SAFETY DATA SHEET

SECTION 01 - IDENTIFICATION

Product Identifier	POTASSIUM IODIDE (10%W/W)
Other identification (Chemical name, Commercial name, Synonymous)	POTASSIUM IODIDE; KNOLLIDE; POTIDE
Product code	PS-9010
Chemical formula	KI
Molar weight	166.01
Recommended use and Restrictions on use	For laboratory, school, commercial or industrial use. Not for medical or household use. Do not use for medical, food or household purposes.
Supplier	LABORATOIRE MAT 610, rue Adanac Québec Québec G1C 7B7 418-660-8666 Mon-Fri 8h-16h www.labmat.com labmat@labmat.com
Emergency phone	418-660-8666 Mon-Fri 8h-16h CENTRE ANTI-POISON DU QUÉBEC 800-463-5060
Date SDS	2026-10-30

SECTION 02 - HAZARDS IDENTIFICATION

WHIMS CANADA	- Specific Target Organ Toxicity - Repeated exposure - category 1
PICTOGRAMS	
Signal Word	DANGER
Hazards statements (H)	- Causes damage to the thyroid through prolonged or repeated exposure
Precautionary statements (P)	- Do not breathe mists, gases, vapors and other fumes, or the product itself. - Wash thoroughly after handling. - Do not eat, drink or smoke when using this product. - Get medical attention if you feel unwell. - Dispose of contents and container in accordance with local, regional and national regulations, or contact a specialist waste disposal company.
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

Component	No. CAS	% Weight
Potassium iodide	7681-11-0	10%

SECTION 04 - FIRST AID MEASURE

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 contaminated 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) When concentrated, high exposure to the product causes the following main symptoms: Skin, eye and respiratory system irritation. Tremors. Sleep disorder. Diarrhea. Rhinitis. Breathing difficulties. Respiratory sensitizer. Damage to the thyroid gland. 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

Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media Do not use a jet of water.

Combustion products Hazardous combustion products formed under fire conditions: Hydrogen iodide. Potassium oxides.

Specific hazards of the dangerous product When concentrated, the product reacts according to the following characteristics: 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

Personal precautions, protective equipment and emergency measures Evacuate personnel to safe areas. When handling, wear appropriate safety equipment (reference Section 8 for protective equipment to be used). Ensure a good ventilation. Use NIOSH cartridge respiratory protection if necessary or for larger spills.

Methods and materials for containment and cleaning up Absorb the product with sand or vermiculite. Dilute residues with water, clean and rinse. Dispose of residues in a container for disposal of hazardous materials. Discharge into the environment must be avoided.

SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage Store in a cool, dry, and well-ventilated place. Keep container tightly closed and store away from heat, water, moisture, and incompatible products (ref. section 10). Deliquescent (strongly hygroscopic). Protect from light and sunlight. Air sensitive.

Methods of handling Avoid contact withh eyes, skin and clothing. Avoid ingestion and inhalation. Wear personal protective equipment (ref. section 8) when handling. Always ensure good ventilation. Apply the usual standard hygiene rules: Wash your hands after use. Do not eat or drink during use.

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Component	CAS-No.	Value
Potassium iodide	7681-11-1	No occupational exposure limits established by region-specific regulators - Quebec, Alberta, Ontario, British Columbia.

Respiratory	If permitted levels are exceeded, use NIOSH cartridge respiratory protection, or an air-supplied respirator.
Gloves	Handle with protective gloves. Suggested material: Nitrile. Butyl. 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	Use safety shoes.
Clothes	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	Use fan. 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
Color	Colorless
Odour	Odorless
Odour threshold	Data not available
Melting point and freezing point	Data not available
Boiling point	Data not available
Flammability	No
Lower flammable / Explosive limit	Data not available
Upper flammable / Explosive limit	Data not available
Flash point	Data not available
Auto-ignition temperature	Data not available
Decomposition temperature	Data not available
pH	6.5
Kinematic viscosity	Data not available
Solubility	Soluble in water. 1480 g/L at 25°C; 38.6 g/L in methanol at 25°C (KI)
Partition coefficient water/n-octanol	Data not available
Vapour pressure	Data not available
Relative density	1.12g/ml @20°C
Vapour density	Data not available
Particle characteristics	Not applicable

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	May react violently with incompatible substances.
Chemical stability	Air sensitive. May decompose on exposure to air and moisture. Decomposes on exposure to light.
Possibility of hazardous reactions	May react violently with incompatible substances.
Conditions to avoid	Avoid moisture. Avoid contact with incompatible materials.
Incompatible materials	When pure, the product reacts with the following products: Oxydants. Strong reducers. Strong acids. Aluminium. Nickel. Magnesium. Zinc. Stain. Copper. Cadmium. Tin oxides. Brass. Stainless. Alkali metals.
Hazardous decomposition products	Hydrogen Iodide. Potassium oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

