Safety Data Sheet

Classified according to WHMIS 2015

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Buffer, Sodium Hypophosphite, pH 2.4, HPLC Mobile Phase for Analysis of Beverage Additives

Product Number: 1468 Other Identifying Product Numbers: 1468-1

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 hours)

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

SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture

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

Hazard Class	Category	Hazard Statements	Precautionary Statements:
Acute Toxicity - Oral	Category 4	H302	P264, P270, P301+P312, P330, P501
Eye Damage / Irritation	Category 2	H319	P264, P280, P305+P351+P338, P337+P313
Reproductive Toxicity	Category 1	H360	P201, P202, P280, P308+P313, P405, P501
Specific Target Organs/Systemic Toxicity Following Single Exposure	Category 2	H371	P260, P264, P270, P308+P311, P405, P501



2.2. GHS Label Elements

Pictograms:



Signal Word: Danger

Hazard Statements:

Hazard Number	Hazard Statement
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H360	May damage fertility or the unborn child.
H371	May cause damage to organs.

Precautionary Statements:

Precautionary Number	Precautionary Statement
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe 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.
P301+P312	IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and
	easy to do. Continue rinsing.
P308+P311	IF exposed or concerned: Call a POISON CENTER or physician.
P308+P313	IF exposed or concerned: Get medical attention.
P330	Rinse mouth.
P337+P313	If eye irritation persists: Get medical attention.
P405	Store locked up.
P501	Dispose of contents in accordance with local, state, federal and international regulations.

2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

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SECTION 3: Composition / Information on Ingredients

3.1. Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	Weight%
Water	H₂O	18.01 g/mol	7732-18-5	80.79
Methyl Alcohol	CH₃OH	32.04 g/mol	67-56-1	14.08
Isopropyl Alcohol	CH ₃ CHOHCH ₃	60.09 g/mol	67-63-0	4.76
Sodium Hypophosphite Monohydrate	$NaH_2PO_2 \cdot H_2O$	105.99 g/mol	10039-56-2	0.13
Phosphoric Acid	H ₃ PO ₄	97.99 g/mol	7664-38-2	0.12
1-Pentanesulfonic Acid, Sodium Salt, Monohydrate	C ₅ H ₁₁ SO ₃ Na	192.20 g/mol	22767-49-3	0.11

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 irritation with burning and stinging with possible damage to the cornea and conjunctiva.
Inhalation: Not expected to require first aid. If necessary, remove to fresh air.

- **Skin Contact:** May cause irritation, redness, and pain.
 - **Ingestion:** IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Induce vomiting immediately as directed by medical personnel. Call a physician immediately.

4.2. Most Important Symptoms and Effects, Acute and Delayed

Harmful if swallowed. Causes serious eye irritation. May damage fertility or the unborn child. May cause damage to organs. If ingested, dilute with large quantity of water. Induce vomiting and call a physician if necessary. Wash areas of contact with water. EYE CONTACT: May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva. SKIN CONTACT: May cause irritation, redness, and pain.

4.3. Medical Attention or Special Treatment Needed

Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops. Induce vomiting immediately as directed by medical personnel. Call a physician immediately.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Water, dry chemical, foam, or carbon dioxide. Water spray may be used to keep fire-exposed containers cool.



5.2. Specific Hazards Arising from the Substance or Mixture

Slight fire hazard when subject to high heat, containers may explode in fire.

5.3. Special Protective Equipment for Firefighters

Use protective clothing and NIOSH-approved 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.

6.2. Cleanup and Containment Methods and Materials

Absorb with inert material (vermiculite, sand). Ventilate, if necessary, site of spillage well to evaporate remaining liquid and dispel vapor. Do not flush to sewer. Always comply with local, state, and federal regulations.

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.

