

# Certificate of Analysis

**Product Name:** NITRIC ACID, 69%, VERITAS  
REDISTILLED

**Item #:** 63

**Lot #:** 19070181



## Certified Values:

Specifications (Max Limits or as Specified)	Pass/Fail	Numerical Results
Assay 68.0 % - Min	Pass	69.7
Chloride 0.00001 % Max	Pass	< 0.00001
Sulfate 0.00001 % Max	Pass	< 0.00001
Arsenic 0.0000001 % Max	Pass	< 0.0000001
Heavy Metals 0.000001 % Max	Pass	< 0.000001
Iron 0.000001 % Max	Pass	< 0.000001
Residue after ignition 0.0001 % Max	Pass	< 0.0001
Color (APHA) 10 Max	Pass	< 10
Al 5.00 ppb Max	Pass	< 0.10
Ag 1.00 ppb Max	Pass	< 0.01
Au 1.00 ppb Max	Pass	< 0.10
B 10.00 ppb Max	Pass	< 0.10
Ba 2.00 ppb Max	Pass	< 0.10
Be 1.00 ppb Max	Pass	< 0.10
Bi 1.00 ppb Max	Pass	< 0.10
Ca 10.00 ppb Max	Pass	0.13
Cd 1.00 ppb Max	Pass	< 0.10

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)

Ce 1.00 ppb Max	Pass	< 0.10
Co 1.00 ppb Max	Pass	< 0.10
Cr 1.00 ppb Max	Pass	< 0.10
Cs 1.00 ppb Max	Pass	< 0.10
Cu 2.00 ppb Max	Pass	< 0.10
Dy 1.00 ppb Max	Pass	< 0.10
Er 1.00 ppb Max	Pass	< 0.10
Eu 1.00 ppb Max	Pass	< 0.10
Fe 5.00 ppb Max	Pass	< 0.10
Ga 1.00 ppb Max	Pass	< 0.10
Gd 1.00 ppb Max	Pass	< 0.10
Ge 1.00 ppb Max	Pass	< 0.10
Hg 2.00 ppb Max	Pass	< 0.10
Ho 1.00 ppb Max	Pass	< 0.10
In 1.00 ppb Max	Pass	< 0.10
Ir 1.00 ppb Max	Pass	< 0.10
K 2.00 ppb Max	Pass	< 0.10
La 1.00 ppb Max	Pass	< 0.10
Li 1.00 ppb Max	Pass	< 0.10
Lu 1.00 ppb Max	Pass	< 0.10
Mg 2.00 ppb Max	Pass	< 0.10
Mn 1.00 ppb Max	Pass	< 0.10
Mo 1.00 ppb Max	Pass	< 0.10

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Na 10.00 ppb Max	Pass	0.18
Nd 1.00 ppb Max	Pass	< 0.10
Ni 1.00 ppb Max	Pass	< 0.10
Os 1.00 ppb Max	Pass	< 0.10
Pb 1.00 ppb Max	Pass	< 0.10
Pd 1.00 ppb Max	Pass	< 0.10
Pr 1.00 ppb Max	Pass	< 0.10
Pt 1.00 ppb Max	Pass	< 0.10
Rb 1.00 ppb Max	Pass	< 0.10
Rh 1.00 ppb Max	Pass	< 0.10
Ru 1.00 ppb Max	Pass	< 0.10
Sb 1.00 ppb Max	Pass	< 0.10
Sc 1.00 ppb Max	Pass	< 0.10
Se 1.00 ppb Max	Pass	< 0.10
Sm 1.00 ppb Max	Pass	< 0.10
Sn 1.00 ppb Max	Pass	< 0.10
Sr 1.00 ppb Max	Pass	< 0.10
Tb 1.00 ppb Max	Pass	< 0.10
Te 1.00 ppb Max	Pass	< 0.10
Th 1.00 ppb Max	Pass	< 0.10
Ti 1.00 ppb Max	Pass	< 0.10
U 1.00 ppb Max	Pass	< 0.10
V 1.00 ppb Max	Pass	< 0.10

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W 1.00 ppb Max	Pass	< 0.10
Y 1.00 ppb Max	Pass	< 0.10
Yb 1.00 ppb Max	Pass	< 0.10
Zn 5.00 ppb Max	Pass	< 0.10
Zr 1.00 ppb Max	Pass	< 0.10

**Comments**

**Certificate Create By:** Jacob Watson  
**Best by:** February 1, 2024  
**Print Date:** March 29, 2019

**Signature on File**

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**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.

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