

Safety Data Sheet

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Buffer, Reference Standard, pH 4.00 ± 0.01 at 25°C (Color Coded Red)

Product Number: 1501

Other Identifying Product Numbers: 1501-1, 1501-16, 1501-16CS, 1501-1CS, 1501-1CT, 1501-2.5, 1501-20, 1501-20, 1501-20B, 1501-32, 1501-32CS, 1501-32CT, 1501-4, 1501-5, 1501-55

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.

This product is not categorized as hazardous in any GHS hazard class.

2.2. GHS Label Elements

Pictograms: None required.

Signal Word: None required.

Hazard Statements: None required.

Precautionary Statements: None required.

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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	98.95%
Potassium Acid Phthalate	HOCOC ₆ H ₄ COOK	204.22 g/mol	877-24-7	1.02%
Proprietary	Proprietary	Data not available.	Proprietary	0.03%
Proprietary	Proprietary	Data not available.	Proprietary	0.00%

SECTION 4: First-Aid Measures

4.1. General First Aid Information

Eye Contact: May cause slight irritation.

Inhalation: Not expected to require first aid. If necessary, remove to fresh air.

Skin Contact: 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

Does not present any significant health hazards. Wash areas of contact with water. EYE CONTACT: May cause slight irritation. SKIN CONTACT: May cause slight irritation.

4.3. Medical Attention or Special Treatment Needed

Not expected to require special treatment.

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 appropriate PPE for the size and nature of the spill. As a general rule, wear safety glasses and gloves.

6.2. Cleanup and Containment Methods and Materials

Absorb with suitable material and dispose of in accordance with local regulations.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

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

8.2. Exposure Controls

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

Respiratory Protection: Normal room ventilation is adequate.

Skin Protection: Chemical resistant gloves.

Eye Protection: Safety glasses or goggles.

8.3. Personal Protective Equipment

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: Red liquid

Physical State: Liquid

Odor: Data not available.

Odor Threshold: Data not available.

pH: 4

Melting/Freezing Point: 0.0°C

Initial Boiling Point /Range: 100°C - 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.

Explosive Properties: 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

Nitric Acid

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: >3200 mg/kg (Potassium Acid Phthalate), details of toxic effects not reported other than lethal dose value.

LD50, Oral, Rat: (FD&C Red #40) >10,000 mg/Kg, details of toxic effects not reported other than lethal dose value.

Skin Corrosion and Irritation:

Not applicable.

Serious Eye Damage and Irritation:

Not applicable.

Respiratory Sensitization:

Not applicable.

Skin Sensitization:

Not applicable.

Germ Cell Mutagenicity:

Not applicable.

Carcinogenicity:

Not applicable.

Reproductive Toxicity:

Not applicable.

Specific Target Organ Toxicity from Single Exposure:

Not applicable.

Specific Target Organ Toxicity from Repeated Exposure:

Not applicable.

Aspiration Hazard:

Not applicable.

Additional Toxicology Information:

Data not available.

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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.

Safety Data Sheet

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

Not listed.

15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Not listed.

15.5. Massachusetts Right-to-Know Substance List

Not listed.

15.6. Pennsylvania Right-to-Know Hazardous Substances

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

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

Not listed.

15.8. California Proposition 65

Not listed.

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

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

Potassium Acid Phthalate (CAS # 877-24-7): Present (DSL)

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

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

Potassium Acid Phthalate (CAS # 877-24-7): Present

Safety Data Sheet

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

16.2. Miscellaneous Hazard Classes

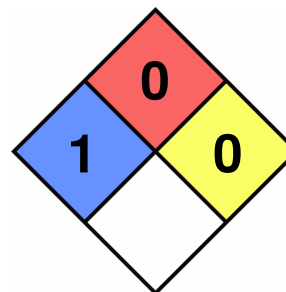
Canadian Carcinogenicity Hazard Class: Not Applicable.

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

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

16.3. National Fire Protection Association (NFPA) Rating

Health: 1
Flammability: 0
Reactivity: 0
Special Hazard:





Safety Data Sheet

16.4. Document Revision

Last Revision Date: 5/5/2015



Safety Data Sheet

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Buffer, Reference Standard, pH 7.00 ± 0.01 at 25°C (Color Coded Yellow)

Product Number: 1551

Other Identifying Product Numbers: 1551-1, 1551-16, 1551-16CS, 1551-1CS, 1551-1CT, 1551-1G, 1551-2.5, 1551-20, 1551-20, 1551-20B, 1551-32, 1551-32CS, 1551-32CT, 1551-4, 1551-5, 1551-55

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.

