Material Safety Data Sheet

**Product Name:** Ethyl Iodide

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### Section 1-Product Information

**Synonyms:** Iodoethane; Hydriodic Ether; Ethane, iodo-
**CAS No.:** 75-03-6
**Molecular Weight:** 155.97
**Chemical Formula:** C2H5I

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### Section 2-Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No</th>
<th>Percent</th>
<th>Hazardous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Iodide</td>
<td>75-03-6</td>
<td>90 - 100%</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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### Section 3-Hazards Identification

#### Emergency Overview

**WARNING!** HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.

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**Health Rating:** 3 - Severe (Poison)
**Flammability Rating:** 1 - Slight
**Reactivity Rating:** 1 - Slight
**Contact Rating:** 2 - Moderate
**Lab Protective Equip:** GOGGLES; LAB COAT
**Storage Color Code:** Blue (Health)

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#### Potential Health Effects

**Inhalation:**
Narcotic in high concentrations. Can cause drowsiness and lethargy of movement.

**Ingestion:**
 Probably will cause prompt vomiting and gastrointestinal upset.

**Skin Contact:**
Moderately irritating to skin; causes rash and loss of natural oils.

**Eye Contact:**
Moderately irritating to eyes. Can cause permanent damage by liquid splashes.

**Chronic Exposure:**
Iodides can affect nervous system and motor control after repeated exposure.

**Aggravation of Pre-existing Conditions:**
Persons with pre-existing skin disorders or eye problems, or impaired kidney or respiratory function may be more susceptible to the effects of the substance.
Section 4-First Aid Measure

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

**Ingestion:**
Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

**Skin Contact:**
Wipe off excess material from skin then immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

**Eye Contact:**
Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Section 5-Fire fighting procedure

**Fire:**
As with most organic liquids, fire is possible at elevated temperatures or by contact with an ignition source.

**Explosion:**
Will react with water or steam to produce toxic and corrosive fumes; can react vigorously with oxidizing materials.

**Fire Extinguishing Media:**
Powder, alcohol foam, water spray or carbon dioxide. Water may be ineffective. Water spray may be used to keep fire exposed containers cool.

**Special Information:**
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Section 6-Accidental Release Measure

Ventilate area of leak or spill. Keep water away from spilled material. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Cover liquid with powder from fire extinguisher and sodium bicarbonate, soda ash or slaked lime. Collect liquid in an appropriate container or absorb with an inert material (e.g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Use non-sparking tools and equipment. Do not flush to sewer!

Section 7-Handling and Storage

Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities. Protect from light.

Section 8-Exposure control/Personal protection
Airborne Exposure Limits:
None established.

Ventilation System:
A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

Personal Respirators (NIOSH Approved):
For conditions of use where exposure to the substance is apparent and engineering controls are not feasible, consult an industrial hygienist. For emergencies, or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection:
Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

<table>
<thead>
<tr>
<th>Section 9 - Physical Chemical Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance:</strong> Clear, colorless liquid.</td>
</tr>
<tr>
<td><strong>Odor:</strong> Characteristic odor. Faint ether-like odor.</td>
</tr>
<tr>
<td><strong>Solubility:</strong> Slightly soluble in water.</td>
</tr>
<tr>
<td><strong>Specific Gravity:</strong> 1.95</td>
</tr>
<tr>
<td><strong>pH:</strong> No information found.</td>
</tr>
<tr>
<td><strong>% Volatiles by volume @ 21C (70F):</strong> 100</td>
</tr>
<tr>
<td><strong>Boiling Point:</strong> 72C (162F)</td>
</tr>
<tr>
<td><strong>Melting Point:</strong> -108C (-162F)</td>
</tr>
<tr>
<td><strong>Vapor Density (Air=1):</strong> 5.38</td>
</tr>
<tr>
<td><strong>Vapor Pressure (mm Hg):</strong> 100 @ 18C (64F)</td>
</tr>
<tr>
<td><strong>Evaporation Rate (BuAc=1):</strong> No information found.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 10 - Stability and Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stability:</strong> Stable at room temperature in sealed containers. Darkens on exposure to air or light due to liberation of iodine.</td>
</tr>
</tbody>
</table>
Hazardous Decomposition Products:
Burning may produce toxic iodine vapors.

