

# Citric acid Datasheet

4<sup>th</sup> Edition (Revised in July, 2016)

### [ Product Information ]

Name: Citric acid

Catalog No.: CFN98551

Cas No.: 77-92-9

**Purity: >=98%** 

 $\textbf{M.F:} \ C_6H_8O_7$ 

M.W: 192.12

Physical Description: Powder

**Synonyms:** 2-Hydroxy-1,2,3-propanetricarboxylic acid; Citric acid anhydride.

## [ Intended Use ]

- 1. Reference standards;
- 2. Pharmacological research;
- 3. Food research;
- 4. Synthetic precursor compounds;
- 5. Intermediates & Fine Chemicals;
- 6. Others.

### [Source]

The herbs of Saccharum sinense.

## [ Biological Activity or Inhibitors]

Citric acid has phytoremediation of heavy metal contaminated soil; citric acid can

decrease the adsorption of both lead and cadmium, such an effect was bigger for

cadmium than for lead, the decrease in the adsorption of Pb and Cd is mainly due to a

decrease of pH in the presence of citric acid; the detoxifying effect of citric acid to Pb in

shoots might result from the transformation of higher toxic forms into lower toxic forms.<sup>[1]</sup>

Citric acid is an Al-chelating substance.[2]

Citric acid is a natural antioxidant. [3]

Dietary citric acid can effectively improve phytate P utilization in chicks.<sup>[4]</sup>

#### [Solvent]

Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc.

#### [ HPLC Method ][5]

Mobile phase: 50-mM Phosphate buffer at pH 2.8, gradient elution;

Flow rate: 0.5 ml/min;

Column temperature: 35 °C;

The wave length of determination: 214 nm.

[Storage]

2-8°C, Protected from air and light, refrigerate or freeze.

## [References]

[1] Chen Y X, Lin Q, Luo Y M, et al. Chemosphere, 2003, 50(6):807-11.

[2] Ma J F, Zheng S J, Matsumoto H. Plant Cell Physiol., 1997, 38(9):1019-25.

[3] Andreja Rižner Hraš, Majda Hadolin, Željko Knez, et al. Food Chem., 2000,

71(2):229-33.

[4] Boling S D, Webel D M, Mavromichalis I, et al. J. Anim. Sci., 2000, 78(3):682-9.

[5] Katie Weikl. Concordia College Journal of Analytical Chemistry, 2012 (3), 57-62.

# [ Contact ]

Address:

S5-3 Building, No. 111, Dongfeng Rd.,

Wuhan Economic and Technological Development Zone,

Wuhan, Hubei 430056,

China

Email: info@chemfaces.com

**Tel:** +86-27-84237783

**Fax:** +86-27-84254680

Web: www.chemfaces.com

Tech Support: service@chemfaces.com