

## Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS)

### SECTION 1: Identification

#### 1.1. Product Identifier

**Trade Name or Designation:** Britton-Robinson Buffer, pH 7.00, adjusted to 0.5 M Ionic Strength

**Product Number:** 1156.70

**Other Identifying Product Numbers:** 1156.70-16

#### 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) 800-424-9300

CHEMTREC (International) 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:               |
| Reproductive Toxicity | Category 1 | H360        | P201, P202, P280, P308+P313, P405, P501 |

#### 2.2. GHS Label Elements

**Pictograms:**



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**Signal Word:** **Danger**

**Hazard Statements:**

| Hazard Number | Hazard Statement                          |
|---------------|-------------------------------------------|
| H360          | May damage fertility or the unborn child. |

**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.                   |
| P280                 | Wear protective gloves and eye protection.                                                  |
| P308+P313            | IF exposed or concerned: 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.

## SECTION 3: Composition / Information on Ingredients

### 3.1. Components of Substance or Mixture

| Chemical Name      | Formula                        | Molecular Weight | CAS Number | Weight% |
|--------------------|--------------------------------|------------------|------------|---------|
| Water              | H <sub>2</sub> O               | 18.01 g/mol      | 7732-18-5  | 96.07   |
| Potassium Chloride | KCl                            | 74.55 g/mol      | 7447-40-7  | 3.10    |
| Sodium Hydroxide   | NaOH                           | 39.99 g/mol      | 1310-73-2  | 0.26    |
| Phosphoric Acid    | H <sub>3</sub> PO <sub>4</sub> | 97.99 g/mol      | 7664-38-2  | 0.25    |
| Boric Acid         | H <sub>3</sub> BO <sub>3</sub> | 61.83 g/mol      | 10043-35-3 | 0.16    |
| Acetic Acid        | CH <sub>3</sub> COOH           | 60.05 g/mol      | 64-19-7    | 0.15    |

## SECTION 4: First-Aid Measures

### 4.1. General First Aid Information

**Eye Contact:** May cause irritation, redness, pain, and tearing.

**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. Do not induce vomiting. Call a physician if necessary.

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### 4.2. Most Important Symptoms and Effects, Acute and Delayed

May damage fertility or the unborn child. Does not present any significant health hazards. May cause irritation to the eyes. Wash areas of contact with water. EYE CONTACT: May cause irritation, redness, pain, and tearing. SKIN CONTACT: May cause slight irritation.

### 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. Diarrhea with water or milk. Do not induce vomiting. Call a physician if necessary.

## 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.

## 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 suitable material and dispose of in accordance with local 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                                                     |
|-------------------------|------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| Boric Acid (10043-35-3) | TLV-TWA    | USA     | 2 mg/m <sup>3</sup> TWA (inhalable particulate matter, listed under Borate compounds, inorganic)                                                                                                                                                                           | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)      |
| Boric Acid (10043-35-3) | TLV-STEL   | USA     | 6 mg/m <sup>3</sup> STEL (inhalable particulate matter, listed under Borate compounds, inorganic)                                                                                                                                                                          | ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL) |
| Boric Acid (10043-35-3) | TLV-TWA    | USA     | "2 mg/m <sup>3</sup> TWA (inhalable particulate matter, listed under Borate compounds, inorganic)" As Boric acid (H <sub>3</sub> BO <sub>3</sub> ) [10043-35-3];<br>"2 mg/m <sup>3</sup> TWA (inhalable particulate matter)" As Borate compounds, inorganic [RR-33876-1]   | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)      |
| Boric Acid (10043-35-3) | TLV-STEL   | USA     | "6 mg/m <sup>3</sup> STEL (inhalable particulate matter, listed under Borate compounds, inorganic)" As Boric acid (H <sub>3</sub> BO <sub>3</sub> ) [10043-35-3];<br>"6 mg/m <sup>3</sup> STEL (inhalable particulate matter)" As Borate compounds, inorganic [RR-33876-1] | ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL) |
| Boric Acid (10043-35-3) | TLV-TWA    | USA     | "2 mg/m <sup>3</sup> TWA (inhalable particulate matter, listed under Borate compounds, inorganic)" As Boric acid (H <sub>3</sub> BO <sub>3</sub> ) [10043-35-3]                                                                                                            | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)      |

