



SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION


1.1 Product identifiers	
i	Product Name : Sodium Metaperiodate
ii	Chemical Formula : NaIO ₄
iii	CAS No. : 7790-28-5
iv	EC No. : 232-197-6
v	HSN Code : 28299030
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, Oxidizing agents
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			
i	H272	Oxidizing solids	: May intensify fire; oxidizer (Category 2)
ii	H314	Skin corrosion	: Causes severe skin burns and eye damage. (Sub-category 1C)
iii	H318	Serious eye damage	: Causes serious eye damage (Category 1)
iv	H372	Specific target organ toxicity - repeated exposure, thymus gland	: Causes damage to organs (thymus gland) through prolonged or repeated exposure. (Category 1),
v	H412	Long-term (chronic) aquatic hazard	: Harmful to aquatic life with long lasting effects. (Category 3)



2.2 GHS Label elements, including precautionary statements	
i	Pictogram : 
ii	Signal word : Danger
iii	Hazard Statement(s)
	H272 : May intensify fire; oxidizer
	H314 : Causes severe skin burns and eye damage.
	H318 : Causes serious eye damage.
	H335 : May cause respiratory irritation
	H372 : Causes damage to organs (thyroid gland) through prolonged or repeated exposure
	H412 : Very toxic to aquatic life
iv	Precautionary Statement(s)
	P210 : Keep away from heat.
	P220 : Keep/Store away from clothing/ combustible materials.
	P221 : Take any precaution to avoid mixing with combustibles.
	P261 : Avoid breathing dust / fumes / gas / mist / vapours / spray
	P264 : Wash exposed skin thoroughly after handling
	P271 : Use outdoors or in a well-ventilated area
	P273 : Avoid release to the environment
	P280 : Wear protective clothing, gloves, eye & face equipment
	P283 : Wear fire/ flame resistant/ retardant clothing.
	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
	P304 + P340 + P310 : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician
	P305 + P351 + P338 : IF IN EYES: Rise cautiously with water for several minutes. Remove contact lenses in present.
	P306 + P360 : IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes
	P370 + P378 : In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction
	P371 + P380 + P375 : In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.



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

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

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Molecular Weight	: 213.89 g/mol
Constituent Elements	: NaIO ₄

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. Causes severe skin burns and eye damage. Causes damage to organs through prolonged or repeated exposure.

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 as there is risk of stomach perforation. Rinse mouth out with water. If you feel still feel unwell, immediately make victim drink 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.
ii	Special hazards arising from the substance or mixture : Oxidizer: Contact with combustible/organic material may cause fire. May ignite combustibles (wood, paper, oil, clothing, etc.). Corrosive material. Thermal decomposition can lead to release of irritating gases and vapors. Hydrogen iodide Sodium oxides silicon oxides Not combustible. Has a fire-promoting effect due to release of oxygen. Ambient fire may liberate hazardous vapours.
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	
	Use personal protective equipment as required. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid dust formation. Do not get in eyes, on skin, or on clothing.
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	
	Keep combustibles (wood, paper, oil, etc.) away from spilled material. Sweep up and shovel into suitable containers for disposal. Avoid dust formation.





7. HANDLING AND STORAGE

7.1 Precautions for safe handling	Use only under a chemical fume hood. Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Do not ingest. If swallowed then seek immediate medical assistance. Do not breathe (dust, vapour, mist, gas). Avoid dust formation. Keep away from clothing and other combustible materials
7.2 Conditions for safe storage, including any incompatibilities	Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area. Do not store near combustible materials. Incompatible Materials. Strong oxidizing agents. Strong reducing agents. Combustible material.
7.3 Specific end use(s)	Apart from the uses mentioned in section 1.2 the product has applications as recovery and cleaning agent of screen printing ink.



8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters	No data available
8.2 Exposure Controls	
i	<i>Appropriate engineering controls</i>
	Use only under a chemical fume hood. Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the work station location.
ii	<i>Personal protective equipment</i>
(a)	<i>Eye / face protection</i>
	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU) safety glasses.
(b)	<i>Skin Protection</i>
	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)	<i>Body Protection</i>
	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)	<i>Respiratory protection</i>
	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)	<i>Control of environmental exposure</i>
	Do not let product enter drains.





