

**Aqua Solutions, Inc.**  
**6913 Highway 225**  
**Deer Park, TX, 77536**  
**281/479-2569**  
**Certificate of Analysis / QC Results**  
**Customer PO # :**

<b>Packaged Product:</b> 4112 HYDROCHLORIC ACID 0.02 NORMAL IN METHANOL			
Test	Target/UOM	Range	Result
Actual Normality	0.0200 EQ/L	0.0195 - 0.0205	0.0196
Sample ID			
Tested 12/20/23			
Tester SHAR			
Recorded 12/20/23			
<b>SAMPLE COLLECTION &amp; HANDLING</b>	YES		YES
<b>PER LAB040</b>	YES		
Sample ID			
Tested 12/20/23			
Tester SHAR			
Recorded 12/20/23			
<b>DATE OF SAMPLING FOR TEST</b>	MM/DD/YYYY		12/20/2023
<b>PURPOSES</b>	MM/DD/YYYY		
Sample ID			
Tested 12/20/23			
Tester SHAR			
Recorded 12/20/23			
<b>AMBIENT TEMPERATURE DURING</b>	25.0	10.0 - 35.0	21.0
<b>SAMPLING DEGC</b>	DEG C		
Sample ID			
Tested 12/20/23			
Tester SHAR			
Recorded 12/20/23			
<b>DATE OF TESTING OF SAMPLE</b>	MM/DD/YYYY		12/20/2023
	MM/DD/YYYY		
Sample ID			
Tested 12/20/23			
Tester SHAR			
Recorded 12/20/23			
<b>AMBIENT TEST TEMPERATURE</b>	20.0	10.0 - 30.0	21.0
<b>DEG C</b>	DEG C		
Sample ID			
Tested 12/20/23			
Tester SHAR			
Recorded 12/20/23			
<b>QCSP5: STANDARDIZATION OF</b>	YES		YES
<b>AQUEOUS ACIDS</b>	METHOD		
Sample ID			
Tested 12/20/23			
Tester SHAR			
Recorded 12/20/23			
<b>N.I.S.T. Traceable to SRM 723</b>	Yes		YES
	YES		
Sample ID			
Tested 12/20/23			
Tester SHAR			
Recorded 12/20/23			

**Aqua Solutions, Inc.**  
**6913 Highway 225**  
**Deer Park, TX, 77536**  
**281/479-2569**  
**Certificate of Analysis / QC Results**  
**Customer PO # :**

<b>PREPARED TO FORMULATION ON FILE</b>	YES YES	YES
Sample ID		
Tested 12/20/23		
Tester SHAR		
Recorded 12/20/23		
<b>APPEARANCE AND COLOR</b>	CLEAR LIQUID APPEARANCE	PASS
Sample ID		
Tested 12/20/23		
Tester SHAR		
Recorded 12/20/23		
<b>INSTRUMENTS USED DURING PREPARATION</b>	INSTRUMENT	M91,VF2-B18,02699,PID-M81
Sample ID		
Tested 12/20/23		
Tester SHAR		
Recorded 12/20/23		
<b>EXPIRATION DATE</b>	MM/DD/YY MM/DD/YYYY	03/30/24
Sample ID		
Tested 12/20/23		
Tester SHAR		
Recorded 12/20/23		
<b>SHELF LIFE OF PRODUCT</b>	3 MONTHS TIME	3 MONTHS
Sample ID		
Tested 12/20/23		
Tester SHAR		
Recorded 12/20/23		
<b>Actual Density</b>	0.79274 GM/ML	0.79215 - 0.79334 0.79280
Sample ID		
Tested 12/20/23		
Tester SHAR		
Recorded 12/20/23		
<b>Lot #</b>	3121517	
<b>Made</b>	12/20/23	

This is to certify that the product listed above has been prepared according to the agreed upon formulation. The solutions producer has a Quality Management System which governs each step of the manufacturing process to insure the production of a consistent product. Traceability from the producer's lot numbers to the original manufacturer's lot number is maintained. Certificates of Analysis for the raw materials used to prepare this product are available upon request.

The weights and/or volumes used to prepare this product are N.I.S.T. Traceable. All balances used in the preparation of product are calibrated daily against N.I.S.T. Traceable weights. The balances are maintained and serviced on a regular basis by an outside certified company. All volumetric glassware used is N.I.S.T. Traceable and certified as meeting Class A specifications.



Aqua Solutions, Inc.  
Ph: 281-479-2569  
Fax: 281-479-2790  
P.O. Box 70  
Deer Park, TX 77536  
Website: [www.aquasolutions.org](http://www.aquasolutions.org)

Page: 3

Date: 12/20/23 at 8:34 AM

**Aqua Solutions, Inc.**  
**6913 Highway 225**  
**Deer Park, TX, 77536**  
**281/479-2569**  
**Certificate of Analysis / QC Results**  
**Customer PO # :**

Unless otherwise agreed to, all chemicals used in the preparation of this product are Reagent ACS grade.

**Quality Manager**