



# MATERIAL SAFETY DATA SHEET

## SECTION I: IDENTIFICATION OF PRODUCT

**PRODUCT NAME:** Citric Acid  
**PRODUCT USE:** Oil Well Fluid & Cement Additive  
**CHEMICAL FAMILY:** Organic Acid

### WORK PLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

**WHMIS CLASSIFICATION:** D-2(B)  
**WORK PLACE HAZARD:** Skin & Eye Irritant

### TRANSPORTATION OF DANGEROUS GOODS (TDG)

**SHIPPING NAME:** Not Regulated Under TDG  
**TDG CLASSIFICATION:** N/A  
**UN NUMBER (PIN):** N/A  
**PACKING GROUP:** N/A

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## SECTION II: HAZARDOUS INGREDIENTS

<u>INGREDIENT</u>	<u>PERCENT (%)</u>	<u>CAS NUMBER</u>	<u>LD<sub>(50)</sub> Oral-Rat</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Citric Acid	100	77-92-9	6730 mg/kg	N/A	N/A

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## SECTION III: TOXICOLOGICAL PROPERTIES

**ROUTE OF ENTRY:**  SKIN     EYE CONTACT     INHALATION     INGESTION

**CHRONIC EXPOSURE:** Non- toxic, non- volatile, non-hazardous nuisance dust symptoms, low risk allergen.

**EYE CONTACT:** May cause eye irritation.

**SKIN CONTACT:** May cause irritation.

**INGESTION:** Irritation of mucous membranes. May cause gastrointestinal irritation.

**INHALATION:** Dust may irritate the nose and throat.

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## SECTION IV: FIRST AID MEASURES



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**SKIN CONTACT:** Immediately flush with water for 15min. and remove contaminated clothing. If irritation persists seek medical attention.

**EYE CONTACT:** Immediately flush eye with water for 15 minutes. Call physician.

**INGESTION:** Give large quantities of water or milk. Call physician.

**INHALATION:** Remove to fresh air. Give artificial respiration if necessary. Call physician.

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## SECTION V: PHYSICAL DATA

**APPEARANCE AND ODOUR:** Solid white crystals; odourless

**SPECIFIC GRAVITY:** 1.665 g/cc

**BOILING POINT (°C):** N/A

**MELTING POINT (°C):** 153°C

**SOLUBILITY IN WATER:** 60% @ 20°C

**PERCENT VOLATILE BY VOLUME:** N/A

**EVAPORATION RATE:** N/A

**VAPOUR PRESSURE (mm Hg):** N/A

**pH:** 0.1N Solution = 2.2

**VAPOUR DENSITY (Air = 1):** N/A

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## SECTION VI: FIRE AND EXPLOSION HAZARD DATA

**FLASH POINT** Non-flammable

**FLAMMABLE LIMITS** N/A

**EXTINGUISHING MEDIA** N/A

**SPECIAL FIRE FIGHTING PROCEDURES** Self-contained respirators required for fire fighting personnel.

**UNUSUAL FIRE AND EXPLOSION HAZARDS** N/A

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## SECTION VII: REACTIVITY DATA

**STABILITY:** Stable [XX] Unstable [ ]

**INCOMPATIBILITY (CONDITIONS TO AVOID):** Alkali metals, organic acids, oxides of sulphur, strong bases.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, carbon dioxide.



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HAZARDOUS POLYMERIZATION:

Will Not Occur [XX]

May Occur [ ]

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## VIII: PREVENTIVE MEASURES

### SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION	Suggest NIOSH/MESA approved dust mask.
VENTILATION	Ventilate adequately.
PROTECTIVE GLOVES	Suggest plastic or rubber.
EYE PROTECTION	Suggest goggles.
OTHER PROTECTIVE EQUIPMENT (Specify)	As necessary to prevent contact with skin; Make eye wash station available.

### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Avoid all skin contact. Keep containers closed when not in use. Store in cool well ventilated area.

### STEPS TO BE TAKEN IN CASE THE MATERIAL IS SPILLED OR RELEASED

Contain the spill. Pick up solids and place in a tightly sealed container.

### WASTE DISPOSAL METHOD

In accordance with municipal, provincial and federal regulation.

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## SECTION IX: PREPARATION

THE INFORMATION CONTAINED HEREIN IS GIVEN IN GOOD FAITH, BUT NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE.

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