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|                              |             |     |                                                                                                                                                                  |                                                                        |
|------------------------------|-------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| Boric Acid (10043-35-3)      | TLV-STEL    | USA | "6 mg/m <sup>3</sup> STEL (inhalable particulate matter, listed under Borate compounds, inorganic)" As Boric acid (H <sub>3</sub> BO <sub>3</sub> ) [10043-35-3] | ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL) |
| Boric Acid (10043-35-3)      | TLV-TWA     | USA | "2 mg/m <sup>3</sup> TWA (inhalable particulate matter, listed under Borate compounds, inorganic)" As Boric acid (H <sub>3</sub> BO <sub>3</sub> ) [10043-35-3]  | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)      |
| Boric Acid (10043-35-3)      | TLV-STEL    | USA | "6 mg/m <sup>3</sup> STEL (inhalable particulate matter, listed under Borate compounds, inorganic)" As Boric acid (H <sub>3</sub> BO <sub>3</sub> ) [10043-35-3] | ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL) |
| Boric Acid (10043-35-3)      | TLV-TWA     | USA | 2 mg/m <sup>3</sup> TWA (inhalable particulate matter)                                                                                                           | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)      |
| Boric Acid (10043-35-3)      | TLV-STEL    | USA | 6 mg/m <sup>3</sup> STEL (inhalable particulate matter)                                                                                                          | ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL) |
| Sodium Hydroxide (1310-73-2) | TLV-Ceiling | USA | 2 mg/m <sup>3</sup> Ceiling                                                                                                                                      | ACGIH - Threshold Limit Values - Ceilings (TLV-C)                      |
| Sodium Hydroxide (1310-73-2) | TWA         | USA | 2 mg/m <sup>3</sup> TWA                                                                                                                                          | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)               |
| Sodium Hydroxide (1310-73-2) | TLV-Ceiling | USA | "2 mg/m <sup>3</sup> Ceiling" As Sodium hydroxide [1310-73-2]                                                                                                    | ACGIH - Threshold Limit Values - Ceilings (TLV-C)                      |
| Sodium Hydroxide (1310-73-2) | TWA         | USA | "2 mg/m <sup>3</sup> TWA" As Sodium hydroxide [1310-73-2]                                                                                                        | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)               |
| Sodium Hydroxide (1310-73-2) | TLV-Ceiling | USA | "2 mg/m <sup>3</sup> Ceiling" As Sodium hydroxide [1310-73-2]                                                                                                    | ACGIH - Threshold Limit Values - Ceilings (TLV-C)                      |
| Sodium Hydroxide (1310-73-2) | TWA         | USA | "2 mg/m <sup>3</sup> TWA" As Sodium hydroxide [1310-73-2]                                                                                                        | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)               |
| Sodium Hydroxide (1310-73-2) | TLV-Ceiling | USA | "2 mg/m <sup>3</sup> Ceiling" As Sodium hydroxide [1310-73-2]                                                                                                    | ACGIH - Threshold Limit Values - Ceilings (TLV-C)                      |
| Sodium Hydroxide (1310-73-2) | TWA         | USA | "2 mg/m <sup>3</sup> TWA" As Sodium hydroxide [1310-73-2]                                                                                                        | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)               |
| Acetic Acid (64-19-7)        | TLV-STEL    | USA | "15 ppm STEL" As Acetic acid [64-19-7]                                                                                                                           | ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL) |
| Acetic Acid (64-19-7)        | TLV-TWA     | USA | "10 ppm TWA" As Acetic acid [64-19-7]                                                                                                                            | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)      |

