



Centre Anti-Poison pour le Québec: (800) 463-5060

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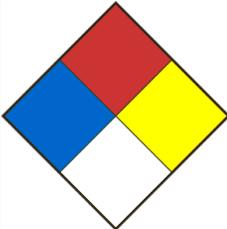
Fax. (Qc): (418) 660-8998

SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier SODIUM IODIDE 4M IN SODIUM HYDROXYDE 8M		Product Use Laboratory use	
Chemical formula NaI / NaOH		Product code SS-0480	Molar weight
Chemical name / Commercial name / Synonymous Winkler solution #2 (NaI + NaOH); Réactif #2			
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 / 800-890-8666	
Emergency phone	CANUTEC: 613-996-6666		CENTRE ANTI-POISON DU QUÉBEC 800-463-5060
Date SDS 7/13/2023	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Serious eye damage/eye irritation - Serious eye damage category 1 Specific Target Organ Toxicity - Repeated exposure category 1 Acute toxicity - Oral category 4 Skin corrosion/irritation - Skin corrosion category 1
Signal Word	DANGER
Hazards statements (H)	H318 Causes serious eye damage. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H372 Causes damage to organs through prolonged or repeated exposure.
Precautionary statements (P)	P280 Wear protective gloves/protective clothing/eye protection/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. P310 Immediately call a POISON CENTER or doctor/physician. P260 Do not breathe dust / fume / gas / mist / vapors / spray. P264 Wash the areas of the body that have been in contact with the product after handling. P270 Do not eat, drink or smoke when using this product. P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P314 Get medical advice/attention if you feel unwell. P321 Specific treatment (see section 4 of the SDS and on this label). P330 Rinse mouth. P363 Wash contaminated clothing before reuse. P405 Store locked up. P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	Health 2 Fire 0 Reactivity 0 Special danger

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Iodure de sodium	7681-82-5	37
Hydroxyde de potassium	1310-73-2	20

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)	The product is a material corrosive. Main symptoms of high exposure: Skin irritation. Eyes irritation. Irritation of the respiratory system. Chemical burns of the skin, eyes and respiratory and digestive mucous membranes. Headaches. Nausea and vomiting. Abdominal pain. To our knowledge, the chemical, physical and toxicological properties have not been fully investigated. Ref. section 11.
Immediate medical attention and special treatment, if necessary	In case of medical consultation, keep this sheet available.
General advice	Show this safety data sheet to the doctor in attendance.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	No
Ignition conditions	Non flammable.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Hazardous combustion products	Hazardous combustion products formed under fire conditions: - Hydrogen iodide, Sodium oxides
Special fire and explosion hazards	When concentrated, the product reacts according to the following characteristics: May react violently with incompatible products (Ref Section 10). Sodium iodide reacts violently with bromine trifluoride and strong oxidizing agents.
Special protective equipment and precautions for firefighters	Discard incompatible substances if this can be done without risk. Firefighters should be equipped with standard protective equipment, fireproof clothing, face mask, gloves, protective boots and, where appropriate, self-contained breathing apparatus.

SECTION 06 - ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up / Personnel precautions, protective equipment	Evacuate personnel to safe areas. Absorb the product with sand or vermiculite. Dilute residues with water, clean and rinse. Ensure a good ventilation of the premises. Dispose of residues in a container for disposal of hazardous materials. When handling, wear suitable safety equipment. Use breathing apparatus if necessary. Avoid breathing vapors, mist or gas.
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SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Store in a cool, dry place. Keep container tightly closed and store away from heat, water, moisture, and incompatible products. Air, light, and moisture sensitive. Protect from light and sunlight. Store in a well-ventilated area.
Methods of handling	This product is corrosive to metals. Avoid contact with the skin, eyes and clothes. Avoid ingestion and inhalation. Wear personal protective equipment when handling. Always ensure good ventilation. Transport according to TDG (ref Section 14)

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
Sodium hydroxide	1310-73-2	C	2.000000 mg/m ³	Canada. British Columbia OEL
		CEV	2.000000 mg/m ³	Canada. Ontario OELs
		(c)	2.000000 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks	Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required			
		C	2.000000 mg/m ³	USA. ACGIH Threshold Limit Values (TLV)
		C	2 mg/m ³	USA. ACGIH Threshold Limit Values (TLV)
Components	CAS-No.	Value	Control Citric acid	
Sodium iodide	7681-82-5	No data available	TLV, TWA, STEL	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		No data available	TLV, TWA, STEL	Canada. British Columbia OEL
		No data available	TLV, TWA, STEL	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

Data source	Sigma-Aldrich (Millipore Sigma)
Ventilation	Fan.
Respiratory	If the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
Gloves	Gloves resistant to basic corrosive materials.
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.

