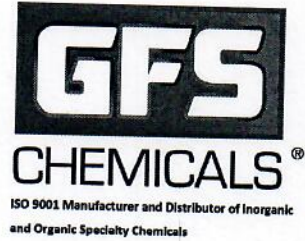


Certificate of Analysis



Product Name: HYDROCHLORIC ACID, 30-35%,
VERITAS DOUBLE DISTILLED
Item #: 43552
Lot #: 20020189

Certified Values:

Specifications (Max Limits or as Specified)	Status	Results
Assay 32 - 35 %	Pass	34
Ag (ppt) 10 ppt Max	Pass	<0.05
Al (ppt) 20 ppt Max	Pass	<5
As (ppt) 50 ppt Max	Pass	<5
Au (ppt) 20 ppt Max	Pass	<1
B (ppt) 100 ppt Max	Pass	<20
Ba (ppt) 20 ppt Max	Pass	<0.05
Be (ppt) 20 ppt Max	Pass	<0.02
Bi (ppt) 20 ppt Max	Pass	<0.01
Ca (ppt) 20 ppt Max	Pass	<10
Cd (ppt) 10 ppt Max	Pass	<0.01
Ce (ppt) 10 ppt Max	Pass	<0.01
Co (ppt) 10 ppt Max	Pass	<0.05
Cr (ppt) 10 ppt Max	Pass	<0.5
Cs (ppt) 10 ppt Max	Pass	<0.01
Cu (ppt) 10 ppt Max	Pass	<0.5
Dy (ppt) 10 ppt Max	Pass	<0.01

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
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)

Er (ppt) 1 ppt Max	Pass	<0.01
Eu (ppt) 1 ppt Max	Pass	<0.01
Fe (ppt) 20 ppt Max	Pass	<2
Ga (ppt) 10 ppt Max	Pass	<0.01
Gd (ppt) 1 ppt Max	Pass	<0.01
Hg (ppt) 50 ppt Max	Pass	<20
Ho (ppt) 1 ppt Max	Pass	<0.01
In (ppt) 1 ppt Max	Pass	<0.01
K (ppt) 20 ppt Max	Pass	<0.5
La (ppt) 10 ppt Max	Pass	<0.01
Li (ppt) 20 ppt Max	Pass	<0.05
Lu (ppt) 1 ppt Max	Pass	<0.01
Mg (ppt) 20 ppt Max	Pass	<0.1
Mn (ppt) 10 ppt Max	Pass	<0.05
Mo (ppt) 10 ppt Max	Pass	<0.5
Na (ppt) 20 ppt Max	Pass	<1
Nd (ppt) 10 ppt Max	Pass	<0.01
Ni (ppt) 20 ppt Max	Pass	<5
Pb (ppt) 10 ppt Max	Pass	<0.01
Pd (ppt) 10 ppt Max	Pass	<0.1
Pr (ppt) 1 ppt Max	Pass	<0.01
Pt (ppt) 10 ppt Max	Pass	<1
Rb (ppt) 10 ppt Max	Pass	<0.01

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Rh (ppt) 10 ppt Max	Pass	<0.01
Sb (ppt) 10 ppt Max	Pass	<0.1
Sc (ppt) 10 ppt Max	Pass	<0.05
Se report	Pass	<20
Sm (ppt) 1 ppt Max	Pass	<0.01
Sr (ppt) 20 ppt Max	Pass	<0.01
Sn (ppt) 10 ppt Max	Pass	<0.1
Tb (ppt) 1 ppt Max	Pass	<0.01
Te (ppt) 1 ppt Max	Pass	<0.01
Ti (ppt) 10 ppt Max	Pass	<0.1
U (ppt) 10 ppt Max	Pass	<0.01
V (ppt) 10 ppt Max	Pass	<0.1
W (ppt) 10 ppt Max	Pass	<0.02
Y (ppt) 10 ppt Max	Pass	<0.01
Yb (ppt) 1 ppt Max	Pass	<0.01
Zn (ppt) 10 ppt Max	Pass	<0.5
Zr (ppt) 10 ppt Max	Pass	<0.01

Comments

CoA #: COA-055128
Certificate Created By: Jacob Watson
CoA Creation Date: April 3, 2020
Best by: March 23, 2022
Print Date: June 4, 2021

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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