

## **TRICITRATES- potassium citrate, sodium citrate, and citric acid monohydrate solution**

**PAI Holdings, LLC dba PAI Pharma**

*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.*

-----

### **Tricitrates SF Oral Solution**

#### **Rx ONLY**

#### **DESCRIPTION**

Tricitrates SF Oral Solution is a stable and pleasant-tasting oral systemic alkalizer containing potassium citrate, sodium citrate, and citric acid in a sugar-free, non-alcoholic base.

Tricitrates SF Oral Solution contains in each teaspoonful (5 mL):

---

#### POTASSIUM CITRATE

Monohydrate            550 mg

#### SODIUM CITRATE

Dihydrate              500 mg

#### CITRIC ACID

Monohydrate           334 mg

---

Each mL contains 1 mEq potassium ion and 1 mEq sodium ion and is equivalent to 2 mEq bicarbonate ( $\text{HCO}_3$ ).

*Inactive Ingredients:* FD&C Yellow No. 6, flavoring, polyethylene glycol, propylene glycol, purified water, sodium benzoate, and sorbitol solution.

#### **ACTIONS**

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

#### **INDICATIONS AND ADVANTAGES**

Tricitrates SF Oral Solution is an effective alkalizing agent useful in those conditions where long-term maintenance of an alkaline urine is desirable, such as in patients with uric acid and cystine calculi of the urinary tract. In addition, it is a valuable adjuvant when administered with uricosuric agents in gout therapy, since urates tend to crystallize out

of an acid urine. It is also effective in correcting the acidosis of certain renal tubular disorders. This product is highly concentrated, and when administered after meals and before bedtime, allows one to maintain an alkaline urine 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 recommended dosage. It is highly palatable, pleasant tasting, and tolerable, even when administered for long periods. Potassium citrate and sodium citrate do not neutralize the gastric juice or disturb digestion.

## **CONTRAINDICATIONS**

Severe renal impairment with oliguria or azotemia, untreated Addison's disease, or severe myocardial damage. In certain situations, when patients are on a sodium-restricted diet, the use of potassium citrate may be preferable; or, when patients are on a potassium-restricted diet, the use of sodium citrate may be preferable.

## **PRECAUTIONS AND WARNINGS**

Should be used with caution by patients with low urinary output or reduced glomerular filtration rates unless under the supervision of a physician. Aluminum-based antacids should be avoided in these patients. Patients should be directed to dilute adequately with water and, preferably, to take each dose after meals, to minimize the possibility of gastrointestinal injury associated with oral ingestion of potassium salt preparations and to avoid saline laxative effect. Sodium salts should be used cautiously in patients with cardiac failure, hypertension, peripheral and pulmonary edema, and toxemia of pregnancy.

Concurrent administration of potassium-containing medication, potassium-sparing diuretics, angiotensin-converting enzyme (ACE) inhibitors, or cardiac glycosides may lead to toxicity. Periodic examination 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**

Tricitrates *SF* Oral Solution 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 hyperkalemia or alkalosis, especially in the presence of hypocalcemia. Potassium intoxication causes listlessness, weakness, mental confusion, and tingling of extremities.

## **DOSAGE AND ADMINISTRATION**

Tricitrates *SF* Oral Solution should be taken diluted in water, followed by additional water, if desired. Palatability is enhanced if chilled before taking.

### **Usual Adult Dose**

3 to 6 teaspoonfuls (15 to 30 mL), diluted in water, four times a day, after meals and at

bedtime, or as directed by a physician.

### **Usual Pediatric Dose**

1 to 3 teaspoonfuls (5 to 15 mL), diluted in water, four times a day, after meals and at bedtime, or as directed by a physician.

### **Usual Dosage Range**

2 to 3 teaspoonfuls (10 to 15 mL), diluted with water, taken four times a day, will usually maintain a urinary pH of 6.5-7.4. 3 to 4 teaspoonfuls (15 to 20 mL), diluted with water, taken four times a day, will usually maintain a urinary pH of 7.0-7.6 throughout most of the 24 hours without unpleasant side effects. To check urine pH, HYDRION Paper (pH 6.0-8.0) or NITRAZINE Paper (pH 4.5-7.5) are available and easy to use.

### **OVERDOSAGE**

Overdosage with sodium salts may cause diarrhea, nausea and vomiting, hypernoia, and convulsions. Overdosage with potassium salts may cause hyperkalemia and alkalosis, especially in the presence of renal disease.

