Samrat Pharmachem Limited

Manufacturers & Exporters of Pharmaceutical Chemicals

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

1.1	**Product identifiers**		
i	Product Name	:	**Iodine Monochloride**
ii	Chemical Formula	:	ICl
iii	CAS No.	:	7790-99-0
iv	EC No.	:	232-236-7
v	HSN Code	:	28129000
vi	Hazardous	:	Yes
vii	Content	:	Minimum 99.0%
viii	Appearance	:	Red brown heavy liquid
1.2	**Relevant identified uses of the substance**		
i	Identified uses	:	Laboratory chemicals
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**			
	Classification according to Regulation (EC) No 1272/2008			
i	H314	Skin corrosion	:	Causes severe skin burns and eye damage. (category 1A)
ii	H318	Serious eye damage	:	Causes serious eye damage (Category 1)
iii	H315	Skin Corrosion / Irritation	:	Causes skin irritation (Category1A)
iv	H335	Specific Target Organ Toxicity (Respiratory)	:	May cause respiratory irritation; Single Exposure (Category 3)
v	H351	Carcinogenicity	:	Suspected of causing cancer. (Category 2)

2.2	GHS Label elements, including precautionary statements		
i	Pictogram	:	
ii	Signal word	:	Danger
iii	Hazard Statement(s)		
	H314	:	Causes severe skin burns and eye damage.
	H315	:	Causes skin irritation
	H318	:	Causes serious eye damage.
	H335	:	May cause respiratory irritation; Single Exposure
	H351	:	Suspected of causing cancer.
iv	Precautionary Statement(s)		
	P261	:	Avoid breathing dust / fumes / gas / mist / vapours / spray
	P271	:	Use outdoors or in a well-ventilated area
	P280	:	Wear protective clothing, gloves, eye & face equipment
	P301 + P330 + P331	:	IF SWALLOWED: rinse mouth. DO NOT induce vomiting
	P303 + P361 + P353	:	IF ON SKIN (or hair): Remove all contaminated clothing. Rise skin with water/shower
	P305 + P351 + P338	:	IF IN EYES: Rise cautiously with water for several minutes. Remove contact lenses in present.
	P311	:	Call poison center/ doctor

2.3	Hazards not otherwise classified (HNOC) or not covered by GHS
Data not available	

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1	Substances		
	Molecular Weight	:	162.36 g/mol
	Constituent Elements	:	ICl

4. FIRST AID MEASURES

4.1	Symptoms		
i	**Most important symptoms and effects, both acute and delayed**		
	Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.		
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	:	Do NOT induce vomiting unless directed to do so by medical personnel. 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	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
	Unsuitable extinguishing media	:	Do not use a heavy water stream.
ii	Special hazards arising from the substance or mixture	:	Hydrogen chloride gas, Hydrogen iodide, Not combustible. Fire may cause evolution of: iodine, Hydrogen chloride gas Ambient fire may liberate hazardous vapours.
iii	Special remarks on Explosion Hazard	:	No data found
iv	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.
v	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**
	Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
6.2	**Environmental precautions**
	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**
	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions. Take up with liquid-absorbent material. Dispose of properly. Clean up affected area.
6.4	**Reference to other sections**
	For disposal see section 13

7. HANDLING AND STORAGE

7.1	**Precautions for safe handling**
	Use only under a chemical fume hood. Wear personal protective equipment/face protection. Avoid dust formation. Do not breathe (dust, vapor, mist, gas). Do not get in eyes, on skin, or on clothing. Do not ingest. If swallowed then seek immediate medical assistance. Do not allow contact with water.
7.2	**Conditions for safe storage, including any incompatibilities**
	Keep refrigerated. Store under an inert atmosphere. Keep away from water or moist air. Protect from light. Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place.
7.3	**Specific end use(s)**
	Apart from the uses mentioned in section 1.2 the product has applications such as antimicrobial agent, chlorinating agent.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1	**Control Parameters**
	No data found
8.2	**Exposure Controls**
i	*Appropriate engineering controls*
	Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
ii	*Personal protective equipment*
(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
	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
(e)	Control of environmental exposure
	Do not let product enter drains.