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SECTION 8: Exposure Controls / Personal Protection

8.1 Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Methyl Alcohol (67-56-1)	TWA	USA	200 ppm TWA; 260 mg/m ³ TWA	U.S OSHA - Final PELs - Time Weighted Averages (TWAs)
Methyl Alcohol (67-56-1)	TLV-STEL	USA	250 ppm STEL	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)
Methyl Alcohol (67-56-1)	TLV-TWA	USA	200 ppm TWA	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Isopropyl Alcohol (67-63-0)	TWA	USA	400 ppm TWA; 980 mg/m ³ TWA	U.S OSHA - Final PELs - Time Weighted Averages (TWAs)
Isopropyl Alcohol (67-63-0)	TLV-STEL	USA	400 ppm STEL	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)
Isopropyl Alcohol (67-63-0)	TLV-TWA	USA	200 ppm TWA	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Phosphoric Acid (7664-38-2)	TWA	USA	1 mg/m³ TWA	U.S OSHA - Final PELs - Time Weighted Averages (TWAs)
Phosphoric Acid (7664-38-2)	TLV-STEL	USA	3 mg/m ³ STEL	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)
Phosphoric Acid (7664-38-2)	TLV-TWA	USA	1 mg/m³ 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: 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. 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**:2.4 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: 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

Strong oxidizing agents

10.4. Hazardous Decomposition Products

Will not occur.

Product Number: 1468

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SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Harmful if swallowed. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. Dispose of contents in accordance with local, state, federal and international regulations.

Acute Toxicity - Dermal Exposure:

Not applicable.

Acute Toxicity - Inhalation Exposure:

Not applicable.

Acute Toxicity - Other Information:

LD50, Oral, Rat: (Methanol) 5628 mg/kg, (1-Pentanesulfonic Acid, sodium salt) 7640 mg/kg, details of toxic effects not reported other than lethal dose value. LD50, Oral, Rat: (Isopropanol) 5045 mg/kg, behavioral effects noted. LC50, Inhalation, Rat: (Isopropanol) 16000 ppm/8hrs. No toxic effect noted. Isopropanol is investigated as a tumorigen, mutagen, and reproductive effector.

Skin Corrosion and Irritation:

Not applicable.

Serious Eye Damage and Irritation:

Causes serious eye irritation. Wash arms, hands and face thoroughly after handling. 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. If eye irritation persists: Get medical attention.

Respiratory Sensitization:

Not applicable.

Skin Sensitization:

Not applicable.

Germ Cell Mutagenicity:

Not applicable.

Carcinogenicity:

Not applicable.

Reproductive Toxicity:

May damage fertility or the unborn child. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Specific Target Organ Toxicity from Single Exposure:

May cause 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 or concerned: Call a POISON CENTER or physician. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.



Specific Target Organ Toxicity from Repeated Exposure: Not applicable.

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.

14.2. Transportation by Air - International Air Transport Association (IATA)

Not regulated according to IATA Dangerous Goods Regulations.

14.3 Transportation of Dangerous Goods (TDG, Canada)

Not regulated according to TDG Regulations.

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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 Methyl Alcohol (CAS # 67-56-1): 5000 lb final RQ: 2270 kg final RQ

Phosphoric Acid (CAS # 7664-38-2): 5000 lb final RQ; 2270 kg final RQ

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

Methyl Alcohol (CAS # 67-56-1): 1.0 % de minimis concentration Isopropyl Alcohol (CAS # 67-63-0): 1.0 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)

15.5. Massachusetts Right-to-Know Substance List

Methyl Alcohol (CAS # 67-56-1): Present Isopropyl Alcohol (CAS # 67-63-0): Present Phosphoric Acid (CAS # 7664-38-2): Present

