Doc ID: SDS-0100	Effective Date: 3/03/2020	Revision: A
Trade name	QuatroSol I Citrate Buffer for Heat Induced Epitope Recovery (pH 6)	

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name	QuatroSol I Citrate Buffer for Heat Induced Epitope Recovery (pH 6)	
Cat ##	K078	
Components Sodium citrate dihydrate		
EC	200-675-3	
CAS	6132-04-3	

1.2 Relevant identified uses of the substance or mixture and uses advised against

Liquid in plastic bottle

1.3 Details of the supplier of the safety data sheet

Diagnostic BioSystems, Inc. 6616 Owens Drive Pleasanton, CA 94588 (925) 484-3350 Customersupport@dbiosys.com

1.4 Emergency telephone number

N/A

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

COMPONENT 1			
	Hazard Class	Category	Hazard Statements (for pure substances)
	N/A	N/A	This product has been classified as non-
Sodium citrate			hazardous based on the physical and/or
dihydrate			chemical nature and/or concentration of
			ingredients.

2.2 Label elements

Signal Word	Warning
Pictogram	
H-Statements	N/A
P-Statements	N/A
EUH-Statements	N/A

2.3 Other hazards



Doc ID: SDS-0100	Effective Date: 3/03/2020	Revision: A
Trade name	QuatroSol I Citrate Buffer for Heat Induced Epitope Recovery (pH 6)	

N/A

SECTION 3: Composition/information on ingredients

Name	Identifiers	Classification according to	Classification (for
		CLP	pure substances)
Sodium citrate dihydrate	EC: 200-675-3	Concentration: <0.5%	Classification of the
	CAS: 6132-04-3		substance or
			mixture Not a
			hazardous
			substance or
			mixture. 2.2 GHS
			Label elements,
			including
			precautionary
			statements Not a
			hazardous
			substance or
			mixture. 2.3 Hazards
			not otherwise
			classified (HNOC) or
			not covered by GHS
			- none

SECTION 4: First aid measures

4.1 Description of first aid measures

	,,	
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration.	
If on skin	Wash off with soap and plenty of water.	
If in eyes	Flush eyes with water as a precaution	
If swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water.	
Self-protection	N/A	
of the first aider		

4.2 Most important symptoms and effects, both acute and delayed

N/A

4.3 Indication of any immediate medical attention and special treatment needed

N/A

SECTION 5: Firefighting measures



Doc ID: SDS-0100	Effective Date: 3/03/2020	Revision: A
Trade name	QuatroSol Citrate Buffer for Heat Induced Epitope Recovery (pH 6)	

5.1 Flammable Properties

Flash point	N/A
Flash point method	N/A
Autoignition temperature	N/A
Upper flame limit (volume % in air)	N/A
Lower flame limit (volume % in air)	N/A
Flame propagation rate (solids)	N/A
Osha flammability class	N/A

5.2 Extinguishing media

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	N/A

5.3 Special hazards arising from the substance or mixture

Hazardous combustion products		Carbon oxides, Sodium oxides
	Other information	Avoid inhalation of toxic fumes.

5.4 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Protective equipment Ensure adequate ventilation	
	Eye Protection: Wear goggles or safety glasses
	Hand protection: Wear latex or vinyl gloves
	Other protective equipment: Use lab coat or apron to prevent contact
	with eyes, skin and clothing
Emergency procedures	N/A
For emergency responders	N/A

6.2 Environmental precautions

Do not allow to enter sewage system

6.3 Methods and material for containment and cleaning up

For containment	N/A
For cleaning up	Sweep up and shovel. Keep in suitable, closed containers for disposal.
Other information	N/A

6.4 Reference to other sections

I N/A		
14/7		



Doc ID: SDS-0100	Effective Date: 3/03/2020	Revision: A
Trade name	QuatroSol Citrate Buffer for Heat Induced Epitope Recovery (pH 6)	

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire	N/A
Measures to prevent aerosol and dust generation	N/A
Measures to protect the environment	N/A
Advice on general occupational hygiene	Wear personal protective equipment. Ensure adequate ventilation. Do not breathe vapors or spray mist. Avoid contact with skin and eyes. Do not ingest. Do not eat, drink when handling this product, and wash hands after handling.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions	Store at 2°C to 8°C
Packaging materials	N/A
Requirements for storage rooms and vessels	N/A
Storage class	N/A
Other information	N/A

