



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

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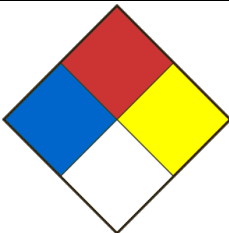
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SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier Sodium azide 0.3%W/V in iodine 0.1N		Product Use Laboratory use	
Chemical formula -		Product code SS-0301	Molar weight
Chemical name / Commercial name / Synonymous -			
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 3/15/2019	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Specific Target Organ Toxicity - Repeated exposure category 1 Acute toxicity - Oral category 4 Acute toxicity - Dermal category 3 Acute toxicity - Inhalation category 4
Signal Word	DANGER
Hazards statements (H)	H372 Causes damage to organs through prolonged or repeated exposure. H302 Harmful if swallowed. H311 Toxic in contact with skin. H332 Harmful if inhaled.
Precautionary statements (P)	P260 Do not breathe dust / fume / gas / mist / vapours / 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. P314 Get medical advice/attention if you feel unwell. P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company. P261 Avoid breathing dust / fume / gas / mist / vapours / spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P321 Specific treatment (see section 4 of the SDS and on this label). P330 Rinse mouth. P361 + P364 Take off immediately all contaminated clothing and wash it before reuse. P405 Store locked up.
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	Health 3 Fire 0 Reactivity 0 Special danger

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Azoture de sodium	26628-22-8	3
Iode	7553-56-2	1
Iodure de potassium	7681-11-0	2
Eau	7732-18-5	Balance

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	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
Ingestion	If the person is conscious, give water to drink. Never give anything by mouth to an unconscious person. Consult a physician.
Most important symptoms and effects (acute and delayed)	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	Not flammable or combustible.
Suitable extinguishing media	Dry powder.
Unsuitable extinguishing media	Do not use water.
Hazardous combustion / decomposition products	Hazardous decomposition products formed under fire conditions. - Hydrogen iodide. Iodine vapors. Gaseous nitrogen. - nitrogen oxides (NOx).
Special fire and explosion hazards	When concentrated, the product reacts according to the following characteristics: Iodine can form explosive compounds sensitive to shock or heat in contact with strong reducing agents. Mixing iodine with antimony and / or ammonia can cause an explosion. Reacts violently with: acetaldehyde, acetylene, acetylides, aluminum + diethyl ether, aluminum-titanium alloys + heat, ammonium hydroxide, antimony, silver azide, bromine pentafluoride, carbides, cesium oxide, chlorine and chlorine trifluoride, fluorine and fluorine oxide, reactive metals (aluminum powder, magnesium, potassium, sodium, zinc), phosphorus, sodium hydride and sodium phosphinate. Potassium iodide may react violently with the following products: bromine pentafluoride, charcoal + ozone, chlorine trifluoride and diazo salts. Sodium azide is hydrolysed by water to be rapidly converted to hydrazoic acid; a potentially explosive and unstable compound. This product may react violently with shock, friction or when heated rapidly. Containers exposed to fire may explode. Its use in organic syntheses can also generate explosive vapors of hydrazoic acid. May react violently with incompatible products (Ref Section 10).
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 / Personal 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. Do not let product enter drains.
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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, moisture, and incompatible products. Keep container tightly closed in a dry and well-ventilated place. Air, light, and moisture sensitive. Protect from sunlight and light. Never allow product to get in contact with water during storage. Do not store near acids.
Methods of handling	Do not use metal utensils to handle iodine as it attacks steel. Bottle in glass containers only. Always open containers slowly to allow any excess pressure to vent. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust or vapor is formed. 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 azide	26628-22-8	(c)	0.290000 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		(c)	0.110000 ppm 0.300000 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		C	0.110000 ppm	Canada. British Columbia OEL
	L	C	0.290000 mg/m ³	Canada. British Columbia OEL
		C	0.110000 ppm 0.300000 mg/m ³	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
A substance which may not be recirculated in accordance with section 108				
		C	0.11 ppm 0.3 mg/m ³	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
A substance which may not be recirculated in accordance with section 108				
		(c)	0.29 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		(c)	0.11 ppm 0.3 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		C	0.29 mg/m ³	Canada. British Columbia OEL
		C	0.11 ppm	Canada. British Columbia OEL
Components	CAS-No.	Value	Control parameters	Basis
Iodine	7553-56-2	C	0.100000 ppm	Canada. British Columbia OEL
		CEV	0.100000 ppm 1.000000 mg/m ³	Canada. Ontario OELs
		(c)	0.100000 ppm 1.000000 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	0.100000 ppm 1.000000 mg/m ³	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
A substance which may not be recirculated in accordance with section 108				
		TWA	0.010000 ppm	Canada. British Columbia OEL
Vapour and aerosol.				
		STEL	0.100000 ppm	Canada. British Columbia OEL
Vapour and aerosol.				
Components	CAS-No.	Value	Control parameters	Basis
Potassium iodide	7681-11-0	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.
Ventilation	Fan.
Respiratory	If work under the hood is not possible, or if the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
Gloves	Handle with gloves.
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.

