SECTION 1: Identification of the substance/mixture

1.1. Product identifier

Product form : Substance
Substance name : Potassium Iodide
Formula : KI
Molecular weight : 166.00 g/mol
CAS No. : 7681-11-0
Product code : LW-KI

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Manufacture of substances

1.3. Emergency telephone number

Emergency number : 1.800.424.9300 (USA)
+1.703.527.3887 (INT)

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

None.

2.2. Label elements

None.

2.3. Hazards not otherwise classified (HNOC) or not covered by GHS

None.

SECTION 3: Composition/information on ingredients

3.1. Substances

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Iodide</td>
<td>Acute Tox. 4; Skin Irrit. 2; Eye</td>
<td>&lt;= 100 %</td>
</tr>
<tr>
<td></td>
<td>Irrit. 2A; H302, H315, H319</td>
<td></td>
</tr>
</tbody>
</table>

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: Description of first aid measures

4.1. Description of first aid measures

General advice : Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
Potassium Iodide  
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First-aid measures after inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

First-aid measures after skin contact: Wash off with soap and plenty of water. Consult a physician.

First-aid measures after eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

First-aid measures after ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2. Most important symptoms and effects, both acute and delayed  
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3. Indication of any immediate medical attention and special treatment needed  
No data available.

SECTION 5: Firefighting measures

5.1. Extinguishing media  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2. Special hazards arising from the substance or mixture  
Hydrogen iodide, Potassium oxides

5.3. Advice for firefighters  
Wear self-contained breathing apparatus for firefighting if necessary.

5.4. More Information  
No data available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures  
Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.  
For personal protection see section 8.

6.2. Environmental precautions  
Do not let product enter drains.

6.3. Methods and material for containment and cleaning up  
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections  
For disposal see section 13.
SECTION 7: Handling and storage

7.1. Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2. Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place. Air, light, and moisture sensitive. Store under inert gas.

7.3. Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Component</th>
<th>7681-11-0</th>
<th>TWA</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium iodide</td>
<td>7681-11-0</td>
<td>TWA</td>
<td>0.010000 mg/m³</td>
<td>USA. ACGIH Threshold Limit Values (TLV)</td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td>Upper Respiratory Tract irritation Hypothyroidism Not classifiable as a human carcinogen varies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TWA</td>
<td></td>
<td>0.010000 mg/m³</td>
<td>USA. ACGIH Threshold Limit Values (TLV)</td>
<td></td>
</tr>
<tr>
<td>Upper Respiratory Tract irritation Hypothyroidism Not classifiable as a human carcinogen varies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure controls
Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.3. Personal protective equipment
**Potassium Iodide**
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Eye protection | Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). |
| Skin Protection | Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. |
| Body protection | Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. |
| Respiratory protection | For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). |
| Environmental exposure controls | Do not let product enter drains. |

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Form: powder; Color: white</td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>6.0 - 9 at 166 g/l at 25 °C (77 °F)</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>681 °C (1,258 °F)</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>1,330 °C (2,426 °F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>1 hPa (1 mmHg) at 745 °C (1,373 °F)</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Potassium Iodide
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Relative density: 3.130 g/cm³
Water solubility: No data available
Partition coefficient: n-octanol/water: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity: No data available
Explosive properties: No data available
Oxidizing properties: No data available

9.2. Other information
Bulk density: 1,700 kg/m³

SECTION 10: Stability and reactivity

10.1. Reactivity
No data available

10.2. Chemical stability
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
No data available

10.4. Conditions to avoid
No data available

10.5. Incompatible materials
Strong reducing agents, Nickel, Strong acids, and its alloys, Steel (all types and surface treatments), Aluminum, Alkali metals, Brass, Magnesium, Zinc, cadmium, Copper

10.6. Hazardous decomposition products
Other decomposition products - no data available
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity: LD50 Oral - Mouse - 1,000 mg/kg
Inhalation: No data available
Dermal: No data available
Skin corrosion/irritation: Skin - Rabbit
Result: Irritating to skin.

Serious eye damage/irritation: Eyes - Rabbit
Result: Irritating to eyes. - 24 h (Draize Test)

Respiratory or skin sensitization: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Germ cell mutagenicity: no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Exposure to excessive amounts of iodine during pregnancy is capable of producing fetal hypothyroidism. Iodine containing drugs have been associated with fetal goiter.

Specific target organ toxicity (single exposure): No data available

Specific target organ toxicity (repeated exposure): No data available

Aspiration hazard: No data available

Additional Information: RTECS: Not available

Prolonged exposure to iodides may produce iodism in sensitive individuals. Symptoms of exposure include: skin rash, running nose, headache and irritation of the mucous membrane. For severe cases the skin may show pimples, boils, hives, blisters and black and blue spots. Iodides are readily diffused across the placenta. Neonatal deaths from respiratory distress secondary to goiter have been reported. Iodides have been known to cause drug-induced fevers, which are usually of short duration.

Liver - Irregularities - Based on Human Evidence
Liver - Irregularities - Based on Human Evidence
SECTION 12: Ecological information

12.1. Toxicity
Toxicity to fish: LC50 - Oncorhynchus mykiss (rainbow trout) - 2,190 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia (water flea) - 2.7 mg/l - 24 h

12.2. Persistence and degradability
No data available

12.3. Bioaccumulative potential
No data available

12.4. Mobility in soil
No data available

12.5. Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6. Other adverse effects
No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated Packaging: Dispose of as unused product.

SECTION 14: Transport information

DOT (US)
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods
**SECTION 15: Regulatory information**

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**
No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Revision Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Iodide</td>
<td>7681-11-0</td>
<td></td>
</tr>
</tbody>
</table>

**New Jersey Right To Know Components**

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Revision Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Iodide</td>
<td>7681-11-0</td>
<td></td>
</tr>
</tbody>
</table>

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**SECTION 16: Other information**

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. : Acute toxicity
Eye Irrit. : Eye irritation
H302 : Harmful if swallowed.
H315 : Causes skin irritation.
H319 : Causes serious eye irritation.
Skin Irrit. : Skin irritation

**HMIS Rating**

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Hazard</td>
<td>2</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>*</td>
</tr>
<tr>
<td>Flammability</td>
<td>0</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>0</td>
</tr>
</tbody>
</table>

**NFPA Rating**
Potassium Iodide
Safety Data Sheet

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health hazard</td>
<td>2</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>0</td>
</tr>
<tr>
<td>Reactivity Hazard</td>
<td>0</td>
</tr>
</tbody>
</table>

Further Information

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