



Certificate of Analysis

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Product name: NITRIC ACID, 69%, VERITAS REDISTILLED

Item #: 63

Lot #: 24006780

Certified Values:

Specifications	Status	Results
Assay 68.0% - Min	Pass	69.8
Chloride 0.00001 % Max	Pass	<0.00001
Sulfate 0.00001 % Max	Pass	<0.00001
Arsenic (As) 1 ppb Max	Pass	<1
Heavy Metals 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	<5.00
Ag 1.00 ppb Max	Pass	<1.00
Au 1.00 ppb Max	Pass	<1.00
B 10.00 ppb Max	Pass	<10.00
Ba 2.00 ppb Max	Pass	<2.00
Be 1.00 ppb Max	Pass	<1.00
Bi 1.00 ppb Max	Pass	<1.00
Ca 10.00 ppb Max	Pass	<10.00
Cd 1.00 ppb Max	Pass	<1.00
Ce 1.00 ppb Max	Pass	<1.00
Co 1.00 ppb Max	Pass	<1.00
Cr 1.00 ppb Max	Pass	<1.00
Cs 1.00 ppb Max	Pass	<1.00
Cu 2.00 ppb Max	Pass	<2.00
Dy 1.00 ppb Max	Pass	<1.00
Er 1.00 ppb Max	Pass	<1.00
Eu 1.00 ppb Max	Pass	<1.00
Fe 5.00 ppb Max	Pass	<5.00
Ga 1.00 ppb Max	Pass	<1.00
Gd 1.00 ppb Max	Pass	<1.00
Ge 1.00 ppb Max	Pass	<1.00
Hg 2.00 ppb Max	Pass	<2.00
Ho 1.00 ppb Max	Pass	<1.00
In 1.00 ppb Max	Pass	<1.00
Ir 1.00 ppb Max	Pass	<1.00
K 2.00 ppb Max	Pass	<2.00
La 1.00 ppb Max	Pass	<1.00
Li 1.00 ppb Max	Pass	<1.00
Lu 1.00 ppb Max	Pass	<1.00
Mg 2.00 ppb Max	Pass	<2.00
Mn 1.00 ppb Max	Pass	<1.00
Mo 1.00 ppb Max	Pass	<1.00
Na 10.00 ppb Max	Pass	<10.00
Nd 1.00 ppb Max	Pass	<1.00
Ni 1.00 ppb Max	Pass	<1.00

Os 1.00 ppb Max	Pass	<1.00
Pb 1.00 ppb Max	Pass	<1.00
Pd 1.00 ppb Max	Pass	<1.00
Pr 1.00 ppb Max	Pass	<1.00
Pt 1.00 ppb Max	Pass	<1.00
Rb 1.00 ppb Max	Pass	<1.00
Rh 1.00 ppb Max	Pass	<1.00
Ru 1.00 ppb Max	Pass	<1.00
Sb 1.00 ppb Max	Pass	<1.00
Sc 1.00 ppb Max	Pass	<1.00
Se 1.00 ppb Max	Pass	<1.00
Sm 1.00 ppb Max	Pass	<1.00
Sn 1.00 ppb Max	Pass	<1.00
Sr 1.00 ppb Max	Pass	<1.00
Tb 1.00 ppb Max	Pass	<1.00
Te 1.00 ppb Max	Pass	<1.00
Th 1.00 ppb Max	Pass	<1.00
Ti 1.00 ppb Max	Pass	<1.00
U 1.00 ppb Max	Pass	<1.00
V 1.00 ppb Max	Pass	<1.00
W 1.00 ppb Max	Pass	<1.00
Y 1.00 ppb Max	Pass	<1.00
Yb 1.00 ppb Max	Pass	<1.00
Zn 5.00 ppb Max	Pass	<5.00
Zr 1.00 ppb Max	Pass	<1.00

Comments

CoA #: COA-102648 **Best by:** September 28, 2028
Certificate Created By: Troy Barker **Print Date:** March 19, 2024
CoA Creation Date: October 25, 2023
Certified by: Aron Becza - Quality Assurance Manager

Aron Becza

Traceability:

This material was processed under a quality management system that is registered to ISO 9001:2015. The equipment used in the testing of material is NIST traceable. In cases where NIST traceability is not possible, equipment manufacturer recommendations and/or industry best practices are followed.

The following tests are performed under an A2LA accredited ISO/IEC 17025 management system:

- UV/VIS Spectrophotometer testing is performed according to ASTM method E169-16
- Turbidity according to ASTM methods D6855-17 and ASTM D7315-17
- Conductivity according to ASTM method D1125-14
- pH according to ASTM method D1293-18
- Karl Fischer titration according to ASTM methods DE203-16 and E1064-16

Samples for testing are obtained using GFS procedure GFSW-LAB-PPG-0022.

Testing is performed in a laboratory temperature of 22 °C +/- 2 °C and/or a solution temperature of 25 °C +/- 0.2 °C.

Karl Fischer testing is performed at a laboratory temperature of 25 °C +/- 5 °C and a relative humidity of less than or equal to 60%.

Measurement Uncertainty:

The reported measurement uncertainty is an expanded measurement uncertainty according to the ASM method E2554-18, calculated using 2 as the coverage factor (which gives a confidence level of approximately 95%).

- Example for a reported conductivity value of 2124 uS/cm:
2124uS/cm ± 0.65%, k=2
- Example for a reported pH value of 8.32:
8.32 ± 0.01, K=2
- Karl Fischer for values between 0.1 to 10 mg/g
 - o Example for a reported Karl Fischer value of 5.3 mg/g:
5.3mg/g ± 3.76%, k=2

