Samrat Pharmachem Limited

Manufacturers & Exporters of Pharmaceutical Chemicals

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

1.1	**Product identifiers**		
i	Product Name	:	**Lithium Iodide**
ii	Chemical Formula	:	ILi
iii	CAS No.	:	7790-22-9
iv	EC No.	:	233-822-5
v	Hazardous	:	Yes
vi	Content	:	Minimum 98%
vii	Appearance	:	White to beige colored powders
1.2	**Relevant identified uses of the substance**		
i	Identified uses	:	Laboratory chemicals, Food, Animal Feed product use.
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**		
i	Emergency Phone	:	+91-7045456789 / 7046456789

2. HAZARD IDENTIFICATION

2.1	**Classification of substance**
	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2	GHS Label elements, including precautionary statements		
i	Pictogram	:	NA
ii	Signal word	:	NA
iii	Hazard Statement(s)	:	NA
iv	Precautionary Statement(s)	:	NA

2.3	Hazards not otherwise classified (HNOC) or not covered by GHS
	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1	Substances		
i	Molecular Weight	:	187.9 g/mol
ii	Constituent Elements	:	ILi

4. FIRST AID MEASURES

4.1	Symptoms		
i	**Most important symptoms and effects, both acute and delayed**		
	Large doses of lithium ion have caused dizziness and prostration, and can cause kidney damage if sodium intake is limited. Dehydration, weight loss, dermatological effects, and thyroid disturbances have been reported. Central nervous system effects that include slurred speech, blurred vision, sensory loss, ataxia, and convulsions may occur.		
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 water (two glasses at least). 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 water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
	Unsuitable extinguishing agents	:	No data available
ii	Special hazards arising from the substance or mixture	:	Lithium oxides
iii	Special remarks on Explosion Hazard	:	No data available
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	:	No additional information available

6. ACCIDENTAL RELEASE MEASURES

6.1	Personal precautions, protective equipment & emergency procedures
	Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, and consult an expert.
6.2	**Environmental precautions**
	No special environment precaution required.
6.3	**Methods and material for containment and cleaning up**
	Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

7.1	Precautions for safe handling
	Avoid raising dust. Use earthed equipment. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Clean contaminated clothing. Keep the substance free from contamination. Thoroughly clean/dry the installation before use. Keep container tightly closed. **Hygiene measures:** Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2	Conditions for safe storage, including any incompatibilities
	Storage conditions: Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Air and light sensitive. Hygroscopic material. Handle and store under inert gas. Storage class (TRGS 510): Non Combustible Solids
7.3	**Specific end use(s)**
	Apart from the uses mentioned in section 1.2 it is used as electrolyte for a high-temperature battery, pacemakers and as a phosphor for neutron detection.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1	Control Parameters
i	**Ingredients with workplace control parameters**
	No data available
8.2	**Exposure Controls**
i	Appropriate engineering controls
	Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Provide adequate general and local exhaust ventilation.
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
	Required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type P2 The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
(e)	Control of environmental exposure
	Do not let product enter drains.

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance	Form: Powder Colour: Beige	**Explosiveness**	No data available
Odour	No data available	**Vapour pressure**	No data available
Odour threshold	No data available	**Relative vapour density at 20°C**	No data available
pH-value	No data available	**Relative density**	No data available
Melting/Freezing point	446 °C	**Solubilities**	No data available
Boiling point	No data available	**Partition coefficient (n-octanol/water)**	No data available
Flash Point	No data available	**Auto/Self-ignition temperature**	No data available
Evaporation rate	No data available	**Decomposition temperature**	No data available
Flammability	No data available	**Viscosity**	No data available
Density	3.49 g/cm3	**Poison Class**	No data available

10. STABILITY & REACTIVITY

i	Reactivity	:	No data available
ii	Chemical stability	:	The product is chemically stable under standard storage conditions.
iii	Possible hazardous reactions	:	No data available
iv	Conditions to avoid	:	Avoid moisture
v	Incompatible material	:	Strong acids , Oxidizing agents
vi	Hazardous decomposition products	:	Lithium oxides

11. TOXICOLOGICAL INFORMATION

11.1	**Information on toxicological effects**		
i	Oral	LD50 Rat	No data available
ii	Dermal	LD50 Rat	No data available
11.2	**Corrosion Irritation**		
i	Serious eye damage / irritation		No data available
ii	Respiratory or skin irritation		No data available
iii	Germ cell mutagenicity		No data available
iv	Carcinogenicity		No data available
v	Reproductive Toxicity		Exposure to excessive amounts of iodine during pregnancy is capable of producing fetal hypothyroidism. Iodine-containing drugs have been associated with foetal goiter. Lithium and its compounds are

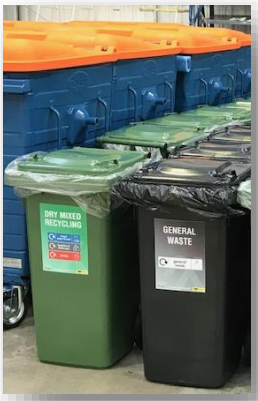
		possible teratogens by analogy to lithium carbonate which has equivocal human teratogenic data and positive animal teratogenic data.
11.3	**Additional information**	
i	No data available	

12. ECOLOGICAL INFORMATION

12.1	**Toxicity**		
i	**Particulars**	**Type**	**Value**
	Fish LC50	Oncorhynchus mykiss (rainbow trout)	No data available
	Crustacea LC 50	Daphnia magna (planktonic crustacean)	No data available
ii	Ecology – general	No data available	
iii	Ecology – air	No data available	
iv	Hazardous to aquatic environment – short term (acute)	No data available	
v	Hazardous to aquatic environment – long term (chronic)	Not classified	
12.2	**Persistence and degradability**		
i	Persistence and degradability	Biodegradability: not applicable.	
ii	Biodegradation	Not applicable	
12.3	**Bio accumulative potential**		
i	BCF – Other aquatic organisms	0.027 BCF	
ii	Partition coefficient n-octanol/water (Log Kow)	-4.6296	
iii	Bioaccumulative potential	Not bioaccumulative.	
12.4	**Mobility in Soil**		
	Highly mobile in soil		
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
	Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals.
ii	Product / Packaging disposal recommendations
	Avoid release to the environment



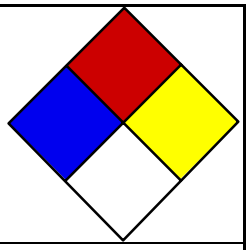
14. TRANSPORT INFORMATION

14.1	In accordance with ADR / IMDG / IATA / ADN / RID				
	ADR	IMDG	IATA	ADN	RID
i	UN Number				
	NA	NA	NA	NA	NA
ii	UN proper shipping name				
	NA	NA	NA	NA	NA
iii	Transport hazard class				
	NA	NA	NA	NA	NA
iv	Hazardous class symbols				
	Not dangerous goods				
v	Packing group				
	NA	NA	NA	NA	NA
vi	Environment hazards: Dangerous for the environment				
	No	No	No	No	No
vii	Marine Pollutant				
	NA	No	NA	NA	NA
14.2	Transport in bulk according to annexure II of Marpol and the IBC Code				
i	IBC Code		Not applicable		

15. REGULATORY INFORMATION

15.1	Regulations
i	This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

16. OTHER INFORMATION

16.1	NFPA Rating		
			
i	Health hazard	:	NA
ii	Fire hazard	:	NA
iii	Reactivity	:	NA

16.2	HMIS Rating		
			
i	Health	:	NA
ii	Flammability	:	NA
iii	Physical	:	NA
iv	Personal Protection	:	NA

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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