This product is not categorized as hazardous in any GHS hazard class.

2.2. GHS Label Elements

Pictograms: None required.

Signal Word: None required.

Hazard Statements: None required.

Precautionary Statements: None required.



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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	98.59%
Sodium Phosphate Dibasic	Na ₂ HPO ₄	141.95 g/mol	7558-79-4	0.90%
Potassium Dihydrogen Phosphate	KH ₂ PO ₄	136.08 g/mol	7778-77-0	0.50%
Proprietary	Proprietary	Data not available.	Proprietary	0.01%
Proprietary	Proprietary	Data not available.	Proprietary	0.00%
Sodium Hydroxide	NaOH	39.99 g/mol	1310-73-2	0.00%

SECTION 4: First-Aid Measures

4.1. General First Aid Information

Eye Contact: May cause slight irritation.

Inhalation: Not expected to require first aid. If necessary, remove to fresh air.

Skin Contact: May cause slight irritation to those allergic to phosphates.

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

4.2. Most Important Symptoms and Effects, Acute and Delayed

Does not present any significant health hazards. May cause irritation. Wash areas of contact with water
EYE CONTACT: May cause slight irritation.
SKIN CONTACT: May cause slight irritation to those allergic to phosphates.

4.3. Medical Attention or Special Treatment Needed

Not expected to require special treatment.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.



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5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard.

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 appropriate PPE for the size and nature of the spill. As a general rule, wear safety glasses and gloves.

6.2. Cleanup and Containment Methods and Materials

Absorb with suitable material (vermiculite, clay, etc.) and dispose of in accordance with local regulations. Check with local agencies for the proper disposal of phosphate containing solutions.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

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

8.2. Exposure Controls

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

Respiratory Protection: Normal room ventilation is adequate.

Skin Protection: Chemical resistant gloves.

Eye Protection: Safety glasses or goggles.

8.3. Personal Protective Equipment

Normal room ventilation is adequate. Chemical resistant gloves. Safety glasses or goggles.



Safety Data Sheet

SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Appearance: Yellow liquid

Physical State: Liquid

Odor: Data not available.

Odor Threshold: Data not available.

pH: 7

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.

Explosive Properties: 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

None identified.

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: (Sodium Phosphate Dibasic) 17 gm/kg; LD50, Dermal, Rabbit: (Potassium Phosphate Monobasic) >4640 mg/kg; details of toxic effects not reported other than lethal dose value.

Skin Corrosion and Irritation:

Not applicable.

Serious Eye Damage and Irritation:

Not applicable.

Respiratory Sensitization:

Not applicable.

Skin Sensitization:

Not applicable.

Germ Cell Mutagenicity:

Not applicable.

Carcinogenicity:

Not applicable.

Reproductive Toxicity:

Not applicable.

Specific Target Organ Toxicity from Single Exposure:

Not applicable.

Specific Target Organ Toxicity from Repeated Exposure:

Not applicable.

Aspiration Hazard:

Not applicable.

Additional Toxicology Information:

Data not available.

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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.

Safety Data Sheet

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

Sodium Hydroxide (CAS # 1310-73-2): 1000 lb final RQ; 454 kg final RQ

Sodium Phosphate Dibasic (CAS # 7558-79-4): 5000 lb final RQ (listed under Sodium phosphate, dibasic); 2270 kg final RQ (listed under Sodium phosphate, dibasic)

Sodium Phosphate Dibasic (CAS # 7558-79-4): 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

Sodium Hydroxide (CAS # 1310-73-2): Present

Sodium Phosphate Dibasic (CAS # 7558-79-4): Present

15.6. Pennsylvania Right-to-Know Hazardous Substances

Sodium Hydroxide (CAS # 1310-73-2): Environmental hazard

Sodium Hydroxide (CAS # 1310-73-2): Present

Sodium Phosphate Dibasic (CAS # 7558-79-4): Environmental hazard

Sodium Phosphate Dibasic (CAS # 7558-79-4): Present

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

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

Sodium Hydroxide (CAS # 1310-73-2): corrosive

Sodium Hydroxide (CAS # 1310-73-2): sn 1706

Sodium Phosphate Dibasic (CAS # 7558-79-4): sn 1723

Safety Data Sheet

15.8. California Proposition 65

Not listed.

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

Sodium Hydroxide (CAS # 1310-73-2): Present (DSL)

Sodium Phosphate Dibasic (CAS # 7558-79-4): Present (DSL)

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

Potassium Dihydrogen Phosphate (CAS # 7778-77-0): Present (DSL)

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

Sodium Hydroxide (CAS # 1310-73-2): Present

Sodium Phosphate Dibasic (CAS # 7558-79-4): Present

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

Potassium Dihydrogen Phosphate (CAS # 7778-77-0): 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

16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable.

