Material Safety Data Sheet
Starch Iodide MSDS

Section 1: Chemical Product and Company Identification

Product Name: Starch Iodide
Catalog Codes: SLS1690
CAS#: Mixture.
RTECS: Not applicable.
TSCA: TSCA 8(b) inventory: Potassium iodide; Zinc chloride; Starch soluble; Water

Contact Information:
Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396
US Sales: 1-800-901-7247
International Sales: 1-281-441-4400
Order Online: ScienceLab.com
CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300
International CHEMTREC, call: 1-703-527-3887
For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Iodide</td>
<td>7681-11-0</td>
<td>0.5</td>
</tr>
<tr>
<td>Zinc chloride</td>
<td>7646-85-7</td>
<td>1.33</td>
</tr>
<tr>
<td>Starch soluble</td>
<td>9005-84-9</td>
<td>3.33</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>94.8</td>
</tr>
</tbody>
</table>

Toxicological Data on Ingredients: Potassium Iodide LD50: Not available. LC50: Not available. Zinc chloride: ORAL (LD50): Acute: 350 mg/kg [Rat]. 329 mg/kg [Mouse].

Section 3: Hazards Identification

Potential Acute Health Effects: Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion.

Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Potassium iodide]. Classified POSSIBLE for human [Zinc chloride]. Mutagenic for mammalian somatic cells. [Zinc chloride]. Mutagenic for bacteria and/or yeast. [Zinc chloride]. TERATOGENTIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Development toxin [POSSIBLE] [Potassium iodide]. The substance may be toxic to kidneys, pancreas. Repeated or prolonged exposure to the substance can produce target organs damage.
Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact:
In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.
Auto-Ignition Temperature: Not applicable.
Flash Points: Not applicable.
Flammable Limits: Not applicable.
Products of Combustion: Not available.
Fire Hazards in Presence of Various Substances: Not applicable.
Explosion Hazards in Presence of Various Substances: Non-explosive in presence of open flames and sparks, of shocks.
Fire Fighting Media and Instructions: Not applicable.
Special Remarks on Fire Hazards: Not available.
Special Remarks on Explosion Hazards: Not applicable.

Section 6: Accidental Release Measures

Small Spill:
Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:
Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.
### Section 7: Handling and Storage

**Precautions:**
Keep locked up. Keep container dry. Do not ingest. Do not breathe gas/fumes/vapor/spray. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.

### Section 8: Exposure Controls/Personal Protection

**Engineering Controls:**
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

**Personal Protection:**
Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill:**
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:**
Zinc chloride TWA: 1 STEL: 2 (mg/m3) [United Kingdom (UK)]
TWA: 1 STEL: 2 (mg/m3) from ACGIH (TLV) [United States]
TWA: 1 STEL: 2 (mg/m3) from OSHA (PEL) [United States]
Consult local authorities for acceptable exposure limits.

### Section 9: Physical and Chemical Properties

**Physical state and appearance:** Liquid.

**Odor:** Not available.

**Taste:** Not available.

**Molecular Weight:** Not applicable.

**Color:** Not available.

**pH (1% soln/water):** Neutral.

**Boiling Point:** The lowest known value is 100°C (212°F) (Water).

**Melting Point:** Not available.

**Critical Temperature:** Not available.

**Specific Gravity:** Weighted average: 1.01 (Water = 1)

**Vapor Pressure:** The highest known value is 2.3 kPa (@ 20°C) (Water).

**Vapor Density:** The highest known value is 0.62 (Air = 1) (Water).

**Volatility:** Not available.

**Odor Threshold:** Not available.

**Water/Oil Dist. Coeff.:** Not available.

**Ionicity (in Water):** Not available.

**Dispersion Properties:** See solubility in water, methanol, acetone.

**Solubility:**
Easily soluble in cold water, hot water. Soluble in methanol. Partially soluble in acetone.

### Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Incompatible materials

**Incompatibility with various substances:** Slightly reactive to reactive with oxidizing agents, metals.

**Corrosivity:** Non-corrosive in presence of glass, of copper, of stainless steel(304), of stainless steel(316).

**Special Remarks on Reactivity:** Incompatible with cyanides, sulfides (Zinc chloride)

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Yes.

### Section 11: Toxicological Information

**Routes of Entry:** Absorbed through skin. Eye contact.

**Toxicity to Animals:** Acute oral toxicity (LD50): 329 mg/kg [Mouse]. (Zinc chloride).

**Chronic Effects on Humans:**
- MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Potassium Iodide]. Classified POSSIBLE for human [Zinc chloride]. Mutagenic for mammalian somatic cells. [Zinc chloride]. Mutagenic for bacteria and/or yeast. [Zinc chloride].
- DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Development toxin [POSSIBLE] [Potassium Iodide]. Contains material which may cause damage to the following organs: kidneys, pancreas.

**Other Toxic Effects on Humans:**
- Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).

**Special Remarks on Toxicity to Animals:** Lowest Published Lethal Dose[Rat] - Route: Inhalation; Dose: 1960 mg/m³/10M (Zinc chloride)

**Special Remarks on Chronic Effects on Humans:**
Contains Zinc chloride and Potassium Iodide which may affect genetic material (mutagenic) cause adverse reproductive effects and birth defects(teratogenic) based on animal data. Also, Zinc Chloride may cause cancer based on animal data.

**Special Remarks on other Toxic Effects on Humans:**
Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: May cause eye irritation. Inhalation: May cause respiratory tract irritation. Ingestion: May cause digestive tract irritation with nausea, vomiting, diarrhea, abdominal pain. Contains Zinc Chloride which may affect behavior/Central nervous system (central nervous system depression), the urinary system (kidney damage - hematuria, oliguria, renal failure), cardiovascular system, respiration (dyspnea), metabolism, pancreas (elevated amylase, and glucose levels)and blood (changes in red blood cell count and in serum compostion).

### Section 12: Ecological Information

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:**
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The products of degradation are less toxic than the product itself.

**Special Remarks on the Products of Biodegradation:** Not available.
Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).
Identification: Not applicable.
Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations:
Other Classifications:
WHMIS (Canada): Not controlled under WHMIS (Canada).
DSCL (EEC):
R40- Possible risks of irreversible effects. S2- Keep out of the reach of children. S36/37- Wear suitable protective clothing and gloves.
HMIS (U.S.A.):
    Health Hazard: 2
    Fire Hazard: 0
    Reactivity: 0
    Personal Protection: h
National Fire Protection Association (U.S.A.):
    Health: 2
    Flammability: 0
    Reactivity: 0
    Specific hazard:
Protective Equipment:
Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

Section 16: Other Information

References: Not available.
Other Special Considerations: Not available.
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 ScienceLab.com 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 ScienceLab.com has been advised of the possibility of such damages.