Hazardous Polymerization:
Will not occur.

Incompatibilities:
Silver chlorite, mercury, magnesium, strong bases, strong oxidizers, water or steam heat and sources of ignition.

Conditions to Avoid:
Heat, flame, ignition sources, light, moisture, incompatibles

Section 11-Toxicity Information
Inhalation rat LC50: 65000 mg/m3/30M. Investigated as a mutagen.

---------\Cancer Lists\\-----------------------------------------------------------
Ingredient                             Known    Anticipated    IARC Category
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Ethyl Iodide (75-03-6)                  No          No            None

Section 12-Ecological Information
Environmental Fate:
No information found.

Environmental Toxicity:
No information found.

Section 13-Disposal Considerations
Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Section 14-Transport Information
Domestic (Land, D.O.T.)

-----------------------
Proper Shipping Name: TOXIC LIQUID, ORGANIC, N.O.S. (ETHYL IODIDE)
Hazard Class: 6.1
UN/NA: UN2810
Packing Group: II
Information reported for product/size: 230ML

International (Water, I.M.O.)

-----------------------
Proper Shipping Name: TOXIC LIQUID, ORGANIC, N.O.S. (ETHYL IODIDE)
Hazard Class: 6.1
UN/NA: UN2810
Packing Group: II
Information reported for product/size: 230ML

International (Air, I.C.A.O.)

Proper Shipping Name: TOXIC LIQUID, ORGANIC, N.O.S. (ETHYL IODIDE)
Hazard Class: 6.1
UN/NA: UN2810
Packing Group: II
Information reported for product/size: 230ML

Section 15-Regulatory Information

--- Chemical Inventory Status - Part 1 ---
<table>
<thead>
<tr>
<th>Ingredient</th>
<th>TSCA</th>
<th>EC</th>
<th>Japan</th>
<th>Australia</th>
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</thead>
<tbody>
<tr>
<td>Ethyl Iodide (75-03-6)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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</tbody>
</table>

--- Chemical Inventory Status - Part 2 ---
---Canada---
<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Korea</th>
<th>DSL</th>
<th>NDSL</th>
<th>Phil.</th>
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</thead>
<tbody>
<tr>
<td>Ethyl Iodide (75-03-6)</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

--- Federal, State & International Regulations - Part 1 ---
-SARA 302- SARA 313---
<table>
<thead>
<tr>
<th>Ingredient</th>
<th>RQ</th>
<th>TPQ</th>
<th>List</th>
<th>Chemical Catg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Iodide (75-03-6)</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

--- Federal, State & International Regulations - Part 2 ---
-RCRA- TSCA-
<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CERCLA</th>
<th>261.33</th>
<th>8(d)</th>
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Chemical Weapons Convention: No  TSCA 12(b): No  CDTA: No
SARA 311/312: Acute: Yes  Chronic: Yes  Fire: No  Pressure: No
Reactivity: No  (Pure / Liquid)

Australian Hazchem Code: None allocated.
Poison Schedule: None allocated.
WHMIS:
This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

Section 16-Additional Information
**NFPA Ratings:**
- Health: 2
- Flammability: 1
- Reactivity: 1

**Label Hazard Warning:**
WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.

**Label Precautions:**
Avoid contact with eyes, skin and clothing.
Avoid breathing vapor or mist.
Keep container closed.
Use only with adequate ventilation.
Wash thoroughly after handling.

**Label First Aid:**
In case of contact, wipe off excess material from skin then immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. In all cases, get medical attention.

**Product Use:**
Laboratory Reagent.

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