



SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier SODIUM PERIODATE 0.04M		Product Use Laboratory use	
Chemical formula NaIO ₄		Product code SS-4444; SS-0404	Molar weight 213,89
Chemical name / Commercial name / Synonymous SODIUM PERIODATE, METAPERIODATE DE SODIUM			
Supplier's name Laboratoire MAT		Address-Street 610, Adanac Street	
City Québec		Province Québec	
Postal code G1C 7B7	Internet www.labmat.com	Phone number 418-660-8666 Lun-Ven 8h-16h	
Emergency phone	418-660-8666 Lun-Ven 8h-16h		CENTRE ANTI-POISON DU QUÉBEC 800-463-5060
Date SDS 10/25/2024	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Serious eye damage/eye irritation - Eye irritation category 2
Signal Word	WARNING
Hazards statements (H)	H319 Causes serious eye irritation.
Precautionary statements (P)	P264 Wash thoroughly after handling. P280 Wear protective gloves, protective clothing and eye and face protection. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/attention.
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	Health 1 Fire 0 Reactivity 0 Special danger

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%P/P)
Periodate De Sodium	7790-28-5	0.8

SECTION 04 - FIRST AID MEASURES

Eye contact	Wash eyes with large amounts of water for at least 15 minutes while holding eyelids apart to rinse eyes. If irritation persists, seek medical attention.
Skin contact	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
Inhalation	If breathed in, move person into fresh air. If breathing is difficult, give oxygen. Consult a physician.
Ingestion	If the person is conscious, give water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.
Most important symptoms and effects (acute and delayed)	Main symptoms of high exposure: Skin irritation. Eyes irritation. Irritation of the respiratory system. Neurological disorders. Gastrointestinal disorders. Nausea and vomiting. Vertigo. Loss of appetite. Tiredness. Chest pain. Ref. section 11.
Immediate medical attention and special treatment, if necessary	Treat according to symptoms. Show this sheet to the attending physician.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	No
Suitable extinguishing media	Use water to extinguish the fire
Unsuitable extinguishing media	Do not use a chemical fire extinguisher.
Hazardous combustion products	Hazardous combustion products formed under fire conditions: - Hydrogen iodide, Sodium oxides
Specific hazards of the dangerous product	In the event of a fire, the water in the solution will evaporate, and the oxidizing base product will fuel the fire. When concentrated, the product reacts according to the following characteristics: Powerful oxidizer Contact with combustible products may cause fire. Sodium periodate can form explosive mixtures in the presence of reducing agents (potassium, sodium, metal hydrides), fine metal powders and magnesium. May react violently with incompatible products (Ref Section 10).
Special protective equipment and precautions for firefighters	Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 06 - ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up / Personal precautions, protective equipment	Evacuate personnel to safe areas. Cut off all sources of ignition. Cover the residues with calcium oxide or sodium carbonate to neutralize the product. Dilute residues with water, clean and rinse. Ensure a good ventilation of the premises. Dispose of residues in a container provided for the disposal of hazardous materials. When handling, wear appropriate safety equipment. Use NIOSH cartridge respiratory protection for larger spills. (Reference Section 8 for protective equipment to be used.) Avoid breathing vapors, mist or gas. Discharge into the environment must be avoided.
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SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Keep container tightly closed in a dry and well-ventilated place. Keep container tightly closed and store away from heat, moisture, combustible and incompatible products. Light sensitive.
Methods of handling	Avoid contact with the skin, eyes and clothes. Avoid formation of dust and aerosols. Avoid ingestion and inhalation. Provide appropriate exhaust ventilation at places where dust or vapor is formed. Keep away from sources of ignition - No smoking. Apply the usual standard hygiene rules: Wash your hands after use. Do not eat or drink during use. Wear personal protective equipment when handling. Always ensure good ventilation.