POTASSIUM IODIDE (10%W/W)

Routes of exposure	Ingestion and skin contact.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	May cause severe eye irritation. To our knowledge, the chemical, physical and toxicological properties have not been fully investigated.
- Skin	Dermatitis. Irritation. May cause: Inflammatory skin reaction. Skin allergy. Formation of vesicular lesions. Skin sensitizer. To our knowledge, the chemical, physical and toxicological properties have not been fully investigated.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Respiratory allergy, Runny nose. Respiratory sensitizer.
Acute toxicity (Ingestion)	Mucous membrane irritation. Abdominal pain. Thyroid gland disorders. Cramps. Diarrhea. Headaches. Dizziness. Sweating, Salivation. Nausea and vomiting. Fever. Intense pain in the mouth. To our knowledge, the chemical, physical and toxicological properties have not been fully investigated.
Chronic exposure effects / symptoms	Burning sensation. Dermatitis. Conjunctivitis. Respiratory allergy. Skin allergy. Chest pain. Cough. Dyspnoea. Laryngitis. Headache. Dizziness. Tearing. Confusion. Irritability. Erythema. Fatigue. Fever. Anemia. Weight loss. Loss of appetite. Convulsions. Nausea and vomiting. May cause damage to: Reproductive system. Target organs: Thyroid gland. It is found in human breast milk. To our knowledge, the chemical, physical and toxicological properties have not been fully investigated.
DL50 (specify species and route of entry)	ETA Mix (Estimated Acute Toxicity): LD50 Oral - Rat - >5000mg/kg. LD50 Dermal - Rat - >5000mg/kg.
CL50 (specify species and route of entry)	ETA Mix (Estimated Acute Toxicity) LC50 Inhalation - Data not available.

POTASSIUM IODIDE

Routes of exposure	Ingestion and skin contact.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	May cause severe eye irritation. Causes burns to the eyes.
- Skin	Dermatitis. Irritation. May cause: Inflammatory skin reaction. Skin allergy. Formation of vesicular lesions. Skin sensitizer.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Respiratory allergy, Runny nose. Respiratory sensitizer.
Acute toxicity (Ingestion)	Mucous membrane irritation. Abdominal pain. Thyroid gland disorders. Cramps. Diarrhea. Headaches. Dizziness. Sweating, Salivation. Nausea and vomiting. Fever. Intense pain in the mouth.
Chronic exposure effects / symptoms	Burning sensation. Dermatitis. Conjunctivitis. Respiratory allergy. Skin allergy. Chest pain. Cough. Dyspnoea. Laryngitis. Headache. Dizziness. Tearing. Confusion. Irritability. Erythema. Fatigue. Fever. Anemia. Weight loss. Loss of appetite. Convulsions. Nausea and vomiting. May cause damage to: Reproductive system. Target organs: Thyroid gland. It is found in human breast milk.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 2484mg/kg. LD50 Dermal - Rat - 2000mg/kg.
CL50 (specify species and route of entry)	LC50 Inhalation - Data not available.

SECTION 12 - ECOLOGICAL INFORMATION

POTASSIUM IODIDE (10%W/W)

Ecotoxicity	Data not available.
Persistence and degradability	Persistence is unlikely based on information provided.
Bioaccumulative potential	Data not available.
Mobility in soil	Probable mobility in the environment due to its solubility in water.
Other adverse effects	Data not available.

POTASSIUM IODIDE

Ecotoxicity	Toxicity to fish: Static test - LC50 - Danio rerio (zebra fish) - > 100 mg/l - 96 h.
Persistence and degradability	Persistence is unlikely based on information provided.
Bioaccumulative potential	Data not available.
Mobility in soil	Probable mobility in the environment due to its solubility in water.
Other adverse effects	Data not available.

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	- Specific Target Organ Toxicity - Repeated exposure - category 1

SECTION 16 - OTHER INFORMATION

CNESST: Commission des normes, de l'équité et de la santé et sécurité au travail
NIH: National institute of health (U.S. Naltional Library of Medecine)
ECHA: Agence Européenne de Chimie
ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
VECD: Valeur d'exposition courte durée
VEMP: Valeur d'exposition moyenne pondérée
CMRG : Chemical Manufacturer's Recommended Guidelines
OSHA : United States Department of Labor - Occupational Safety and Health Administration
TLV : Threshold limit value
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling
RSST: Règlement sur la santé et sécurité au travail (Québec)
INRS: l'Institut national de recherche et de sécurité pour la prévention des accidents du travail et des maladies professionnelles (France)

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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