SODIUM CITRATE AND CITRIC ACID- sodium citrate and citric acid monohydrate solution MAJOR® PHARMACEUTICALS

Disclaimer: This drug has not been found by FDA to be safe and effective, and this labeling has not been approved by FDA. For further information about unapproved drugs, click here.

Sodium Citrate and Citric Acid Oral Solution USP

A Sugar-Free Systemic Alkalizer

DESCRIPTION

Sodium Citrate and Citric Acid Oral Solution USP is a stable and pleasant-tasting systemic alkalizer containing sodium citrate and citric acid in a sugar-free base. It is a nonparticulate neutralizing buffer.

Sodium Citrate and Citric Acid Oral Solution USP contains in each teaspoonful (5 mL):

SODIUM CITRATE Dihydrate 500 mg (0.34 Molar)

CITRIC ACID Monohydrate 334 mg (0.32 Molar)

Each mL contains 1 mEg sodium ion and is equivalent to 1 mEg bicarbonate (HCO3).

INACTIVE INGREDIENTS: Flavoring, purified water, sodium benzoate, and sucralose solution.

CLINICAL PHARMACOLOGY

Sodium citrate is absorbed and metabolized to sodium bicarbonate, thus acting as a systemic alkalizer. The effects are essentially those of chlorides before absorption and those of bicarbonates subsequently. Oxidation is virtually complete so that less than 5% of sodium citrate is excreted in the urine unchanged.

INDICATIONS AND USAGE

Sodium Citrate and Citric Acid Oral Solution USP is an effective alkalinizing agent. It is useful in those conditions where long-term maintenance of an alkaline urine is desirable, and is of value in the alleviation of chronic metabolic acidosis, such as results from chronic renal insufficiency or the syndrome of renal tubular acidosis, especially when the administration of potassium salts is undesirable or contraindicated. This product is also useful for buffering and neutralizing gastric hydrochloric acid quickly and effectively. Sodium Citrate and Citric Acid Oral Solution USP is concentrated, and when administered after meals and before bedtime, allows one to maintain an alkaline urinary pH around the clock, usually without the necessity of a 2 A.M. dose. This product alkalinizes the urine without producing a systemic alkalosis in the recommended dosage. This product is highly palatable, pleasant tasting, and tolerable, even when administered for long periods.

CONTRAINDICATIONS

Patients on sodium-restricted diets or with severe renal impairment.

PRECAUTIONS

Sodium Citrate and Citric Acid Oral Solution USP should be used with caution by patients with low urinary output unless under the supervision of a physician. This product should not be administered concurrently with aluminum-based antacids. Patients should be directed to dilute adequately with water and preferably, to take each dose after meals to avoid saline laxative effect. Sodium salts should be used cautiously in patients with cardiac failure, hypertension, impaired renal function, peripheral and pulmonary edema, and toxemia of pregnancy. Periodic examinations and determinations of serum electrolytes, particularly serum bicarbonate level, should be carried out in those patients with renal disease in order to avoid these complications.

ADVERSE REACTIONS

Sodium Citrate and Citric Acid Oral Solution USP is generally well tolerated, without any unpleasant side effects, when given in recommended doses to patients with normal renal function and urinary output. However, as with any alkalinizing agent, caution must be used in certain patients with abnormal renal mechanisms to avoid development of alkalosis, especially in the presence of hypocalcemia.

OVERDOSAGE

Overdosage with sodium salts may cause diarrhea, nausea and vomiting, hypernoia, and convulsions.

DOSAGE AND ADMINISTRATION

Sodium Citrate and Citric Acid Oral Solution USP should be taken diluted in water, followed by additional water, if desired. SHAKE WELL BEFORE USING.

For Systemic Alkalization

Usual Adult Dose

2 to 6 teaspoonfuls (10 to 30 mL), diluted in 1 to 3 ounces of water, after meals and at bedtime, or as directed by a physician.

Usual Pediatric Dose

1 to 3 teaspoonfuls (5 to 15 mL), diluted in 1 to 3 ounces of water, after meals and at bedtime, or as directed by a physician. For children under two years of age, use is based on consultation with a physician.

As a neutralizing buffer

3 teaspoonfuls (15 mL), diluted with 15 mL water, taken as a single dose, or as directed by a physician.

HOW SUPPLIED

Sodium Citrate and Citric Acid Oral Solution USP (colorless, cherry flavor) is supplied in the following oral dosage forms:

NDC 0904-7316-88: 15 mL unit dose cup

NDC 0904-7316-80: Case contains 100 unit dose cups of 15 mL (0904-7316-88)

packaged in 10 trays of 10 unit dose cups each.

