# Samrat Pharmachem Limited

Manufacturers & Exporters of Pharmaceutical Chemicals

# 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. A2/3444-3445,<br>GIDC, Phase 4,<br>Ankleshwar – 393002,<br>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 | *Appropriate engineering controls* |
| | 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 | *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: Solid crystalline<br>Colour: White to pale yellow | **Explosiveness** | Not determined |
| **Odour** | Odourless | **Vapour pressure** | Not determined |
| **Odour threshold** | Not determined | **Relative vapour density at 20ºC** | Not determined |
| **pH-value** | 3.5 - 5.5 | **Relative density** | 3.860 g/cm3 |
| **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/cm³ | **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 |

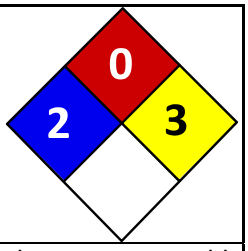
## 14. TRANSPORT INFORMATION

| 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 | | | | |
| | I | I | I | I | I |
| 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** | |   |
| 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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