listed on Canada’s Ingredient Disclosure List.

Exposure Limits:

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 1/04/1995 Revision #14 Date: 12/12/1997
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 way 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, however arising, even if Fisher has been advised of the possibility of such damages.