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|                             |          |     |                                                                 |                                                                        |
|-----------------------------|----------|-----|-----------------------------------------------------------------|------------------------------------------------------------------------|
| Acetic Acid (64-19-7)       | TWA      | USA | "10 ppm TWA; 25 mg/m <sup>3</sup> TWA" As Acetic acid [64-19-7] | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)               |
| Acetic Acid (64-19-7)       | TWA      | USA | 10 ppm TWA; 25 mg/m <sup>3</sup> TWA                            | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)               |
| Acetic Acid (64-19-7)       | TLV-TWA  | USA | 10 ppm TWA                                                      | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)      |
| 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" As Acetic acid [64-19-7]                           | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)      |
| Acetic Acid (64-19-7)       | TLV-STEL | USA | "15 ppm STEL" As Acetic acid [64-19-7]                          | ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL) |
| Acetic Acid (64-19-7)       | TWA      | USA | "10 ppm TWA; 25 mg/m <sup>3</sup> TWA" As Acetic acid [64-19-7] | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)               |
| Acetic Acid (64-19-7)       | TLV-TWA  | USA | "10 ppm TWA" As Acetic acid [64-19-7]                           | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)      |
| Acetic Acid (64-19-7)       | TWA      | USA | "10 ppm TWA; 25 mg/m <sup>3</sup> TWA" As Acetic acid [64-19-7] | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)               |
| Acetic Acid (64-19-7)       | TLV-STEL | USA | "15 ppm STEL" As Acetic acid [64-19-7]                          | ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL) |
| Phosphoric Acid (7664-38-2) | TWA      | USA | "1 mg/m <sup>3</sup> TWA" As Phosphoric acid [7664-38-2]        | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)               |
| Phosphoric Acid (7664-38-2) | TLV-TWA  | USA | "1 mg/m <sup>3</sup> TWA" As Phosphoric acid [7664-38-2]        | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)      |
| Phosphoric Acid (7664-38-2) | TLV-STEL | USA | "3 mg/m <sup>3</sup> STEL" As Phosphoric acid [7664-38-2]       | ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL) |
| Phosphoric Acid (7664-38-2) | TLV-STEL | USA | "3 mg/m <sup>3</sup> STEL" As Phosphoric acid [7664-38-2]       | ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL) |
| Phosphoric Acid (7664-38-2) | TLV-TWA  | USA | "1 mg/m <sup>3</sup> TWA" As Phosphoric acid [7664-38-2]        | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)      |
| Phosphoric Acid (7664-38-2) | TWA      | USA | "1 mg/m <sup>3</sup> TWA" As Phosphoric acid [7664-38-2]        | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)               |
| Phosphoric Acid (7664-38-2) | TLV-TWA  | USA | "1 mg/m <sup>3</sup> TWA" As Phosphoric acid [7664-38-2]        | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)      |
| Phosphoric Acid (7664-38-2) | TWA      | USA | "1 mg/m <sup>3</sup> TWA" As Phosphoric acid [7664-38-2]        | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)               |
| Phosphoric Acid (7664-38-2) | TLV-STEL | USA | "3 mg/m <sup>3</sup> STEL" As Phosphoric acid [7664-38-2]       | ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL) |