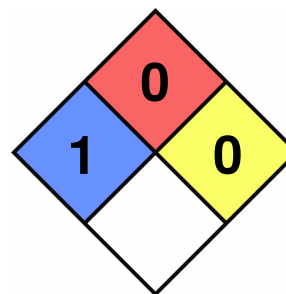
Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.

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

Not Applicable.

16.3. National Fire Protection Association (NFPA) Rating

Health: 1
Flammability: 0
Reactivity: 0
Special Hazard:





Safety Data Sheet

16.4. Document Revision

Last Revision Date: 5/5/2015

Safety Data Sheet

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Buffer, Reference Standard, pH 10.00 ± 0.01 at 25°C (Color Coded Blue)

Product Number: 1601

Other Identifying Product Numbers: 1601-1, 1601-16, 1601-16CS, 1601-1CS, 1601-1CT, 1601-2.5, 1601-20, 1601-20, 1601-20B, 1601-32, 1601-32CS, 1601-4, 1601-5, 1601-55

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.

This product is not categorized as hazardous in any GHS hazard class.

2.2. GHS Label Elements

Pictograms: None required.

Signal Word: None required.

Hazard Statements: None required.

Precautionary Statements: None required.



Safety Data Sheet

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	99.04%
Sodium Carbonate	Na ₂ CO ₃	105.98 g/mol	497-19-8	0.53%
Sodium Bicarbonate	NaHCO ₃	84.00 g/mol	144-55-8	0.40%
Sodium Hydroxide	NaOH	39.99 g/mol	1310-73-2	0.02%
Proprietary	Proprietary	Data not available.	Proprietary	0.01%
Proprietary	Proprietary	Data not available.	Proprietary	0.00%

SECTION 4: First-Aid Measures

4.1. General First Aid Information

Eye Contact: May cause slight irritation.

Inhalation: Not expected to require first aid. If necessary, remove to fresh air.

Skin Contact: 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

Does not present any significant health hazards. After contact with skin, wash immediately with plenty of water. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. EYE CONTACT: May cause slight irritation. SKIN CONTACT: May cause slight irritation.

4.3. Medical Attention or Special Treatment Needed

Not expected to require special treatment.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.



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5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard.

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 appropriate PPE for the size and nature of the spill. As a general rule, wear safety glasses and gloves.

6.2. Cleanup and Containment Methods and Materials

Absorb with suitable material and treat as normal refuse. Small amounts of the liquid may be flushed to the drain with excess water. Always dispose of in accordance with local regulations.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

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

8.2. Exposure Controls

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

Respiratory Protection: Normal room ventilation is adequate.

Skin Protection: Chemical resistant gloves.

Eye Protection: Safety glasses or goggles.

8.3. Personal Protective Equipment

Normal room ventilation is adequate. Chemical resistant gloves. Safety glasses or goggles.



Safety Data Sheet

SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Appearance: Blue liquid

Physical State: Liquid

Odor: Data not available.

Odor Threshold: Data not available.

pH: 10

Melting/Freezing Point: 0.0°C

Initial Boiling Point /Range: 100°C - 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.

Explosive Properties: 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

Acids

10.4. Hazardous Decomposition Products

Will not occur.



Safety Data Sheet

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: 4090 mg/kg (Sodium Carbonate), 4220 mg/kg (Sodium Bicarbonate), details of toxic effects not reported other than lethal dose value.

Skin Corrosion and Irritation:

Not applicable.

Serious Eye Damage and Irritation:

Not applicable.

Respiratory Sensitization:

Not applicable.

Skin Sensitization:

Not applicable.

Germ Cell Mutagenicity:

Not applicable.

Carcinogenicity:

Not applicable.

Reproductive Toxicity:

Not applicable.

Specific Target Organ Toxicity from Single Exposure:

Not applicable.

Specific Target Organ Toxicity from Repeated Exposure:

Not applicable.

Aspiration Hazard:

Not applicable.

Additional Toxicology Information:

Data not available.



Safety Data Sheet

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.

Safety Data Sheet

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

Sodium Hydroxide (CAS # 1310-73-2): 1000 lb final RQ; 454 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

Sodium Hydroxide (CAS # 1310-73-2): Present

15.6. Pennsylvania Right-to-Know Hazardous Substances

Sodium Hydroxide (CAS # 1310-73-2): Environmental hazard

Sodium Hydroxide (CAS # 1310-73-2): Present

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

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

Sodium Hydroxide (CAS # 1310-73-2): corrosive

Sodium Hydroxide (CAS # 1310-73-2): sn 1706

15.8. California Proposition 65

Not listed.

