



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. A2/3444-3445, 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)



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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



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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.	

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable