



SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

| 1.1 Product identifiers | |
|---|--|
| i | Product Name : Ethyl Iodide |
| ii | Chemical Formula : C ₂ H ₅ I |
| iii | CAS No. : 75-03-6 |
| iv | EC No. : 200-833-1 |
| v | HSN Code : 28276090 |
| vi | Hazardous : Yes |
| vii | Content : Minimum 99.0% |
| viii | Appearance : Clear colorless heavy liquid |
| 1.2 Relevant identified uses of the substance | |
| i | Identified uses : Laboratory chemicals, manufacture of substances |
| 1.3 Details of Manufacturer | |
| i | Company : Samrat Pharmachem Limited |
| ii | Address : Plot No. A2/3445, GIDC, Phase 4, Ankleshwar – 393002, Gujarat, India. |
| iii | Phone : +91-7045456789 / 7046456789 |
| iv | Email : contact@samratpharmachem.in |
| v | Webpage : www.samratpharmachem.com |
| 1.4 Emergency Number | |
| | Emergency Phone : +91-7045456789 / 7046456789 |




2. HAZARD IDENTIFICATION

| 2.1 Classification of substance | | | |
|---------------------------------|------|--|--|
| i | H302 | Acute Oral Toxicity | : Harmful if swallowed (Category 4) |
| ii | H315 | Skin Corrosion / Irritation | : Causes skin irritation (Category 2) |
| iii | H317 | Skin Sensitization | : May cause an allergic skin reaction (Category 1) |
| iv | H319 | Eye Irritation | : Causes serious eye irritation (Category 2) |
| v | H334 | Respiratory Sensitization | : May cause allergy or asthma symptoms or breathing difficulties if inhaled (Category 1) |
| vi | H335 | Specific Target Organ Toxicity (Respiratory) | : May cause respiratory irritation; Single Exposure (Category 3) |



| | | | |
|---|------|--|---|
| vii | H341 | Category 1 (H317) Germ Cell Mutagenicity | Suspected of causing genetic defects Combustible liquid (Category 2) |
| For full text of H-statements mentioned in this section, see section 16 | | | |

| 2.2 GHS Label elements, including precautionary statements | |
|--|--|
| i | Pictogram :  |
| ii | Signal word : Danger |
| iii | Hazard Statement(s) |
| | H226 : Flammable liquid and vapour |
| | 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; Single Exposure |
| | H341 : Suspected of causing genetic defects Combustible liquid |
| iv | Precautionary Statement(s) |
| | P210 : Keep away from heat, sparks, Open flames and other ignition sources |
| | P280 : Wear protective clothing, gloves, eye & face equipment |
| | P301 + P330 + P331 : IF SWALLOWED: rinse mouth. DO NOT induce vomiting |
| | P302 + P352 : IF ON SKIN: Wash with plenty of soap and water |
| | P305 + P351 + P338 : IF IN EYES: Rise cautiously with water for several minutes. Remove contact lenses in present. |
| | P312 : Immediately call a poison centre or doctor / physician |



| 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS |
|---|
| No data available |

3. COMPOSITION / INFORMATION ON INGREDIENTS

| 3.1 Substances | |
|----------------|--|
| i | Molecular Weight : 155.97 g/mol |
| ii | Constituent Elements : C ₂ H ₅ I |





4. FIRST AID MEASURES

| | |
|--|---|
| 4.1 Symptoms | |
| i | Most important symptoms and effects, both acute and delayed |
| | May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing |
| ii | Indication of any immediate medical attention & special treatment needed |
| | If seeking medical attention, provide SDS document to physician. |
| 4.2 Description of first aid measures | |
| i | Inhalation : If inhaled, move victim to fresh air. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. |
| ii | Ingestion : Rinse mouth out with water. If you feel still feel unwell, immediately make victim drink a slurry of activated charcoal in water (two glasses at most). Consult a doctor. |
| iii | Skin contact : Take off immediately all contaminated clothing. Wash skin with plenty of water. Cover the irritated skin with an emollient. If skin irritation occurs: Get medical advice/attention. |
| iv | Eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention. |