15.6. Pennsylvania Right-to-Know Hazardous Substances

Methyl Alcohol (CAS # 67-56-1): "Present" As Denatured alcohols [RR-00113-8] Methyl Alcohol (CAS # 67-56-1): Environmental hazard Methyl Alcohol (CAS # 67-63-0): "Present Isopropyl Alcohol (CAS # 67-63-0): "Present" As Isopropyl alcohol manufacture (strong-acid process) [RR-00068-0] Isopropyl Alcohol (CAS # 67-63-0): Environmental hazard Isopropyl Alcohol (CAS # 67-63-0): Present Isopropyl Alcohol (CAS # 67-63-0): Present Isopropyl Alcohol (CAS # 67-63-0): Special hazardous substance Phosphoric Acid (CAS # 7664-38-2): Environmental hazard Phosphoric Acid (CAS # 7664-38-2): Present Water (CAS # 7732-18-5): "Present" As Ethyl alcohol and water [RR-00802-6] Water (CAS # 7732-18-5): Present

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

Methyl Alcohol (CAS # 67-56-1): flammable - third degree; teratogen Methyl Alcohol (CAS # 67-56-1): sn 1222 Methyl Alcohol (CAS # 67-56-1): SN 1222 500 lb TPQ Isopropyl Alcohol (CAS # 67-63-0): flammable - third degree Isopropyl Alcohol (CAS # 67-63-0): sn 1076 Isopropyl Alcohol (CAS # 67-63-0): SN 1076 500 lb TPQ (manufacturing - strong acid process only) Phosphoric Acid (CAS # 7664-38-2): corrosive Phosphoric Acid (CAS # 7664-38-2): sn 1516



15.8. California Proposition 65

Methyl Alcohol (CAS # 67-56-1): developmental toxicity, 3/16/2012

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

Sodium Hypophosphite Monohydrate (CAS # 10039-56-2): Present (DSL) 1-Pentanesulfonic Acid, Sodium Salt, Monohydrate (CAS # 22767-49-3): Present (DSL) Methyl Alcohol (CAS # 67-56-1): Present (DSL) Methyl Alcohol (CAS # 67-63-0): Present (NDSL) Isopropyl Alcohol (CAS # 67-63-0): Present (DSL) Isopropyl Alcohol (CAS # 67-63-0): Present (NDSL) Phosphoric Acid (CAS # 7664-38-2): Present (DSL) Water (CAS # 7732-18-5): Present (DSL)

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

All components of this solution are listed as active on the TSCA Inventory or are mixtures (hydrates) of active items listed on the TSCA Inventory.

Sodium Hypophosphite Monohydrate (CAS # 10039-56-2): Present (ACTIVE) 1-Pentanesulfonic Acid, Sodium Salt, Monohydrate (CAS # 22767-49-3): Present (ACTIVE) Methyl Alcohol (CAS # 67-56-1): Present (ACTIVE) Isopropyl Alcohol (CAS # 67-63-0): Present (ACTIVE) Phosphoric Acid (CAS # 7664-38-2): Present (ACTIVE) Water (CAS # 7732-18-5): Present (ACTIVE)

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

Sodium Hypophosphite Monohydrate (CAS # 10039-56-2): 231-669-9 1-Pentanesulfonic Acid, Sodium Salt, Monohydrate (CAS # 22767-49-3): 245-208-4 Methyl Alcohol (CAS # 67-56-1): 200-659-6 Methyl Alcohol (CAS # 67-63-1): 270-649-4 Isopropyl Alcohol (CAS # 67-63-0): 200-661-7 Isopropyl Alcohol (CAS # 67-63-0): 270-649-4 Phosphoric Acid (CAS # 7664-38-2): 231-633-2 Water (CAS # 7732-18-5): 231-791-2

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SECTION 16: Other Information

16.1. Full Text of Hazard Statements and Precautionary Statements

Harmful if swallowed. Causes serious eye irritation. May damage fertility or the unborn child. May cause damage to organs.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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.

IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Call a POISON CENTER or physician. Rinse mouth. If eye irritation persists: Get medical attention.

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. Biohazardous Infectious Materials Hazard Class: Not Applicable.

16.3. National Fire Protection Association (NFPA) Rating

Health:	2
Flammability:	1
Reactivity:	0
Special Hazard:	



16.4. Document Revision

Last Revision Date: 2023-09-11

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.