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid.
Appearance	Brun-orange foncé-
Odour	âcre.
Odour threshold	Data not available
pH	8.
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.
Vapour density	Data not available
Relative density	1.01 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	Non-reactive under normal conditions.
Chemical stability	Stable under recommended storage conditions. May decompose on exposure to air and moisture.
Possibility of hazardous reactions	An explosion occurred when a mixture of sodium azide, methylene chloride, dimethyl sulfoxide, and sulfuric acid were being concentrated on a rotary evaporator.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	This product may decompose if exposed to light or by the combined action of air and moisture. Avoid heat, open flame, moisture, friction and shocks. Avoid the accumulation of static electricity.
Incompatible material	When pure, the products react with the following products: Acids and acid chlorides, barium carbonate, bromine, carbon disulfide, chromyl chloride, dibromomalonitrile, dimethyl sulphate, metal halides, hydrazine, heavy metals and their salts, water and heat. Strong reducing agents, Nickel, Strong acids, and its alloys, Steel (includes all types and surface treatments), Aluminum, Alkali metals, Brass, Magnesium, Zinc, Cadmium, Copper. Pewter - tin oxides. Iodine reacts in contact with the following products: rubber, plastics, iron and ferrous salts, Sulfur compounds, antimony salts, arsenites, bromides, chlorides, iodides, thiocyanates, ferrous salts, hypophosphites, morphine salts, oils, creosote, phosphates, tannin, tartrates. Acetylene, acetaldehyde, strong oxidizers, strong reducers agents, ammonia, alcohols, acetylides, aluminum + diethyl ether, aluminum-titanium alloys + heat, ammonium hydroxide, antimony, silver azide, bromine pentafluoride, carbides, cesium oxide, chlorine and chlorine trifluoride, fluorine and fluorine oxide, metal powders and reactive metals (aluminum powder, magnesium, potassium, sodium, zinc, copper), phosphorus, sodium hydride and sodium phosphinate. The mixture of iodine, antimony and ammonia causes an explosion.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - Hydrogen iodide. Iodine vapors. - Potassium oxides. Toxic vapors of gaseous nitrogen and oxides of nitrogen. - Sodium oxides.

IODINE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Severe irritation and burns that may cause permanent eye damage.
- Skin	Severe irritation and tissue burns. Repeated exposure may cause a skin reaction characterized mainly by erythematous lesions.
- Inhalation	Spasms, irritation and inflammation of the nose, throat and lungs. Edema of the larynx and bronchi. Chemical pneumonitis and pulmonary edema that can lead to death. Inhalation may cause disruption of the thyroid gland.
Acute toxicity (Ingestion)	Burns and ulcerations of the mouth, throat, esophagus and abdominal wall. Dysphagia, thyroid disorders, abdominal pain, cramps, diarrhea, melena, hematemesis, headache, dizziness, salivation, runny nose, parotitis, weakness, weight loss, convulsions, vascular collapse, unconsciousness, coma and can lead to death. Amounts of 2 to 3 g were fatal.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, cutaneous allergic reactions, thyroid disorders (disruption of hormonal secretion), nervous disorders, chest pain, cough, dyspnea, rhinitis, bronchitis, headache, vertigo, irritability, hypersensitivity, epiphora (excessive flow of tears), erythema, intense thirst, salivation, fatigue, weakness, weight loss and loss of appetite, seizures, nausea and vomiting. Prolonged exposure to this product is likely to cause embryotoxic effects in humans.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 315 mg/kg. LD50 Dermal - Rabbit - 1425 mg/kg.
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - 4h - > 4.588 mg / l Note: cough Respiratory condition

