

## Product Specification Sheet

**Product Name:** Citric Acid Monohydrate

**Country of Origin:** China

### Product Exclusive Features:

- Citric acid is a weak organic acid with the formula  $C_6H_8O_7$ .
- It is a natural preservative which occurs naturally in citrus fruits and is also used to add an acidic or sour taste to foods and drinks.

### Product Specification:

Sr No.	Test	Specification
1	Description	White crystalline or granular powder; odourless
2	Clarity and color solution	Confirming with the test
3	Water	7.5-8.8 %
4	Content	99.5-100.5 %
5	Readily carbonisable substances	Not deeper in the test
6	Sulphate	Less than and equal to 0.015 %
7	Oxalates	Less than and equal to 0.01 %
8	Heavy metal	Less than equal to 10 ppm
9	Aluminium	Less than equal to 0.2 ppm
10	Lead	Less than equal to 0.5 MG/KG
11	Arsenic	Less than equal to 1 MG/KG
12	Mercury	Less than equal to 1 MG/KG
13	Sulphated Ash	Less than equal to 0.05 %
14	Bacterial endotoxins	Less than equal to 0.5 LU/MG
15	Tridodecylamine	Less than equal to 0.1 LU/MG
16	Mesh	8-40 /8-16 /8-80

**Product Shelf Life:** 2 Year from the date of Manufacturing  
**Packing:** 25 kg HDPE woven sack bag with LD liner

## Applications of Citric Acid Monohydrate

- **Foods**

Citric acid can be added to ice cream as an emulsifying agent to keep fats from separating, to caramel to prevent sucrose crystallization, or in recipes in place of fresh lemon juice. Citric acid is used with sodium bicarbonate in a wide range of effervescent formulae, both for ingestion (e.g., powders and tablets) and for personal care (e.g., bath salts, bath bombs, and cleaning of grease). Citric acid is also often used in cleaning products and sodas or fizzy drinks.

- **Cleaning and chelating agent**

Citric acid is an excellent chelating agent, binding metals. It is used to remove lime scale from boilers and evaporators. It can be used to soften water, which makes it useful in soaps and laundry detergents. By chelating the metals in hard water, it lets these cleaners produce foam and work better without need for water softening. Citric acid is the active ingredient in some bathroom and kitchen cleaning solutions. A solution with a 6% concentration of citric acid will remove hard water stains from glass without scrubbing. In the industry, it is used to dissolve rust from steel. Citric acid can be used in shampoo to wash out wax and coloring from the hair.

- **Cosmetics and pharmaceuticals**

Citric acid is widely used as a pH adjusting agent in creams and gels of all kinds. In this role, it is classified in most jurisdictions as a processing aid and so does not need to be listed on ingredient lists. Citric acid is an alpha hydroxy acid and used as an active ingredient in chemical peels.

- **Dyeing**

Citric acid can be used in food coloring to balance the pH level of a normally basic dye. It is used as an odorless alternative to white vinegar for home dyeing with acid dyes

- **Industrial and construction**

Citric acid can be used as a successful alternative to nitric acid in passivation of stainless steel

- **Photography**

Citric acid can be used as a lower-odor stop bath as part of the process for developing photographic film. Photographic developers are alkaline, so a mild acid is used to neutralize and stop their action quickly, but commonly used acetic acid leaves a strong vinegar odor in the darkroom.

- **Synthesize solid materials from small molecules**

In materials science, the Citrate-gel method is similar process to sol-gel method which is a method for producing solid materials from small molecules.