5. FIRE FIGHTING MEASURES

| | |
|--------------------------------|---|
| 5.1 Extinguishing media | |
| i | Suitable extinguishing agents : Suitable : Water spray, carbon dioxide (CO ₂), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers. |
| ii | Special hazards arising from the substance or mixture : Vapors may travel to source of ignition and flash back. Vapors may form explosive mixture with air. Keep product and empty container away from heat and sources of ignition. Risk of ignition. Combustible material. Containers may explode when heated. |
| iii | Advice for firefighters : Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. |
| iv | Additional information : Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system. |





6. ACCIDENTAL RELEASE MEASURES

| | |
|--|--|
| 6.1 Personal precautions, protective equipment & emergency procedures | |
| i | Use personal protective equipment as required. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges. |
| 6.2 Environmental precautions | |
| i | Corrosive solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dyke if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the SDS and with local authorities. |
| 6.3 Methods and material for containment and cleaning up | |
| i | Cover drains. Cover spill with non-combustible material e.g. sand, mud & vermiculite. Observe possible material restrictions (see sections 7 and 10). Use gloves to take up dry. Dispose-off properly. Clean up affected area carefully. |
| 6.4 Reference to other sections | |
| i | For disposal see section 13 |



7. HANDLING AND STORAGE

| | |
|---|---|
| 7.1 Precautions for safe handling | |
| i | Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. |
| 7.2 Conditions for safe storage, including any incompatibilities | |
| i | Keep tightly closed. Must be stored in tightly sealed containers away from light, moisture and strong oxidizers. Keep container in a cool and well-ventilated area. Do not store in open, unlabelled or mislabelled containers. |
| 7.3 Specific end use(s) | |
| i | Used as ethylating agent in Grignard reaction. |





8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| | |
|------------|--|
| 8.1 | Control Parameters |
| i | Data not available |
| 8.2 | Exposure Controls |
| i | <i>Appropriate engineering controls</i> |
| | Obtain special instructions before use Do not handle until all safety precautions have been read and understood Use personal protective equipment as required Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Avoid breathing dust/fume/gas/mist/vapors/spray In case of inadequate ventilation wear respiratory protection Contaminated work clothing should not be allowed out of the workplace Use only outdoors or in a well-ventilated area Keep away from heat/sparks/open flames/hot surfaces. |
| ii | <i>Personal protective equipment</i> |
| (a) | Eye / face protection |
| | Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses |
| (b) | 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. |
| (c) | 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. |
| (d) | Respiratory protection |
| | When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly |
| (e) | Control of environmental exposure |
| | Do not let product enter drains. |





9. PHYSICAL & CHEMICAL PROPERTIES

| | | | |
|-------------------------------|--|--|----------------------|
| Appearance | Form: Liquid Color: clear colorless | Explosiveness | Not determined |
| Odour | Ether like | Vapour pressure | 133 hpa @ 18 °C |
| Odour threshold | No Data Available | Relative vapour density at 20°C | Not determined |
| pH-value | Not Applicable | Relative density | No data available |
| Melting/Freezing point | -108 °C | Solubilities | Not determined |
| Boiling point | 72.3°C at 1 atm pressure | Partition coefficient (n-octanol/water) | log Pow 2,0 - (Lit.) |
| Flash Point | 53 °C | Auto/Self-ignition temperature | Not determined |
| Evaporation rate | Not determined | Decomposition temperature | Not determined |
| Flammability | Flammable | Viscosity | 0.592 cp at 20°C |
| Density | 1.950 g/cm ³ | Poison Class | Not determined |



10. STABILITY & REACTIVITY

| | | |
|-----|----------------------------------|---|
| (a) | Reactivity | : Non-reactive under normal conditions. Reacts (slowly) with some metals |
| (b) | Chemical stability | : Stable under normal conditions. Moisture sensitive. Light sensitive. |
| (c) | Possible hazardous reactions | : None under normal processing. Hazardous polymerization does not occur. |
| (d) | Conditions to avoid | : Incompatible products. Excess heat. Keep away from open flames, hot surfaces and sources of ignition. Exposure to moist air or water. Protect from light. |
| (e) | Incompatible material | : Strong oxidizing agents |
| (f) | Hazardous decomposition products | : Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen iodide |