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|                             |          |     |                                                              |                                                                           |
|-----------------------------|----------|-----|--------------------------------------------------------------|---------------------------------------------------------------------------|
| Phosphoric Acid (7664-38-2) | TWA      | USA | "1 mg/m <sup>3</sup> TWA" As<br>Phosphoric acid [7664-38-2]  | U.S. - OSHA - Final PELs - Time<br>Weighted Averages (TWAs)               |
| Phosphoric Acid (7664-38-2) | TLV-STEL | USA | "3 mg/m <sup>3</sup> STEL" As<br>Phosphoric acid [7664-38-2] | ACGIH - Threshold Limit Values - Short<br>Term Exposure Limits (TLV-STEL) |
| Phosphoric Acid (7664-38-2) | TLV-TWA  | USA | "1 mg/m <sup>3</sup> TWA" As<br>Phosphoric acid [7664-38-2]  | ACGIH - Threshold Limit Values - Time<br>Weighted Averages (TLV-TWA)      |
| Phosphoric Acid (7664-38-2) | TWA      | USA | 1 mg/m <sup>3</sup> TWA                                      | U.S. - OSHA - Final PELs - Time<br>Weighted Averages (TWAs)               |
| Phosphoric Acid (7664-38-2) | TLV-TWA  | USA | 1 mg/m <sup>3</sup> TWA                                      | ACGIH - Threshold Limit Values - Time<br>Weighted Averages (TLV-TWA)      |
| Phosphoric Acid (7664-38-2) | TLV-STEL | USA | 3 mg/m <sup>3</sup> STEL                                     | ACGIH - Threshold Limit Values - Short<br>Term Exposure Limits (TLV-STEL) |
| Phosphoric Acid (7664-38-2) | TLV-TWA  | USA | "1 mg/m <sup>3</sup> TWA" As<br>Phosphoric acid [7664-38-2]  | ACGIH - Threshold Limit Values - Time<br>Weighted Averages (TLV-TWA)      |
| Phosphoric Acid (7664-38-2) | TLV-STEL | USA | "3 mg/m <sup>3</sup> STEL" As<br>Phosphoric acid [7664-38-2] | ACGIH - Threshold Limit Values - Short<br>Term Exposure Limits (TLV-STEL) |
| Phosphoric Acid (7664-38-2) | TWA      | USA | "1 mg/m <sup>3</sup> TWA" As<br>Phosphoric acid [7664-38-2]  | U.S. - OSHA - Final PELs - Time<br>Weighted Averages (TWAs)               |
| Phosphoric Acid (7664-38-2) | TLV-STEL | USA | "3 mg/m <sup>3</sup> STEL" As<br>Phosphoric acid [7664-38-2] | ACGIH - Threshold Limit Values - Short<br>Term Exposure Limits (TLV-STEL) |
| Phosphoric Acid (7664-38-2) | TLV-TWA  | USA | "1 mg/m <sup>3</sup> TWA" As<br>Phosphoric acid [7664-38-2]  | ACGIH - Threshold Limit Values - Time<br>Weighted Averages (TLV-TWA)      |
| Phosphoric Acid (7664-38-2) | TWA      | USA | "1 mg/m <sup>3</sup> TWA" As<br>Phosphoric acid [7664-38-2]  | U.S. - OSHA - Final PELs - Time<br>Weighted Averages (TWAs)               |
| Phosphoric Acid (7664-38-2) | TWA      | USA | "1 mg/m <sup>3</sup> TWA" As<br>Phosphoric acid [7664-38-2]  | U.S. - OSHA - Final PELs - Time<br>Weighted Averages (TWAs)               |
| Phosphoric Acid (7664-38-2) | TLV-TWA  | USA | "1 mg/m <sup>3</sup> TWA" As<br>Phosphoric acid [7664-38-2]  | ACGIH - Threshold Limit Values - Time<br>Weighted Averages (TLV-TWA)      |
| Phosphoric Acid (7664-38-2) | TLV-STEL | USA | "3 mg/m <sup>3</sup> STEL" As<br>Phosphoric acid [7664-38-2] | ACGIH - Threshold Limit Values - Short<br>Term Exposure Limits (TLV-STEL) |

### 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:** 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:** 1.02

**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

Bromine Trifluoride, Potassium Permanganate plus Sulfuric 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: (Potassium Chloride) 2600 mg/kg; Irritation: eye, rabbit (500mg/24 hr mild). LD50, Oral, Rat: (Phosphoric Acid) 1530 mg/kg, behavioral, kidney, bladder, hair effects noted. LD50, Dermal, Rat: 2740 mg/kg (Phosphoric Acid), behavioral effects noted. LD50, Oral, Rat (Acetic Acid): 3310 mg/kg; LD50, Dermal, Rabbit (Acetic Acid): 1.06 g/kg; LC50, Inhalation, Mouse (Acetic Acid): 5620 ppm/1 hr. LD50, Oral, Rat: (Boric Acid) 2660 mg/kg, details of toxic effects not reported other than lethal dose value; LdLo, Oral, Woman: 200 mg/kg (Boric Acid), behavioral and gastrointestinal effects noted.

