SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Acetate Buffer, pH 4.6, for Bromide Analysis

Product Number: 54

Other Identifying Product Numbers: 54-1, 54-16, 54-32

1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

1.3. Details of the Supplier of the Safety Data Sheet

Company: Ricca Chemical Company

Address: 448 West Fork Drive

Arlington, TX 76012 USA

Telephone: 888-467-4222

1.4. Emergency Telephone Number (24 hr)

CHEMTREC (USA) 800-424-9300 CHEMTREC (International) 1+ 703-527-3887

SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture (in accordance with OSHA HCS 29 CFR 1910.1200)

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

		Hazard	
Hazard Class	Category	Statement	Precautionary Statements
Skin Corrosion / Irritation	Category 2	H315	P264, P280, P302+P352, P321, P332+P313, P362
Eye Damage / Irritation	Category 1	H318	P280, P305+P351+P338, P310
Respiratory Sensitizer	Category 1	H334	P261, P285, P304+P341, P342+P311, P501
Specific Target Organs/Systemic Toxicity Following Single Exposure	Category 1	H370	P260, P264, P270, P307+P311, P321, P405, P501
Specific Target Organs/Systemic Toxicity Following Repeated Exposure	Category 2	H373	P260, P314, P501

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RICCA CHEMICAL COMPANY®

Safety Data Sheet

2.2. GHS Label Elements Pictograms:





Signal Word: Danger

Hazard Statements:

Hazard Number	Hazard Statement
H315	Causes skin irritation.
H318	Causes serious eye damage.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements:

Precautionary Number	Precautionary Statement		
P260	Do not breathe fumes, mist, vapors, or spray.		
P261	Avoid breathing fumes, mist, vapors, or spray.		
P264	Wash arms, hands and face thoroughly after handling.		
P270	Do not eat, drink or smoke when using this product.		
P280	Wear protective gloves and eye protection.		
P285	In case of inadequate ventilation wear respiratory protection.		
P302+P352	IF ON SKIN: Wash with plenty of soap and water.		
P304+P341	IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.		
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy		
	to do. Continue rinsing.		
P307+P311	IF exposed: Call a POISON CENTER or physician.		
P310	Immediately call a POISON CENTER or physician.		
P314	Get medical attention if you feel unwell.		
P321	Specific treatment (Wash areas of contact with water).		
P332+P313	If skin irritation occurs: Get medical attention.		
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER or physician.		
P362	Take off contaminated clothing and wash it before reuse.		
P405	Store locked up.		
P501	Dispose of contents in accordance with local, state, federal and international regulations.		

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2.3. WHMIS Classification

WHMIS classification is not included based on the recommended option (Option 4) found in the Canada Gazette Part II, Vol. 149, No.3, page 458

2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

SECTION 3: Composition / Information on Ingredients

3.1. Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	Weight%
Water	H ₂ O	18.01 g/mol	7732-18-5	81.05%
Sodium Chloride	NaCl	58.44 g/mol	7647-14-5	9.00%
Sodium Acetate Trihydrate	NaC ₂ H ₃ O ₂ ·3H ₂ O	136.08 g/mol	6131-90-4	6.80%
Acetic Acid	CH₃COOH	60.05 g/mol	64-19-7	3.15%

SECTION 4: First-Aid Measures

4.1. General First Aid Information

Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing. May cause slight irritation.

Inhalation: IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

Skin Contact: IF ON SKIN: Wash with plenty of soap and water. May cause slight irritation.

Ingestion: Dilute with water or milk. Call a physician if necessary.

4.2. Most Important Symptoms and Effects, Acute and Delayed

May cause mild irritation to the skin, eyes, and upper respiratory tract. Ingestion of large doses may produce abdominal pain, nausea and vomiting. Does not present any significant health hazards. EYE CONTACT: May cause slight irritation. SKIN CONTACT: May cause slight irritation.

4.3. Medical Attention or Special Treatment Needed

Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water).

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.

5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard.

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5.3. Special Protective Equipment for Firefighters

Use protective clothing and breathing equipment appropriate for the surrounding fire.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory protection.

6.2. Cleanup and Containment Methods and Materials

Absorb with suitable material (paper towels, etc.) and dispose of in accordance with local regulations. Ventilate, if necessary, site of spillage well to evaporate remaining liquid and dispel vapor.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

Store locked up. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage.

SECTION 8: Exposure Controls / Personal Protection

8.1. Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Acetic Acid (64-19-7)	TWA	USA	10 ppm TWA	U.S OSHA - Final PELs - Time
			25 mg/m³ TWA	Weighted Averages (TWAs)
Acetic Acid (64-19-7)	TLV-STEL	USA	15 ppm STEL	ACGIH - Threshold Limit Values - Short
				Term Exposure Limits (TLV-STEL)
Acetic Acid (64-19-7)	TLV-TWA	USA	10 ppm TWA	ACGIH - Threshold Limit Values - Time
				Weighted Averages (TLV-TWA)

8.2. Exposure Controls

Engineering Controls: No specific controls are needed. Normal room ventilation is adequate.

Respiratory Protection: In case of inadequate ventilation wear respiratory protection. Normal room ventilation is adequate.

Skin Protection: Wear protective gloves and eye protection. Chemical resistant gloves. **Eye Protection:** Wear protective gloves and eye protection. Safety glasses or goggles.

8.3. Personal Protective Equipment

Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory protection. Normal room ventilation is adequate. Chemical resistant gloves. Safety glasses or goggles.

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SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Appearance: Colorless liquid

Physical State: Liquid

Odor: Data not available.

