

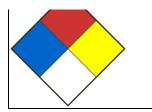
#### SAFETY DATA SHEET

# SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier				Product Use	
POTASSIUM DICHROMATE (0.3N / 0.05M)			Laboratory use		
Chemical formula				Product code	Molar weight
K2Cr2O7				PS-0603	294,2
Chemical name / Commercial name / Synonymous POTASSIUM DICHROMATE, POTASSIUM BICHROMATE, POTASSIUM DICHROMATE (VI), CHROMIC ACID DIPOTASSIUM SALT, RED POTASSIUM CHROMATE, DIPOTASSIUM DICHROMATE			SALT, RED		
Supplier's name			Address-Street		
Laboratoire MAT		610, Adanac Street			
City		Province			
Québec		Québec			
Postal code	Internet		Phone number		
G1C 7B7	37 www.labmat.com		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	e SDS SDS Prepared by			E-Mail	
2/2/2024 Laboratoire MA		Г	labmat@labmat.com		

## **SECTION 02 - HAZARDS IDENTIFICATION**

Classification WHIMS / GHS		
	Respiratory or skin	sensitization - Respiratory sensitizer category 1
	Germ cell mutager	icity category 1A
	Carcinogenicity ca	tegory 1B
	Reproductive toxic	ity category 1B
	Specific Target Or	gan Toxicity - Repeated exposure category 1
	Respiratory or skin	sensitization - Skin sensitize category 1
		ation - Skin corrosion category 1
	Serious eye dama	ge/eye irritation - Eye irritation category 2
Signal Word	DANGER	
Hazards statements (H)	H314 Causes seve	re skin burns and eye damage.
		an allergic skin reaction.
	H319 Causes seria	ous eye irritation.
	H334 May cause of	allergy or asthma symptoms or breathing difficulties if inhaled.
	H340 May cause g	genetic defects.
	H350 May cause of	cancer.
	H360 May damag	e fertility or the unborn child.
	H372 Causes dam	age to organs through prolonged or repeated exposure.
Precautionary statements (P)	P201	Obtain special instructions before use.
	P202	Do not handle until all safety precautions have been read and understood.
	P260	Do not breathe dust / fume / gas / mist / vapors / spray.
	P261	Avoid breathing dust / fume / gas / mist / vapors / spray.
	P264	Wash the areas of the body that have been in contact with the product after
	1 204	handling.
	P270	Do no eat, drink or smoke when using this product.
	P272	Contaminated work clothing should not be allowed out of the workplace.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P284	Wear respiratory protection.
	P301 + P330 + P3	331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
	P303 + P361 + P	353 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.
	P305 + P351 + P3	338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P308 + P313	IF exposed or concerned: Get medical advice/attention.
	P310	Immediately call a POISON CENTER or doctor/physician.
	P314	Get medical advice/attention if you feel unwell.
	P321	Specific treatment (see section 4 of the SDS and on this label).
	P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
	P337 + P313	If eye irritation persists: Get medical advice/attention.
	P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
	P362 + P364	Take off contaminated clothing and wash it before reuse.
	P363	Wash contaminated clothing before reuse.
	P405	Store locked up.
	P501	Dispose of contents and container in accordance with local, regional and national
PICTOGRAMS		regulations, or contact a specialist waste disposal company.
Other dangers	N	FPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
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# SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%P/P)
Dichromate de potassium	7778-50-9	1,4

## **SECTION 04 - FIRST AID MEASURES**

Eye contact	If irritation persists, seek medical attention.
Skin contact	If irritation persists, seek medical attention.
Inhalation	If breathed in, move person into fresh air. If not breathing, give artificial respiration. 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: Nausea and vomiting. Diarrhea. Cough. Breathing difficulties. Blurry vision. Skin irritation. Redness. 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	Risk of fire or explosion if heated or crushed in presence of combustible products.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Data not available.
Hazardous combustion products	Hazardous combustion products formed under fire conditions: Toxic vapors of potassium chromate Potassium oxides, Chromium oxides.
Special fire and explosion hazards	The product in solution is not considered to be an oxidizer, but during a fire the water would evaporate, and the dry product would regain its oxidizing properties and could feed the flames. Can ignite organic and combustible materials. Potassium dichromate may react violently or explode on contact with: acetone + sulfuric acid, boron + silicon, ethylene glycol (above 100 $^{\circ}$ C), iron (ignition at 1090 $^{\circ}$ C), hydrazine, hydroxylamine, tungsten (ignition at 1700 $^{\circ}$ C). May react violently with incompatible products (Ref Section 10).
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	Evacuate personnel to safe areas. Absorb the product with sand or vermiculite. Do not use cellulose-
containment and cleaning up /	based absorbent. Dilute residues with water, clean and rinse. Ensure a good ventilation of the
Personnal precautions, protective	premises. When handling, wear appropriate safety equipment. Use a respirator as needed. Dispose of
equipment	residues in a container provided for the disposal of hazardous materials. Discharge into the environment
	must be avoided.