**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:**

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:**

Not applicable.

**Specific Target Organ Toxicity from Repeated Exposure:**

Not applicable.

**Aspiration Hazard:**

Not applicable.

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### **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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### 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.

## 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" As Sodium hydroxide [1310-73-2]

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

Acetic Acid (CAS # 64-19-7): "5000 lb final RQ; 2270 kg final RQ" As Acetic acid [64-19-7]

Acetic Acid (CAS # 64-19-7): 5000 lb final RQ; 2270 kg final RQ

Phosphoric Acid (CAS # 7664-38-2): "5000 lb final RQ; 2270 kg final RQ" As Phosphoric acid [7664-38-2]

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

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### 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" As Sodium hydroxide [1310-73-2]

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

Acetic Acid (CAS # 64-19-7): "Present (including glacial)" As Acetic acid [64-19-7]

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

Phosphoric Acid (CAS # 7664-38-2): "Present" As Phosphoric acid [7664-38-2]

Phosphoric Acid (CAS # 7664-38-2): Present

### 15.6. Pennsylvania Right-to-Know Hazardous Substances

Sodium Hydroxide (CAS # 1310-73-2): "Environmental hazard" As Sodium hydroxide (Na(OH)) [1310-73-2]

Sodium Hydroxide (CAS # 1310-73-2): "Present" As Sodium hydroxide (Na(OH)) [1310-73-2]

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

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

Acetic Acid (CAS # 64-19-7): "Environmental hazard; Environmental hazard (water solutions)" As Acetic acid [64-19-7]

Acetic Acid (CAS # 64-19-7): "Present (including water solutions)" As Acetic acid [64-19-7]

Acetic Acid (CAS # 64-19-7): Environmental hazard; Environmental hazard (water solutions)

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

Phosphoric Acid (CAS # 7664-38-2): "Environmental hazard" As Phosphoric acid [7664-38-2]

Phosphoric Acid (CAS # 7664-38-2): "Present" As Phosphoric acid [7664-38-2]

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

Boric Acid (CAS # 10043-35-3): "sn 0241" As Borate compounds, inorganic [RR-33876-1]

Boric Acid (CAS # 10043-35-3): sn 0241

Sodium Hydroxide (CAS # 1310-73-2): "corrosive" As Sodium hydroxide [1310-73-2]

Sodium Hydroxide (CAS # 1310-73-2): "sn 1706" As Sodium hydroxide [1310-73-2]

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

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

Acetic Acid (CAS # 64-19-7): "corrosive" As Acetic acid [64-19-7]

Acetic Acid (CAS # 64-19-7): "sn 0004" As Acetic acid [64-19-7]

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

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

Phosphoric Acid (CAS # 7664-38-2): "corrosive" As Phosphoric acid [7664-38-2]

Phosphoric Acid (CAS # 7664-38-2): "sn 1516" As Phosphoric acid [7664-38-2]

Phosphoric Acid (CAS # 7664-38-2): corrosive

Phosphoric Acid (CAS # 7664-38-2): sn 1516



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### 15.8. California Proposition 65

Not listed.

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

Boric Acid (CAS # 10043-35-3): "Present" As Boric acid (H<sub>3</sub>BO<sub>3</sub>) [10043-35-3] (DSL)  
Boric Acid (CAS # 10043-35-3): Present (DSL)  
Sodium Hydroxide (CAS # 1310-73-2): "Present" As Sodium hydroxide [1310-73-2] (DSL)  
Sodium Hydroxide (CAS # 1310-73-2): Present (DSL)  
Acetic Acid (CAS # 64-19-7): "Present" As Acetic acid [64-19-7] (DSL)  
Acetic Acid (CAS # 64-19-7): "Present" As Carboxylic acids, C1-5 [68937-68-8] (NDSL)  
Acetic Acid (CAS # 64-19-7): Present (DSL)  
Acetic Acid (CAS # 64-19-7): Present (NDSL)  
Potassium Chloride (CAS # 7447-40-7): "Present" As Potassium chloride [7447-40-7] (DSL)  
Potassium Chloride (CAS # 7447-40-7): Present (DSL)  
Phosphoric Acid (CAS # 7664-38-2): "Present" As Phosphoric acid [7664-38-2] (DSL)  
Phosphoric Acid (CAS # 7664-38-2): Present (DSL)  
Water (CAS # 7732-18-5): "Present" As Water [7732-18-5] (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.**