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Control parameters	Value	Basis
Sodium Periodate	7790-28-5	TLV, TWA, STEL	No data available	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TLV, TWA, STEL	No data available	Canada. British Columbia OEL
		TLV, TWA, STEL	No data available	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

Ventilation	Use fan.
Respiratory	If permitted levels are exceeded, use NIOSH cartridge respiratory protection, or an air-supplied respirator.
Gloves	Gloves resistant to basic corrosive materials. Suggested material: Nitrile. Butyle. Neoprene. The type, thickness and length of the glove must be chosen according to the use, the concentration of the product, as well as the duration of use. Replace gloves regularly for better protection.
Eyes	Safety goggles with safety shutters.
Shoes	Safety shoes.
Clothing	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Engineering control	Have safety showers and eyewash stations in the workplace in case of an emergency and a ventilation system to maintain the level of concentrations in the air below the exposure limit values. Recirculation is prohibited.

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid.
Appearance	Liquide clair.
Odour	Inodore.
Odour threshold	Data not available
pH	~6.
Melting point / Freezing point	Data not available
Initial boiling point	Data not available
Boiling range	Data not available
Flash point	Data not available
Evaporation rate	Data not available
Flammability	No
Lower flammable / Explosive limit	Data not available
Upper flammable / Explosive limit	Data not available
Vapour pressure	Data not available
Solubility	Soluble dans l'eau froide, l'acide acétique, l'acide nitrique et l'acide sulfurique.
Vapour density	Data not available
Relative density	1.01 g/ml (Théorique)g/ml
Partition coefficient water/n-octanol	Data not available
Auto-ignition temperature	Data not available
Decomposition temperature	Data not available
Viscosity	Data not available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Oxidizer: risk of fire in case of contact with combustible / organic substance. Material may react violently with water. May react violently with incompatible substances.
Chemical stability	Hygroscopic. Sensitive to light.
Possibility of hazardous reactions	Metaperiodates (IO ₄) are susceptible to decomposition with explosive violence.
Conditions to avoid, including static discharge, shock or vibration	Avoid moisture and excessive heat. Exposure to light.
Incompatible materials	Reducing agents (potassium, sodium, metal hydrides), fine metal powders, organic and combustible materials, magnesium, heat and moisture. When pure, the product reacts with the following products:
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Toxic vapors of hydrogen iodide. - Sodium oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

SODIUM PERIODATE

Routes of exposure	Inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation and tearing.
- Skin	Irritation.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Nervous disorders, chest pain, cough, dyspnea, headache, dizziness, nausea and vomiting.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Gastrointestinal disorders, cramps, diarrhea, headache, dizziness, convulsions, nausea and vomiting.
Chronic exposure effects / symptoms	Burning sensation, nervous disorders, chest pain, cough, dyspnea, laryngitis, headache, dizziness, fatigue, diaphoresis, weight loss and loss of appetite, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Data not available; LD50 Dermal - Data not available.
CL50 (specify species and route of entry)	LC50 - Inhalation - Data not available.

SUMMARY

Acute exposure effects / Symptoms:	By exposure routes below.
Ingestion	To our knowledge, the product has not been fully evaluated
Inhalation	To our knowledge, the product has not been fully evaluated
Skin	To our knowledge, the product has not been fully evaluated
Eyes	To our knowledge, the product has not been fully evaluated
Chronic exposure effects / Symptoms:	To our knowledge, the product has not been fully evaluated
ETA Mix (Estimated Acute Toxicity)	LD50 Oral: No data available LD50 Dermal: No data available LC50 Inhalation: No data available

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Data not available.
Persistence and degradability	Data not available.
Bioaccumulative potential	Data not available.
Mobility in soil	Probable mobility in the environment due to its solubility in water.
Other adverse effects	Very toxic to aquatic life. All littering must be avoided in the environment.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Method	Dispose of contents and container in accordance with local, regional and national regulations, or contact a specialist waste disposal company.
Contaminated Packaging	Dispose of as unused product.

SECTION 14 - TRANSPORT INFORMATION

UN Number	N/R
UN Proper shipping name	
Transport hazard class(es)	
Packing group	
Limited quantity index	
ERAP Index	
Special precautions	

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Serious eye damage/eye irritation - Eye irritation category 2
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SECTION 16 - OTHER INFORMATION

Further information

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. Laboratoire MAT Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

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