



**ChemPure* Brand
Chemicals**

Cust-Product Code: CP-A1010P
Lot #: 2020103099

...Pure Quality

CERTIFICATE OF ANALYSIS

PRODUCT NAME: **Acetic Acid**
Glacial, ACS

F.W.: 60.0500

CHEMICAL FORMULA: CH₃COOH

CAS No: 64-19-7

Density: 1.0510

ANALYTICAL RESULTS		
ITEM	SPECIFICATIONS	ANALYSIS
Assay (CH ₃ COOH)	99.7% min.	100.0%
Color (APHA)	10 max.	<5
Chloride (Cl)	1 ppm max.	<1 ppm
Heavy metals (by ICP-OES)	0.5 ppm max.	<0.5 ppm
Sulfate (SO ₄)	1 ppm max.	<1 ppm
Substances Reducing Permanganate	To pass test	Passes Test
Substances Reducing Dichromate	To pass test	Passes Test
Residue After Evaporation	0.001% max.	<0.001%
Iron (Fe)	0.2 ppm max.	<0.1 ppm
Dilution Test	To pass test	Passes Test
Acetic Anhydride	0.01% max.	<0.01%
Titrate Base	0.0004 meq/g max.	0.0001 meq/g
Date of Manufacture	Record Actual	10/12/2020
Expiration date	Record Actual	10/12/2022
REMARKS		

Important. It is certified that the above is a true copy of the actual lot analysis. To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication. However, nothing herein shall constitute any express or implied warranty of merchantability or fitness for a particular purpose. The minimum shelf life is based on current knowledge and holds only for proper storage conditions in the original containers. We herewith confirm that the delivery is effected according to the technical conditions agreed. Particular properties of the products or the suitability for a particular area of application is not assured. It is the customer's responsibility to inspect and test the products in order to satisfy itself as to the suitability for the customer's particular purpose. This information is not intended to be all inclusive as to the manner and conditions of use, handling, storage, disposal, and other factors that may involve other or additional legal, environmental, safety or performance considerations, and CHEMPURE BRAND CHEMICALS assumes no liability whatsoever for the use of or reliance upon this information. Our technical personnel will be happy to respond to questions. Safe handling and use of the product remains the responsibility of the customer. No suggestions for use are intended as, and nothing herein shall be construed as, recommendations to infringe any existing patents or to violate any Federal, State, Local or foreign laws. This document was produced electronically and is valid without a signature. ChemPure Quality Management.

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**ChemPure* Brand
Chemicals**

Cust-Product Code: CP-M1495S
Lot #: 2021012193

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CERTIFICATE OF ANALYSIS

PRODUCT NAME: **Hydrochloric Acid**
ACS

F.W.: 36.4600

CHEMICAL FORMULA: HCl

CAS No: 7647-01-0

Density: 1.1800

ANALYTICAL RESULTS		
ITEM	SPECIFICATIONS	ANALYSIS
Appearance	Clear, colorless liquid	Passes Test
Assay (HCl)	36.5 - 38.0%	37.4%
Color (APHA)	10 max.	0
Residue After Ignition	5 ppm max.	<5 ppm
Bromide (Br)	0.005% max.	<0.005%
Sulfate (SO ₄)	1 ppm max.	<0.1 ppm
Sulfite (SO ₃)	1 ppm max.	<0.1 ppm
Free Chlorine (Cl ₂)	1 ppm max.	<0.5 ppm
Ammonium (NH ₄)	3 ppm max.	<3 ppm
Arsenic (As)	0.01 ppm max.	<0.01 ppm
Heavy Metals	1 ppm max.	<0.01 ppm
Iron (Fe)	0.2 ppm max.	<0.01 ppm
Manufacture Date	Record Actual	01/14/2021
Recommended Retest Date	Report Actual	01/14/2023

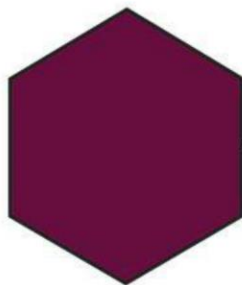
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**ChemPure* Brand
Chemicals**

