

**CITRASATE CONCENTRATE
MATERIAL SAFETY DATA SHEET**

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MSDS Number: D001
Revision Date: 12/01/00
Revision No.: 001

Generic Product Identification

Product Name: CITRASATE CONCENTRATE
Synonyms: Dialysate concentrate for bicarbonate dialysis
Chemicals present: See components below
Chemical Families: Inorganic salts, sugar and organic acid

Hazard Overview

Fire hazard: Material is not flammable.
Health hazard: May irritate eyes, nose and throat. May be harmful if swallowed.

Components

<u>Chemical Formula</u>	<u>Chemical Name</u>	<u>Common Name</u>	<u>CAS #</u>	<u>% by Weight</u>
NaCl	Sodium Chloride	Salt, Sea salt	07647-14-5	70.3
C6H12O6	Dextrose	Sugar	00050-99-7	24.0
CaCl ₂ 2H ₂ O	Calcium Chloride	NA	10035-04-8	1.7*
MgCl ₂ 6H ₂ O	Magnesium Chloride	NA	0779-18-6	1.8
KCl	Potassium Chloride	Muriate of potash	07447-40-7	0.0*
C6H8O7	Citric Acid	NA	00077-92-9	1.9
NaC ₂ H ₃ O ₂ 3H ₂ O	Sodium Acetate	Acetic acid	06131-90-4	0.3

*Calcium Chloride will vary by formula from 1.7% to 2.0%, Potassium Chloride will vary by formula from 0.0% to 1.8%.

Physical Data

Boiling Point: 1413°C (for Sodium Chloride)
Melting Point: 146°C (for Dextrose)
Solubility: All component chemicals are soluble in water.
Appearance and Odor: White crystalline powder or granules. No odor.

Fire and Explosion Data

Flash Point: NA
Auto-ignition Temperature NA
Flammable Limits (% by volume air): Upper: NA Lower: NA
Fire Extinguishing Media:

Material is not flammable. Use water, CO₂, dry chemical or foam.

Special Firefighting Procedures:

Use water to cool nearby containers and structures. Wear full protective equipment including suitable respiratory protection.

Unusual Fire and Explosion Hazards

High dust concentration (of the Dextrose) may ignite in the presence of an ignition source.

Reactivity Data

Stability: Stable

Incompatibles:

Li metal, Bromine trifluoride, strong oxidizers, sulfuric acid, strong bases

Decomposition Products: Chlorine, CO, CO₂

Hazardous Polymerization: Will not occur

Reactivity Data (continued)

Conditions to Avoid: Excessive dusting in presence of ignition source

Health Hazard Data

Effects of Exposure and First Aid Procedures

Skin Contact: May irritate with prolonged contact. Wash with soap and water.

Eye Contact: Dust may cause irritation. Flush eyes with water.

Ingestion: Large quantities may cause gastrointestinal irritation, nausea and vomiting.

Rinse mouth with water and give victim large amounts of water.

Inhalation: May irritate the nose, throat and upper respiratory tract.

Remove to fresh air.

Carcinogenicity: None identified

NTP Listing

No listing

IARC listing

No listing

OSHA Regulated

Precautions for Safe Handling and Use

Spill and Leak Procedures:

Remove all ignition sources. Sweep or scoop into disposal container in a manner that minimizes dust dispersion. Wear suitable protective equipment.

Disposal Procedures:

Dispose in accordance with all Local, State and Federal regulations.

Storage and Handling:

Store in a cool, dry, well-ventilated area. Hygroscopic material, store in tightly closed containers.

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Protective Equipment

Ventilation:

Use adequate general or local exhaust ventilation to keep dust levels as low as possible.

Respiratory Protection:

None needed unless dust is present. Use a dust respirator mask if necessary.

Eye Protection:

Safety glasses are recommended.

Protective Clothing

Not necessary, but skin contact should be avoided.

Overall:

Use good chemical handling procedures.

*** End of MSDS ***