



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

<b>Packaged Product:</b> 4192			
HYDROCHLORIC ACID 0.5 NORMAL IN METHANOL			
Test	Target/UOM	Range	Result
<b>PREPARED TO FORMULATION ON FILE</b>	YES		YES
Sample ID			
Tested 09/06/23			
Tester BPHI			
Recorded 09/06/23			
<b>SAMPLE COLLECTION &amp; HANDLING PER LAB040</b>	YES		YES
Sample ID			
Tested 09/06/23			
Tester BPHI			
Recorded 09/06/23			
<b>DATE OF SAMPLING FOR TEST PURPOSES</b>	MM/DD/YYYY		09/06/2023
Sample ID	MM/DD/YYYY		
Tested 09/06/23			
Tester BPHI			
Recorded 09/06/23			
<b>AMBIENT TEMPERATURE DURING SAMPLING DEGC</b>	25.0	10.0 - 35.0	21.8
Sample ID			
Tested 09/06/23			
Tester BPHI			
Recorded 09/06/23			
<b>DATE OF TESTING OF SAMPLE</b>	MM/DD/YYYY		09/06/2023
Sample ID	MM/DD/YYYY		
Tested 09/06/23			
Tester BPHI			
Recorded 09/06/23			
<b>Actual Normality</b>	0.5000	0.4991 - 0.5009	0.5002
	EQ/L		
Sample ID			
Tested 09/06/23			
Tester BPHI			
Recorded 09/06/23			
<b>QCSP5: STANDARDIZATION OF AQUEOUS ACIDS</b>	YES		YES
	METHOD		
Sample ID			
Tested 09/06/23			
Tester BPHI			
Recorded 09/06/23			
<b>N.I.S.T. Traceable to SRM 723 THAM</b>	YES		YES
	YES		
Sample ID			
Tested 09/06/23			
Tester BPHI			
Recorded 09/06/23			



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

<b>APPEARANCE AND COLOR</b>	CLEAR LIQUID APPEARANCE	PASS
Sample ID		
Tested	09/06/23	
Tester	BPHI	
Recorded	09/06/23	
<b>INSTRUMENTS USED DURING PREPARATION</b>	<b>INSTRUMENT</b>	M55,GC,VF5-L12
Sample ID		
Tested	09/06/23	
Tester	BPHI	
Recorded	09/06/23	
<b>Actual Density</b>	0.81619 GM/ML	0.81429 - 0.81809 0.81609
Sample ID		
Tested	09/06/23	
Tester	BPHI	
Recorded	09/06/23	
<b>EXPIRATION DATE</b>	MM/DD/YY MM/DD/YYYY	03/30/24
Sample ID		
Tested	09/06/23	
Tester	BPHI	
Recorded	09/06/23	
<b>Lot #</b>	3090126	
<b>Made</b>	09/06/23	

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.

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

  
**Quality Manager**