Boric Acid (CAS # 10043-35-3): "Present (ACTIVE)" As Boric acid (H<sub>3</sub>BO<sub>3</sub>) [10043-35-3]  
Boric Acid (CAS # 10043-35-3): Present (ACTIVE)  
Sodium Hydroxide (CAS # 1310-73-2): "Present (ACTIVE)" As Sodium hydroxide (NaOH) [1310-73-2]  
Sodium Hydroxide (CAS # 1310-73-2): Present (ACTIVE)  
Acetic Acid (CAS # 64-19-7): "Present (ACTIVE)" As Acetic acid [64-19-7]  
Acetic Acid (CAS # 64-19-7): Present (ACTIVE)  
Potassium Chloride (CAS # 7447-40-7): "Present (ACTIVE)" As Potassium chloride (KCl) [7447-40-7]  
Potassium Chloride (CAS # 7447-40-7): Present (ACTIVE)  
Phosphoric Acid (CAS # 7664-38-2): "Present (ACTIVE)" As Phosphoric acid [7664-38-2]  
Phosphoric Acid (CAS # 7664-38-2): Present (ACTIVE)  
Water (CAS # 7732-18-5): "Present (ACTIVE)" As Water [7732-18-5]  
Water (CAS # 7732-18-5): Present (ACTIVE)

## 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)

Boric Acid (CAS # 10043-35-3): "233-139-2" As Boric acid [10043-35-3]  
Boric Acid (CAS # 10043-35-3): 233-139-2  
Boric Acid (CAS # 10043-35-3): 234-343-4  
Sodium Hydroxide (CAS # 1310-73-2): "215-185-5" As Sodium hydroxide [1310-73-2]  
Sodium Hydroxide (CAS # 1310-73-2): 215-185-5  
Acetic Acid (CAS # 64-19-7): "200-580-7" As Acetic acid [64-19-7]  
Acetic Acid (CAS # 64-19-7): 200-580-7  
Acetic Acid (CAS # 64-19-7): 273-079-4  
Potassium Chloride (CAS # 7447-40-7): "231-211-8" As Potassium chloride [7447-40-7]  
Potassium Chloride (CAS # 7447-40-7): 231-211-8  
Phosphoric Acid (CAS # 7664-38-2): "231-633-2" As Orthophosphoric acid [7664-38-2]  
Phosphoric Acid (CAS # 7664-38-2): 231-633-2  
Water (CAS # 7732-18-5): "231-791-2" As Water [7732-18-5]  
Water (CAS # 7732-18-5): 231-791-2

## SECTION 16: Other Information

### 16.1. Full Text of Hazard Statements and Precautionary Statements

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.

### 16.2. Miscellaneous Hazard Classes

**Canadian Carcinogenicity Hazard Class:** Not Applicable.

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

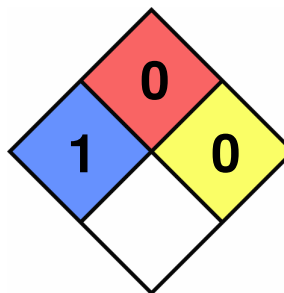
**Health Hazards Not Otherwise Classified (HHNOC):** Not Applicable.

**Biohazardous Infectious Materials Hazard Class:** Not Applicable.

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### 16.3. National Fire Protection Association (NFPA) Rating

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



### 16.4. Document Revision

Last Revision Date: 2025-01-29

### 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.