Samrat Pharmachem Limited

Manufacturers & Exporters of Pharmaceutical Chemicals

SAFETY DATA SHEET

Version: 2.0
Revision Date: 01/01/2022

1. PRODUCT AND COMPANY IDENTIFICATION

1.1	**Product identifiers**		
i	Product Name	:	**Sodium Iodide**
ii	Chemical Formula	:	NaI
iii	CAS No.	:	7681-82-5
iv	EC No.	:	231-679-3
v	HSN Code	:	28276020
vi	Hazardous	:	Yes
vii	Content	:	Minimum 99.0%
viii	Appearance	:	White Crystalline Powder
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	:	+91-7045002222

2. HAZARD IDENTIFICATION

2.1	**Classification of substance**			
	Classification according to Regulation (EC) No 1272/2008			
i	H315	Skin Corrosion / Irritation	:	Causes skin irritation (Category 2)
ii	H319	Eye Irritation	:	Causes serious eye irritation (Category 2)
iii	H372	Specific Target Organ Toxicity (Oral)	:	Thyroid; Repeated Exposure (Category 1)
iv	H400	Acute Aquatic Hazard	:	Toxic to Aquatic Life (Category 1)
	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)		
	H315	:	Causes skin irritation
	H319	:	Causes serious eye irritation
	H372	:	Causes damage to organs (thyroid gland) through prolonged or repeated exposure
	H400	:	Very toxic to aquatic life
iv	Precautionary Statement(s)		
	P261	:	Avoid breathing dust / fumes / gas / mist / vapours / spray
	P264	:	Wash exposed skin thoroughly after handling
	P273	:	Avoid release to the environment
	P302 + P352	:	IF ON SKIN: Wash with plenty of water.
	P305 + P351 + P338	:	IF IN EYES: Rise cautiously with water for several minutes. Remove contact lenses in present.
	P314	:	Get medical advice/ attention if you feel unwell.

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		
	Molecular Weight	:	149.89 g/mol
	Constituent Elements	:	Sodium (Na) Iodine (I)

4. FIRST AID MEASURES

4.1	Symptoms		
i	**Most important symptoms and effects, both acute and delayed**		
	Eye Burn / Irritation, Nausea, Headache, Shortness of breath.		
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	Swallowing	:	Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.
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 agents	:	For this substance/mixture no limitations of extinguishing agents are given.
ii	Special hazards arising from the substance or mixture	:	Combustion products may include carbon oxides or other toxic vapors. Thermal decomposition can lead to release of irritating gases and vapors. Fire may cause evolution of Hydrogen iodide. Sodium oxides may also be generated, ambient fire may liberate hazardous vapours.
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**
	Wear protective equipment. Transfer to a disposal or recovery container. Use spark-proof tools and explosion proof equipment. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat. Stop the spill, if possible.
6.2	**Environmental precautions**
	Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment. Do not let product enter drains. Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment.
6.3	**Methods and material for containment and cleaning up**
	If in a laboratory setting, follow Chemical Hygiene Plan procedures. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect solids in powder form using vacuum with (HEPA filter).
6.4	**Reference to other sections**
	For disposal see section 13

7. HANDLING AND STORAGE

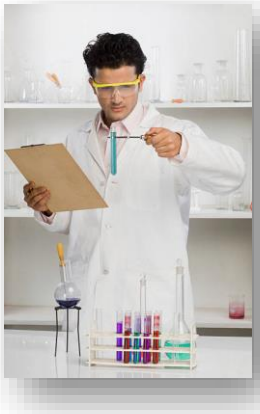
7.1	**Precautions for safe handling**
	Wash hands after handling. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Follow good hygiene procedures when handling chemical materials. Use only in well-ventilated areas. Avoid generation of dust or fine particulate. Avoid contact with eyes, skin, and clothing.
7.2	**Conditions for safe storage, including any incompatibilities**
	Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well-sealed containers. Store with like hazards.
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	**Control Parameters**		
i	Ingredients with workplace control parameters		
	Predicted no effect concentration (PNEC)		
	Particulars	**Value**	**Exposure Time**
(a)	Fresh Water	0.28 mg / l	short-term (single instance)
(b)	Sea Water	28 µg / l	short-term (single instance)
(c)	Fresh water sediment	1.38 mg / kg	short-term (single instance)
(d)	Sea sediment	0.138 mg / kg	short-term (single instance)
(e)	Soil	0.111 mg / kg	short-term (single instance)
ii	*Derived no effect level (DNEL's)*		
(a)	Worker (Industry)	0.822 mg/m^3	chronic - systemic effects
(b)	Worker (Industry)	0.233 mg/kg bw/day	chronic - systemic effects
8.2	**Exposure Controls**		
i	*Appropriate engineering controls*		
	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.		
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		
	The glove material has to be impermeable and resistant to the product/ the substance/ the preparation being used/handled. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.		
(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		
	Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills, respiratory protection is advisable.		
(e)	Control of environmental exposure		
	Do not let product enter drains.		