POTASSIUM IODIDE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation and burns that may cause permanent eye damage.
- Skin	Irritation and dermatitis. May cause an allergic and inflammatory reaction of the skin in the form of erythematous or vesicular lesions.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Nervous disorders, respiratory allergy, pain in chest, cough, dyspnea, headache, dizziness, fever, nausea and vomiting.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Target organ: thyroid. Abdominal pain, thyroid disorders, cramps, diarrhea, headache, dizziness, sweating, salivation, fever, convulsions, nausea and vomiting.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, respiratory and skin allergies, pain in the chest, cough, dyspnoea, laryngitis, headache, vertigo, tearing, confusion, irritability, erythema, fatigue, fever, anemia, weight loss and loss of appetite, seizures, nausea and vomiting. Prolonged exposure may cause reproductive abnormalities in humans.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 2779 mg/kg LD50 Dermal - Rat - 2000 mg/kg
CL50 (specify species and route of entry)	LC50 - Inhalation - Data not available.

SODIUM AZIDE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation and may cause inflammation of the conjunctiva.
- Skin	Irritation and dermatitis.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Nervous disorders, chest pain, cough, dyspnea, headache, dizziness, hypotension, tachycardia, respiratory depression and may lead to death by pulmonary or cerebral edema.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Abdominal pain, kidney damage (incontinence), cramps, diarrhea, headache, dizziness, sweating, salivation, nausea and vomiting, weakness, acidosis, tachycardia, hypotension, collapse, unconsciousness, coma and can lead to death.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, nervous disorders, chest pain, cough, dyspnea, headache, dizziness, confusion, drowsiness, irritability, tearing, tiredness, tachycardia, hypotension, weight loss and loss of appetite, convulsions, nausea and vomiting. Prolonged exposure to this product may cause reproductive abnormalities in humans.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 27 mg/kg LD50 Dermal - Rabbit - 20 mg/kg.
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - 4h - 54 - 520 mg/m ³

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: 888mg/kg - Rat LD50 Dermal: 678mg/kg - Undefined species LC50 Inhalation: 1.9mg/L - 4h- Rat

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Iodine: Toxicity to fish: LC50 Oncorhynchus mykiss (rainbow trout) -1.7mg / l -96.0 h. Toxicity to daphnia and other aquatic invertebrates: CE 50-Daphnia magna (Great Daphnia) -0.2mg / l-48h Toxicity to algae: Growth inhibition EC50 - Desmodesmus subspicatus (green algae) - 0.13mg/L. Potassium iodide: Toxicity to fish: Static test: LC50 - Danio rerio (zebra fish) - > 100 mg/l - 96.0 h. Sodium azide: Acute fish toxicity: LC50 - Pimephales promelas (fathead minnow) - 5.46 mg/l - 96 h Toxicity to algae: Static test: EC50 - Pseudokirchneriella subcapitata (green algae) - 0.35 mg/l - 96 h
Persistence and degradability	Data not available.
Bioaccumulative potential	Data not available.
Mobility in soil	Probable mobility due to its solubility in water.
Other adverse effects	Very toxic to aquatic life. Causes long-term adverse effects. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

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	3287
UN Proper shipping name	LIQUIDE INORGANIQUE TOXIQUE, N.S.A.
Transport hazard class(es)	6.1 Toxic substances
Packing group	III
Limited quantity index	5L
ERAP Index	-
Special precautions	16 (azoture de sodium)

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Specific Target Organ Toxicity - Repeated exposure category 1 Acute toxicity - Oral category 4 Acute toxicity - Dermal category 3 Acute toxicity - Inhalation category 4
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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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