Safety Data Sheet

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

Sodium Hydroxide (CAS # 1310-73-2): Present (DSL)

Sodium Bicarbonate (CAS # 144-55-8): Present (DSL)

Sodium Carbonate (CAS # 497-19-8): Present (DSL)

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

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

Sodium Hydroxide (CAS # 1310-73-2): Present

Sodium Bicarbonate (CAS # 144-55-8): Present

Sodium Carbonate (CAS # 497-19-8): 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

16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable.

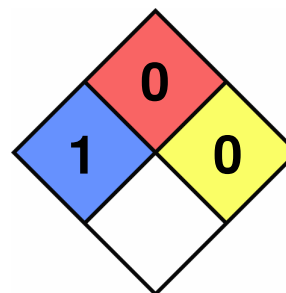
Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.

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

Not Applicable.

16.3. National Fire Protection Association (NFPA) Rating

Health: 1
Flammability: 0
Reactivity: 0
Special Hazard:





Safety Data Sheet

16.4. Document Revision

Last Revision Date: 5/5/2015

Safety Data Sheet

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Rinse Solution, High Purity Water for Rinsing Electrodes and other Laboratory Instruments

Product Number: 6648

Other Identifying Product Numbers: 6648-16, 6648-20, 6648-20, 6648-20B

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.

This product is not categorized as hazardous in any GHS hazard class.

2.2. GHS Label Elements

Pictograms: None required.

Signal Word: None required.

Hazard Statements: None required.

Precautionary Statements: None required.



Safety Data Sheet

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	100.00%

SECTION 4: First-Aid Measures

4.1. General First Aid Information

Eye Contact: Not hazardous by eye contact.

Inhalation: Not expected to require first aid. If necessary, remove to fresh air.

Skin Contact: Not hazardous by skin contact.

Ingestion: No action necessary to be taken.

4.2. Most Important Symptoms and Effects, Acute and Delayed

Clear, colorless liquid. Non-flammable, non-toxic, non-corrosive. Does not present any significant health hazards. EYE CONTACT: Not hazardous by eye contact. SKIN CONTACT: Not hazardous by skin contact.

4.3. Medical Attention or Special Treatment Needed

Not expected to require special treatment.

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.

5.3. Special Protective Equipment for Firefighters

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



Safety Data Sheet

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear appropriate PPE for the size and nature of the spill. As a general rule, wear safety glasses and gloves.

6.2. Cleanup and Containment Methods and Materials

Absorb the liquid with suitable material, then treat as normal refuse. The liquid may be flushed to the sewer.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

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

8.2. Exposure Controls

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

Respiratory Protection: Normal room ventilation is adequate.

Skin Protection: None required.

Eye Protection: Safety glasses or goggles.

8.3. Personal Protective Equipment

Normal room ventilation is adequate. None required. Safety glasses or goggles.



Safety Data Sheet

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: Data not available.

Melting/Freezing Point: 0.0°C

Initial Boiling Point /Range: 100°C - 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: 1.00

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.

Explosive Properties: 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

Reacts violently with elemental metals: Sodium, Lithium and Magnesium.

10.4. Hazardous Decomposition Products

Will not occur.



Safety Data Sheet

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: > 90 mL/kg, details of toxic effects not reported other than lethal dose value.

Skin Corrosion and Irritation:

Not applicable.

Serious Eye Damage and Irritation:

Not applicable.

Respiratory Sensitization:

Not applicable.

Skin Sensitization:

Not applicable.

Germ Cell Mutagenicity:

Not applicable.

Carcinogenicity:

Not applicable.

Reproductive Toxicity:

Not applicable.

Specific Target Organ Toxicity from Single Exposure:

Not applicable.

Specific Target Organ Toxicity from Repeated Exposure:

Not applicable.

Aspiration Hazard:

Not applicable.

Additional Toxicology Information:

Data not available.

Safety Data Sheet

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.

Safety Data Sheet

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

Not listed.

15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Not listed.

15.5. Massachusetts Right-to-Know Substance List

Not listed.

15.6. Pennsylvania Right-to-Know Hazardous Substances

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

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

Not listed.

15.8. California Proposition 65

Not listed.

