

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	Citrasate Dry Acid Blend Bag
Product Number:	None
Formula:	Mixture of inorganic salts and organic acid
Product Use:	For preparation of hemodialysis dialysate, for use as directed in product labeling.
Restrictions on Use:	For intended medical device use only. Do not use for direct administration, food use, or non-labeled applications.

SUPPLIER INFORMATION: Fresenius Medical Care Renal Therapies Group, LLC

Address:
920 Winter Street
Waltham, MA 02451

Phone Number: 1-800-323-5188
Fax Number: N/A
Email Address: N/A

Emergency Contact Information:
CHEMTREC 1-800-424-9300

2. HAZARDS IDENTIFICATION

CLASSIFICATION AND LABELING (GHS / HMIS / NFPA) – Blend Bag:

GHS Status		
Pictogram	Classification	Signal Word, Hazard Statements, Precautionary Statements
	Skin corrosion/irritation, Category 1C, H314 Serious eye damage/eye damage, Category 1, H318	Danger: Causes severe skin burns and serious eye damage. P260: Do not breathe dust/fume/gas/mist/vapors/spray. P264+P265: Wash hands thoroughly after handling. Do not touch eyes. P280: Wear protective gloves/eye protection/face protection. P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P302+P361+P354: IF ON SKIN: Take off Immediately all contaminated clothing. Immediately rinse with water for several minutes. P363: Wash contaminated clothing before reuse. P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P342+P316: If experiencing respiratory symptoms: Get emergency medical help immediately. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. P337+P317: If eye irritation persists: Get medical help. P321: Specific treatment (see information on this label and safety datasheet). P405: Store locked up. P501: Dispose of contents/container to in accordance with applicable Federal, State and/or local rules / regulations. Hazards Not Otherwise Classified: None.

POTENTIAL HEALTH EFFECTS

ACUTE EFFECTS:

Eye: Causes serious eye damage.

Skin: Causes severe skin burns.

Inhalation: Inhalation of large quantities may cause irritation or damage to the nose, throat and respiratory tract.

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

CHRONIC EFFECTS:

None expected.

3. COMPOSITION/INFORMATION ON INGREDIENTS of Blend Bag

Components	CAS No.	Weight % Range
Sodium Chloride	7647-14-5	88 – 93
Calcium Chloride Dihydrate	10035-04-8	2 – 4
Magnesium Chloride Hexahydrate	7791-18-6	1 – 2
Potassium Chloride	7447-40-7	1 – 4
Citric Acid	77-92-9	2 – 3

4. FIRST AID MEASURES

PROCEDURES

Eye Contact:	If in eyes: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if eye irritation persists.
Skin Contact:	Rinse affected area with water. Get medical attention if irritation, pain, swelling or other symptoms persist.
Inhalation:	If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor.
Ingestion:	If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor.
Note to Physicians:	None known. Use general supportive care.

5. FIRE FIGHTING MEASURES

Unusual Fire and Explosion Hazards:	None.
Extinguishing Media:	Alcohol foam, water fog, carbon dioxide or dry chemical as appropriate for surrounding fire.
Special Firefighting Procedures:	Use procedures, protective clothing, breathing apparatus, and equipment appropriate for surrounding fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	In case of accidental bulk release, wear appropriate personal protective equipment (PPE), including goggles, respirator, boots, gloves, and clothing which covers exposed areas of the arms, legs and torso (PPE must be selected in accordance with Section 8 of this SDS).
Environmental precautions:	Avoid dispersal of spilled material and runoff to the environment. Avoid contact with soil and waterways.
Methods and materials for containment:	Sweep, scoop or vacuum into a container.
Cleanup procedures:	Ventilate the area. Sweep, scoop or vacuum into a container. Thoroughly collect spilled material and dispose of in accordance with applicable hazardous waste laws.

7. HANDLING AND STORAGE

Handling:	Transport in original container in accordance with good industrial hygiene and safety practice. Use PPE in accordance with Section 8 of this SDS while handling. Avoid inhalation and contact with eyes and skin. Keep in the original container or an approved alternative made from compatible material, keep tightly closed when not in use.
Storage:	Store securely with access limited to authorized personnel, protected from direct sunlight and away from other chemicals in a dry, cool, well-ventilated area, away from incompatible materials. Keep away from food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
Other Precautions:	Refer to product instructions and label for further requirements for handling, storage and use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product is a powder but contains no substances with occupational exposure limit values. OSHA PELs for particulates not otherwise regulated (PNOR) are 15 mg/m³ (total dust as 8-hour time-weighted average) and 5 mg/m³ (respirable fraction as 8-hour time-weighted average).

