

## **Safety Data Sheet**

# Buffer Solution, pH 8.00

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Buffer Solution, pH 8.00

Synonyms/Generic Names: pH 8.00 Buffer

**SDS Number:** 134.00

Product Use: For Educational Use Only

Manufacturer: Columbus Chemical Industries, Inc. N4335 Temkin Rd. Columbus, WI. 53925

For More Information Contact: Ward's Science 5100 West Henrietta Rd. PO Box 92912-9012 Rochester, NY 14692 (800) 962-2660 (Monday-Friday 7:30-7:00 Eastern Time)

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

### 2. HAZARDS IDENTIFICATION

OSHA Hazards: No known OSHA hazards.

Target Organs: None

Signal Word: None

Pictograms: None

**GHS Classification:** 

Not a hazardous mixture according to GHS.

GHS Label Elements, including precautionary statements:

#### **Hazard Statements:**

None

#### **Precautionary Statements:**

None

#### **Potential Health Effects**

Eyes	May cause eye irritation.
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Ingestion	May be harmful if swallowed.

NFPA Ratings	
Health	0
Flammability	0
Reactivity	0
Specific hazard	Not Available

HMIS Ratings	
Health	0
Fire	0
Reactivity	0
Personal	А

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Water	Balance	7732-18-5	231-791-2	H <sub>2</sub> O	18.00 g/mol
Potassium Phosphate, Monobasic	<1	7778-77-0	231-913-4	H <sub>2</sub> KO <sub>4</sub> P	136.09 g/mol
Sodium Hydroxide	<1	1310-73-2	215-185-5	NaOH	40.00 g/mol

### **4. FIRST-AID MEASURES**

Eyes	Rinse with plenty of water for at least 15 minutes and seek medical attention if necessary.
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not
	breathing, give artificial respiration. Get medical attention if necessary.
Skin	Flush with plenty of water and wash using soap. Get medical attention if necessary.
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If
	conscious, wash out mouth with water. Get medical attention if necessary.

### **5. FIRE-FIGHTING MEASURES**

Suitable (and unsuitable) extinguishing media	Product is not flammable. Use appropriate media for adjacent fire. Cool containers with water.
Special protective equipment and precautions for firefighters	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
Specific hazards arising from the chemical	Emits toxic fumes (carbon oxides, potassium oxides, sodium oxides, phosphorus oxides) under fire conditions. (See also Stability and Reactivity section).

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment
	may be subject to federal/national or local reporting requirements.
Methods and materials for	Absorb spill with noncombustible absorbent material, then place in a
containment and cleaning up	suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

### 7. HANDLING AND STORAGE

#### Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

#### Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Contains no substances with occupational exposure limit values.

#### **Personal Protection**

Eyes	Wear chemical safety glasses or goggles.	
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an	
	approved respirator.	
Skin	Wear nitrile or rubber gloves, and apron or lab coat.	
Other	Not Available	

#### **Other Recommendations**

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Clear, colorless liquid.
Odor	Not Available
Odor threshold	Not Available
рН	8.00
Melting point/freezing point	Not Available
Initial boiling point and boiling range	Not Available
Flash point	Not Flammable
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Explosive
Vapor pressure	Not Available
Vapor density	Not Available
Density	Not Available
Solubility (ies)	Not Available
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

### **10. STABILITY AND REACTIVITY**

Chemical Stability	Stable
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	Not Available
Incompatible Materials	Strong oxidizing agents, bases.
Hazardous Decomposition Products	Carbon oxides, potassium oxides, sodium oxides, phosphorus
	oxides.

### 11. TOXICOLOGICAL INFORMATION

#### Acute Toxicity

/ touto i oxioity	
Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	Not Available

#### Carcinogenicity

<u></u>		
IARC	No components of this product present at levels greater than or equal to 0.1% is identified	
	as probable, possible or confirmed human carcinogen by IARC.	
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified	
	as a carcinogen or potential carcinogen by ACGIH.	
NTP	No components of this product present at levels greater than or equal to 0.1% is identified	
	as a known or anticipated carcinogen by NTP.	
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified	
	as a carcinogen or potential carcinogen by OSHA.	

#### Signs & Symptoms of Exposure

Skin	Irritation.
Eyes	Irritation.
Respiratory	Irritation.
Ingestion	Irritation.

Chronic Toxicity	Not Available
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available
Specific Target Organ Toxicity	Not Available
Reproductive Toxicity	Not Available
Respiratory/Skin Sensitization	Not Available

### 12. ECOLOGICAL INFORMATION

Ecotoxicity

Lootoxicity	
Aquatic Vertebrate	Not Available
Aquatic Invertebrate	Not Available
Terrestrial	Not Available

Persistence and Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

### **13. DISPOSAL CONSIDERATIONS**

Waste Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residues.
Product	Users should review their operations in terms of the applicable federal/national or
Containers	local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.
	before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

### 14. TRANSPORTATION INFORMATION

US DOT	Not Dangerous Goods
TDG	Not Dangerous Goods
IMDG	Not Dangerous Goods
Marine Pollutant	No
IATA/ICAO	Not Dangerous Goods

### **15. REGULATORY INFORMATION**

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.	
,		
DSCL (EEC)	All ingredients are listed on the DSCL inventory.	
California Proposition 65	Not Listed	
SARA 302	Not Listed	
SARA 304	Not Listed	
SARA 311	No SARA Hazards	
SARA 312	No SARA Hazards	
SARA 313	Not Listed	
WHMIS Canada	Not Listed	

### **16. OTHER INFORMATION**

Revision	Date
Revision 1	01/11/2013

Disclaimer: Columbus Chemical Industries, Inc. ("Columbus") believes that the information herein is factual but is not intended to be all inclusive. The information relates only to the specific material designated and does not relate to its use in combination with other materials or its use as to any particular process. Because safety standards and regulations are subject to change and because Columbus has no continuing control over the material, those handling, storing or using the material should satisfy themselves that they have current information regarding the particular way the material is handled, stored or used and that the same is done in accordance with federal, state and local law. COLUMBUS MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING (WITHOUT LIMITATION) WARRANTIES WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN OR WITH RESPECT TO FITNESS FOR ANY PARTICULAR USE.