



# EPOCH MASTER GLOBAL BUSINESS(JIANGSU)INC.

RM.3-93,TENGFEI BUILDING,NO.88 JIANGMIAO RD., RESEARCH AND INNOVATION PARK,  
NANJING ZONE,(JIANGSU) PILOT FREE TRADE ZONE ,CHINA.

## Citric Acid Anhydrous

**Chemical name:**Citric Acid Anhydrous

**Synonymous:**2-Hydroxy-1,2,3-Propanetricarboxylic Acid

**Sales Models:**Wholesale

**Reference FOB Price:**US \$500-1000 / Ton

**Min Order:**22mt

**Port:**Tianjin, China

**Samples:**US \$ 100/Piece

**Payment Terms:**L/C, T/T, Paypal

- Model:CAA
- Brand:RAWCHEM
- Code:22023
- CAS No.:77-92-9
- Molecular weight:192.122
- Molecular formula:C<sub>6</sub>H<sub>8</sub>O<sub>7</sub>
- EINECS:201-069-1
- H.S.Code:2918140000
- Melting point:153 °C
- Density:1.542 g/cm<sup>3</sup>
- Shelf life:24 months

### Product Parameters

**Appearance:** colorless semi-transparent crystalline powder.

### Physical and Chemical data:

Melting Point	Density (g/m <sup>3</sup> )	Critical point of crystallization
153°C	1.542	36.6°C (to become CAM)

### Other Related indexes:

EINECS	RTECS	PubChem	MDL	BRN
201-069-1	GE7350000	24864122	MFCD00011669	782061

**Solubility:** Soluble in water, alcohol and ether, the solubility in water is as below:

Temperature (°C)	10	20	30	40	50	60	70	80	90	100
Solubility by (g)	54	59.2	64.3	68.6	70.9	73.5	76.2	78.8	81.4	84



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## Main types:

According to the particle size, there are mainly 2 types:

1. 10~40 mesh;
2. 30~100 mesh.

## Features:

1. Big solubility in water, alcohol and ether;
2. Among all the sour agents, CAA's acidity is the most accepted by human;
3. Water softening ability, it can combine the  $\text{Ca}^{2+}$  and other metal ions (except for alkali metal), and for the compounds (like Calcium citrate), their solubility in cold water is higher than hot water, which is a big advantage in detergent industry;
4. pH buffering ability;
5. Low toxic.

## Application

1. Food industry as acidity modifier;
2. Detergent industry as water softener and auxiliary;
3. Cosmetics;
4. Chemical industry and etc.

## Function and application in food industry:

1. As sour agent in beverages, can, candy, and etc;
2. As sucrose conversion agent in sugar making;
3. As color fixative for fresh vegetables and fruits ( 1% CAA + 1~2% sodium chloride solution);
4. As pH buffering agent and modifiers in various mass production food;
5. As antioxidant in the mass processing of many food;
6. As modifier when combined with sodium bicarbonate in wheaten food;
7. As flavor and smell-remover in salted food and cans;
8. Slower the decline speed of Vc concentration in orange juice;

## Function in detergent industry:

### Replacing STPP to soften water with the following advantages:

1. Environmental friendly with good bi-degradation;
2. Better safety in dish washing and other related detergents which can enter human organs easily;
3. Good chelating ability, not only to  $\text{Ca}^{2+}$ ,  $\text{Mg}^{2+}$  but also to other non-alkali metal ions, and the solubility of these chelated salts in cold water is bigger than hot water;
4. Better solubility than STPP, Zeolite;
5. Good pH buffering ability;
6. Rust inhibiting ability which is good for the related equipments and pipes;
7. Thickening agent in liquid detergent system.

## Important Notice

1. Citric Acid anhydrous is easily get caked when exposed in air;
2. Relationship / difference between Citric Acid Anhydrous and Citric Acid Monohydrate:  
The only difference is there is a crystal water molecule in CAM, there is almost no difference in chemical features and applications.
3. We normally list 2 years as the shelf life in our COA, the real shelf life can be slightly longer than 2 years if it's stocked in good condition (bags are sealed enough, away from direct sun-light, moisture and other incompatible chemical materials).