Odor Threshold: Data not available.

pH: 4.6

Melting/Freezing Point: Approximately 0°C

Initial Boiling Point /Range: Approximately 100°C - Approximately 100°C

Flash Point: Data not available.

Evaporation Rate: Data not available.

Flammability: Data not available.

Flammability/Explosive Limits: Data not available.

Vapor Pressure: Data not available.

Vapor Density: Data not available.

Relative Density: 1.0

Solubility: Miscible

Partition Coefficient (n-Octanol/Water): Data not available.

Auto-Ignition Temperature: Data not available.

Decomposition Temperature: Data not available.

Viscosity: Data not available.

ExplosiveProperties: Data not available. **Oxidizing Properties:** Data not available.

SECTION 10: Stability and Reactivity

10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

10.2. Possibility of Hazardous Reactions

Data not available.

10.3. Conditions to Avoid and Incompatible Materials

Strong oxidizers (such as Chlorine, Fluorine, Bromine), and oxidizing materials.

10.4. Hazardous Decomposition Products

Will not occur.

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SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Not applicable.

Acute Toxicity - Dermal Exposure:

Not applicable.

Acute Toxicity - Inhalation Exposure:

Not applicable.

Acute Toxicity - Other Information:

LD50, Oral, Rat: 3530 mg/kg (Sodium Acetate); 3310 mg/kg (Acetic Acid); 3000 mg/kg (Sodium Chloride), details of toxic effects not reported other than lethal dose value.

Skin Corrosion and Irritation:

Causes skin irritation. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF ON SKIN: Wash with plenty of soap and water. Specific treatment (Wash areas of contact with water). If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.

Serious Eye Damage and Irritation:

Causes serious eye damage. Wear protective gloves and eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

Respiratory Sensitization:

May cause allergy or asthma symptoms or breathing difficulties if inhaled. Avoid breathing fumes, mist, vapors, or spray. In case of inadequate ventilation wear respiratory protection. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician. Dispose of contents in accordance with local, state, federal and international regulations.

Skin Sensitization:

Not applicable.

Germ Cell Mutagenicity:

Not applicable.

Carcinogenicity:

Not applicable.

Reproductive Toxicity:

Not applicable.

Specific Target Organ Toxicity from Single Exposure:

Causes damage to organs. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF exposed: Call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

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Specific Target Organ Toxicity from Repeated Exposure:

May cause damage to organs through prolonged or repeated exposure. Do not breathe fumes, mist, vapors, or spray. Get medical attention if you feel unwell. Dispose of contents in accordance with local, state, federal and international regulations.

Aspiration Hazard:

Not applicable.

Additional Toxicology Information:

Data not available.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Not applicable.

12.2. Persistence and Degradability

Data not available.

12.3. Bioaccumulative Potential

Data not available.

12.4. Mobility in Soil

Data not available.

12.5. Other Adverse Ecological Effects

Data not available.

SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods

Data not available.

SECTION 14: Transportation Information

14.1. Transportation by Land - Department of Transportation (DOT, United States of America)

Not regulated according to DOT Regulations.

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Not regulated according to IATA Regulations.

SECTION 15: Regulatory Information

- 15.1. Occupational Safety and Health Administration (OSHA) Hazards
 Not listed.
- 15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances Not listed.
- 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals
 Acetic Acid (CAS # 64-19-7): 5000 lb final RQ; 2270 kg final RQ
- 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

 Not listed.
- 15.5. Massachusetts Right-to-Know Substance List

Acetic Acid (CAS # 64-19-7): Present

15.6. Pennsylvania Right-to-Know Hazardous Substances

Acetic Acid (CAS # 64-19-7): Environmental hazard Acetic Acid (CAS # 64-19-7): Present Water (CAS # 7732-18-5): Present

15.7. New Jersey Worker and Community Right-to-Know Components

Acetic Acid (CAS # 64-19-7): corrosive Acetic Acid (CAS # 64-19-7): sn 0004

15.8. California Proposition 65

Not listed.

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15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Sodium Acetate Trihydrate (CAS # 6131-90-4): Present (DSL) Acetic Acid (CAS # 64-19-7): Present (DSL) Acetic Acid (CAS # 64-19-7): Present (NDSL)

Sodium Chloride (CAS # 7647-14-5): Present (DSL)

Water (CAS # 7732-18-5): Present (DSL)

15.10. United States of America Toxic Substances Control Act (TSCA) List

Sodium Acetate Trihydrate (CAS # 6131-90-4): Present Acetic Acid (CAS # 64-19-7): Present Sodium Chloride (CAS # 7647-14-5): Present Water (CAS # 7732-18-5): Present

15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Not listed.

SECTION 16: Other Information

16.1. Full Text of Hazard Statements and Precautionary Statements

Causes skin irritation. Causes serious eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Causes damage to organs. May cause damage to organs through prolonged or repeated exposure.

Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory protection.

IF ON SKIN: Wash with plenty of soap and water. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed: Call a POISON CENTER or physician. Get medical attention if you feel unwell. Specific treatment (Wash areas of contact with water). If skin irritation occurs: Get medical attention. If experiencing respiratory symptoms: Call a POISON CENTER or physician. Take off contaminated clothing and wash it before reuse.

Store locked up.

Dispose of contents in accordance with local, state, federal and international regulations.

16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable.

Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.

Health Hazards Not Otherwise Classified (HHNOC): Not Applicable.

Not Applicable.

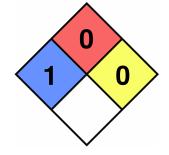
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16.3. National Fire Protection Association (NFPA) Rating

Health: 1
Flammability: 0
Reactivity: 0

Special Hazard:



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16.4. Document Revision

Last Revision Date: 5/1/2015

DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.

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