### **HOW SUPPLIED**

Tricitrates *SF* Oral Solution (orange colored, raspberry flavored) is supplied in the following oral dosage form:

NDC 0121-0677-16: 16 fl oz (473 mL) bottles

### **STORAGE**

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

### **SHAKE WELL BEFORE USING.**

### **Manufactured By**

***Pharmaceutical Associates, Inc.***

Greenville, SC 29605

**R08/22**

### **PRINCIPAL DISPLAY PANEL - 473 mL Bottle Label**

NDC 0121-0677-16

Tricitrates *SF*  
Oral Solution

550 mg/500 mg/334 mg per 5 mL

A SUGAR-FREE SYSTEMIC ALKALIZER

Each teaspoonful (5 mL) contains:  
 Potassium Citrate Monohydrate 550 mg  
 Sodium Citrate Dihydrate 500 mg  
 Citric Acid Monohydrate 334 mg

Each mL contains 1 mEq Potassium Ion and  
 1 mEq Sodium Ion, and is equivalent to 2 mEq  
 Bicarbonate (HCO<sub>3</sub>).

May not meet USP monograph requirements for  
 pH.

16 fl oz (473 mL)

Pharmaceutical  
 Associates, Inc.  
 Greenville, SC 29605

NDC 0121-0677-16

**INDICATIONS AND USAGE:** Tricitrates *SF* Oral Solution is a stable and pleasant-tasting solution containing potassium citrate, sodium citrate, and citric acid. It is designed to aid in maintaining effective alkalinity of the urine.

**Rx ONLY**

See package insert for complete prescribing information.

X0677160317      R03/17



## Tricitrates *SF*

### Oral Solution

550 mg/500 mg/334 mg per 5 mL

A SUGAR-FREE SYSTEMIC ALKALIZER

Each teaspoonful (5 mL) contains:  
 Potassium Citrate Monohydrate ..... 550 mg  
 Sodium Citrate Dihydrate ..... 500 mg  
 Citric Acid Monohydrate ..... 334 mg

Each mL contains 1 mEq Potassium Ion and  
 1 mEq Sodium Ion, and is equivalent to 2 mEq  
 Bicarbonate (HCO<sub>3</sub>).

May not meet USP monograph requirements for  
 pH.

16 fl oz (473 mL)



**DOSAGE AND ADMINISTRATION:**  
*Usual Adult Dosage:* 3 to 6 teaspoonfuls (15 to 30 mL) **DILUTED** with water, four times a day, after meals and at bedtime, or as directed by a physician.

*Usual Pediatric Dosage:* 1 to 3 teaspoonfuls (5 to 15 mL) **DILUTED** with water, four times a day, after meals and at bedtime, or as directed by a physician.

**SHAKE WELL BEFORE USING.**

**STORAGE:** Keep tightly closed. Store at controlled room temperature, 20° -25° C (68° -77°F). [See USP] Protect from excessive heat or freezing.

*Dispense in a tight, light-resistant container with a child-resistant closure.*

**Questions? 1-800-845-8210**

## TRICITRATES

potassium citrate, sodium citrate, and citric acid monohydrate solution

### Product Information

<b>Product Type</b>	HUMAN PRESCRIPTION DRUG	<b>Item Code (Source)</b>	NDC:0121-0677
<b>Route of Administration</b>	ORAL		

**Active Ingredient/Active Moiety**

Ingredient Name	Basis of Strength	Strength
<b>POTASSIUM CITRATE</b> (UNII: EE90ONI6FF) (ANHYDROUS CITRIC ACID - UNII:XF417D3PSL)	POTASSIUM CITRATE	550 mg in 5 mL
<b>SODIUM CITRATE</b> (UNII: 1Q73Q2JULR) (ANHYDROUS CITRIC ACID - UNII:XF417D3PSL)	SODIUM CITRATE	500 mg in 5 mL
<b>CITRIC ACID MONOHYDRATE</b> (UNII: 2968PHW8QP) (ANHYDROUS CITRIC ACID - UNII:XF417D3PSL)	ANHYDROUS CITRIC ACID	334 mg in 5 mL

**Inactive Ingredients**

Ingredient Name	Strength
<b>FD&amp;C YELLOW NO. 6</b> (UNII: H77VEI93A8)	
<b>POLYETHYLENE GLYCOL, UNSPECIFIED</b> (UNII: 3WJQ0SDW1A)	
<b>PROPYLENE GLYCOL</b> (UNII: 6DC9Q167V3)	
<b>WATER</b> (UNII: 059QF0KO0R)	
<b>SODIUM BENZOATE</b> (UNII: OJ245FE5EU)	
<b>SORBITOL</b> (UNII: 506T60A25R)	

**Product Characteristics**

<b>Color</b>	orange	<b>Score</b>	
<b>Shape</b>		<b>Size</b>	
<b>Flavor</b>	RASPBERRY	<b>Imprint Code</b>	
<b>Contains</b>			

**Packaging**

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:0121-0677-16	473 mL in 1 BOTTLE; Type 0: Not a Combination Product	05/25/2005	

**Marketing Information**

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
unapproved drug other		05/25/2005	

**Labeler** - PAI Holdings, LLC dba PAI Pharma (044940096)**Establishment**

Name	Address	ID/FEI	Business Operations
PAI Holdings, LLC dba Pharmaceutical Associates, Inc. and dba PAI Pharma		097630693	manufacture(0121-0677)

