



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

<b>Packaged Product:</b> 4133			
HYDROCHLORIC ACID 0.1 NORMAL IN METHANOL			
Test	Target/UOM	Range	Result
<b>PREPARED TO FORMULATION ON FILE</b>	YES		YES
Sample ID			
Tested 03/12/24			
Tester AFRE			
Recorded 03/12/24			
<b>SAMPLE COLLECTION &amp; HANDLING PER LAB040</b>	YES		YES
Sample ID			
Tested 03/12/24			
Tester AFRE			
Recorded 03/12/24			
<b>DATE OF SAMPLING FOR TEST PURPOSES</b>	MM/DD/YYYY		03/12/2024
Sample ID			
Tested 03/12/24			
Tester AFRE			
Recorded 03/12/24			
<b>AMBIENT TEMPERATURE DURING SAMPLING DEGC</b>	25.0	10.0 - 35.0	20.0
Sample ID			
Tested 03/12/24			
Tester AFRE			
Recorded 03/12/24			
<b>DATE OF TESTING OF SAMPLE</b>	MM/DD/YYYY		03/12/2024
Sample ID			
Tested 03/12/24			
Tester AFRE			
Recorded 03/12/24			
<b>AMBIENT TEST TEMPERATURE DEGC</b>	20.0	15.0 - 30.0	20.0
Sample ID			
Tested 03/12/24			
Tester AFRE			
Recorded 03/12/24			
<b>Actual Normality</b>	0.1000	0.0991 - 0.1009	0.1000
	EQ/L		
Sample ID			
Tested 03/12/24			
Tester AFRE			
Recorded 03/12/24			
<b>QCSP5: STANDARDIZATION OF AQUEOUS ACIDS</b>	YES		YES
	METHOD		
Sample ID			
Tested 03/12/24			
Tester AFRE			
Recorded 03/12/24			



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<b>N.I.S.T. Traceable to SRM 723 THAM</b>	YES		YES
	YES		
Sample ID			
Tested	03/12/24		
Tester	AFRE		
Recorded	03/12/24		
<b>Actual Density</b>	0.79722	0.79596 - 0.79848	0.79716
	GM/ML		
Sample ID			
Tested	03/12/24		
Tester	AFRE		
Recorded	03/12/24		
<b>APPEARANCE AND COLOR</b>	CLEAR LIQUID APPEARANCE		PASS
Sample ID			
Tested	03/12/24		
Tester	AFRE		
Recorded	03/12/24		
<b>INSTRUMENTS USED DURING PREPARATION</b>	INSTRUMENT		M55,M103,VF5-L15,M91,BID00 488,TID4
Sample ID			
Tested	03/12/24		
Tester	AFRE		
Recorded	03/12/24		
<b>EXPIRATION DATE</b>	MM/DD/YYYY		06/30/2024
	MM/DD/YYYY		
Sample ID			
Tested	03/12/24		
Tester	AFRE		
Recorded	03/12/24		
<b>Lot #</b>	4031182		
<b>Made</b>	03/12/24		

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**