

# Certificate of Analysis



**Product Name:** FORMIC ACID, 88%, REAGENT (ACS)  
**Item #:** 650  
**Lot #:** 19280101

## Certified Values:

Specifications (Max Limits or as Specified)	Status	Results
Assay 88.0 % - Min	Pass	90.2
Color (APHA) 15 Max	Pass	< 15
Dilution test	Pass	Passes Test
Residue after evaporation 0.002 % Max	Pass	0.001
Acetic acid (%) 0.4 % Max	Pass	< 0.4
Ammonium 0.005 % Max	Pass	< 0.005
Chloride 0.001 % Max	Pass	< 0.001
Sulfate 0.002 % Max	Pass	< 0.002
Sulfite	Pass	Passes Test
Heavy Metals (as Pb) 0.0005 % Max	Pass	< 0.0005
Iron 0.0005 % Max	Pass	< 0.0005

## Comments

**CoA #:** COA-042042  
**Certificate Created By:** Karen Hirsch  
**CoA Creation Date:** July 30, 2019  
**Best by:** June 26, 2024  
**Print Date:** June 4, 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)