



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

<b>Packaged Product:</b> 4190			
HYDROCHLORIC ACID 0.5 NORMAL NIST TRACEABLE SOLUTION			
Test	Target/UOM	Range	Result
Actual Normality	0.5000 EQ/L	0.4995 - 0.5005	0.5000
Sample ID			
Tested 04/01/24			
Tester SHAR			
Recorded 04/01/24			
QCSP5: STANDARDIZATION OF AQUEOUS ACIDS	YES METHOD		YES
Sample ID			
Tested 04/01/24			
Tester SHAR			
Recorded 04/01/24			
N.I.S.T. Traceable to SRM 723 THAM	YES YES		YES
Sample ID			
Tested 04/01/24			
Tester SHAR			
Recorded 04/01/24			
PREPARED TO FORMULATION ON FILE	YES YES		YES
Sample ID			
Tested 04/01/24			
Tester SHAR			
Recorded 04/01/24			
SAMPLE COLLECTION & HANDLING PER LAB040	YES YES		YES
Sample ID			
Tested 04/01/24			
Tester SHAR			
Recorded 04/01/24			
DATE OF SAMPLING FOR TEST PURPOSES	MM/DD/YYYY MM/DD/YYYY		04/01/2024
Sample ID			
Tested 04/01/24			
Tester SHAR			
Recorded 04/01/24			
AMBIENT TEMPERATURE DURING SAMPLING DEGC	25.0 DEG C	10.0 - 35.0	21.0
Sample ID			
Tested 04/01/24			
Tester SHAR			
Recorded 04/01/24			
DATE OF TESTING OF SAMPLE	MM/DD/YYYY MM/DD/YYYY		04/01/2024
Sample ID			
Tested 04/01/24			
Tester SHAR			
Recorded 04/01/24			



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<b>AMBIENT TEST TEMPERATURE</b>	20.0	15.0 - 30.0	21.0
<b>DEG C</b>	<b>DEG C</b>		
Sample ID			
Tested	04/01/24		
Tester	SHAR		
Recorded	04/01/24		
<b>APPEARANCE AND COLOR</b>	<b>CLEAR LIQUID</b>		<b>PASS</b>
	<b>APPEARANCE</b>		
Sample ID			
Tested	04/01/24		
Tester	SHAR		
Recorded	04/01/24		
<b>INSTRUMENTS USED DURING PREPARATION</b>	<b>INSTRUMENT</b>		<b>T-193,GC,T-VI</b>
Sample ID			
Tested	04/01/24		
Tester	SHAR		
Recorded	04/01/24		
<b>EXPIRATION DATE</b>	<b>MM/DD/YY</b>		<b>04/30/26</b>
	<b>MM/DD/YYYY</b>		
Sample ID			
Tested	04/01/24		
Tester	SHAR		
Recorded	04/01/24		
<b>SHELF LIFE OF PRODUCT</b>	<b>2 YEARS</b>		<b>2 YEARS</b>
	<b>TIME</b>		
Sample ID			
Tested	04/01/24		
Tester	SHAR		
Recorded	04/01/24		
<b>Lot #</b>	4032705		
<b>Made</b>	04/01/24		

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**