



# Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS)

## SECTION 1: Identification

### 1.1. Product Identifier

**Trade Name or Designation:** pH 7 Buffer

**Product Number:** 35653-02

**Other Identifying Product Numbers:**

### 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

### 1.3. Details of the Supplier of the Safety Data Sheet

**Company:** Cole-Parmer Instrument Company

**Address:** 625 EAST BUNKER COURT

VERNON HILLS, IL 60061 USA

**Telephone:** 800-323-9340

### 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.

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

### 2.2. GHS Label Elements

**Pictograms:** None Required.

**Signal Word:** None Required.

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**Hazard Statements:** None Required.

**Precautionary Statements:** None Required.

### 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   | 98.59   |
| Sodium Phosphate Dibasic       | Na <sub>2</sub> HPO <sub>4</sub> | 141.95 g/mol        | 7558-79-4   | 0.90    |
| Potassium Dihydrogen Phosphate | KH <sub>2</sub> PO <sub>4</sub>  | 136.08 g/mol        | 7778-77-0   | 0.50    |
| Sodium Azide                   | NaN <sub>3</sub>                 | 65.00 g/mol         | 26628-22-8  | < 0.1   |
| Proprietary                    | Proprietary                      | Data not available. | Proprietary | < 0.1   |
| Proprietary                    | Proprietary                      | Data not available. | Proprietary | < 0.1   |
| Sodium Hydroxide               | NaOH                             | 39.99 g/mol         | 1310-73-2   | < 0.1   |
| Proprietary                    | Proprietary                      | Data not available. | Proprietary | < 0.1   |

## 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

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. Di with water or milk. Call a physician if necessary.



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## 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 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.

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### SECTION 8: Exposure Controls / Personal Protection

#### 8.1 Control Parameters

| Chemical Name                | Limit Type  | Country | Exposure Limit  | Information Source                                       |
|------------------------------|-------------|---------|---|--|
| 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) |
| Sodium Azide (26628-22-8)    | TLV-Ceiling | USA     | "0.29 mg/m <sup>3</sup> Ceiling (as Sodium azide); 0.11 ppm Ceiling (as Hydrazoic acid vapor)" As Sodium azide [26628-22-8] | ACGIH - Threshold Limit Values - Ceilings (TLV-C)        |
| Sodium Azide (26628-22-8)    | TLV-Ceiling | USA     | "0.29 mg/m <sup>3</sup> Ceiling (as Sodium azide); 0.11 ppm Ceiling (as Hydrazoic acid vapor)" As Sodium azide [26628-22-8] | ACGIH - Threshold Limit Values - Ceilings (TLV-C)        |
| Sodium Azide (26628-22-8)    | TLV-Ceiling | USA     | "0.29 mg/m <sup>3</sup> Ceiling (as Sodium azide); 0.11 ppm Ceiling (as Hydrazoic acid vapor)" As Sodium azide [26628-22-8] | ACGIH - Threshold Limit Values - Ceilings (TLV-C)        |

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|                           |             |     |   |   |
|---------------------------|-------------|-----|---|---|
| Sodium Azide (26628-22-8) | TLV-Ceiling | USA | "0.29 mg/m <sup>3</sup> Ceiling (as Sodium azide); 0.11 ppm Ceiling (as Hydrazoic acid vapor)" As Sodium azide [26628-22-8] | ACGIH - Threshold Limit Values - Ceilings (TLV-C) |
| Sodium Azide (26628-22-8) | TLV-Ceiling | USA | 0.29 mg/m <sup>3</sup> Ceiling (as Sodium azide); 0.11 ppm Ceiling (as Hydrazoic acid vapor)                                | ACGIH - Threshold Limit Values - Ceilings (TLV-C) |
| Sodium Azide (26628-22-8) | TLV-Ceiling | USA | "0.29 mg/m <sup>3</sup> Ceiling (as Sodium azide); 0.11 ppm Ceiling (as Hydrazoic acid vapor)" As Sodium azide [26628-22-8] | ACGIH - Threshold Limit Values - Ceilings (TLV-C) |
| Sodium Azide (26628-22-8) | TLV-Ceiling | USA | "0.29 mg/m <sup>3</sup> Ceiling (as Sodium azide); 0.11 ppm Ceiling (as Hydrazoic acid vapor)" As Sodium azide [26628-22-8] | ACGIH - Threshold Limit Values - Ceilings (TLV-C) |
| Sodium Azide (26628-22-8) | TLV-Ceiling | USA | "0.29 mg/m <sup>3</sup> Ceiling (as Sodium azide); 0.11 ppm Ceiling (as Hydrazoic acid vapor)" As Sodium azide [26628-22-8] | ACGIH - Threshold Limit Values - Ceilings (TLV-C) |

### 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:** Green liquid

**Physical State:** Liquid

**Odor:** Data not available.

**Odor Threshold:** Data not available.

**pH:** 7.00

**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:** 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

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.