9. PHYSICAL & CHEMICAL PROPERTIES

Appearance	Form: Solid crystalline Colour: White to pale yellow	Explosiveness	Not determined
Odour	Odourless	Vapour pressure	Not determined
Odour threshold	Not determined	Relative vapour density at 20°C	Not determined
pH-value	3.5 - 5.5	Relative density	3.860 g/cm ³
Melting/Freezing point	300 °C	Solubilities	107 g/L (20°C) in water
Boiling point	Not determined	Partition coefficient (n-octanol/water)	Not determined
Flash Point	Not determined	Auto/Self-ignition temperature	Not determined
Evaporation rate	Not determined	Decomposition temperature	Not determined
Flammability	Not flammable	Viscosity	Not determined
Density	3.8 g/cm ³	Poison Class	Not determined



10. STABILITY & REACTIVITY

(a)	Reactivity	: Stable under normal conditions. Oxidizer: Contact with combustible/organic material may cause fire.
(b)	Chemical stability	: The product is chemically stable under standard ambient conditions (room temperature) .
(c)	Possible hazardous reactions	: None under normal processing. Can react violently on contact with incompatibles
(d)	Conditions to avoid	: Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.
(e)	Incompatible material	: Reducing agents, strong oxidizing agent, Combustible materials
(f)	Hazardous decomposition products	: Sodium oxides.





11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects	
	No data available
11.2 Corrosion Irritation	
Serious eye damage / irritation	Causes serious eye irritation
Respiratory or skin irritation	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	No data available
Reproductive Toxicity	Not classified
11.3 Additional information	
i	No data available



12. ECOLOGICAL INFORMATION

12.1 Toxicity			
i	Particulars	Type	Value
	Fish LC50	Oncorhynchus mykiss (rainbow trout)	> 0.17 mg/L
	Crustacea LC 50	Daphnia magna (water flea)	0.18 mg/l – 48 h
	Other aquatic invertebrates ErC 50	Algae	1.1 mg/l - 72 h
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			
	Very toxic to aquatic life.		






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 3085	UN 3085	UN 3085	UN 3085	UN 3085
ii	UN proper shipping name				
	Sodium Metaperiodate	Sodium Metaperiodate	Sodium Metaperiodate	Sodium Metaperiodate	Sodium Metaperiodate
iii	Transport hazard class				
	5.1 (8)	5.1 (8)	5.1 (8)	5.1 (8)	5.1 (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

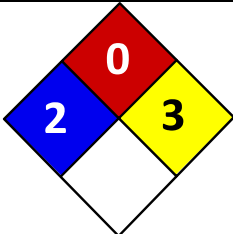


15. REGULATORY INFORMATION

15.1 Regulations	
i	California Proposition 65: This product does not contain any Proposition 65 chemicals.
ii	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	: 2 - Intense or continued but not chronic exposure could cause temporary incapacitation or possible 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	: 3 - Capable of detonation or explosive decomposition but requires a strong initiating source, must be heated under confinement before initiation, reacts explosively with water, or will detonate if severely shocked.								
16.2 HMIS Rating		<table border="1" data-bbox="987 909 1226 1155"><tr><td>Health</td><td>2</td></tr><tr><td>Fire</td><td>0</td></tr><tr><td>Reactivity</td><td>3</td></tr><tr><td>Personal protection</td><td></td></tr></table>	Health	2	Fire	0	Reactivity	3	Personal protection	
Health	2									
Fire	0									
Reactivity	3									
Personal protection										
i	Health	: 2- Temporary or minor injury may occur								
ii	Flammability	: 0 - Materials that will not burn								
iii	Physical	: 3 - Materials that may form explosive mixtures with water and are capable of detonation or explosive reaction in the presence of a strong initiating source.								
iv	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.									

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