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid.
Appearance	Liquide clair.
Odour	Donnée non disponible.
Odour threshold	Data not available
pH	Donnée non disponible.
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	Très soluble dans l'eau. Soluble dans l'alcool, la glycérine et l'acétone.
Vapour density	Data not available
Relative density	Data not available
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	Basic product, reacts violently with strong acids. Reacts strongly with metals.
Chemical stability	Sensitive to light. Air sensitive.
Possibility of hazardous reactions	Stable under normal conditions. May react violently with incompatible substances. On contact with certain metals, the product may generate hydrogen gas.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid contact with incompatible materials and extreme temperatures. Sensitive to the air. This product may decompose if exposed to light and moisture.
Incompatible material	When pure, the product reacts with the following products: Strong oxidizing agents, Strong acids, Organic materials, reactive metals (zinc, aluminum or tin). Acid anhydrides, Alkali metals. Strong oxidizing agents (nitric acid, perchloric acid, peroxides, chlorates and perchlorates), strong reducing agents (potassium, sodium, hydrides of metals), strong acids, steel, aluminum, trifluoride bromine, cadmium, calomel, chloral hydrate, copper, tin, brass, magnesium, nickel, alkaloidal salts and metal salts, zinc, light and moisture.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - Hydrogen iodide, Sodium oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

SODIUM HYDROXIDE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Severe burns and destruction of ocular tissue that can lead to corneal ulceration and blindness.
- Skin	May be harmful if absorbed through skin. Causes skin burns.
- Inhalation	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Acute toxicity (Ingestion)	Corrosion of the digestive tract, bloody vomiting with mucous membrane fragments, diarrhea, inflammation of the larynx and possibility of oesophageal and gastric perforation, death.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, lung and eye damage, nerve disorders, chest pain, cough, dyspnea, laryngitis, headache, dizziness, confusion, irritability, sweating, salivation, tearing, fatigue, alopecia, loss weight loss and loss of appetite, seizures, nausea and vomiting.
DL50 (specify species and route of entry)	Oral rat: 140mg/kg Dermal rabbit: 1350mg/kg
CL50 (specify species and route of entry)	LC50 - Inhalation - Data not available.

SODIUM IODIDE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Severe irritation and may result in inflammation of the conjunctiva.
- Skin	Irritation and dermatitis. Prolonged exposure to the skin may result in a skin reaction characterized mainly by vesicular or bullous lesions.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Nervous disorders, chest pain, cough, dyspnea, headache, dizziness, fever, nausea and vomiting. Acute inhalation may cause pulmonary edema.
Acute toxicity (Ingestion)	Irritation and burning of the mouth, throat, esophagus and abdominal wall. Dysphagia, endocrine disorders (hypothyroidism), abdominal pain, cramps, diarrhea, melena, headache, dizziness, intense thirst, sweating, salivation, nausea and vomiting, convulsions, stupor, circulatory collapse, unconsciousness, coma and may result in death.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, nervous disorders, chest pain, cough, dyspnea, laryngitis, headache, dizziness, confusion, irritability, sweating, salivation, fatigue, erythema, hypothyroidism, weight loss and loss of appetite convulsions, nausea and vomiting. Prolonged exposure may cause reproductive abnormalities and teratogenic effects in the fetus.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 4,340 mg/kg LD50 Dermal - Rat - 2000 mg/kg.
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:668 mg/kg - Rat LD50 Dermal:3016mg/kg- Undefined species LC50 Inhalation: No data available

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Sodium hydroxide: Toxicity to fish: LC50 - Gambusia affinis (Mosquito fish) - 125 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates: CL50 - Oncorhynchus mykiss (Truite arc-en-ciel) - 45.4 mg/l - 96 h Immobilisation CE50 -Immobilization EC50 - Daphnia - 40.38 mg/l - 48 h. Sodium iodide: Toxicity to fish: LC50 - Oncorhynchus mykiss (rainbow trout) - 860 mg / l - 96 h Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Great Daphnia) - 0.17 mg / l - 48 h
Persistence and degradability	Soluble in water. Persistence is unlikely based on the information provided.
Bioaccumulative potential	Data not available.
Mobility in soil	Probable mobility in the environment due to its solubility in water.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

SECTION 13 - DISPOSAL CONSIDERATIONS

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

SECTION 14 - TRANSPORT INFORMATION

UN Number	3266
UN Proper shipping name	LIQUIDE INORGANIQUE CORROSIF, BASIQUE, N.S.A. (Hydroxyde de sodium)
Transport hazard class(es)	8 Corrosive substances
Packing group	II
Limited quantity index	1L
ERAP Index	-
Special precautions	16

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Serious eye damage/eye irritation - Serious eye damage category 1 Specific Target Organ Toxicity - Repeated exposure category 1 Acute toxicity - Oral category 4 Skin corrosion/irritation - Skin corrosion category 1
Other regulatory information	Ce produit a été classé conformément aux critères de danger énoncés dans le Règlement sur les produits dangereux et la FDS contient tous les renseignements exigés par le Règlement sur les produits dangereux.

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.

Last Update: 7/13/2023