

CHEMBREAK ECA**SECTION 1. IDENTIFICATION**

Product Identifier CHEMBREAK ECA
Other Means of Identification Enzyme and Acid Blend
Product Family Polymer Enzyme Breaker
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**

Skin irritation - Category 2; Eye irritation - Category 2A

Label Elements

Signal Word:

Warning

Hazard Statement(s):

Causes skin and eye irritation.

Precautionary Statement(s):

Prevention:

Wash hands and skin thoroughly after handling.

Wear eye protection/face protection.

Wear protective gloves.

Response:

IF ON SKIN: Wash with plenty of water.

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

Continue rinsing.

If skin irritation occurs: Get medical advice or attention.

If eye irritation persists: Get medical advice or attention.

Take off contaminated clothing and wash it before reuse.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Citric acid	77-92-9	30-60		

SECTION 4. FIRST-AID MEASURES

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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. Get medical attention immediately.

Skin Contact

Quickly and gently blot or brush away excess chemical. Quickly take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Immediately flush with lukewarm, gently flowing water for at least 30 minutes. If irritation develops or persists, seek medical attention.

Eye Contact

Quickly and gently blot or brush chemical off the face. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 30 minutes, while holding the eyelid(s) open. If adverse symptoms persist, seek medical attention.

Ingestion

Have victim rinse mouth with water. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious or convulsing victim. Get medical attention.

First-aid Comments

Ensure that medical personnel are aware of the material(s) involved, and take the appropriate precautions to protect themselves.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Water fog, foam, carbon dioxide (CO₂) or dry chemical powder.

Unsuitable Extinguishing Media

DO NOT use water jet.

Specific Hazards Arising from the Product

Not classified as flammable or combustible.

Special Protective Equipment and Precautions for Fire-fighters

Evacuate area of all unnecessary personnel. Fight fire from a safe distance or a protected location. Approach fire from upwind to avoid hazardous vapours or gases.

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

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. Shut off all ignition sources; no smoking, flares or flames in hazard area.

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. Contain spill and pick up solids by sweeping/shoveling into tightly sealed containers. Contain and soak up spill with absorbent that does not react with spilled product. Contaminated absorbent poses the same hazard as the spilled product. Place used absorbent into suitable, covered, labelled containers for disposal. After cleaning, flush away traces with water. Collect washing for disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Prevent uncontrolled release of product. Use good personal hygiene and housekeeping. Wear personal protective

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equipment to avoid direct contact with this chemical. Avoid contact with skin and eyes. Avoid ignition sources. Do not cut, grind, weld or drill on or near the containers. Wash thoroughly after handling.

Handle in accordance with good industrial hygiene and safety practice. 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. Do not store in unlabeled containers.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Citric Acid

Exposure Limits:

Dermal, acute: 500 mg/24 hr = moderate

Eye: 75 mg/24 hr = severe

Appropriate Engineering Controls

Provide mechanical ventilation to prevent dust concentrations and to reduce potential exposure. Provide emergency eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles.

Skin Protection

Prevent skin contact. Wear chemical protective clothing e.g. gloves, aprons, boots. Chemically-resistant gloves should be used.

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 powder. Particle Size: Not applicable
Odour	Odourless
Odour Threshold	Not available
pH	2.6 (10% solution)
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Initial Boiling Point/Range	Not available
Flash Point	> 93.3 °C
Evaporation Rate	Not available
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)	1.540
Solubility	Soluble in water; Not applicable (in other liquids)
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Other Information	
Physical State	Solid
Molecular Formula	Not applicable
Molecular Weight	Not applicable
Bulk Density	Not available

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SECTION 10. STABILITY AND REACTIVITY

Chemical Stability

Normally stable.

Conditions to Avoid

Generation of dust. Accumulation of static charge.

Incompatible Materials

Strong bases (e.g. sodium hydroxide), strong oxidizing agents (e.g. perchloric acid).

Hazardous Decomposition Products

Oxides of carbon. Smoke on combustion.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Citric Acid

LD50 Oral Mouse: 5040 mg/kg

LD50 Oral Rat: 6730 mg/kg

Skin Corrosion/Irritation

SKIN IRRITANT. Causes moderate to severe irritation. Repeated or prolonged exposure can irritate the skin. Symptoms include pain, redness and swelling.

Animal tests show mild irritation (citric acid).

Serious Eye Damage/Irritation

EYE IRRITANT. Causes moderate to severe irritation. Symptoms include sore, red eyes and tearing.

Animal tests show moderate to severe irritation (citric acid).

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Can cause severe irritation of the nose and throat. Symptoms may include coughing, shortness of breath, difficulty breathing and tightness in the chest.

Ingestion

Can irritate the mouth, throat and stomach. Symptoms may include nausea, vomiting, stomach cramps and diarrhea.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

No known effects of long-term (chronic) exposure.

No information was located for: Respiratory and/or Skin Sensitization, Carcinogenicity, Development of Offspring, Sexual Function and Fertility, Germ Cell Mutagenicity, Interactive Effects

SECTION 12. ECOLOGICAL INFORMATION

Environmental fate of this material is not available.

Ecotoxicity

Citric Acid

LC50 96-hr Goldfish: 440-706 mg/L

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Recycle and reuse product, if possible. Dispose of in accordance with federal, provincial and local government regulations.

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SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG 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

Canada

WHMIS 1988 Classification



Class D2B

D2B - Toxic (Skin irritant; Eye irritant)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by the Controlled Products Regulations.

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All intentional components of this product are either on the DSL, the confidential DSL or notifications / import restrictions are in place.

USA

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

All ingredients are listed on the TSCA Inventory.

SECTION 16. OTHER INFORMATION

NFPA Rating **Health - 2** **Flammability - 0** **Instability - 0**

SDS Prepared By Bri-Chem Supply Ltd

Phone No. (403) 252-5904

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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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