

**Chief Medical Supplies Ltd.** 

411 – 19 Street, S. E. Calgary, AB., Canada. T2E 6J7 1.866.620.6034

# Safety Data Sheet Citric Acid 20%

Document No. M-D6-019

Section I – Product and Company Identification

**Synonym:** 2-Hydroxy-1,2,3-Propanetricarboxylic **Company Identification:** 

Acid Chief Medical Supplies Ltd.

**CAS No.:** 77-92-9 411 – 19 Street, S. E.

Molecular Weight: 192.13g/mol Calgary, AB., Canada. T2E 6J7 Chemical Formula:  $C_6H_8O_7$  1.866.620.6034

Product Code: CA20-4 For information, call: 1-403-207-6034

**Emergency Number:** 1-403-207-6034

#### Section II - Hazards Identification

Appearance: Clear colorless liquid

Physical State: Liquid

**Odor:** Odorless

Hazards of Product: Causes eye and skin irritation. May cause respiratory tract irritation.

**Potential Health Hazards** 

Eye: Causes severe eye irritation.

**Skin:** Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Some references state that citric acid has allergenic properties but, no animal or human studies were found to support this claim. It does not seem likely that citric acid is a sensitizer since it is found in the body as an essential component of the citric acid cycle which releases energy for physiological functions. Citric acid is widely distributed in plants and in animal tissues and fluids.

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Excessive intake of citric acid may cause erosion of the teeth.

**Inhalation:** May cause respiratory tract irritation. Because its vapor pressure is negligible, it exists in the air only as a mist or spray.

# Section III - Composition/Information on Ingredients

Ingredient Name	Chemical Formula	CAS No.	% by weight
Critic Acid	C <sub>6</sub> H <sub>8</sub> O <sub>7</sub>	64-19-7	20%
Water	H <sub>2</sub> O	7732-18-5	80%

#### Section IV - First Aid Measures

**Skin Contact:** In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.

**Eye Contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Ingestion:** If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

## Section V - Fire Fighting Measures

**Conditions of flammability:** Not available Flash point and method of determination: Not available **Upper flammable limit:** Not available Lower flammable limit: Not available **Auto-ignition temperature:** Not available **Hazardous combustion products:** Not applicable **Explosion data - sensitivity to mechanical impact:** Not available Explosion data - sensitivity to static discharge: Not available

**Fire Fighting Media and Instructions:** Use DRY chemicals, CO2, alcohol foam or water spray.

Special Remarks on Fire Hazards: Not available

Special Remarks on Explosion Hazards: Not available

#### Section VI - Accidental Release Measures

**Spill:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation. Spill may be carefully neutralized with lime (calcium oxide, CaO).

#### Section VII - Handling and Storage

**Handling Procedures:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Avoid breathing spray or mist.

**Storage Requirements:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

## Section VIII - Exposure Controls/Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

**Personal Protection** 

**Eyeware:** Chemical splash goggles

Gloves: Gloves

**Clothing:** Synthetic apron

**Respirator:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Exposure Limits:** OSHA Permissible Exposure Limit (PEL): 25 ppm (TWA); ACGIH Threshold Limit Value (TLV): 10 ppm (TWA); 10 ppm (STEL).

## Section IX – Physical and Chemical Properties

Physical state: Liquid

Odour and appearance: Odorless
Odour threshold: Not available
Specific gravity: Not available
Vapour pressure: Not available
Vapour density: Not available
Evaporation rate: Not available
Boiling point: Not available
Freezing point: Not available
pH (1% soln/water): Not available

Coefficient of water/oil distribution: Not Available

Taste: Not available

**Critical Temperature:** Not available **Dispersion Properties:** Not available

Solubility: Soluble in water

#### Section X - Stability and Reactivity

Stability: Stable

Conditions to avoid: Incompatible materials, excess heat.

**Incompatible materials:** Oxidizing agents, potassium tartrate, alkalis, alkali carbonates, acetates, sulfides (inorganic, e.g. ferric sulfide, lead sulfide, sodium sulfide), bicarbonates, metal nitrates, strong oxidizing agents, metals, strong reducing agents, strong bases.

Conditions of reactivity: Not available

Hazardous decomposition products: Carbon monoxide. Carbon dioxide.

Special Remarks on Corrosivity: Not available

Polymerization: Will not occur

## Section XI – Toxicological Information

Route of entry: Not available

Effects of Acute exposure: Not available

Other Toxic Effects on Humans: Not available

Irritancy of product: Not available

Sensitization to product: Not available

Carcinogenicity: Not available

Reproductive toxicity: Not available

**Teratogenicity:** Not available **Mutagenicity:** Not available

Toxicologically synergistic products: Not available

Toxicity to Animals: Not available

Special Remarks on other Toxic Effects on Humans: Not available

# **Section XII – Ecological Information**

Ecotoxicity: Not available
BOD5 and COD: Not available

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However,

long term degradation products may arise.

Toxicity of the Products of Biodegradation: Not available

Special Remarks on the Products of Biodegradation: Not available.

## Section XIII – Disposal Considerations

**Waste disposal:** Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## **Section XIV – Transport Information**

Special shipping information: Not regulated

Transport of Dangerous Goods (TDG): Not regulated

**Department of Transportation (DOT):** Not a DOT controlled material (United States).

International Maritime Dangerous Goods (IMO): None International Civil Aviation Organization (ICAO): None

WHIMIS classification: CLASS E: Corrosive liquid (Canada)

**OSHA:** Not available **SERA:** Not available

TSCA: TSCA 8(b) inventory: Citric acid

## Section XIV - Other Information

MSDS creation date: Oct 3, 2000 Last revision date: Jan 08, 2016

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Chief Medical Supplies be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Chief Medical Supplies has been advised of the possibility of such damages.

This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all of the information required by the CPR