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

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

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

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

Safety Data Sheet

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

16.2. Miscellaneous Hazard Classes

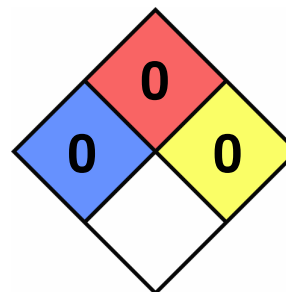
Canadian Carcinogenicity Hazard Class: Not Applicable.

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

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

16.3. National Fire Protection Association (NFPA) Rating

Health: 0
Flammability: 0
Reactivity: 0
Special Hazard:





Safety Data Sheet

16.4. Document Revision

Last Revision Date: 5/5/2015



Safety Data Sheet

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Buffer Assortment Pack - pH 4, 7, and 10

Product Number: 1480

Other Identifying Product Numbers: 1480-16, 1480-20, R1480000-3x4A

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.

This product is not categorized as hazardous in any GHS hazard class.

2.2. GHS Label Elements

Pictograms: None required.

Signal Word: None required.

Hazard Statements: None required.

Precautionary Statements: None required.

Safety Data Sheet

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%

SECTION 4: First-Aid Measures

4.1. General First Aid Information

Eye Contact: No action required to be taken. If necessary, rinse eyes with water.

Inhalation: Not expected to require first aid. If necessary, remove to fresh air.

Skin Contact: No action required to be taken. If necessary, wash areas of contact with water.

Ingestion: No action required to be taken. If necessary, dilute with water.

4.2. Most Important Symptoms and Effects, Acute and Delayed

May cause mild irritation to areas of contact.

4.3. Medical Attention or Special Treatment Needed

Not expected to require special treatment.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Not considered to be a fire or explosion hazard.

5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard.

5.3. Special Protective Equipment for Firefighters

Wear protective clothing and NIOSH-approved breathing equipment appropriate for the surrounding fire.



Safety Data Sheet

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear appropriate PPE for the size and nature of the spill. As a general rule, wear safety glasses and gloves.

6.2. Cleanup and Containment Methods and Materials

Absorb with suitable material and dispose of in accordance with local regulations.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

Protect from freezing and physical damage.

SECTION 8: Exposure Controls / Personal Protection

8.2. Exposure Controls

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

Respiratory Protection: No specific controls are needed. Normal room ventilation is adequate.

Skin Protection: No specific controls are needed.

Eye Protection: No specific controls are needed.

8.3. Personal Protective Equipment

As a general rule, wear safety glasses and gloves.



Safety Data Sheet

SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Appearance: See individual components.

Physical State: See individual components.

Odor: See individual components.

Odor Threshold: Data not available.

pH: See individual components.

Melting/Freezing Point: Data not available.

Initial Boiling Point /Range: Data not available.

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: Data not available.

Solubility: See individual components.

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

Auto-Ignition Temperature: Data not available.

Decomposition Temperature: Data not available.

Viscosity: Data not available.

Explosive Properties: 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

Protect from freezing and physical damage.

10.4. Hazardous Decomposition Products

May emit irritating fumes when heated to decomposition.



Safety Data Sheet

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:

Data not available.

Skin Corrosion and Irritation:

Not applicable.

Serious Eye Damage and Irritation:

Not applicable.

Respiratory Sensitization:

Not applicable.

Skin Sensitization:

Not applicable.

Germ Cell Mutagenicity:

Not applicable.

Carcinogenicity:

Not applicable.

Reproductive Toxicity:

Not applicable.

Specific Target Organ Toxicity from Single Exposure:

Not applicable.

Specific Target Organ Toxicity from Repeated Exposure:

Not applicable.

Aspiration Hazard:

Not applicable.

Additional Toxicology Information:

Data not available.

Safety Data Sheet

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.

Safety Data Sheet

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

Not listed.

15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Not listed.

15.5. Massachusetts Right-to-Know Substance List

Not listed.

15.6. Pennsylvania Right-to-Know Hazardous Substances

Not listed.

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

Not listed.

15.8. California Proposition 65

Not listed.

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

Not listed.

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

Not listed.

Safety Data Sheet

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

16.2. Miscellaneous Hazard Classes

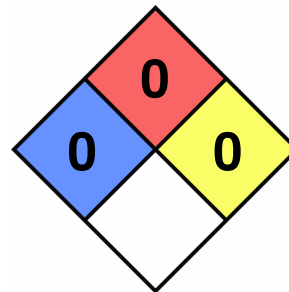
Canadian Carcinogenicity Hazard Class: Not Applicable.

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

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

16.3. National Fire Protection Association (NFPA) Rating

Health: 0
Flammability: 0
Reactivity: 0
Special Hazard:



Safety Data Sheet

16.4. Document Revision

Last Revision Date: 5/5/2015

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.