## SECTION 07 - HANDLING AND STORAGE

	Store in a cool, dry place. Keep container tightly closed and store away from heat, moisture, combustible and organic products. Avoid storing on a wooden floor. Keep container tightly closed in a dry and well-ventilated place. Protect from sunlight and light.
•	Bottle in the glass preferably. 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. 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 parameters	Basis	
Potassium dichromate	7778-50-9			Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)	
		TWA	0.050000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)	
Remarks	Confirmed Hu	man Carcinog	jen (means that the a	agent is carcinogenic to humans)	
		TWAEV	0.050000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants	
		which expos	sure must be reduced	ccordance with section 108 d to a minimum in accordance with section 42	
		TWA	0.025000 mg/m3	Canada. British Columbia OEL	
	sufficient evid	ence of carci oplies to those	nogenicity in humans e substances confirm	arcinogenic to humans, and used when there is ed as human carcinogens based on the weight of	
		C	0.100000 mg/m3	Canada. British Columbia OEL	
	sufficient evid	ence of carci oplies to those	nogenicity in humans e substances confirme	arcinogenic to humans, and used when there is ed as human carcinogens based on the weight of	
				Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)	
		-	I		
		TWA	0.05 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)	
	Confirmed Hu	man Carcinoç	en (means that the a	agent is carcinogenic to humans)	
		TWAEV	0.05 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants	
		which expos	sure must be reduced	ccordance with section 108 d to a minimum in accordance with section 42	
		TWA	0.025 mg/m3	Canada. British Columbia OEL	
	IARC '1' applies to substances categorized as carcinogenic to humans, and used when there is sufficient evidence of carcinogenicity in humans. ACGIH 'A1' applies to those substances confirmed as human carcinogens based on the weight of evidence from epidemiological studies		arcinogenic to humans, and used when there is ed as human carcinogens based on the weight of		
		С	0.1 mg/m3	Canada. British Columbia OEL	
	sufficient evidence of carcinoger		nogenicity in humans e substances confirme	arcinogenic to humans, and used when there is ed as human carcinogens based on the weight of	
		TWA	0.050000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)	
		TWA	0.05 mg/m3	USA. ACGIH Threshold Limit Values (TLV)	
Data source		Sigma-Al	drich (Millipore Sigm	la)	
Ventilation			Use fan.		
Respiratory		lf work u	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 w	Handle with gloves.		
Eyes		Safety g	Safety goggles with safety shutters.		
Shoes		Safety sł	Safety shoes.		
Clothing		Labcoat.	Labcoat. Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.		
Engineering control				ewash stations in the workplace in case of an emergency and a ventilation of concentrations in the air below the exposure limit values.	

### SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid.
Appearance	Liquide orange.
Odour	Donnée non disponible.
Odour threshold	Data not available
pН	Solution aqueuse 1% = pH 4.04 Solution aqueuse 10% = pH 3.57 (Dichromate de potassium).
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. Insoluble dans l'alcool.
Vapour density	Data not available
Relative density	1.01g/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.
Chemical stability	Sensitive to light. Sensitive to heat.
Possibility of hazardous reactions	Oxidizer. Keep away from open flames, hot surfaces and sources of ignition. May react violently with incompatible substances.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid the accumulation of static electricity. Heat, flames, sparks. Light sensitive.
Incompatible material	When pure, the product reacts with the following products: Acids. Powdered metals. Strong reducing agents (potassium, sodium, metal hydrides), acids, ethylene glycol, iron, hydrazine, hydroxylamine, organic and combustible materials, easily oxidizable substances, tungsten, heat and humidity.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions Potassium oxides, Chromium oxides.

### SECTION 11 - TOXICOLOGICAL INFORMATION

#### POTASSIUM DICHROMATE

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	Irritation and dermatitis. Exposed areas of the skin, including the fingers, the back of the hand and the forearms may present small ulcerations ("chrome sori").
- 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.
Acute toxicity (Ingestion)	Severe irritation of the digestive tract. Dysphagia, abdominal pain, haemorrhagic enteritis, cramps, diarrhea, melena, intense thirst, nausea and vomiting, tubular nephritis and possible hepatotoxicity, convulsions, circulatory collapse, unconsciousness, coma and can lead to death.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, respiratory allergies, cutaneous reactions (chromium sori), kidney and lung damage, chest pain, cough, dyspnea, laryngitis, pharyngitis, headache, dizziness, ulceration and perforation of the septum nasal, discoloration of the teeth, metallic taste in the mouth, fatigue, digestive disorders (inflammation and ulceration of the gastrointestinal tract), weight loss and loss of appetite, seizures, nausea and vomiting. Prolonged exposure to this product is likely to cause cancer.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 67-168 mg/kg. LD50 Dermal - Rabbit - 2000 mg/kg.
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - 4h - 0.09 mg/L.

#### 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: 4623 mg/kg - Rat LD50 Dermal: > 5000 mg/kg - Rabbit LC50 Inhalation: 6.2mg/L - 4h - Rat

#### **SECTION 12 - ECOLOGICAL INFORMATION**

	Potassium dichromate: Toxicity to fish: LC50 - Lepomis macrochirus - 0.131 mg/l - 96.0 h. Mortality NOEC - Pimephales promelas (fathead minnow) - 6 mg/l - 7.0 d Toxicity to daphnia and other aquatic invertebrates: Mortality NOEC - Daphnia magna (Water flea) - 0.035 mg/l - 48 h. Toxicity to algae: EC50 - Pseudokirchneriella subcapitata - 0.31 mg/l - 72 h
Persistence and degradability	Data not available.
Bioaccumulative potential	Bioaccumulation Oncorhynchus mykiss (rainbow trout) - 180 d. Bioconcentration factor (BCF): 17. 4.
Mobility in soil	Probable mobility due to its solubility in water.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## **SECTION 13 - DISPOSAL CONSIDERATIONS**

	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**

Germ cell mutagenicity category 1A Carcinogenicity category 1B Reproductive toxicity category 1B Specific Target Organ Toxicity - Repeated exposure category 1 Respiratory or skin sensitization - Skin sensitize category 1 Skin corrosion/irritation - Skin corrosion category 1 Serious eye damage/eye irritation - Eye irritation category 2	WHIMS CANADA	Reproductive toxicity category 1B Specific Target Organ Toxicity - Repeated exposure category 1 Respiratory or skin sensitization - Skin sensitize category 1 Skin corrosion/irritation - Skin corrosion category 1
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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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