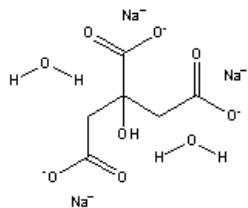


## Citric Acid, Trisodium Salt, Dihydrate

### Structure:



**Molecular Formula:** C<sub>6</sub>H<sub>5</sub>O<sub>7</sub>Na<sub>3</sub> · 2H<sub>2</sub>O

**Molecular Weight:** 294.1

**CAS #:** 6132-04-3

**Synonym:** Sodium Citrate, trisodium salt

**Physical Description:** White crystalline powder

**Solubility:** Freely soluble in water (> 100 mg/ml - clear, colorless solution). pH of a 0.1 M solution in water is approximately 7.5 to 9.0; Insoluble in alcohol.

**Description:** Used as a substrate for citrate lyase<sup>1</sup>, a buffer component; an anticoagulant.<sup>2,3</sup> To make a sodium citrate buffer use equimolar concentrations (typically approximately 0.05 M concentration) of citric acid, free acid and sodium citrate. Add equal volumes of each solution and titrate to the desired pH. For anticoagulation use it is typically used at a concentration of approximately 0.129 M (i.e. for 4.5 ml blood use 16.0 mg sodium citrate and 2.1 mg citric acid).

### Availability:

Catalog Number	Description	Size
102900	Citric Acid, Trisodium Salt, Dihydrate	100 g 500 g 1 kg 5 kg
194817	Citric Acid, Trisodium Salt, Dihydrate, Molecular Biology Reagent	100 g 500 g 1 kg 5 kg 10 kg
194868	Sodium Citrate, Trisodium Salt, Dihydrate, ACS Grade	100 g 500 g 1 kg 5 kg

### References:

1. Bergmeyer, H.U. (ed.), *Meths. Enzymat. Anal.*, **3rd Ed.** **2**, 173 (1983) Chemie
2. Ramsey, D.M., et al., *J. Clin. Pathol.*, v. **30**, 766 (1977).
3. Babb, A., et al., *Artif. Organs*, v. **3**, 470 (1979).
4. Amils, R., et al., *Meths. Enzymol.*, v. **59**, 449 (1979).