



# SAFETY DATA SHEET

## 1. Chemical Product and Company Identification

Description: Buffer Calibration Solution, pH 10.00 (Color Coded-BLUE)  
Product Code: Signet Part Number 3822-7010  
Product Type: Aqueous Salt Solution  
Application: Calibration of pH and ORP Electrodes

## Manufacturer/Supplier Information

Manufactured for and SDS prepared by:  
Georg Fischer Signet LLC  
3401 Aero Jet Ave.  
El Monte, California 91731

Date Prepared: 05/05/2015

For additional health, safety or regulatory information, call (626) 571-2770

**For Chemical Emergency  
Spill Leak Fire Exposure or Accident  
Call CHEMTREC Day or Night**

**DOMESTIC NORTH AMERICA 800-424-9300  
INTERNATIONAL, CALL 703-527-3887 (collect calls accepted)**

## 2. Hazard(s) Identification

### Classification

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Based on available data, the classification criteria are not met

**Label Elements** None required

### Hazards not otherwise classified (HNOC)

None identified

## 3. Composition / information on ingredients

<i>Chemical</i>	<i>CAS No.</i>	<i>% w/v</i>
Water	7732-18-5	97.78
Ethylenediaminetetraacetic acid, disodium salt dihydrate	6381-92-6	1.0
Potassium carbonate	584-08-7	0.6
Boron potassium oxide (B4K2O7)	1332-77-0	0.4
Potassium hydroxide	1310-58-3	0.2
C.I. Acid blue 9, disodium salt	3844-45-9	0.02

#### 4. First Aid Measures

**Eye Contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention if symptoms occur.

**Skin Contact:** Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention if symptoms occur.

**Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.

**Ingestion:** Do not induce vomiting. Obtain medical attention.

**Most important symptoms/effects:** No information available.

**Notes to Physician:** Treat symptomatically

#### 5. Fire-Fighting Measures

**Suitable Extinguishing Media:** Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

**Unsuitable Extinguishing Media:** No information available

**Flash Point:** Not applicable  
**Method -** No information available

**Autoignition Temperature:** No information available

**Explosion Limits**  
**Upper** No data available  
**Lower** No data available

#### Hazardous Combustion Products

None known

#### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### NFPA

<b>Health</b>	<b>Flammability</b>	<b>Instability</b>	<b>Physical Hazards</b>
<b>1</b>	<b>0</b>	<b>0</b>	<b>N/A</b>

#### 6. Accidental release measures

**Personal Precautions** Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

**Environmental Precautions** See Section 12 for additional ecological information.

**Methods for Containment and Clean Up** No information available.

#### 7. Handling and storage

**Handling** Ensure adequate ventilation.

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place.

## 8. Exposure controls / personal protection

### Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Boron potassium oxide (B4K2O7)	TWA: 2 mg/m <sup>3</sup> STEL: 6 mg/m <sup>3</sup>		
Potassium hydroxide	Ceiling: 2 mg/m <sup>3</sup>	(Vacated) Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Potassium hydroxide	Ceiling: 2 mg/m <sup>3</sup>		CEV: 2 mg/m <sup>3</sup>

### Legend

**ACGIH** - American Conference of Governmental Industrial Hygienists

**OSHA** - Occupational Safety and Health Administration

**NIOSH IDLH**- The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.  
Ensure that eyewash stations and safety showers are close to the workstation location.

### **Personal Protective Equipment**

**Eye/Face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

<b>Physical State</b>	Liquid
<b>Appearance</b>	Blue
<b>Odor</b>	Odorless
<b>Odor Threshold</b>	No information available
<b>pH</b>	7.00 @ 25 °C
<b>Melting Point/Range</b>	0 °C / 32 °F
<b>Boiling Point/Range</b>	100 °C / 212 °F
<b>Flash Point</b>	Not applicable
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid,gas)</b>	No information available

### **Flammability or explosive limits**

<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Vapor Pressure</b>	No data available

**Vapor Density** No information available  
**Relative Density** No information available  
**Solubility** Soluble in water  
**Decomposition Temperature** No information available  
**Viscosity** No information available

**10. Stability and reactivity**

**Reactive Hazard** None known, based on information available.  
**Stability** Stable under normal conditions.  
**Conditions to Avoid** No information available.  
**Incompatible Materials** Strong oxidizing agents  
**Hazardous Decomposition Products** None under normal use conditions  
**Hazardous Polymerization** Hazardous polymerization does not occur.  
**Hazardous Reactions** None under normal processing.

