



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

**Packaged Product:** SPX243  
 SODIUM HYDROXIDE 0.5000N (SPECIAL TEST PARAMETERS) 10L

**Lot #** 4062860

**Chemical Product:** SPX243F  
 SODIUM HYDROXIDE 0.5000N (SPECIAL TEST PARAMETERS)

Test	Target/UOM	Range	Result
<b>PREPARED TO FORMULATION ON FILE</b>	YES		YES
Sample ID			
Tested 07/15/24			
Tester JENC			
Recorded 07/15/24			
<b>DILUTION WATER MEETS ASTM TYPE 2 SPECS</b>	YES		PASS
Sample ID			
Tested 07/15/24			
Tester JENC			
Recorded 07/15/24			
<b>Actual Normality</b>	0.5000 EQ/L	0.4995 - 0.5005	0.4999
Sample ID			
Tested 07/15/24			
Tester JENC			
Recorded 07/15/24			
<b>N.I.S.T. Traceable to SRM 84 (KHP)</b>	YES		YES
Sample ID			
Tested 07/15/24			
Tester JENC			
Recorded 07/15/24			
<b>APPEARANCE AND COLOR</b>	CLEAR LIQUID APPEARANCE		PASS
Sample ID			
Tested 07/15/24			
Tester JENC			
Recorded 07/15/24			
<b>INSTRUMENTS USED DURING PREPARATION</b>	INSTRUMENT		M55,M113,T57,M91,BID02259, TID41100
Sample ID			
Tested 07/15/24			
Tester JENC			
Recorded 07/15/24			
<b>Actual Density</b>	1.02020 GM/ML	1.02004 - 1.02036	1.02019
Sample ID			
Tested 07/15/24			
Tester JENC			
Recorded 07/15/24			



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<b>SODIUM CARBONATE</b>	<=/ 500 PPM %	BRL
Sample ID		
Tested	07/29/24	
Tester	TMCG	
Recorded	07/29/24	
<b>ALUMINUM (AL) CONTENT</b>	</=3PPM	BRL
Sample ID		
Tested	07/29/24	
Tester	TMCG	
Recorded	07/29/24	
<b>CALCIUM CONTENT</b>	</=1.0PPM PPM	BRL
Sample ID		
Tested	07/29/24	
Tester	TMCG	
Recorded	07/29/24	
<b>MAGNESIUM (MG) CONTENT</b>	</=1.0PPM PPM	BRL
Sample ID		
Tested	07/29/24	
Tester	TMCG	
Recorded	07/29/24	
<b>IRON</b>	</=1.0 PPM PPM	BRL
Sample ID		
Tested	07/29/24	
Tester	TMCG	
Recorded	07/29/24	
<b>COPPER (CU) CONTENT</b>	</=0.2PPM COPPER	BRL
Sample ID		
Tested	07/29/24	
Tester	TMCG	
Recorded	07/29/24	
<b>SILICA PPM</b>	</=20 PPM PPM	BRL
Sample ID		
Tested	07/29/24	
Tester	TMCG	
Recorded	07/29/24	
<b>LEAD (PB) CONTENT</b>	</=0.1PPM MG/L	BRL
Sample ID		
Tested	07/29/24	
Tester	TMCG	
Recorded	07/29/24	
<b>CHLORIDE CONTENT</b>	</=2.0 PPM PPM	BRL
Sample ID		
Tested	07/29/24	
Tester	TMCG	
Recorded	07/29/24	



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<b>SULFATE (SO4) CONTENT</b>	$\leq 1.0$ PPM MG/KG	BRL
Sample ID		
Tested	07/29/24	
Tester	TMCG	
Recorded	07/29/24	
<b>FLUORIDE (F)</b>	$\leq 1.0$ PPM PPM	BRL
Sample ID		
Tested	07/29/24	
Tester	TMCG	
Recorded	07/29/24	
<b>PHOSPHATE CONTENT</b>	$\leq 2.0$ PPM PPM	BRL
Sample ID		
Tested	07/29/24	
Tester	TMCG	
Recorded	07/29/24	
<b>HEAVY METALS (AS LEAD)</b>	$\leq 0.5$ PPM PPM	BRL
Sample ID		
Tested	07/29/24	
Tester	TMCG	
Recorded	07/29/24	
<b>EXPIRATION DATE</b>	MM/DD/YY MM/DD/YYYY	07/30/26
Sample ID		
Tested	07/15/24	
Tester	JENC	
Recorded	07/15/24	
<b>SHELF LIFE OF PRODUCT</b>	2 YEARS TIME	2 YEARS
Sample ID		
Tested	07/15/24	
Tester	JENC	
Recorded	07/15/24	
<b>Made</b>	07/15/24	

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.