



# CITRIC ACID

### **SECTION 1. IDENTIFICATION**

Product Identifier CITRIC ACID
Other Means of Organic Acid

Identification

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.** ChemTrec, (800) 424-9300, 24/7

### **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.

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#### **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 uo 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

pH
Odourless
Not available
2.2 (0.1 N solution)

Melting Point/Freezing Point 153 °C (melting); Not applicable (freezing)

Initial Boiling Point/RangeNot availableFlash PointNot applicableEvaporation RateNot applicable

Upper/Lower Flammability or

**Explosive Limit** 

Not available (upper); Not available (lower)

Vapour PressureNot availableVapour Density (air = 1)Not availableRelative Density (water = 1)1.665 at 20 °C

**Solubility** 60 g/100 mL (Soluble) in water; Not applicable (in other liquids)

Partition Coefficient, Not applicable

n-Octanol/Water (Log Kow)

**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 srong 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
Phone No.

Date of Preparation

Date of Last Revision

Bri-Chem Supply Ltd
(403) 252-5904

October 01, 2015

July 29, 2016

**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. Should further information be required, this can be

obtained through the sales office whose address is at the top of this data sheet.

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