Pharmaceutical raw material

# Citric acid

Acids and salts

$C_6H_8O_7$ / $C_6H_8O_7 \cdot H_2O$



Material illustration

## Substance identity

An organic triprotic acid. Anhydrous acid and monohydrate have different molar masses, a distinction relevant to formulation calculations.

| Property | Reference value | Method or source |
|---|---|---|
| Anhydrous form | **CAS 77-92-9** | PubChem |
| Chemical formula | **$C_6H_8O_7$ / 192.12 g/mol** | PubChem |
| Monohydrate | **CAS 5949-29-1** | PubChem · $C_6H_8O_7 \cdot H_2O$ |
| Chemical formula | **$C_6H_8O_7 \cdot H_2O$ / 210.14 g/mol** | PubChem · $C_6H_8O_7 \cdot H_2O$ |

For acceptance, check the agreed specification and the certificate of analysis (COA) for the delivered lot.



## Applications

A component of citrate buffers and the acid component of some effervescent mixtures. Anhydrous citric acid and the monohydrate have different molar masses and contribute different amounts of water.



## Purchasing criteria

Identify anhydrous acid or monohydrate, the reporting basis for assay and the crystal size. For moisture-sensitive blends, agree on the primary packaging.

**Technical reference**

PubChem · PubChem · $C_6H_8O_7 \cdot H_2O$