

CITRIC ACID

SECTION 1. IDENTIFICATION

Product Identifier CITRIC ACID

Other Means of Identification: CITRIC ACID

Supplier Identifier: Integrity Chemical Solutions Inc. 205 Crystal Shores Drive, Okotoks, Alberta T1S 2L1 403.988.7695

Emergency Phone No.

FOR EMERGENGIES INVOLVING DANGEROUS GOODS

Call CANUTEC'S 24-Hour Number:

1-888-CANUTEC (226-8832) (North American use) and/or 1-613-996-6666 (International use)

SECTION 2. HAZARD IDENTIFICATION

Classification

Eye irritation - Category 2A

Label Elements



Signal Word:

Warning

Causes serious eye irritation.

Wash thoroughly after handling.

Wear eye protection/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Storage:

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers	Other Names
CITRIC ACID	77-92-9	80-100		

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor. If breathing has stopped, trained personnel should begin rescue breathing. Call a Poison Centre or doctor.

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes. Call a Poison Centre or doctor if you feel unwell. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely.

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Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If a contact lens is present, DO NOT delay flushing or attempt to remove the lens. Immediately call a Poison Centre or doctor. Specific treatment is required.

Ingestion

Rinse mouth with water. If vomiting occurs naturally, lie on your side in the recovery position. Rinse mouth with water again. Immediately call a Poison Centre or doctor.

Most Important Symptoms and Effects, Acute and Delayed

If inhaled:

Can irritate the nose and throat. Symptoms may include coughing, shortness of breath, difficult breathing and tightness in the chest.

If on skin:

Symptoms include pain, redness, and swelling.

If in eyes:

Causes moderate to severe irritation.

If swallowed:

Can burn the lips, tongue, throat and stomach. Symptoms may include nausea, vomiting, stomach cramps and diarrhea.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

Specific Hazards Arising from the Product

Does not burn.

When ignited may produce carbon dioxide, carbon monoxide, and hydrocarbons.

Special Protective Equipment and Precautions for Fire-fighters

Fight fire from a safe distance or a protected location.

A full-body encapsulating chemical protective suit with positive pressure SCBA may be necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel.

Environmental Precautions

It is good practice to prevent releases into the environment. Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Stop or reduce leak if safe to do so. Avoid generating dust. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid generating dusts. Prevent uncontrolled release of product. Avoid heating that will increase the amount of vapours. Wear personal protective equipment to avoid direct contact with this chemical.

It is good practice to: avoid breathing product; avoid skin and eye contact and wash hands after handling.

Conditions for Safe Storage

Store in an area that is: cool, dry, well-ventilated. Store in the original, labelled, shipping container.

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA = US Occupational Safety and Health Administration.

PEL = Permissible Exposure Limits.

Total Dust 15 mg/m3

Respirable Fraction 5 mg/m3.

Appropriate Engineering Controls

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Neoprene rubber.

Respiratory Protection

Wear a NIOSH approved powered air-purifying respirator with an appropriate cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance White powder.

Odour Odourless

Odour Threshold Not available

pH 1.7 (10% solution)

Melting Point/Freezing Point 307 °F (153 °C) (melting); Not available (freezing)

Initial Boiling Point/Range175 °CFlash PointNot availableVapour PressureNot availableRelative Density (water = 1)1.665 at 20 °C

Solubility 60 g/100 mL (Soluble) in water

Decomposition Temperature 175 °C

Viscosity Not available (kinematic); Not available (dynamic)

Other Information

Physical State Solid

Molecular Weight 192.12 g/mol Vapour Pressure at 50 deg C Not available

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

Conditions to Avoid

Direct sunlight. Extremely high or low temperatures.

Incompatible Materials

Strong acids. Strong bases. Copper, aluminum alloys, zinc.

Hazardous Decomposition Products

Oxides of Carbon.

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Date of Last Revision:

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SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Oral LD50 5400 mg/kg (rat)

Skin Corrosion/Irritation

Animal tests show mild irritation. 500 mg 24H (rabbit).

SKIN IRRITANT. Symptoms include pain, redness, and swelling.

Serious Eye Damage/Irritation

Animal tests show serious eye irritation. 750 mg 24H (rabbit).

EYE IRRITANT. Causes moderate to severe irritation. May cause serious eye damage, including burns.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Can irritate the nose and throat. Symptoms may include coughing, shortness of breath, difficult breathing and tightness in the chest.

Ingestion

Can burn the lips, tongue, throat and stomach. Symptoms may include nausea, vomiting, stomach cramps and diarrhea.

No information was located for: STOT (Specific Target Organ Toxicity) - Single Exposure, STOT (Specific Target Organ Toxicity) - Repeated Exposure, Respiratory and/or Skin Sensitization, Carcinogenicity, Development of Offspring, Sexual Function and Fertility, Germ Cell Mutagenicity, Interactive Effects

SECTION 12. ECOLOGICAL INFORMATION

TLM 80 ppm 24H (Mosquito fish).

Other Adverse Effects

Avoid release to the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Recycle and reuse product, if possible. Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

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SECTION 16. OTHER INFORMATION

SDS Prepared By Integrity Chemical Solutions Inc.

Phone No. 403.988.7695 **Date of Preparation** June 1, 2023

Disclaimer This Health and Safety information is correct to the best of our knowledge and belief at the

date of its publication, but we cannot accept liability for any loss, injury or damage which may result from its use. We shall ensure, so far as is reasonably practicable, that any revision of this Data Sheet is sent to all customers to whom we have directly supplied this substance, but must point out that it is the responsibility of any intermediate supplier to ensure that such revision is passed to the ultimate user. The information given in the Data Sheet is designed only as guidance for safe handling, storage, and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent

personnel, within a controlled environment.

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