

Centre Anti-Poison pour le Québec: (800) 463-5060 Tél. (Qc): (418) 660-8666 / 800-890-8666 Fax. (Qc): (418) 660-8998

SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier			Product Use		
OXALIC ACID DIHYDRATE			Laboratory use		
Chemical formula				Product code	Molar weight
H ₂ C ₂ O ₄ .2H ₂ O				OP-0166; OR-0109; OT-0166	126,07
Chemical name / Commercial name / Synonymous OXALIC ACID DIHYDRATE, ETHANEDIOIC ACID DIHYDRATE, ETHANEDIONIC ACID DIHYDRATE					
Supplier's name			Address-Street		
Laboratoire MAT		610, Adanac Street			
City		Province			
Québec		Québec			
Postal code	Internet		Phone number		
G1C 7B7	www.labmat.com		418-660-8666 / 800-890-8666		
Emergency phone	CANUTEC: 613-996-6666		CENTRE ANTI-POISON DU QUÉBEC 800-463-5060		
Date SDS		SDS Prepared by		E-Mail	
3/30/2021	Laboratoire MA		Т	labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS				
,	Serious eye damage/eye irritation - Serious eye damage category 1			
	Skin corrosion/irri	Skin corrosion/irritation - Skin irritation category 2		
	Acute toxicity - Oral category 4			
	Acute toxicity - De	Acute toxicity - Dermal category 4		
Signal Word	DANGER			
Hazards statements (H)	H318 Causes seri	ous eye damage.		
	H302 Harmful if s	wallowed.		
	H312 Harmful in a	contact with skin.		
	H315 Causes skin	irritation.		
Precautionary statements (P)	P280	Wear protective gloves/protective clothing/eye protection/face protection.		
	P305 + P351 + F	2338 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.		
	P264	Wash the areas of the body that have been in contact with the product after handling.		
	P270	Do no eat, drink or smoke when using this product.		
	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.		
	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.		
	P332 + P313	If skin irritation occurs: Get medical advice/attention.		
	P362 + P364	Take off contaminated clothing and wash it before reuse.		
	P501	Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.		
PICTOGRAMS	!			
Other dangers	N	IFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)		
	Health 3			
	Fire 1			
	Reactivity 0			
	Special danger			

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Acide oxalique dihydrate	6153-56-6	<=100

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. 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: Paresthesia (tingling, stiffness of the skin (cardboard skin), numbness). Skin lesions. Convulsions. Tremors. Tetany (muscle contractures). 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	Fine dust in sufficient concentration may be combustible, or explode if confined to a small space and subject to a source of ignition.
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: Formic acid. Carbon oxides.
Special fire and explosion hazards	May react violently with incompatible products (Ref Section 10). Oxalic acid dihydrate in high concentration in the air is capable of creating a dust explosion. Reacts with certain silver compounds to form silver oxalate which is explosive.
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	Evacuate personnel to safe areas. Pick up with a shovel or broom, taking care not to scatter dust. Cover
containment and cleaning up /	the residues with sodium carbonate or calcium oxide to neutralize the product. Dilute residues with water,
Personnal precautions, protective	clean and rinse. Ensure a good ventilation of the premises. Dispose of residues in a container provided
equipment	for the disposal of hazardous materials. Use a respirator as needed. Use personal protective
	equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Avoid breathing dust.

SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Store in cool place. Keep container tightly closed and store away from heat, moisture, and incompatible products. Protect from the sun's rays. Keep container tightly closed in a dry and well-ventilated place. Moisture sensitive.
Methods of handling	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. 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	NoCAS	Control parameters	Value	Basis			
Oxalic acid	144-62-7	TWA	1.000000 mg/m3	Canada. LEP Colombie Britannique			
		STEL	2.000000 mg/m3	Canada. LEP Colombie Britannique			
		TWA	1.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)			
Remarques	La limite d'ez compenser le	La limite d'exposition professionnelle est basée sur les effets de l'irritation et son ajustement pour compenser les emplois du temps de travail inhabituels n'est pas nécessaire					
		STEL	2.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)			
	La limite d'ez compenser le	La limite d'exposition professionnelle est basée sur les effets de l'irritation et son ajustement pour compenser les emplois du temps de travail inhabituels n'est pas nécessaire					
		TWAEV	1.000000 mg/m3	Canada. Ontario OELs			
		STEV	2.000000 mg/m3	Canada. Ontario OELs			
		VEMP	1.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants			
		VEMP	1 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants			
		VECD	2 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants			
		VECD	2.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants			
		TWA	1 mg/m3	Canada. British Columbia OEL			
		STEI	2 mm /m2	Canada British Columbia OEl			

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	Handle with gloves.
Eyes	Safety goggles with safety shutters.
Shoes	Safety shoes.
Clothing	Labcoat.
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	Solid.
Appearance	Cristaux blancs-
Odour	inodore.
Odour threshold	Data not available
рН	Solution aqueuse 0.1M = pH 1.3.
Melting point / Freezing point	102°C
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	<0.01 hPa (< 0.01 mmHg) à 20 °C-
Vapour density	Data not available
Relative density	Data not available
Solubility	Soluble dans l'eau (env.126.1 g/l à 20 °C (68 °F)) ; soluble dans l'alcool.
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	Acid product, reacts strongly with strong bases. May react violently with incompatible substances.
Chemical stability	Moisture sensitive. Sublimates with heat, with partial decomposition.
Possibility of hazardous reactions	Risk of explosion in contact with strong oxidants.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid moisture. Decomposes at 155°C.
Incompatible material	Strong oxidizing agents (nitric acid, perchloric acid, peroxides, chlorates and perchlorates), acid chlorides, corroded steel, furfuryl alcohol, silver and its salts, bases, alkali metals , chlorate and sodium hypochlorite, heat and humidity.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Formic acid. Carbon oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

OXALIC ACID DIHYDRATE

Routes of exposure	Ingestion and inhalation.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Severe irritation and burns that may cause permanent eye damage.
- Skin	Severe irritation and tissue burn. Prolonged contact with oxalic acid solutions produces skin lesions that become worse over time; these can cause gangrenous cyanosis.
- 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)	Burns and corrosion of the digestive tract. Possibility of oesophageal or gastric perforation and bleeding, kidney damage, abdominal pain, diarrhea, nausea and vomiting, hypocalcemia, paresthesia, myoclonus, spasmodic muscle contractions, fast and irregular pulse, convulsions, hypotension, coma and can lead to death.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, skin lesions, brittle and blackish nails, kidney damage, nerve disorders, chest pain, cough, dyspnea, laryngitis, headache, dizziness, albuminuria, irritability, sweating, salivation, fatigue, loss of weight and loss of appetite, seizures, nausea and vomiting. Hypocalcemia, kidney stones, tetany.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 375 mg/kg. LD50 Dermal - Rabbit - 20 000 mg/kg
CL50 (specify species and route of entry)	Data not available.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Toxicity to fish: LC50: Leuciscus idus melanotus: 160 mg/L - 48 h Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 137 mg/L -48 h
Persistence and degradability	Biodegradability aerobic. Readily biodegradable.
Bioaccumulative potential	Data not available.
Mobility in soil	Data not available.
Other adverse effects	Data not available.

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

WHIMS CANADA	Serious eye damage/eye irritation - Serious eye damage category 1 Skin corrosion/irritation - Skin irritation category 2
	Acute toxicity - Oral category 4 Acute toxicity - Dermal category 4

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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