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance	Form: Crystalline Colour: White	**Flammability**	Not determined
Odour	Odourless	**Vapour pressure**	1,3 hPa at 767 °C
Odour threshold	Not Applicable	**Relative vapour density at 20°C**	Not determined
pH-value	8,2 at 26 °C	**Relative density**	3.6670
Melting/Freezing point	659 °C at 975 hPa – OECD Guideline 102	**Solubilities**	165 g/l at 25 °C - soluble
Boiling point	1.304 °C at 1.013 hPa	**Partition coefficient (n-octanol/water)**	Pow: 0,5; log Pow: -1,3 at 25 °C
Flash Point	Not determined	**Auto/Self-ignition temperature**	Not determined
Evaporation rate	Not determined	**Decomposition temperature**	Not determined
Flammability	Not determined	**Viscosity**	Not determined
Density	3.5 g/cm3 at 25 °C	**Poison Class**	Not determined
Bulk Density	ca. 1.500 – 2.00 kg/m^3	**Dissociation Constant**	0.06 at 25 °C



10. STABILITY & REACTIVITY

(a)	Reactivity	:	Non-reactive under normal conditions. Reacts (slowly) with some metals
(b)	Chemical stability	:	The product is chemically stable under standard ambient conditions (room temperature) . Moisture sensitive. Hydroscopic solid.
(c)	Possible hazardous reactions	:	None under normal processing.
(d)	Conditions to avoid	:	Store away from oxidizing agents, strong acids or bases. Incompatible materials , exposure to air, light, moist air or water, excess heat, dust formation.
(e)	Incompatible material	:	Strong reducing agents, metals, metallic powder & strong oxidisers
(f)	Hazardous decomposition products	:	Risk of explosion with: Alkali metals, Ammonia, halogen-halogen compounds and hydrogen peroxide. Risk of ignition or formation of inflammable gases with: perchloric acid Fluorine Exothermic reaction with: Oxidizing agents, Iodine

11. TOXCICOLOGICAL INFORMATION

11.1	**Information on toxicological effects**		
	Oral	LD50 Rat	4.340 mg/kg
	Dermal	Not classified due to data which are conclusive although insufficient for classification.	
	Inhalation	Not classified due to data which are conclusive although insufficient for classification.	
	Additional Information:	Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. (OECD 403 method)	
11.2	**Corrosion Irritation**		
	Serious eye damage / irritation		Causes serious eye irritation (Draize Test)
	Respiratory or skin irritation		Shall not be classified as a respiratory or skin sensitiser (ECHA)
	Germ cell mutagenicity		Mutagenicity tests are negative (OECD 471 test guideline)
	Carcinogenicity		Did not show carcinogenic effects in experiments
	Reproductive Toxicity		Not classified (OECD 422 test method)
11.3	**Additional information**		
i	No observed adverse effect level (NOAEL)		
	Particulars		**Value**
	Specific target organ toxicity (STOT) Single exposure		Not classified. No data available.
	LD50 Rat: Oral		4.340 mg/kg
	Specific target organ toxicity (STOT) Repeated exposure		Category 1: Thyroid affection
ii	Aspiration Hazard		Not classified
iii	Viscosity, Kinematic		Not applicable
iv	Prolonged exposure to iodides may produce iodism in sensitive individuals. Symptoms of exposure include: skin rash, running nose, headache and irritation of the mucous membrane. For severe cases the skin may show pimples, boils, hives, blisters and black and blue spots. Iodides are readily diffused across the placenta. Neonatal deaths from respiratory distress secondary to goiter have been reported. Iodides have been known to cause drug-induced fevers, which are usually of short duration. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.		

12. ECOLOGICAL INFORMATION

12.1	Toxicity		
i	**Particulars**	**Type**	**Value**
	Fish LC50	Danio rerio (zebra fish)	> 100 mg/l, 96 hours
	Daphina EC50	Daphnia magna (water flea)	0.17 mg/l, 48 hours
	Other aquatic invertebrates EC 50	Algae	0.17 mg/l
ii	Ecology – general	Very toxic to aquatic life. Before neutralisation, the product may represent a danger to aquatic organisms	
iii	Ecology – air	Not dangerous for the ozone layer	
iv	Hazardous to aquatic environment – short term (acute)	Very toxic to aquatic life	
v	Hazardous to aquatic environment – long term (chronic)	Not classified	

12.2	Persistence and degradability	
(a)	Persistence and degradability	Not applicable (inorganic)
(b)	Biodegradation	Not applicable (inorganic)