NDC 0904-7316-62: 30 mL unit dose cup

NDC 0904-7316-73: Case contains 100 unit dose cups of 30 mL (0904-7316-62)

packaged in 10 trays of 10 unit dose cups each.

STORAGE:

Keep tightly closed. Store at controlled room temperature, 20°-25°C (68°-77°F). Protect from freezing.

Rx ONLY

Distributed by: MAJOR® PHARMACEUTICALS Indianapolis, IN 46268

Rev. 02/23

PRINCIPAL DISPLAY PANEL - 15 mL Unit Dose Cup Label

MAJOR®

NDC 0904-7316-88

Sodium Citrate and Citric Acid Oral Solution USP (Sugar Free)

1.5 g/1 g per 15 mL

SHAKE WELL-DILUTE AS DIRECTED

Delivers 15 mL • See insert

For Institutional Use Only • Rx ONLY

MAJOR® PHARMACEUTICALS

Indianapolis, IN 46268



PRINCIPAL DISPLAY PANEL - 30 mL Unit Dose Cup Label

MAJOR®

NDC 0904-7316-62

Sodium Citrate and Citric Acid Oral Solution USP (Sugar Free)

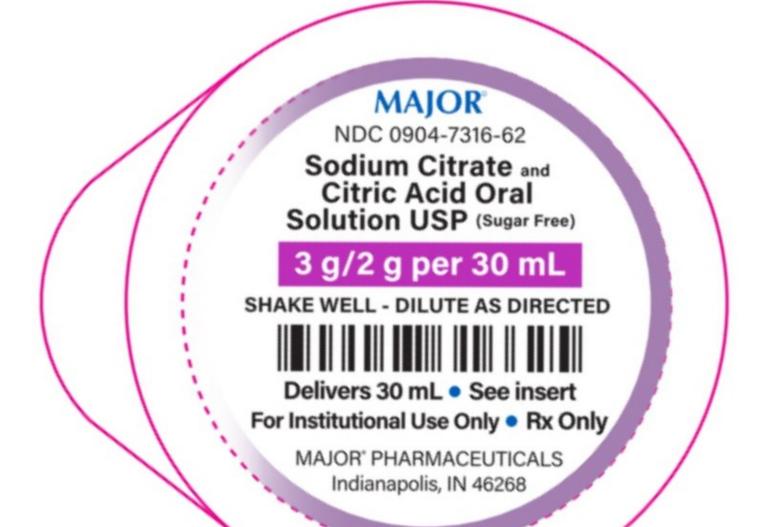
3 g/2 g per 30 mL

SHAKE WELL-DILUTE AS DIRECTED

Delivers 30 mL • See insert

For Institutional Use Only • Rx ONLY

MAJOR® PHARMACEUTICALS



SODIUM CITRATE AND CITRIC ACID

sodium citrate and citric acid monohydrate solution

Product Information			
Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:0904-7316
Route of Administration	ORAL		

Active Ingredient/Active Moiety			
Ingredient Name	Basis of Strength	Strength	
SODIUM CITRATE (UNII: 1Q73Q2JULR) (ANHYDROUS CITRIC ACID - UNII:XF417D3PSL)	SODIUM CITRATE	500 mg in 5 mL	
ANHYDROUS CITRIC ACID (UNII: XF417D3PSL) (ANHYDROUS CITRIC ACID -	ANHYDROUS CITRIC	334 mg	

Inactive Ingredients			
Ingredient Name	Strength		
WATER (UNII: 059QF0KO0R)			
SODIUM BENZOATE (UNII: OJ245FE5EU)			
SUCRALOSE (UNII: 96K6UQ3Z D4)			

Product Characteristics			
Color		Score	
Shape		Size	
Flavor	CHERRY	Imprint Code	
Contains			

P	Packaging			
#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:0904- 7316-80	10 in 1 CASE	08/01/2023	
1		10 in 1 TRAY		
1	NDC:0904- 7316-88	15 mL in 1 CUP, UNIT-DOSE; Type 0: Not a Combination Product		
2	NDC:0904- 7316-73	10 in 1 CASE	08/01/2023	
2		10 in 1 TRAY		
2	NDC:0904- 7316-62	30 mL in 1 CUP, UNIT-DOSE; Type 0: Not a Combination Product		

Marketing Information				
Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date	
unapproved drug other		08/01/2023		

Labeler - MAJOR® PHARMACEUTICALS (191427277)

Revised: 8/2023 MAJOR® PHARMACEUTICALS