



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

<b>Packaged Product:</b> 4355			
HYDROCHLORIC ACID 2.0 NORMAL			
Test	Target/UOM	Range	Result
<b>PREPARED TO FORMULATION ON FILE</b>	YES		YES
Sample ID			
Tested 10/31/23			
Tester JENC			
Recorded 10/31/23			
<b>SAMPLE COLLECTION &amp; HANDLING PER LAB040</b>	YES		YES
Sample ID			
Tested 10/31/23			
Tester JENC			
Recorded 10/31/23			
<b>DATE OF SAMPLING FOR TEST PURPOSES</b>	MM/DD/YYYY		10/31/2023
Sample ID			
Tested 10/31/23			
Tester JENC			
Recorded 10/31/23			
<b>AMBIENT TEMPERATURE DURING SAMPLING DEGC</b>	25.0	10.0 - 35.0	21.5
Sample ID			
Tested 10/31/23			
Tester JENC			
Recorded 10/31/23			
<b>DATE OF TESTING OF SAMPLE</b>	MM/DD/YYYY		10/31/2023
Sample ID			
Tested 10/31/23			
Tester JENC			
Recorded 10/31/23			
<b>AMBIENT TEST TEMPERATURE DEGC</b>	20.0	15.0 - 30.0	21.5
Sample ID			
Tested 10/31/23			
Tester JENC			
Recorded 10/31/23			
<b>Actual Normality</b>	2.0000	1.9990 - 2.0010	1.9995
	EQ/L		
Sample ID			
Tested 10/31/23			
Tester JENC			
Recorded 10/31/23			
<b>QCSP5: STANDARDIZATION OF AQUEOUS ACIDS</b>	YES		YES
	METHOD		
Sample ID			
Tested 10/31/23			
Tester JENC			
Recorded 10/31/23			



**Aqua Solutions, Inc.**  
**6913 Highway 225**  
**Deer Park, TX, 77536**  
**281/479-2569**

**Certificate of Analysis / QC Results**

Customer PO # :

<b>N.I.S.T. Traceable to SRM 723 THAM</b>	YES		YES
	YES		
Sample ID			
Tested	10/31/23		
Tester	JENC		
Recorded	10/31/23		
<b>CERTIFIED TOTAL ORGANIC CARBON (PPM)</b>	1.0	0.0 - 4.0	3.8
	PPM		
Sample ID			
Tested	10/31/23		
Tester	JENC		
Recorded	10/31/23		
<b>APPEARANCE AND COLOR</b>	CLEAR LIQUID APPEARANCE		PASS
Sample ID			
Tested	10/31/23		
Tester	JENC		
Recorded	10/31/23		
<b>INSTRUMENTS USED DURING PREPARATION</b>	INSTRUMENT		T169,T71,M55,M91,BID02259, TID41100
Sample ID			
Tested	10/31/23		
Tester	JENC		
Recorded	10/31/23		
<b>Actual Color, APHA</b>	10	0 - 10	9
	COLOR		
Sample ID			
Tested	10/31/23		
Tester	JENC		
Recorded	10/31/23		
<b>Prepared with 36.5-38% ACS HCL</b>	YES		YES
	YES		
Sample ID			
Tested	10/31/23		
Tester	JENC		
Recorded	10/31/23		
<b>IDENTITY</b>	PASS		PASS
	PASS		
Sample ID			
Tested	10/31/23		
Tester	JENC		
Recorded	10/31/23		
<b>EXPIRATION DATE</b>	MM/DD/YY		11/30/25
	MM/DD/YYYY		
Sample ID			
Tested	10/31/23		
Tester	JENC		
Recorded	10/31/23		



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

<b>SHELF LIFE OF PRODUCT</b>	SHELF LIFE TIME	2 YEARS
Sample ID		
Tested	10/31/23	
Tester	JENC	
Recorded	10/31/23	
<b>Actual Density</b>	1.03295 GM/ML	1.03239 - 1.03351 1.03296
Sample ID		
Tested	10/31/23	
Tester	JENC	
Recorded	10/31/23	
<b>SPECIFIC GRAVITY</b>	1.035 SPEC GRAV	1.030 - 1.040 1.035
Sample ID		
Tested	10/31/23	
Tester	JENC	
Recorded	10/31/23	
<b>Assay w/v HCL</b>	7.29 W/V%	6.12 - 7.48 7.29
Sample ID		
Tested	10/31/23	
Tester	JENC	
Recorded	10/31/23	
<b>EXPIRATION DATE</b>	MM/DD/YYYY MM/DD/YYYY	11/30/2025
Sample ID		
Tested	10/31/23	
Tester	JENC	
Recorded	10/31/23	
<b>Lot #</b>	3102633	
<b>Made</b>	10/31/23	

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**