



VWR ANALYTICAL

# Safety Data Sheet

## SECTION 1: Identification

### 1.1. Product Identifier

**Trade Name or Designation:** Buffer, Reference Standard , pH 12.00 ± 0.02 at 25°C

**Product Number:** BDH5088

**Other Identifying Product Numbers:** BDH5088-4L

### 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

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

**Company:** VWR

**Address:** 100 Matsonford Road  
Suite 200  
Radnor, PA 19087 USA

**Telephone:**

### 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.



VWR ANALYTICAL

# Safety Data Sheet

## 2.3. WHMIS Classification

## 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	99.57%
Potassium Chloride	KCl	74.55 g/mol	7447-40-7	0.37%
Sodium Hydroxide	NaOH	39.99 g/mol	1310-73-2	0.06%

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

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

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

### 4.3. Medical Attention or Special Treatment Needed

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.



VWR ANALYTICAL

# 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 spill with suitable material. Neutralize with dilute acid solution, then flush to drain with excess water if allowed by local regulations. Always dispose of in accordance with local, state and federal 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.



VWR ANALYTICAL

# Safety Data Sheet

## SECTION 9: Physical and Chemical Properties

### 9.1. Basic Physical and Chemical Properties

**Appearance:** Clear, colorless, odorless

**Physical State:** Liquid

**Odor:** Data not available.

**Odor Threshold:** Data not available.

**pH:** 12

**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:** 1.01

**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

Bromine Trifluoride, Potassium Permanganate plus Sulfuric Acid.

### 10.4. Hazardous Decomposition Products

Will not occur.



VWR ANALYTICAL

# 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 (Potassium Chloride) 2600 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.

## SECTION 12: Ecological Information

### 12.1. Ecotoxicity

Not applicable.



VWR ANALYTICAL

# Safety Data Sheet

## 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.

## 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



VWR ANALYTICAL

# Safety Data Sheet

## 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.

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

Sodium Hydroxide (CAS # 1310-73-2): Present  
Potassium Chloride (CAS # 7447-40-7): Present  
Water (CAS # 7732-18-5): Present

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

Sodium Hydroxide (CAS # 1310-73-2): Present  
Potassium Chloride (CAS # 7447-40-7): 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.

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

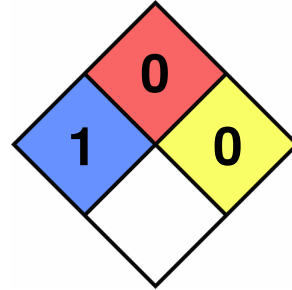


VWR ANALYTICAL

# Safety Data Sheet

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

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



## 16.4. Document Revision

Last Revision Date: 5/4/2015

### DISCLAIMER

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International and its Affiliates shall not be held liable for any damage resulting from handling.