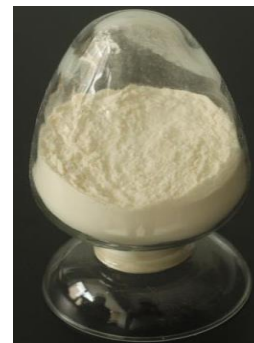




SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers	
i	Product Name : N-iodosuccinimide
ii	Chemical Formula : C ₄ H ₄ INO ₂
iii	CAS No. : 516-12-1
iv	EC No. : 208-221-6
v	Hazardous : Yes
vi	Appearance : White to off-white tan colored powder
vii	Content : Minimum 98%
viii	HSN No. : 29251900
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	
i	Emergency Phone : +91-7045456789 / 7046456789




2. HAZARD IDENTIFICATION

2.1 Classification of substance			
i	H315	Skin irritation	: Irritates the exposed skins(Category 2)
ii	H317	Skin sensitization	: causes skin irritation (Category 1B)
iii	H319	Eye irritation	: Causes serious eye irritation (Category 2)
iv	H400	acute aquatic hazard	: Shows Short term effect on aquatic living beings (Category 1)
v	H411	Chronic aquatic hazard	: Shows long term effect on aquatic living beings (Category 1)





2.2 GHS Label elements, including precautionary statements	
i	Pictogram : 
ii	Signal word : Warning
iii	Hazard Statement(s)
	H315 : Causes skin irritation.
	H317 : May cause an allergic skin reaction.
	H319 : Eye irritation
	H400 : acute aquatic hazard
iv	Precautionary Statement(s)
	P273 : Avoid release to the environment.
	P280 : Wear protective gloves/ eye protection/ face protection
	P304 + P340 + P311 : IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth.
	P314 : Get medical advice/ attention if you feel unwell.
	Supplemental Hazard statement : None



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 : 224.98 g/mol
ii	Constituent Elements : C ₄ H ₄ INO ₂

4. FIRST AID MEASURES

4.1 Symptoms	
i	Most important symptoms and effects, both acute and delayed
	May cause sensitisation or allergic reactions in sensitive individuals. May cause discomfort if swallowed. Stomach pain. Nausea, vomiting.
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 : Induce vomiting only if medical emergency is too far and the person is awake directed to do so by medical personnel. Rinse mouth out with water. If you 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 : Water, carbon dioxide dry powder. Unsuitable extinguishing agents : For this substance/mixture no limitations of extinguishing agents are given.
ii	Special hazards arising from the substance or mixture : Carbon oxides Nitrogen oxides (NOx) Hydrogen iodide Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.
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 : 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	
	Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, and consult an expert.



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6.2 Environmental precautions	Do not let product enter drains. Use non-sparking tools and equipment. Pick up spill for recovery or disposal and place in a closed container.
6.3 Methods and material for containment and cleaning up	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions. Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling	<p>Avoid raising dust. Use earthed equipment. Keep away from naked flames/heat. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Keep the substance free from contamination. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Keep container tightly closed.</p> <p>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.</p>
7.2 Conditions for safe storage, including any incompatibilities	<p>Storage conditions: Tightly closed. Do not store near combustible materials. Recommended storage temperature see product label.</p> <p>Storage class: Storage class (TRGS 510): 11: Combustible solids.</p>
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
	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.



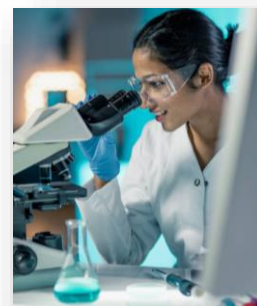
9. PHYSICAL & CHEMICAL PROPERTIES

Appearance	Form: Powder Colour: White to off-white tan	Explosiveness	Non explosive
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	2-6	Relative density	No data available
Melting/Freezing point	202-206°C	Solubilities	Water: 898 g/l at 25 °C (soluble)
Boiling point	No data available	Partition coefficient (n-octanol/water)	No data available
Flash Point	No data available	Auto/Self-ignition temperature	>400°C
Evaporation rate	No data available	Decomposition temperature	No data available
Flammability	Not flammable	Viscosity	No data available
Density	2025 gm/cm ³	Poison Class	No data available



10. STABILITY & REACTIVITY

i	Reactivities	: The following applies in general to flammable organic substances and mixtures: In correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.
ii	Chemical stability	: The product is chemically stable under normal conditions.





iii	Possible hazardous reactions	: Violent reactions possible with oxidizing agents and bases
iv	Conditions to avoid	: Incompatible products. Exposure to light
v	Incompatible material	: No data available
vi	Hazardous decomposition products	: Carbon oxides Nitrogen oxides (NOx) Hydrogen iodide Combustible

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects			
i	Oral	No data available	No data available
ii	Inhalation	No data available	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		Suspected of causing genetic defects
iv	Carcinogenicity		No data available
v	Reproductive Toxicity		No data available
11.3 Additional information			
May cause damage to organs from repeated exposure.			



12. ECOLOGICAL INFORMATION

12.1 Toxicity			
i	Particulars	Type	Value
	Fish LC50	No data available	No data available
	Crustacea LC 50	No data available	No data available
ii	Ecology – general	No data available	
iii	Ecology – air	No data available	
iv	Hazardous to aquatic environment – short term (acute)	Very toxic to aquatic organisms.	
v	Hazardous to aquatic environment – long term (chronic)	May cause long-term adverse effects in the aquatic environment. Based on available literature and data from closely analogous substances using structure/activity relationships.	
12.2 Persistence and degradability			
i	Persistence and degradability		No data available
ii	Biodegradation		No data available
12.3 Bio accumulative potential			
i	BCF – Other aquatic organisms		No data available
ii	Partition coefficient n-octanol/water (Log Kow)		No data available
iii	Bioaccumulative potential		No data available
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
	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				
	UN 3077	UN 3077	UN 3077	UN 3077	UN 3077
ii	UN proper shipping name				
	ENVIRONMEN TALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1- Iodopyrrolidine- 2,5-dione)	ENVIRONME NTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1- Iodopyrrolidine -2,5-dione)	ENVIRONME NTALLY HAZARDOU S SUBSTANCE , SOLID, N.O.S. (1- Iodopyrrolidin e-2,5-dione)	ENVIRONME NTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1- Iodopyrrolidin e-2,5-dione)	ENVIRONME NTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1- Iodopyrrolidin -2,5-dione)
iii	Transport hazard class				
	9	9	9	9	9
iv	Hazardous class symbols				
v	Packing group				
	III	III	III	III	III





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vi	Environment hazards: Dangerous for the environment				
	Yes	Yes	Yes	Yes	Yes
vii	Marine Pollutant				
	NA	Yes	NA	NA	NA
14.2 Transport in bulk according to annexure II of Marpol and the IBC Code					
i	IBC Code		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	Seveso III: Directive 2012/18/EU : E1 ENVIRONMENTAL HAZARDS of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

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 : 0-Normally stable, even under fire exposure conditions, and is not reactive with water.					
16.2 HMIS Rating		<table border="1"> <tr> <td>Health</td> </tr> <tr> <td>Fire</td> </tr> <tr> <td>Reactivity</td> </tr> <tr> <td>Personal Protection</td> </tr> </table>	Health	Fire	Reactivity	Personal Protection
Health						
Fire						
Reactivity						
Personal Protection						
i	Health : No data available					
ii	Flammability : No data available					
iii	Physical : No data available					
iv	Personal Protection : No data available					



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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.