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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

Sodium Azide (CAS # 26628-22-8): "1000 lb EPCRA RQ" As Sodium azide (Na(N<sub>3</sub>)) [26628-22-8]

Sodium Azide (CAS # 26628-22-8): "500 lb TPQ (this material is a reactive solid, the TPQ does not default to 10000 pounds for non-powder, non-molten, non-solution form)" As Sodium azide (Na(N<sub>3</sub>)) [26628-22-8]

Sodium Azide (CAS # 26628-22-8): 1000 lb EPCRA RQ

Sodium Azide (CAS # 26628-22-8): 500 lb TPQ (this material is a reactive solid, the TPQ does not default to 10000 pounds for non-powder, non-molten, non-solution form)



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### 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Sodium Hydroxide (CAS # 1310-73-2): "1000 lb final RQ"  
Sodium Hydroxide (CAS # 1310-73-2): 1000 lb final RQ  
Sodium Hydroxide (CAS # 1310-73-2): 454 kg final RQ  
Sodium Hydroxide (CAS # 1310-73-2): 454 kg final RQ" As Sodium hydroxide [1310-73-2]  
Sodium Azide (CAS # 26628-22-8): "1000 lb final RQ"  
Sodium Azide (CAS # 26628-22-8): 1000 lb final RQ  
Sodium Azide (CAS # 26628-22-8): 454 kg final RQ  
Sodium Azide (CAS # 26628-22-8): 454 kg final RQ" As Sodium azide [26628-22-8]  
Sodium Phosphate Dibasic (CAS # 7558-79-4): 2270 kg final RQ  
Sodium Phosphate Dibasic (CAS # 7558-79-4): 5000 lb final RQ

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

Sodium Azide (CAS # 26628-22-8): "1.0 % de minimis concentration" As Sodium azide [26628-22-8]  
Sodium Azide (CAS # 26628-22-8): 1.0 % de minimis concentration

### 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  
Sodium Azide (CAS # 26628-22-8): "Extraordinarily hazardous" As Sodium azide [26628-22-8]  
Sodium Azide (CAS # 26628-22-8): Extraordinarily hazardous  
Sodium Phosphate Dibasic (CAS # 7558-79-4): 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): Environmental hazard  
Sodium Azide (CAS # 26628-22-8): "Environmental hazard" As Sodium azide (Na(N3)) [26628-22-8]  
Sodium Azide (CAS # 26628-22-8): Environmental hazard  
Sodium Phosphate Dibasic (CAS # 7558-79-4): Environmental hazard  
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

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  
Sodium Azide (CAS # 26628-22-8): "reactive - third degree" As Sodium azide [26628-22-8]  
Sodium Azide (CAS # 26628-22-8): "SN 1684 500 lb TPQ" As Sodium azide (Na(N3)) [26628-22-8]  
Sodium Azide (CAS # 26628-22-8): "sn 1684" As Sodium azide [26628-22-8]  
Sodium Azide (CAS # 26628-22-8): reactive - third degree  
Sodium Azide (CAS # 26628-22-8): sn 1684  
Sodium Azide (CAS # 26628-22-8): SN 1684 500 lb TPQ  
Sodium Phosphate Dibasic (CAS # 7558-79-4): sn 1723



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### 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" As Sodium hydroxide [1310-73-2] (DSL)

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

Sodium Azide (CAS # 26628-22-8): "Present" As Sodium azide [26628-22-8] (DSL)

Sodium Azide (CAS # 26628-22-8): Present (DSL)

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

Water (CAS # 7732-18-5): "Present" As Water [7732-18-5] (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

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

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

Sodium Azide (CAS # 26628-22-8): "Present (ACTIVE)" As Sodium azide (Na(N<sub>3</sub>)) [26628-22-8]

Sodium Azide (CAS # 26628-22-8): Present (ACTIVE)

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

Water (CAS # 7732-18-5): "Present [XU] (ACTIVE)" As Water [7732-18-5]

Water (CAS # 7732-18-5): Present [XU] (ACTIVE)

Potassium Dihydrogen Phosphate (CAS # 7778-77-0): 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 Hydroxide (CAS # 1310-73-2): "215-185-5" As Sodium hydroxide [1310-73-2]

Sodium Hydroxide (CAS # 1310-73-2): 215-185-5

Sodium Azide (CAS # 26628-22-8): "247-852-1" As Sodium azide [26628-22-8]

Sodium Azide (CAS # 26628-22-8): 247-852-1

Sodium Phosphate Dibasic (CAS # 7558-79-4): 231-448-7

Sodium Phosphate Dibasic (CAS # 7558-79-4): 231-558-5

Water (CAS # 7732-18-5): "231-791-2" As Water [7732-18-5]

Water (CAS # 7732-18-5): 231-791-2

Potassium Dihydrogen Phosphate (CAS # 7778-77-0): 231-913-4

Potassium Dihydrogen Phosphate (CAS # 7778-77-0): 240-213-8

## SECTION 16: Other Information

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

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### 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.

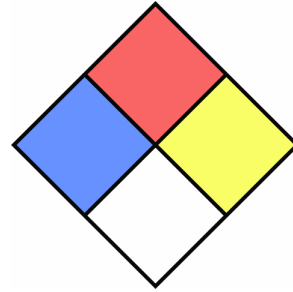
### 16.3. National Fire Protection Association (NFPA) Rating

**Health:**

**Flammability:**

**Reactivity:**

**Special Hazard:**



### 16.4. Document Revision

**Last Revision Date:** 2025-04-06

## 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 COLE-PARMER INSTRUMENT COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.