7.3 Specific end use(s)

Recommendations	N/A
Industrial sector specific solutions	N/A

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

8.2 Exposure controls

•		
Respiratory Protection	Use in well-ventilated laboratory	
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin	
	exposure	
Eye/face Protection	Wear appropriate protective eyeglasses or chemical safety	
	goggles	
Hygiene Measures	Handle in accordance with good industrial hygiene and safety	
	practice	



Doc ID: SDS-0100	Effective Date: 3/03/2020	Revision: A
Trade name	QuatroSol Citrate Buffer for Heat Induced Epitope Recovery (pH 6)	

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

312 mjormation on basic physical and oriented properties		
Appearance	Clear, Liquid	
Odor	Odorless	
Order Threshold	N/A	
рН	6	
Melting Point/ Freezing Point	N/A	
Initial Boiling Point/ Freezing Point	N/A	
Flash Point	N/A	
Evaporation Rate	N/A	
Flammability	N/A	
Upper/Lower Flammability or Explosive Limits	N/A	
Vapor Pressure	N/A	
Vapor Density	N/A	
Relative Density	N/A	
Solubility	N/A	
Partition Coefficient: n-octanol/water	N/A	
Auto-Ignition Temperature	N/A	
Decomposition temperature	N/A	
Viscosity	N/A	
Explosive Properties	N/A	
Oxidizing Properties	N/A	

9.2 Other Information

N/A

Section 10: Stability and Reactivity

10.1 Reactivity

N/A

10.2 Chemical Stability

Stable under recommended storage conditions

10.3 Possibility of Hazardous Reactions

N/A

10.4 Conditions to Avoid

Strong prolonged heat and contact with incompatible materials



Doc ID: SDS-0100	Effective Date: 3/03/2020	Revision: A
Trade name	QuatroSol I Citrate Buffer for Heat Induced Epitope Recovery (pH 6)	

10.5 Incompatible Materials

Strong Acids

Strong Bases

Strong Oxidizers

Metals and Metallic compounds

Sodium citrate dihydrate is Strong oxidizing agents

10.6 Hazardous Decomposition Products

N/A

SECTION 11: Toxicological Information

Sodium citrate dihydrate (in pure form): LD50 Oral - Mouse - male and female - 5,400 mg/kg		
Common route of entry Ingestion		
Potential Effects of Acute	Its concentration is low (<0.5%) in this product, but it is Strong oxidizing	
Exposure agents		
Potential Effects of	N/A	
Chronic Exposure		
Symptoms of	N/A	
Overexposure		

SECTION 12: Ecological Information

12.1 Toxicity

Preservatives normally are toxic for aquatic organisms when using pure substances. No ecological problems are to be expected when this product is handled and used with care and attention.

12.2 Persistence and Degradability

N/A

12.3 Bioaccumulative potential

N/A

12.4 Mobility in Soil

N/A

12.5 Results of PBT and vPvB Assessment

N/A

12.6 Other Adverse Effects

N/A



Doc ID: SDS-0100	Effective Date: 3/03/2020	Revision: A
Trade name	QuatroSol Citrate Buffer for Heat Induced Epitope Recovery (pH 6)	

SECTION 13: Disposal Considerations

13.1 Waste Treatment Methods

Dispose of waste product, unused product and contaminated packaging in compliance with federal, state and local regulations. If unsure of the applicable requirements, contact the authorities for information.

SECTION 14: Transport Information

14.1 Un Number

N/A

14.2 Un Proper Shipping Name

N/A

14.3 Transport Hazard Class (es)

N/A

14.4 Packing Group

N/A

14.5 Environmental Hazards

N/A

14.6 Special Precautions for User

N/A

14.7 Transport in Bulk according to Annex II of MARPOL73/78 and the IBC Code

N/A

SECTION 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

The product does not contain a hazardous ingredient in an amount that requires identification and labeling according to EC directives.

15.2 Chemical Safety Assessment

N/A

SECTION 16: Other Information

This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with



Doc ID: SDS-0100	Effective Date: 3/03/2020	Revision: A
Trade name	QuatroSol I Citrate Buffer for Heat Induced Epitope Recovery (pH 6)	

respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information of their particular purposes.