MATERIAL SAFETY DATA SHEET
ETHYL IODIDE

1. Identification of the substance/preparation and the company

1.1 Product Identifiers:

Product Name: Iodoethane
Product Codes: 9305
CAS No : 75-03-6

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

Identified uses: Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Supplier: Infinium Pharmachem Pvt. Ltd.(AN ISO 9001:2008 CERTIFIED CO.)
            38, G.I.D.C, Sojitra
            Dist: Anand
            Gujarat, India
Tel : 0091-2697-234987
Fax : 0091-2697-234987
Email : info@infiniumpharmchem.com

2. Composition/Information on Ingredients

Synonyms : Hydroiodic ether; Monoiodo Monoiodoethane’Iodoethane; Ethyljodid; Iodoctano; Jodethan; Monoiodoethane
CAS No. : 75-03-6
Molecular Weight : 155.97
Chemical Formula : CH$_3$CH$_2$I

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

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)

### 3. Hazards Identification (Emergency Overview)

**3.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302
Skin irritation (Category 2), H315
Eye irritation (Category 2), H319
Respiratory sensitization (Category 1), H334
Skin sensitization (Category 1), H317
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xn Harmful R22, R36/37/38, R42/43
R22 Harmful if swallowed
R36/37/38 Irritating to eyes, respiratory system and skin.
R42/43 May cause sensitization by inhalation and skin contact

### 3.2 Label elements

Labeling according Regulation (EC) No 1272/2008

Pictogram
Signal word

Danger

Hazard statement(s)

H302  Harmful if swallowed.
H315  Causes skin irritation.
H317  May cause an allergic skin reaction.
H319  Causes serious eye irritation.
H334  May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335  May cause respiratory irritation.

Precautionary statement(s)

P261  Avoid breathing vapours.
P280  Wear protective gloves.
P305 + P351 + P338  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P342 + P311  If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Supplemental Hazard Statements  none

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.
4.1 Description of first aid measures

**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.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 3.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen iodide

5.3 Advice for firefighters

Wear self contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

6. Accidental Release Measures
6.1 Personal precautions, protective equipment and emergency procedures

- Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.
- Evacuate personnel to safe areas.
- For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which is opened must be carefully resealed and kept upright to prevent leakage. Moisture sensitive. Light sensitive.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. Exposure Controls/Personal Protection
8.1 Airborne Exposure Limits
None established.

8.2 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.

8.3 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-face piece 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.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state and appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Ethereal</td>
</tr>
<tr>
<td>Taste</td>
<td>Not available</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>155.97 g/mole</td>
</tr>
<tr>
<td>Color</td>
<td>Clear Colorless</td>
</tr>
<tr>
<td>pH (1% soln/water)</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>72°C (161.6°F)</td>
</tr>
<tr>
<td>Melting Point</td>
<td>-108°C (-162.4°F)</td>
</tr>
<tr>
<td>Critical Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.95 (Water = 1)</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>18.3 kPa (@ 20°C)</td>
</tr>
<tr>
<td>Volatility</td>
<td>100% (v/v)</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>Water/Oil Dist. Coeff.</td>
<td>Not available</td>
</tr>
<tr>
<td>Ionicity (in Water)</td>
<td>Not available</td>
</tr>
</tbody>
</table>
Dispersion Properties: Not available.
Solubility: Miscible with alcohol, and most other Organic solvents. Soluble in 250 parts water With gradual decomposition

9.2 Other safety information

Vapor Density: 5.4 (Air = 1)

10. Stability and Reactivity

10.1 Chemical Stability

Stability: Stable at room temperature in sealed containers. Darkens on exposure to air or light due to liberation of iodine.

10.2 Possibility of hazardous reactions

Hazardous Decomposition Products: Burning may produce toxic iodine vapors.
Hazardous Polymerization: Will not occur.

10.3 Incompatible materials

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

10.4 Conditions to avoid

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

11. Toxicological Information

11.1 Information on toxicological effects

Routes of Entry: Absorbed through skin. Eye contact. Inhalation. Ingestion.

Toxicity to Animals: Acute toxicity of the mist (LC50): 65000 mg/m3 0.5 hours [Rat].

Chronic Effects on Humans
MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. May cause damage to the following organs: kidneys, lungs, liver, central nervous system (CNS).
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/Conc: LDL [Rabbit] - Route: Oral; Dose: 300 mg/kg

Special Remarks on Chronic Effects on Humans: May affect genetic material (mutagenic)

Special Remarks on other Toxic Effects on Humans

Acute Potential Health Effects:
Skin: Causes skin irritation and possible burns. May cause blistering of the skin. May be absorbed through the skin.

Eyes: Causes eye irritation. May cause chemical conjunctivitis and corneal damage.

Inhalation: Inhalation of high concentrations of vapor may affect behavior and cause central nervous system effects characterized by nausea, headache, dizziness, suffocation, unconsciousness, and coma. Causes respiratory tract irritation. May cause burning sensation in the chest. May cause liver and kidney damage. May cause narcotic effects at high concentration. Aspiration may lead to pulmonary edema.

Ingestion: May cause gastrointestinal tract irritation with nausea, vomiting and diarrhea. Ingestion of large doses may affect behavior/central nervous system and cause central nervous system depression.

Chronic Potential Health Effects:
Skin: Prolonged or repeated skin contact may cause skin irritation and sensitization, an allergic reaction.

Inhalation: Chronic inhalation may cause symptoms similar to those of acute inhalation. Effects may be delayed.

12. Ecological Information

Environmental Fate: No information found.
Environmental Toxicity: No information found.

13. Disposal Considerations

13.1 Waste treatment methods
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.

14. Transport Information

14.1 Domestic (Land, D.O.T.)

**Proper Shipping Name:** TOXIC LIQUID, ORGANIC, N.O.S. (ETHYL IODIDE)

**Hazard Class:** Class -3 (6.1)

**UN/NA:** UN1992

**Packing Group:** III

**Information reported for product/size:**

International (Water, I.M.O.)

14.2 Proper Shipping Name: TOXIC LIQUID, ORGANIC, N.O.S. (ETHYL IODIDE)

**Hazard Class:** Class -3 (6.1)

**UN/NA:** UN1992

**Packing Group:** III

**Information reported for product/size:**

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

14.3 Proper Shipping Name: TOXIC LIQUID, ORGANIC, N.O.S. (ETHYL IODIDE)

**Hazard Class:** Class -3 (6.1)

**UN/NA:** UN1992

**Packing Group:** III

**Information reported for product/size:**

15. Regulatory Information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**Safety, health and environmental Regulations/legislation specific for the Substance or mixture:**

REACH Restrictions - Annex XVII  

: Ensure all national/local regulations are observed.

: The components of this product are not subject to restrictions.
REACH Authorization - Annex XIV: The components of this product are not subject to authorization.

15.2. Chemical Safety Assessment

Chemical Safety Assessment: For this product a chemical safety assessment was not carried out.

15.3 Other Classifications:

WHMIS (Canada):
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 regulations. CAS# 75-03-6 is not listed on Canada's Ingredient Disclosure List.

DSCL (EEC):

16. Other Information


Further information: None.

In accordance with REACH Regulation (CE) Nº 1907/2006 and with CLP Regulation (CE) Nº 1272/2008

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