**11. Toxicological information**

**Acute Toxicity**

**Product Information** No acute toxicity information is available for this product

**Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium carbonate	> 2000 mg/kg ( Rat )	Not listed	Not listed
Potassium hydroxide	284 mg/kg ( Rat )	Not listed	Not listed

**Toxicologically Synergistic Products** No information available  
**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** No information available  
**Sensitization** No information available  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	Cas-No	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
Ethylenediaminetetraa cetic acid, disodium salt dihydrate	638-92-6	Not listed	Not listed	Not listed	Not listed	Not listed
Potassium carbonate	584-08-7	Not listed	Not listed	Not listed	Not listed	Not listed
Boron potassium oxide (B4K2O7)	1332-77-0	Not listed	Not listed	Not listed	Not listed	Not listed
Potassium hydroxide	1310-58-3	Not listed	Not listed	Not listed	Not listed	Not listed
C.I. Acid blue 9, disodium salt	3844-45-9	Not listed	Not listed	Not listed	Not listed	Not listed

**Mutagenic Effects** No information available  
**Reproductive Effects** No information available.  
**Developmental Effects** No information available.  
**Teratogenicity** No information available.  
**STOT - single exposure** None known

**STOT - repeated exposure** None known  
**Aspiration hazard** No information available  
**Symptoms / Effects** No information available  
**Endocrine Disruptor Information** No information available  
**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological Information

### Ecotoxicity

Do not empty into drains.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Potassium carbonate	Not listed	LC50 <510 mg/L 96h	Not listed	Not listed
Potassium hydroxide	Not listed	80 mg/L LC50 96 h	Not listed	Not listed

**Persistence and Degradability** No information available  
**Bioaccumulation/ Accumulation** No information available  
**Mobility** No information available.

## 13. Disposal Considerations

### Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transportation Information

DOT. SHIPPING NAME: Not regulated  
 DOT. HAZARD CLASS: Not regulated  
 TDG: Not regulated  
 IATA: Not regulated  
 IMDG/IMO: Not regulated

## 15. Regulatory Information

**All of the components in the product are on the following Inventory lists:** Australia X = listed China Canada Europe TSCA Korea Philippines.

### International Inventories

Component	TSCA	DSL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
Water	X	X	231-791-2	X	-	X	X	X
Ethylenediaminetetraacetic acid, disodium salt dihydrate	-	X	-	X	-	X	X	-
Potassium carbonate	X	X	209-529-3	X	X	X	X	X
Boron potassium oxide (B4K2O7)	X	X	215-575-5	X	-	X	X	X
Potassium hydroxide	X	X	215-181-3	X	X	X	X	X
C.I. Acid blue 9, disodium salt	X	X	223-339-8	X	X	X	X	X

**Legend:**

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance.

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule.

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

**U.S. Federal Regulations****TSCA 12(b)** Not applicable**SARA 313** Not applicable**SARA 311/312 Hazardous Categorization**

<b>Acute Health Hazard</b>	No
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

**Clean Water Act**

Component	CWA - Hazardous	CWA – Reportable Quantities	CWA – Toxic	Component CWA - Hazardous
Potassium hydroxide	X	1000 lb	-	-

**Clean Air Act** Not applicable**OSHA** Occupational Safety and Health Administration Not applicable**CERCLA**

Component	Hazardous Substances RQs	CERCLA EHS RQs
Potassium hydroxide	1000 lb	-

**California Proposition 65** This product does not contain any Proposition 65 chemicals.**State Right-to-Know**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Water	-	-	X	-	-
Potassium hydroxide	X	X	X	-	X
C.I. Acid blue 9, disodium salt	X	-	-	-	-

**U.S. Department of Transportation**

Reportable Quantity (RQ): N  
DOT Marine Pollutant N  
DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico – Grade:** No information available

**Canada:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

**WHMIS Hazard Class:** Non-controlled

**17. Disclaimer**

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**Revision**

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Responsibility for SDS: S.K. Wells

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