



Centre Anti-Poison pour le Québec: (800) 463-5060  
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## SAFETY DATA SHEET

### SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier CITRIC ACID (MONOHYDRATE)		Product Use Laboratory use	
Chemical formula C <sub>6</sub> H <sub>8</sub> O <sub>7</sub> .H <sub>2</sub> O		Product code CC-0152 ; CR-0152	Molar weight 210,14
Chemical name / Commercial name / Synonymous CITRIC ACID MONOHYDRATE, BETA-HYDROXYTRICARBOXYLIC ACID, BETA-HYDROXY-TRICARBOXYLIC ACID, 2-HYDROXY-1,2,3-PROPANETRICARBOXYLIC ACID			
Supplier's name Laboratoire MAT		Address-Street 610, Adanac Street	
City Québec		Province Québec	
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Emergency phone	CANUTEC: 613-996-6666	CENTRE ANTI-POISON DU QUÉBEC 800-463-5060	
Date SDS 9/9/2019	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

### SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Serious eye damage/ Eye irritation category 2A
Signal Word	WARNING
Hazards statements (H)	H319 Causes serious eye irritation.
Precautionary statements (P)	P264 Wash the areas of the body that have been in contact with the product after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/attention.
PICTOGRAMS	
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

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Acide citrique monohydrate	5949-29-1	<=100

## SECTION 04 - FIRST AID MEASURES

<b>Eye contact</b>	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.
<b>Skin contact</b>	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
<b>Inhalation</b>	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
<b>Ingestion</b>	If the person is conscious, rinse the mouth with water. Never give anything by mouth to an unconscious person. Consult a physician.
<b>Most important symptoms and effects (acute and delayed)</b>	Ref. section 11.
<b>Immediate medical attention and special treatment, if necessary</b>	In case of medical consultation, keep this sheet available.
<b>General advice</b>	Show this safety data sheet to the doctor in attendance.

## SECTION 05 - FIREFIGHTING MEASURES

<b>Flammability</b>	No
<b>Ignition conditions</b>	Non flammable.
<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. Carbon oxides.
<b>Special fire and explosion hazards</b>	Anhydrous citric acid may react violently or even explode on contact with nitric or perchloric acids, strong bases and metal nitrates. The risks are increased when these mixtures are heated. May react violently with incompatible products (Ref Section 10).
<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. Ensure a good ventilation of the premises. Avoid breathing vapours, mist or gas. Avoid dust formation. Pick up with a shovel or broom, taking care not to scatter dust. Dispose of residues in a container provided for the disposal of hazardous materials. Dilute residues with water, clean and rinse. Do not let product enter drains.
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## SECTION 07 - HANDLING AND STORAGE

<b>Conditions for safe storage</b>	Keep container tightly closed in a dry and well-ventilated place. Store in a cool, dry place. Protect from the sun's rays.
<b>Methods of handling</b>	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.

## SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### Workplace control parameters

Components	CAS-No.	Value	Control Citric acid	
Citric acid monohydrate	5949-29-1	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

<b>Physical state</b>	Solid.
<b>Appearance</b>	Poudre cristalline de couleur blanche.
<b>Odour</b>	inodore.
<b>Odour threshold</b>	Data not available
<b>pH</b>	1.8 à 50g/L.
<b>Melting point / Freezing point</b>	135-152°C
<b>Initial boiling point</b>	Data not available
<b>Boiling range</b>	Data not available
<b>Flash point</b>	Data not available
<b>Evaporation rate</b>	Data not available
<b>Flammability</b>	No
<b>Lower flammable / Explosive limit</b>	Data not available
<b>Upper flammable / Explosive limit</b>	Data not available
<b>Vapour pressure</b>	Data not available
<b>Vapour density</b>	Data not available
<b>Relative density</b>	1.542g/cm <sup>3</sup>
<b>Solubility</b>	Soluble dans l'eau, l'alcool et l'éther.
<b>Partition coefficient water/n-octanol</b>	Data not available
<b>Auto-ignition temperature</b>	1010°C
<b>Decomposition temperature</b>	Data not available
<b>Viscosity</b>	Data not available

## SECTION 10 - STABILITY AND REACTIVITY

<b>Reactivity</b>	Non-reactive under normal conditions.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	Stable under normal conditions.
<b>Conditions of instability (Including sensitivity to shock / static discharge / vibration)</b>	Avoid moisture.
<b>Incompatible material</b>	Strong oxidizing agents, strong bases, nitric and perchloric acid, metal nitrates, heat and humidity.
<b>Hazardous decomposition products</b>	Hazardous decomposition products formed under fire conditions. Carbon oxides.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### CITRIC ACID (MONOHYDRATE)

<b>Routes of exposure</b>	Ingestion, inhalation, skin and eyes.
<b>Acute exposition effects / symptoms:</b>	By exposure route below.
<b>- Eyes</b>	Severe irritation that may cause eye damage.
<b>- Skin</b>	Severe irritation and dermatitis.
<b>- Inhalation</b>	Irritation of the mucous membranes and respiratory tract. Nervous disorders, dizziness, headache, watery eyes, cough, dyspnea, nausea and vomiting.
<b>Acute toxicity (Ingestion)</b>	Irritation of the mucous membranes. Gastrointestinal disorders, cramps, enteritis, diarrhea, headache, dizziness, convulsions, nausea and vomiting.
<b>Chronic exposure effects / symptoms</b>	Burning sensation, dermatitis, conjunctivitis, nervous disorders, respiratory allergy, watery eyes, dizziness, cough, dyspnea, laryngitis, loss of appetite, fatigue, convulsions, nausea and vomiting. Alteration of dental enamel.
<b>DL50 (specify species and route of entry)</b>	DL50- Oral(e) - mouse - 5.79 g/kg LD50 Dermal - Data not available.
<b>CL50 (specify species and route of entry)</b>	LC50 - Inhalation - Data not available.

## SECTION 12 - ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	LC50 - Leuciscus idus (Golden orfe) - 440-760 mg/L - 96 h CE50 - water flea - 120 mg/L - 72 h
<b>Persistence and degradability</b>	Data not available.
<b>Bioaccumulative potential</b>	Data not available.
<b>Mobility in soil</b>	Data not available.
<b>Other adverse effects</b>	Data not available.

## SECTION 13 - DISPOSAL CONSIDERATIONS

<b>Waste Disposal Method</b>	Dispose of contents / container in accordance with local / regional / national / international regulations / or contact a specialist waste disposal company.
<b>Contaminated Packaging</b>	Dispose of as unused product.

## SECTION 14 - TRANSPORT INFORMATION

<b>UN Number</b>	N/R
<b>UN Proper shipping name</b>	
<b>Transport hazard class(es)</b>	
<b>Packing group</b>	
<b>Limited quantity index</b>	
<b>ERAP Index</b>	
<b>Special precautions</b>	

## SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Serious eye damage/ Eye irritation category 2A
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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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