

CITRIC ACID

SECTION 1. IDENTIFICATION

Product Identifier CITRIC ACID
Other Means of Identification Organic Acid
Product Family Alkalinity Control
Recommended Use Drilling Fluid Additive.
Supplier Identifier Bri-Chem Supply Ltd., Bay 4, 5510 - 3rd Street SE, Calgary, Alberta, T2H 1J9, Bri-Chem Supply, 403-252-5904, www.brichemsupply.com
Emergency Phone No. 306-634-3411

SECTION 2. HAZARD IDENTIFICATION

Classification

Eye irritation - Category 2A

Label Elements



Signal Word:

Warning

Hazard Statement(s):

Causes serious eye irritation.

Precautionary Statement(s):

Prevention:

Wash hands thoroughly after handling.

Wear eye protection/face protection.

Response:

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

Continue rinsing.

If eye irritation persists: Get medical advice or attention.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
Citric acid	77-92-9	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

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.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If adverse symptoms persist, seek medical attention.

Ingestion

Give patient large quantities of water or milk then induce vomiting. If swallowed, give patient large quantities of water then induce vomiting.

Most Important Symptoms and Effects, Acute and Delayed

If on skin:

May cause mild irritation.

If in eyes:

May cause mild irritation.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Dry chemical, carbon dioxide, foam, water.

Specific Hazards Arising from the Product

Non-flammable.

Special Protective Equipment and Precautions for Fire-fighters

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.

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

Contain spill and pick up solids by sweeping/shoveling into tightly sealed containers.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid ingestion. Avoid skin and eye contact. Practice reasonable caution and personal cleanliness.

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. Keep container tightly closed and away from incompatible materials.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

LD50 (oral mouse)=5040 mg/kg

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Dermal, acute: 500 mg/24 hr= moderate

Eye: 750 mg/24hr= severe.

Appropriate Engineering Controls

Provide mechanical ventilation to prevent dust concentrations and to reduce potential exposure.

Individual Protection Measures

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Eye/Face Protection

Wear chemical safety goggles.

Skin Protection

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

Respiratory Protection

In absence of proper ventilation, recommend NIOSH-approved dust respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**Basic Physical and Chemical Properties**

Appearance	White Granules. Particle Size: Not applicable
Odour	Odourless
Odour Threshold	Not available
pH	2.2 (0.1 N solution)
Melting Point/Freezing Point	153 °C (melting); Not applicable (freezing)
Initial Boiling Point/Range	Not available
Flash Point	Not applicable
Evaporation Rate	Not applicable
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	1.665 at 20 °C
Solubility	60 g/100 mL (Soluble) in water; Not applicable (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not applicable
Auto-ignition Temperature	1000 - 1020 °C
Decomposition Temperature	Not applicable
Viscosity	Not applicable (kinematic)
Other Information	
Physical State	Solid
Molecular Formula	Not applicable
Molecular Weight	Not applicable
Bulk Density	Not applicable
Surface Tension	Not applicable
Critical Temperature	Not applicable
Electrical Conductivity	Not applicable
Vapour Pressure at 50 deg C	Not applicable
Saturated Vapour Concentration	Not applicable

SECTION 10. STABILITY AND REACTIVITY**Chemical Stability**

Normally stable.

Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

Incompatible Materials

Avoid contact with metal nitrates and strong oxidizers.

Incompatible with copper, zinc, aluminum and their alloys due to corrosion.

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Hazardous Decomposition Products

Carbon monoxide and carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

Mild irritancy of product.

Acute Toxicity

Oral: LD50 6730 gm/kg (rat)

Skin Corrosion/Irritation

May cause mild irritation.

Serious Eye Damage/Irritation

May cause mild irritation.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Treat as a nuisance dust.

Ingestion

May cause irritation of mucous membranes and gastrointestinal tract.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Irritation

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

SECTION 12. ECOLOGICAL INFORMATION

No ecotoxicity or environmental fate data available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of according to Federal, Provincial or Municipal guidelines or laws. Containers should NOT be re-used. Containers should be disposed of in accordance with government regulations.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations.

Special Precautions Please note: This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

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

Canada

WHMIS 1988 Classification



Class D2B

D2B - Toxic (Skin irritant; Eye irritant)

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SECTION 16. OTHER INFORMATION

NFPA Rating **Health - 2** **Flammability - 0** **Instability - 0**
SDS Prepared By Bri-Chem Supply Ltd
Phone No. (403) 252-5904
Date of Preparation October 01, 2017

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