12.3	Bio accumulative potential
(a)	No bioaccumulation is to be expected (log Pow <= 4)

12.4	Mobility in Soil
	No data available

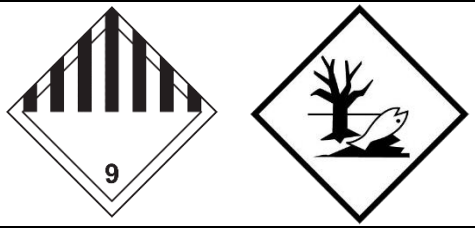
12.5	Results of PBT and vPvB assessment
	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6	Other adverse effects
	Not known

13. DISPOSAL CONSIDERATIONS

13.1	Waste disposal recommendation's	
i	General instructions	
	Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.	
ii	Product / Packaging disposal recommendations	
	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container	
iii	European list of waste (LoW) code	
	Code	**Content**
	18 01 06*	Chemicals consisting of or containing dangerous substances
	15 01 10*	Packaging containing residues of or contaminated by dangerous substances

14. TRANSPORT INFORMATION

14.1	In accordance with ADR / IMDG / IATA / ADN / RID				
	ADR	**IMDG**	**IATA**	**ADN**	**RID**
i	UN Number				
	UN 3077	UN 3077	UN 3077	UN 3077	UN 3077
ii	UN proper shipping name				
	ENVIRONMENTALLY HAZARDOUS SUBSTANCE,SOLID, N.O.S. (Sodium Iodide)				
iii	Transport hazard class				
	9	9	9	9	9
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				
	Yes	Yes	Yes	Yes	Yes

14.2	**Special precautions for user**	
i	Overland Transport	
(a)	Classification code (ADR)	M7
(b)	Special provisions (ADR)	274, 335, 601, 375
(c)	Orange plates	
(d)	Hazard Identification No. (Kemler No.)	90
ii	Transport by sea	
	Special provisions (IMDG)	274, 335, 966, 967, 969
iii	Air transport	
	Special provisions (IATA)	A97, A158, A179, A197
iv	Inland waterway transport	
(a)	Classification code (ADN)	M7
(b)	Special provisions	274, 335, 375, 601
v	Rail Transport	
(a)	Classification code (RID)	M7
(b)	Special provision (RID)	274, 335, 375, 601
14.3	**Transport in bulk according to annexure II of Marpol and the IBC Code**	
	IBC Code	Not applicable

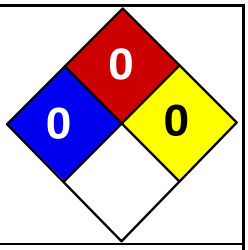
15. REGULATORY INFORMATION

15.1	**EU - Regulations**	
i	No REACH Annexure XVII restrictions	
ii	Sodium Iodide is not the REACH Candidate List	
iii	Sodium Iodide is not on the REACH Annexure XIV List	
iv	Sodium Iodide is not subject to Regulations (EU) No. 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals	
v	Sodium Iodide is not subject to Regulation (EU) No. 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants	
15.2	**National Regulations (Listed on)**	
i	**AICS**	Australian Inventory of Chemical Substances
ii	**Canadian DSL**	Canadian Domestic Substances List
iii	**CICR**	Chemical Inventory & Control Regulation
iv	**IECSC**	Inventory of Existing Chemical Substances Produced or Imported in China
v	**ECSI**	EC Substance Inventory

vi	**KECL/KECI**	Korean Existing Chemicals Inventory
vii	**NZIoC**	New Zealand Inventory of Chemicals
viii	**PICCS**	Philippines Inventory of Chemicals & Chemical Substances
ix	**US TSCA**	United States Toxic Substances Control Act
x	**REACH REG.**	REACH Registered Substance
xi	**INSQ**	Mexican National Inventory of Chemical Substances
xii	**CSCL-ENCS**	List of Existing & New Chemical Substance
xiii	**TCSI**	Taiwan Chemical Substance Inventory

16. OTHER INFORMATION

16.1 NFPA Rating



i	Health hazard	:	0 - 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 - Material that in themselves are normally stable, even under fire conditions.

16.2 HMIS Rating

Health	0
Fire	0
Reactivity	0
Personal Protection	A

i	Health	:	0 - No significant risk to health
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	:	A - Gloves. Synthetic apron. Vapor 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.
16.4	**Preparation Information**
	Samrat Pharmachem Limited
	Plot No. A2/3445, GIDC, Phase 4, Ankleshwar – 393002, Gujarat, India. Phone: +91-7045456789, +91-7046456789 Email: contact@samratpharmachem.in Website: www.samratpharmachem.com
	Version: 2.0		*Revision Date: 01/01/2022*

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