

Section I – Product and Company Identification

Product Name: CITRATE ACID CONCENTRATE, Hemosate Ultra, Citrasate

Synonyms: Dialysate concentrate for bicarbonate dialysis

Chemicals present: See components below

Chemical Families: Inorganic salts, sugar and organic acid

Recommended use: Professional use

Company Identification:

Chief Medical Supplies Ltd.
 411 – 19 Street, S. E.
 Calgary, AB., Canada.
 T2E 6J7

1.866.620.6034

For information, call:

1-403-207-6034

Emergency Number:

1-613-996-6666

Section II – Hazards Identification

Hazard classification: Not classified.

Label elements: Safety data sheet available on request

Other hazards which do not result in classification: No additional information available.

Section III – Composition/Information on Ingredients

Ingredient Name	Chemical Formula	CAS No.	% by weight
Sodium Chloride	NaCl	7647-14-5	26.3
Potassium Chloride	KCl	7447-40-7	0.00*
Calcium Chloride	CaCl ₂	10043-52-4	0.83*
Magnesium Chloride	MgCl ₂	7786-30-3	0.46
Citric Acid	C ₆ H ₈ O ₇	00077-92-9	0.69
Sodium Acetate	NaC ₂ H ₃ O ₂ .3H ₂ O	06131-90-4	0.11
Dextrose	C ₆ H ₁₂ O ₆	50-99-7	4.95

*Calcium Chloride will vary from 0.83% to 0.99%, Potassium Chloride from 0.00% to 1.34%.

Product is composed of ~65% water.

Section IV – First Aid Measures

First-aid measures:

Inhalation: If inhaled, move to fresh air. Get medical advice/attention if required.

Skin Contact: Wash with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation develops or persists

Eye Contact: Flush with plenty of water for a minimum of 15 minutes while holding the eyelids open. Remove contact lenses, if worn. If irritation persists, get medical attention.

Ingestion: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Drink a glass of water or milk and call a physician immediately. Never give anything by mouth to an unconscious person. Get medical advice/attention if needed.

Symptoms and effects:

- Inhalation :** May cause respiratory tract irritation. Symptoms include sneezing, sore throat or runny nose.
- Skin Contact:** May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
- Eye Contact:** May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
- Ingestion:** Swallowing may cause burns of mouth, throat, and stomach. May cause stomach distress, nausea or vomiting.

Immediate medical attention and special treatment:

Symptoms may not appear immediately. In case of accident or feeling of illness, seek medical advice immediately (show the label or SDS where possible).

Section V – Fire Fighting Measures

- Suitable extinguishing media:** Treat for surrounding material.
- Unsuitable extinguishing media:** None known.
- Specific hazards arising from the hazardous product:** Does not support combustion.
- Special protective equipment and precautions for fire-fighters:** Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Section VI – Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

- General measures:** Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.
- Environmental Precautions:** Keep undiluted product out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.
- Methods and materials for containment and cleaning up:**

- Containment:** Contain and/or absorb spill with inert material (e.g. diatomaceous earth, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Spills:** Wear eye protection, protective gloves, boots, clothing and a respirator if air contamination is above the permitted levels. If allowed by federal, provincial or local regulatory authorities, flush the spill to the sewer. If mops or towels or similar materials are used, ensure that these items are thoroughly rinsed with copious amounts of water. Do not reuse the liquid material.

Section VII – Handling and Storage

- Precautions for safe handling:** Avoid contact with skin and eyes. Avoid breathing vapour or mist. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke.

Laundry contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

Conditions for safe storage (including incompatible materials): Store in a cool, dry, well-ventilated area between 15-30°C. Store in tightly closed containers. Store unused product in original closed container. Keep out of the reach of children.

Section VIII – Exposure Controls/Personal Protection

Engineering Controls: Use adequate general or local exhaust ventilation. If air contamination is above the permitted levels, use an approved respirator.

Individual protection measures (Personal Protection Equipment):

Hand protection: Wear suitable gloves.

Eye protection: Safety glasses or goggles are recommended when using product.

Skin and body protection: Wear suitable protective clothing.

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Environmental exposure controls: Maintain levels below Community environmental protection thresholds.

Other information: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

Section IX – Physical and Chemical Properties

Physical state:	Liquid
Appearance:	Clear
Odour:	Odourless.
Odour threshold:	No data available
pH:	1.9 – 4.2
Melting point/Freezing point:	146°C (for dextrose)
Initial boiling point/boiling range:	1413°C (for sodium chloride)
Flash point:	> 93 °C (> 199.4 °F)
Evaporation rate:	No data available
Flammability (solid; gas):	Not flammable
Lower flammable/explosive limit:	No data available
Upper flammable/explosive limit:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	1.2
Solubility:	All component chemicals are soluble in water.
Partition coefficient - n-octanol/water:	No data available

Auto-ignition temperature: No data available
Decomposition temperature: No data available

Section X – Stability and Reactivity

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical stability: Stable under normal storage conditions.

Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.

Conditions to avoid (e.g., static discharge, shock, or vibration): Excessive dusting in presence of ignition source

Incompatible materials: Lithium metal, Bromine trifluoride, strong oxidizers, sulfuric acid, strong bases. Bases and corrosive to metals.

Hazardous decomposition products: Not available; Will not occur.

Hazardous polymerization: Will not occur

Section XI – Toxicological Information

Acute toxicity: Based on available data, the classification criteria are not met. No toxicological data available. The product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version.

ACUTE ANIMAL TOXICITY DATA:

Chemical Substance	Oral LD50 (mg/kg)	Dermal LD50 (mg/kg) I	Inhalation LC50 (4-hour) (mg/L)
Citric Acid	3310 to 3530 in rat	Not established	Not established
Sodium Acetate	3530 in rat	Not established	Not established
Sodium Chloride	3000 in rat	>10,000 in rabbit	Not established
Potassium Chloride	1870 in rat	Not established	Not established
Calcium Chloride	3798 to 4179 in rat	> 5000 in rabbit	Not established
Magnesium Chloride	2800 in rat	Not established	Not established
Dextrose	25,800 in rat	Not established	Not established

Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): Skin, eye, inhalation, ingestion.

Symptoms related to the physical, chemical and toxicological characteristics:

Skin Corrosion/Irritation: Not expected under normal use conditions.

Serious Eye Damage/Irritation: Prolonged or repeated eye exposure to product may cause mild irritation due to presence of acetic acid.

Respiratory or Skin Sensitization: Data not available

Effects of chronic exposure: None expected

Sensitization to product: None expected

Carcinogenicity: None

Reproductive toxicity: None

Teratogenicity: None

Mutagenicity: None

Toxicologically synergistic products: Not available

Section XII – Ecological Information

Ecotoxicity: No additional information available.

Persistence and degradability: No additional information available.

Bioaccumulative potential: No additional information available.

Mobility in soil: No additional information available.

Other adverse effects: No additional information available.

Section XIII – Disposal Considerations

Waste disposal: This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

Section XIV – Transport Information

UN number: Not regulated for transport.

UN proper shipping name: Not applicable.

Transport hazard class(es): Not applicable.

Packing group: Not applicable.

Environmental hazards: Not applicable.

Special shipping information: Keep warm if shipping in cold weather.

Section XV – Regulatory Information

WHIMIS classification: None

OSHA: Not hazardous

Section XVI – Other Information

SDS creation date: Jun 15, 2011

Last revision date: 2019-07-17

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***