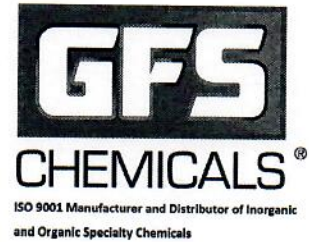


# Certificate of Analysis



**Product Name:** CITRIC ACID, ANHYDROUS, REAGENT (ACS)  
**Item #:** 649  
**Lot #:** 20450172

## Certified Values:

Specifications (Max Limits or as Specified)	Status	Results
Assay 99.5 % - Min	Pass	100.1
Insoluble 0.005 % Max	Pass	< 0.005
Residue after ignition 0.02 % Max	Pass	< 0.02
Chloride 0.001 % Max	Pass	< 0.001
Oxalate - Pass test (about 0.05%)	Pass	Passes Test
Phosphate 0.001 % Max	Pass	< 0.001
Sulfur compounds (as SO <sub>4</sub> ) 0.002 % Max	Pass	< 0.002
Lead 0.0002 % Max	Pass	< 0.0002
Iron 0.0003 % Max	Pass	< 0.0003
Subs. carbonizable by hot Sulfuric acid	Pass	Passes Test

## Comments

**CoA #:** COA-064126  
**Certificate Created By:** Catherine Myron  
**CoA Creation Date:** November 6, 2020  
**Best by:** October 10, 2025  
**Print Date:** May 28, 2021

**Signature on File**

Not for direct use in food, cosmetics, finished pharmaceuticals or drug products. Supplier is not responsible for compliance with FDA Current Good Manufacturing Practice(cGMP) requirements, including without limitation those for finished drug products in 21 C.F.R Parts 210 and 211. Consult warranty limitations at [www.gfschemicals.com/statics/documents/aboutus/termsandconditions.html](http://www.gfschemicals.com/statics/documents/aboutus/termsandconditions.html)

For resale by GFS authorized distributors only.

GFS Chemicals, Inc. P.O. Box 245 Powell, OH 43065 \* Signed Orig. Doc. On File  
1-800-858-9682 (U.S. and Canada) 1-740-881-5501 (International) 1-740-881-5989 (Fax)

**ISO 17025 Testing**

All ISO 17025 testing is performed at GFS Chemicals, Inc. 800 Kaderly Dr, Columbus, OH 43228 USA

UV/Vis Spectrophotometer testing is performed according to ASTM method E169-16.

Turbidity testing is performed according to ASTM methods D6855-17 and ASTM D7315-17.

Conductivity testing is performed according to ASTM method D1125-14.

pH testing is performed according to ASTM method D1293-18.

Karl Fischer titration testing is performed according to ASTM methods E203-16 and E1064-16.

Not for direct use in food, cosmetics, finished pharmaceuticals or drug products. Supplier is not responsible for compliance with FDA Current Good Manufacturing Practice(cGMP) requirements, including without limitation those for finished drug products in 21 C.F.R Parts 210 and 211. Consult warranty limitations at [www.gfschemicals.com/statics/documents/aboutus/termsandconditions.html](http://www.gfschemicals.com/statics/documents/aboutus/termsandconditions.html)

For resale by GFS authorized distributors only.

---

GFS Chemicals, Inc. P.O. Box 245 Powell, OH 43065 \* Signed Orig. Doc. On File  
1-800-858-9682 (U.S. and Canada) 1-740-881-5501 (International) 1-740-881-5989 (Fax)