11. TOXICOLOGICAL INFORMATION

| | | | |
|--|---------------------------------|----------|---|
| 11.1 Information on toxicological effects | | | |
| | Oral | LD50 Rat | 65 mg/kg |
| 11.2 Corrosion Irritation | | | |
| | Serious eye damage / irritation | | Causes serious eye irritation |
| | Respiratory or skin irritation | | May cause sensitization by inhalation and skin contact. |
| | Germ cell mutagenicity | | Mutagenicity tests are positive |
| | Carcinogenicity | | Not determined. |
| | Reproductive Toxicity | | No information available |
| 11.3 Additional information | | | |
| i | No data available | | |





12. ECOLOGICAL INFORMATION

| | | |
|--|---|---|
| 12.1 Toxicity | | |
| No information available | | |
| 12.2 Persistence and degradability | | |
| (a) | Persistence and degradability | Biodegradability |
| (b) | Biodegradation | No information available |
| 12.3 Bio accumulative potential | | |
| (a) | Bio accumulative potential | No information available |
| 12.4 Mobility in Soil | | |
| (a) | Partition coefficient n-octanol/water (Log Koc) | Will likely be mobile in the environment due to its volatility. |
| 12.5 Results of PBT and vPvB assessment | | |
| No data available | | |
| 12.6 Other adverse effects | | |
| Not known | | |



13. DISPOSAL CONSIDERATIONS

| | |
|---|---|
| 13.1 Waste disposal recommendation's | |
| i | General instructions |
| | Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification. |
| ii | Product / Packaging disposal recommendations |
| | Avoid release to the environment/ Drains |



14. TRANSPORT INFORMATION

| | | | | | |
|--|-------------------------|--------------|--------------|--------------|--------------|
| 14.1 In accordance with ADR / IMDG / IATA / ADN / RID | | | | | |
| | ADR | IMDG | IATA | ADN | RID |
| i | UN Number | | | | |
| | UN 1933 | UN 1933 | UN 1933 | UN 1933 | UN 1933 |
| ii | UN proper shipping name | | | | |
| | Ethyl Iodide | Ethyl Iodide | Ethyl Iodide | Ethyl Iodide | Ethyl Iodide |
| iii | Transport hazard class | | | | |
| | 3 | 3 | 3 | 3 | 3 |
| iv | Hazardous class symbols | | | | |





| | | | | | |
|-------------|--|-----|----------------|----------------|----------------|
| | | | | | |
| v | Packing group | | | | |
| | III | III | III | III | III |
| vi | Environment hazards: Dangerous for the environment | | | | |
| | Yes | Yes | Yes | Yes | Yes |
| vii | Marine Pollutant | | | | |
| | Not applicable | No | Not applicable | Not applicable | Not applicable |
| 14.2 | Special precautions for user | | | | |
| i | No data available | | | | |

15. REGULATORY INFORMATION

| | |
|-------------|--|
| 15.1 | Regulations |
| i | This material safety data sheet complies with the requirements of Regulation (EC) No.1907/2006 |
| ii | This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) |

16. OTHER INFORMATION

| | | |
|-------------------------|---------------|--|
| 16.1 NFPA Rating | | |
| i | Health hazard | : 2 -Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury |
| ii | Fire hazard | : 1-Materials that require considerable preheating, under all ambient temperature conditions, before ignition and combustion can occur |
| iii | Reactivity | : 1-Normally stable, but can become unstable at elevated temperatures and pressures |



Samrat Pharmachem Limited

Manufacturers & Exporters of Pharmaceutical Chemicals

| | | |
|---------------------------------|---|----------------------------|
| 16.2 HMIS Rating | | Health |
| | | Fire |
| | | Reactivity |
| | | Personal Protection |
| i | Health : No data available | |
| ii | Flammability : No data available | |
| iii | Physical : No data available | |
| vi | Personal Protection : No data available | |
| 16.3 Further Information | | |
| | The above information is derived from the available literature & believed to be correct but may not be complete & conclusive. The company shall not be responsible for any damage resulting from handling or usage of the product. The information shall be used only as a guide. | |

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