Cust-Product Code: CP-M1776P
Lot #: 2021011560

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CERTIFICATE OF ANALYSIS

PRODUCT NAME: **Nitric Acid**
ACS

CHEMICAL FORMULA: HNO₃

F.W.: 63.0100

CAS No: 7697-37-2

Density: 1.4200

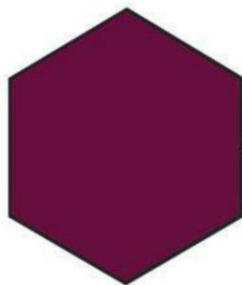
ANALYTICAL RESULTS		
ITEM	SPECIFICATIONS	ANALYSIS
Appearance	Colorless, free from susp. matter	Passes Test
Assay (HNO ₃)	68.0 - 70.0%	69.9%
Color (APHA)	10 max.	0
Residue After Ignition	5 ppm max.	<1 ppm
Chloride (Cl)	0.5 ppm max.	<0.5 ppm
Sulfate (SO ₄)	1 ppm max.	<1 ppm
Arsenic (As)	0.01 ppm max.	<0.01 ppm
Heavy Metals (as Pb)	0.2 ppm max.	<0.2 ppm
Iron (Fe)	0.2 ppm max.	<0.2 ppm
Manufacture Date	Record Actual	01/15/2021
Expiration date	2 Years	01/15/2023
REMARKS		
Meets ACS specifications		

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**ChemPure* Brand
Chemicals**

Cust-Product Code: CP-M1969D
Lot #: 2020092934

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CERTIFICATE OF ANALYSIS

PRODUCT NAME: **Potassium Iodide**
Crystal, ACS

F.W.: 166.0000

CHEMICAL FORMULA: KI

CAS No: 7681-11-0

Density: 1.0000

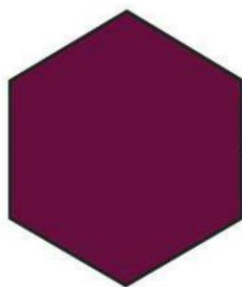
ANALYTICAL RESULTS		
ITEM	SPECIFICATIONS	ANALYSIS
Heavy Metals (as Pb)	5 ppm max.	1 ppm
Assay (KI)	99.0% min.	100.0%
Barium (Ba)	0.002% max.	0.00004%
Calcium (Ca)	0.002% max.	0.0002%
Chloride and bromide (as Cl)	0.01% max.	0.005%
Color	White	Passes Test
Form	Granules	Passes Test
Insoluble Matter	0.005% max.	0.002%
Iodate (IO ₃)	3 ppm max.	<3 ppm
Iron (Fe)	3 ppm max.	1 ppm
Loss on Drying at 150°C	0.2% max.	0.03%
Magnesium (Mg)	0.001% max.	0.00003%
pH of a 5% solution at 25°C	6.0-9.2	6.5
Phosphate (PO ₄)	0.001% max.	0.0008%
Sodium (Na)	0.005% max.	0.004%
Sulfate (SO ₄)	0.005% max.	0.001%
Manufacture Date	Record Actual	08/21/2020
Expiration date	Record Actual	08/21/2022
REMARKS		

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**ChemPure* Brand
Chemicals**

Cust-Product Code: CP-M2280D
Lot #: 2020031671

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CERTIFICATE OF ANALYSIS

PRODUCT NAME: **Sodium Acetate, Anhydrous**
ACS

F.W.: 82.0300

CHEMICAL FORMULA: NaCH₃COO

CAS No: 127-09-3

Density: 1.0000

ANALYTICAL RESULTS		
ITEM	SPECIFICATIONS	ANALYSIS
Assay (NaC ₂ H ₃ O ₂)	99.0% min.	99.7%
pH of a 5% solution at 25°C	7.0-9.2	8.4
Insoluble Matter	0.01% max.	0.003%
Loss on drying @ 120C	1.0% max.	0.3%
Chloride (Cl)	0.002% max.	<0.002%
Phosphate (PO ₄)	0.001% max.	<0.001%
Sulfate (SO ₄)	0.003% max.	<0.003%
Calcium (Ca)	0.005% max.	0.001%
Magnesium (Mg)	0.002% max.	0.0008%
Heavy metals (by ICP-OES)	0.001% max.	<0.001%
Iron (Fe)	0.001% max.	<0.001%
Manufacture Date	Record Actual	01/21/2020
Expiration date	Record Actual	01/20/2023
REMARKS		

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