



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

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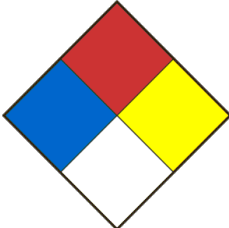
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## SAFETY DATA SHEET

### SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier POTASSIUM NITRATE 15%W/V		Product Use Laboratory use	
Chemical formula KNO <sub>3</sub>		Product code PS-0415	Molar weight 101,11
Chemical name / Commercial name / Synonymous POTASSIUM NITRATE, SALPÊTRE, NITRE, NITRIC ACID POTASSIUM SALT, VICKNITE			
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 4/1/2019	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

### SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Not a hazardous substance according to WHMIS 2015
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	<b>Health</b> 2 <b>Fire</b> 0 <b>Reactivity</b> 1 <b>Special danger</b>

### SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Nitrate de potassium	7757-79-1	13

### 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. See a doctor.
Skin contact	Remove soiled clothing. Wash skin with plenty of water for at least 15 minutes. Consult a physician.
Inhalation	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
Ingestion	If the person is conscious, drink water and do not induce vomiting. Never give anything by mouth to an unconscious person. Get immediate medical help.
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

<b>Flammability</b>	No
<b>Ignition conditions</b>	Heat, sparks and open flame.
<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable extinguishing media</b>	Data not available.
<b>Hazardous combustion / decomposition products</b>	Hazardous decomposition products formed under fire conditions. Nitrogen oxide. - Potassium oxides.
<b>Special fire and explosion hazards</b>	When concentrated, the product reacts according to the following characteristics: Powerful oxidizer Potential for explosion if potassium nitrate is heated or crushed by contact with: aluminum + barium nitrate + potassium perchlorate + water (storage), boron + laminac + trichlorethylene, coal wood + sulfur, sodium peroxide + dextrose, strong reducing agents (potassium, sodium, metal hydrides), antimony trisulfide, arsenic and arsenic disulfide, boron, silicide Calcium, carbon, chromium nitride, fluorine, lactose, phosphorus, phosphides, metal powders (aluminum, antimony, iron, germanium, magnesium, titanium, zinc, zirconium), metal sulphides ( barium sulphide, calcium sulphide), molybdenum disulfide, sodium acetate, sodium hypophosphite, sodium phosphinate, sodium thiosulfate, titanium disulfide and trichlorethylene. Contact with combustible products may cause fire. May react violently with incompatible products (Ref Section 10). To our knowledge, the product has not been fully evaluated.
<b>Special protective equipment and precautions for firefighters</b>	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

<b>Methods and materials for containment and cleaning up / Personal precautions, protective equipment</b>	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 vapours, mist or gas. Do not let product enter drains.
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## SECTION 07 - HANDLING AND STORAGE

<b>Conditions for safe storage</b>	Store in a cool, dry place. Keep container tightly closed and store away from heat, moisture, combustible and organic products. Keep container tightly closed in a dry and well-ventilated place.
<b>Methods of handling</b>	Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust or vapor is formed. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition.

## SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### Workplace control parameters

Components	CAS-No.	Value	Control Citric acid	
POTASSIUM NITRATE	7757-79-1	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

<b>Ventilation</b>	Use fan.
<b>Respiratory</b>	If the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
<b>Gloves</b>	Handle with gloves.
<b>Eyes</b>	Safety goggles with safety shutters.
<b>Shoes</b>	Safety shoes.
<b>Clothing</b>	Labcoat.
<b>Engineering control</b>	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 incolore.
Odour	Inodore.
Odour threshold	Data not available
pH	pH = ~7.
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 (100g/L @25°C). Peu soluble dans l'alcool (KNO <sub>3</sub> ).
Vapour density	Data not available
Relative density	1.10 g/ml (théorique).
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.
Possibility of hazardous reactions	Stable under normal conditions.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid moisture and excessive heat.
Incompatible material	When pure, the product reacts with the following products: Strong reducing agents, strong acids, antimony trisulfide, arsenic, calcium silicide, carbon, chromium nitride, lactose, fine metal powders (aluminum, antimony, iron, germanium, magnesium titanium, zinc, zirconium), metal sulfides, phosphides, sodium acetate, sodium hypophosphite, sodium thiosulfate, trichlorethylene, heat and moisture.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Toxic vapors of nitrogen oxides. - Potassium oxides.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### POTASSIUM NITRATE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation and tearing.
- Skin	May be harmful if absorbed through skin. Irritation and dermatitis.
- Inhalation	May be harmful if inhaled. Irritation of the mucous membranes and respiratory tract. Nervous disorders, chest pain, cough, dyspnea, headache, dizziness, watery eyes, fever, nausea and vomiting.
Acute toxicity (Ingestion)	May be harmful if swallowed. May cause irritation. Gastrointestinal disorders, cramps, diarrhea, headache, dizziness, convulsions, nausea and vomiting.
Chronic exposure effects / symptoms	Is recognized as probably carcinogenic agent for humans (class 2A IARC) - Group 2A. May cause cyanosis. Burning sensation, dermatitis, nervous disorders, kidney damage, chest pain, cough, dyspnea, laryngitis, headache, dizziness, watery eyes, confusion, irritability, fatigue, anemia, methaemoglobinaemia, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 2000 mg/kg. LD50 Dermal - Rat - 5000 mg/kg.
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - 4h - 527 mg/m <sup>3</sup> .

## 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: > 5000mg/kg - Rat LD50 Dermal: > 5000mg/kg - Rat LC50 Inhalation: 4040 mg/m <sup>3</sup> - 4h -Rat

## SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Potassium nitrate: Toxicity to fish: LC50 - <i>Gambusia affinis</i> (wild guppy) - 22.5 mg / l - 96 h Static test LC50 - <i>Poecilia reticulata</i> (Guppy) - 1,378 mg / l - 96 h Toxicity for daphnia and the others invertebrates aquatic. EC50 - <i>Daphnia magna</i> : 226 mg/l - 72 h
Persistence and degradability	Data not available.
Bioaccumulative potential	Data not available.
Mobility in soil	Data not available.
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	N/R
UN Proper shipping name	
Transport hazard class(es)	
Packing group	
Limited quantity index	
ERAP Index	
Special precautions	

## SECTION 15 - REGULATORY INFORMATION

WHMIS CANADA	Not a hazardous substance according to WHMIS 2015
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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.

**Last Update: 4/1/2019**