

## Certificate of Analysis

### (Representative Sample Certificate)

**Product Name:** Citric Acid  
**INCI Name:** Citric Acid  
**CAS Number:** 77-92-9  
**Lot Number:** Not available (data may vary slightly with different lots or batches)  
**Shelf Life:** 36 months from production date

Analytical Tests	Specifications	Results
Characteristics	Colorless or white, crystalline powder	Pass
Water Solubility	Very soluble	Pass
Ethanol Solubility	Freely soluble (96%)	Pass
Ether Solubility	Sparingly soluble	Pass
Appearance of Solution	Clear and colorless	Pass
Odor	Typical, practically odorless	Pass
Clarity of Solution	Passes test	Pass
Color of Solution	Passes test	Pass
Assay	99.7-100.3%	99.9%
Water	≤0.50%	0.07%
Readily Carbonizable Substances	Passes test	Pass
Calcium	≤30 mg/kg	Pass
Heavy Metals	≤5 mg/kg	Pass
Iron	≤3 mg/kg	Pass
Arsenic	≤1 mg/kg	Pass
Lead	≤0.5 mg/kg	Pass
Mercury	≤0.5 mg/kg	Pass
Chloride	≤5 mg/kg	Pass
Oxalic Acid / Oxalate	≤100 mg/kg	Pass
Sulphate (100mg/kg)	≤100 mg/kg	Pass
Residue on Ignition	≤0.05%	Pass
Sulphated Ash	≤0.05%	Pass
Particles > Mesh 25 (0.71mm)	≤10 %	Pass
Particles > Mesh 0.63mm	≤10%	4%
Particles < 0.20mm	≤10%	3%
Particles < Mesh 100 (0.150mm)	≤10%	Pass

Product meets requirements of the latest edition of the Ph.Eur., USP, FCC and EU no. 231/2012. All analytical methods are in accordance with the latest requirements of Ph. Eur., USP, FCC or equivalent methods.

The above data were obtained using the test indicated and is subject to the deviation inherent in the test method. Results may vary under other test methods or conditions. This report is not to be signed. All data are as per our supplier.

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