# 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: 11/28/2018
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, REFER TO THE INFORMATION CONTAINED HEREIN AND CALL YOUR LOCAL GF OFFICE**

## 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

**Water**

**CAS Number:** 7732-18-5
**% w/v:** 97.78

**Ethylenediaminetetraacetic acid disodium salt dihydrate**

**CAS Number:** 6381-92-6
**% w/v:** 1.0

**Potassium Carbonate**

**CAS Number:** 584-08-7
**% w/v:** 0.6

**Boron Potassium Oxide (B4K207)**

**CAS Number:** 1332-77-0
**% w/v:** 0.4

**Potassium Hydroxide**

**CAS Number:** 1310-58-3
**% w/v:** 0.2

**C.I. Acid Blue 9, Disodium Salt**

**CAS Number:** 3844-45-9
**% w/v:** 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

**Specific Hazards Arising from the Chemical:** Thermal decomposition can lead to release of irritating gases and vapors.

**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**

| Health | Flammability | Instability | Physical Hazards |
|---|---|---|---|
| 1 | 0 | 0 | N/A |

**6. Accidental Release Measures**

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

**Environmental Precautions:** Should not be released into the environment. See Section 12 for additional ecological information.

**Methods for Containment and Clean Up:** Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

**7. Handling and Storage**

**Handling:** Wear personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not inhale.

**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$^3$<br>STEL: 6 mg/m$^3$ | | |
| Potassium Hydroxide | Ceiling: 2 mg/m$^3$ | (Vacated) Ceiling: 2 mg/m$^3$ | Ceiling: 2 mg/m$^3$ |

| Component | Quebec | Mexico OEL (TWA) | Ontario TWAEV |
|---|---|---|---|
| Potassium Hydroxide | Ceiling: 2 mg/m$^3$ | | CEV: 2 mg/m$^3$ |

**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**

**Physical State:** Liquid
**Appearance:** Blue
**Odor:** Odorless
**Odor Threshold:** No information available
**pH:** 10.00 @ 25 °C
**Melting Point/Range:** 0 °C / 32 °F
**Boiling Point/Range:** 100 °C / 212 °F
**Flash Point:** Not applicable
**Evaporation Rate:** No information available
**Flammability (solid,gas):** No information available
**Flammability or Explosive Limits:**
**Upper:** No data available
**Lower:** No data available
**Vapor Pressure:** No data available
**Vapor Density:** No information available
**Specific Gravity:** 1.013 @ 25°C
**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:** None known
**Hazardous Decomposition Products:** Thermal decomposition can lead to release or irritating gases and vapors
**Hazardous Polymerization:** Hazardous polymerization does not occur.
**Hazardous Reactions:** None under normal processing.

## 11. Toxicological information

**Acute Toxicity:** 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 Information:**

| 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 Information:**

| 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 |
| Ethylenediaminetetraa Cetic 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**

| | |
|---|---|
| **Acute Health Hazard:** | No |
| **Chronic Health Hazard:** | No |
| **Fire Hazard:** | No |
| **Sudden Release of Pressure Hazard:** | No |
| **Reactive Hazard:** | 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): Y
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**

Date of latest revision: 11/28/2018
Responsibility for SDS: S.K. Wells