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance	Form: low melting solid Colour: Red Brown	**Specific gravity**	3.200
Odour	Odourless	**Vapour pressure**	Not available
Odour threshold	Not determined	**Relative vapour density at 20°C**	Not available
pH-value	Not available	**Relative density**	Not available
Melting/Freezing point	26 °C / 78.8 °F	**Solubilities**	Not available
Boiling point	97 °C / 206.6 °F	**Partition coefficient (n-octanol/water)**	Not determined
Flash Point	40 °C	**Auto/Self-ignition temperature**	Not available

Evaporation rate	Not determined	**Decomposition temperature**	Not available
Flammability	Not determined	**Viscosity**	Not determined
Density	1.05 g/cm³	**Poison Class**	Not determined

10. STABILITY & REACTIVITY

(a)	Reactivity	:	Non-reactive under normal conditions.
(b)	Chemical stability	:	If kept under long exposure to air the material shall evaporate releasing violet fumes. No decomposition if used and stored according to specifications.
(c)	Possible hazardous reactions	:	None under normal processing. Can react violently on contact with incompatibles
(d)	Conditions to avoid	:	Avoid dust formation. Incompatible products. Excess heat. Exposure to light. Exposure to air. Exposure to moist air or water.
(e)	Incompatible material	:	Strong oxidizing agents, Organic materials, Strong bases, Metals
(f)	Hazardous decomposition products	:	Hydrogen iodide, Chlorine, Hydrogen chloride gas

11. TOXICOLOGICAL INFORMATION

11.1	**Information on toxicological effects**		
	Oral	LD50 Rat	50 mg/kg
11.2	**Corrosion Irritation**		
	Serious eye damage / irritation		Causes serious eye irritation
	Respiratory or skin irritation		Causes severe burn , may cause respiratory irritation.
	Germ cell mutagenicity		No data available
	Carcinogenicity		No data available
	Reproductive Toxicity		No data available
11.3	**Additional information**		
i	No information available		
ii	Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea(Iodine monochloride)		

12. ECOLOGICAL INFORMATION

12.1	**Toxicity**	
	No data available	
12.2	**Persistence and degradability**	
(a)	Persistence and degradability	Biodegradability
(b)	Biodegradation	No data available
12.3	**Bio accumulative potential**	
(a)	BCF – Other aquatic organisms	No data available
(b)	Partition coefficient n-octanol/water (Log Kow)	No data available
(c)	Bioaccumulative potential	No data available
12.4	**Mobility in Soil**	
(a)	Partition coefficient n-octanol/water (Log Koc)	No data available
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

14. TRANSPORT INFORMATION

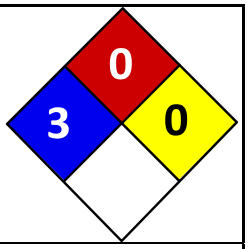
14.1	In accordance with ADR / IMDG / IATA / ADN / RID				
	ADR	**IMDG**	**IATA**	**ADN**	**RID**
i	UN Number				
	UN 1792	UN 1792	UN 1792	UN 1792	UN 1792
ii	UN proper shipping name				
	Iodine Monochloride	Iodine Monochloride	Iodine Monochloride	Iodine Monochloride	Iodine Monochloride
iii	Transport hazard class				
	8	8	8	8	8
iv	Hazardous class symbols				
					
v	Packing group				
	II	II	II	II	II
vi	Environment hazards: Dangerous for the environment				
	Yes	Yes	Yes	Yes	Yes
vii	Marine Pollutant				
	Not applicable	Yes	Not applicable	Not applicable	Not applicable

15. REGULATORY INFORMATION

15.1	Regulations
i	**U.S. Department of Homeland Security :** This product does not contain any DHS chemicals.
ii	**California Proposition 65 :** This product does not contain any Proposition 65 chemicals.

16. OTHER INFORMATION

16.1 NFPA Rating



i	Health hazard	:	3 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
ii	Fire hazard	:	0 - Materials that will not burn under typical dire conditions, including intrinsically non-combustible materials such as concrete, stone, and sand.
iii	Reactivity	:	0 - Normally stable, even under fire exposure conditions, and is not reactive with water.

16.2 HMIS Rating

Health	3
Fire	0
Reactivity	0
Personal protection	J

i	Health	:	3 - Moderate Hazard - Temporary or minor injury may occur
ii	Flammability	:	0 - Minimal Hazard - Materials that will not burn
iii	Physical	:	0 - Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
vi	Personal Protection	:	J - Gloves. Synthetic apron. Vapour and dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

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.