Engineering Controls:	Normal building ventilation.
Eye/Face Protection:	Safety glasses recommended.
Skin Protection:	Wear nitrile gloves and suitable clothing to prevent repeated or prolonged skin contact.
Respiratory Protection:	Not required through typical use.
General Hygiene Considerations:	Wash hands thoroughly after use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Value	Property	Value
Appearance:	White crystalline powder or granules	Initial Boiling Point (°F):	Not established
Odor:	Odorless	Boiling Range (°F):	Not established
Odor Threshold:	Not established	Melting point:	Not established
Molecular Weight:	Not established	Specific gravity (g/cc):	Not established
Physical State:	Solid	Viscosity (cps):	Not established
pH:	Not applicable as a dry solid; corrosive when wet	Flash Point:	Not established
Vapor Pressure (mm Hg):	Not established	Decomposition Temperature:	Not established
Solubility in Water (20°C):	Soluble	Flammability:	Not flammable
Volatiles, Percent by volume:	Not established	Upper/Lower Flammability Limits:	Not established
Vapor Density (air = 1):	Not established	Auto-ignition Temperature:	Not established
Evaporation Rate:	Not established	Octanol/water partition coefficient:	Not established

Property	Value	Property	Value
Relative Density:	Not established	Particle Characteristics:	Not established

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Reactivity:	Strong oxidizers, strong bases.
Conditions to Avoid:	None known.
Materials to Avoid:	Incompatible materials.
Hazardous Decomposition Products:	No hazardous decomposition products are expected under normal conditions of use. Exposure to fire or elevated temperatures may produce carbon oxides gas (CO and CO ₂). Contact with incompatible materials, including bicarbonates and other carbonate-containing compounds, may result in the evolution of carbon dioxide (CO ₂) gas.
Hazardous Polymerization:	Will not occur.
Hazardous reaction conditions:	None known.

11. TOXICOLOGICAL INFORMATION

Potential Exposure Routes:	Skin, eye, inhalation, ingestion.
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ACUTE ANIMAL TOXICITY DATA:

Chemical Substance	Oral LD50 (mg/kg)	Dermal LD50 (mg/kg)	Inhalation LC50 (4-hour, mg/m ³)
Sodium Chloride	3000 in rat	>10,000 in rabbit	Not established
Calcium Chloride	1000 to 4179 in rat	>2630 in rat	Not established
Magnesium Chloride	2800 in rat	> 2000 in Rat	Not established
Potassium Chloride	2600 in rat	Not established	Not established
Citric Acid	3000 to 11700 in rat	>2,000 in rat	Not established

Skin Corrosion/Irritation:	Causes severe skin burns
Eye Damage/ Irritation:	Causes serious eye damage
Respiratory Irritation:	May cause respiratory irritation.
Germ Cell Mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive, Teratogenicity, or Developmental Effects:	Not classified
STOT- Single Exposure:	Not classified
STOT- Repeated Exposure:	Not classified
Aspiration Hazard:	Not classified
Neurological Effects:	None known

Interactions with Other Chemicals None known
Which Enhance Toxicity:

12. ECOLOGICAL INFORMATION

Ecotoxicity: Not established.
Persistence and Not established.
degradability:
Bioaccumulative Not established.
potential:
Mobility in soil: Not established.
Other adverse effects: Not established.

13. DISPOSAL CONSIDERATIONS

When discarded in its unused or undiluted form, this product meets the definition of a corrosive solid (pH <2) under certain state criteria. Dispose of in accordance with applicable Federal, State and/or local rules / regulations.

14. TRANSPORT INFORMATION

Regulation	UN #	Proper Shipping Name	Hazard Class	Packing Group
U.S DOT	3261	Corrosive Solid, Acidic, Organic N.O.S (Citric Acid)	8	PG III
TDG	3261	Corrosive Solid, Acidic, Organic N.O.S (Citric Acid)	8	PG III
IATA	3261	Corrosive Solid, Acidic, Organic N.O.S (Citric Acid)	8	PG III
IMDG	3261	Corrosive Solid, Acidic, Organic N.O.S (Citric Acid)	8	PG III
ADR/RID	3261	Corrosive Solid, Acidic, Organic N.O.S (Citric Acid)	8	PG III

Environmental Hazard No.
(Marine Pollutant)

Special Precautions for None known.
transport:

15. REGULATORY INFORMATION

Not mandatory

16. OTHER INFORMATION

The data included herein are presented according to Fresenius Medical Care practices current at the time of preparation hereof, are made available solely for the consideration, investigation and verification of the original recipients hereof and do not constitute a representation or warranty for which Fresenius Medical Care assumes responsibility. It is the responsibility of a recipient of this data to remain currently informed on chemical hazard information, to design and update its own safety program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right to know, and environmental protection.

As medical device subject to labeling under FDA, the product meets the requirements for the workplace labeling exemption in 29 CFR 1910.1200(b)(5)(iii). As such, this SDS is provided for workplace hazard communication, transport, and waste-management purposes.

REVISIONS: This SDS was prepared to conform to 29 CFR Parts 1910.1200(g), 1915.1200 and 1926.59, known as Hazard Communication (HazCom) Standard.

Revision Date: 7/16/2026. Supersedes: July 2, 2015. Sections 1 -14, and 16 have been updated.

PREPARED BY: Fresenius Medical Care Renal Therapies Group, LLC