

# SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Calcium Hardness Test Reagent #1B Buffer  
**Catalog Number:** F0694

Bio-Lab, Inc.  
P.O. Box 300002  
Lawrenceville, GA USA 30049  
(800) 859-7946

24 HR. Emergency  
Telephone Numbers:  
(800) 424-9300 CHEMTREC (Transportation)  
(877) 800-5553 Poison Control Center (Medical)

**MSDS Number:** M01819  
**Chemical Name:** Not Applicable  
**CAS Number:** Not applicable  
**Additional CAS No. (for hydrated forms):** Not applicable  
**Chemical Formula:** Not Applicable  
**Chemical Family:** Alkali  
**Intended Use:** Water Analysis

## 2. HAZARDS IDENTIFICATION

**GHS Classification:**

**Hazard categories:** . Corrosive to Metals: Met. Corr. 1 Skin Corrosion/Irritation: Skin Corr. 1A

**GHS Label Elements:**

DANGER



**Hazard statements:** May be corrosive to metals. . Causes severe skin burns and eye damage.

**Precautionary statements:** P321 Specific treatment (see supplemental first aid instructions on this label). P406 Store in corrosive resistant container with a resistant inner liner. Dispose of contents/container according to state, local, federal or national regulations. Keep only in original container. Do not breathe dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Wear eye protection. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim/person to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.

**HMIS:**

**Health:** 3

**Flammability:** 0

**Reactivity:** 0

**Protective Equipment:** B - Safety Glasses and Gloves

**NFPA:**

**Health:** 3

**Flammability:** 0

**Reactivity:** 0

**Symbol:** Not applicable

**WHMIS Hazard Classification:** Class E - Corrosive material

**WHMIS Symbols:** Corrosive

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Hazardous Components according to GHS:**

**Sodium Hydroxide**

**CAS Number:** 1310-73-2

**Chemical Formula:** NaOH

**GHS Classification:** Met. Corr.1, H290; Skin Corr. 1A, H314; Aquatic Acute 3, H402

**Percent Range (Trade Secret):** 10.0 - 20.0

**Percent Range Units:** weight / volume

**PEL:** 2 mg/m<sup>3</sup>

**TLV:** Not established

**WHMIS Symbols:** Acute Poison Corrosive

**Hazardous Components according to GHS: No**

**Demineralized Water**

**CAS Number:** 7732-18-5

**Chemical Formula:** H<sub>2</sub>O

**GHS Classification:** Not a dangerous substance according to GHS.

**Percent Range (Trade Secret):** 85.0 - 95.0

**Percent Range Units:** weight / weight

**PEL:** Not established

**TLV:** Not established

**WHMIS Symbols:** Not applicable

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## 4. FIRST AID MEASURES

**General Information:** In the event of exposure, show this Material Safety Data Sheet and label (where possible) to a doctor.

**Advice to doctor:** Treat symptomatically.

**Eye Contact:** Immediately flush eyes with water for 15 minutes. Call physician.

**Skin Contact (First Aid):** Flood with water then wash with vinegar. Call physician if irritation develops.

**Inhalation:** Remove to fresh air.

**Ingestion (First Aid):** Do not induce vomiting. Give 1-2 glasses of water. Follow with citrus fruit juice, if available. Never give anything by mouth to an unconscious person. Call physician immediately.

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## 5. FIRE FIGHTING MEASURES

**Flammable Properties:** Material will not burn.

**Fire Fighting Instruction:** As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear. Evacuate area and fight fire from a safe distance.

**Extinguishing Media:** Use media appropriate to surrounding fire conditions

**Extinguishing Media NOT To Be Used:** Not applicable

**Fire / Explosion Hazards:** This product will not burn or explode.

**Hazardous Combustion Products:** This material will not burn.

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## 6. ACCIDENTAL RELEASE MEASURES

**Spill Response Notice:**

Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance.

**Containment Technique:** Releases of this material may contaminate the environment. Absorb spilled liquid with non-reactive sorbent material. Stop spilled material from being released to the environment. Dike the spill to contain material for later disposal.

**Clean-up Technique:** Cover spilled material with a dry acid, such as citric or boric. Scoop up slurry into a large beaker. Dilute with a large excess of water. Adjust to a pH between 6 and 9. Use sulfuric or citric acid to lower pH. Use soda ash or sodium bicarbonate to increase pH. Flush reacted material to the drain with a large excess of water. Decontaminate the area of the spill with a weak acid solution.

**Evacuation Procedure:** Evacuate local area (15 foot radius or as directed by your facility's emergency response plan) when: any quantity is spilled. If conditions warrant, increase the size of the evacuation.

**DOT Emergency Response Guide Number:** 154

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## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes skin clothing Do not breathe mist or vapors. Wash thoroughly after handling. Use with adequate ventilation. Maintain general industrial hygiene practices when using this product.

**Storage:** Keep container tightly closed when not in use. Store between 10° and 25°C. Keep away from: acids / acid fumes.

**Flammability Class:** Not applicable

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Have an eyewash station nearby. Have a safety shower nearby. Use general ventilation to minimize exposure to mist, vapor or dust.

**Personal Protective Equipment:**

**Eye Protection:** safety glasses with top and side shields

**Skin Protection:** disposable latex gloves

**Inhalation Protection:** adequate ventilation

**Precautionary Measures:** Avoid contact with: eyes skin clothing Do not breathe: mist/vapor Wash thoroughly after handling. Use with adequate ventilation. Keep away from: acids/acid fumes heat

**TLV:** Sodium Hydroxide: TLV = 2 mg/m<sup>3</sup>

**PEL:** Sodium Hydroxide: PEL = 2 mg/m<sup>3</sup>

**For Occupational Exposure Limits (OEL) for ingredients, see section 3 - Composition/Information on Ingredients.:**

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Clear, colorless

**Physical State:** Liquid

**Molecular Weight:** Not Applicable

**Odor:** None

**Odor Threshold:** Odorless

**pH:** 12.5

**Metal Corrosivity:**

**Corrosivity Classification:** Classified as corrosive to metals.

**Steel:** Not determined

**Aluminum:** Not determined

**Specific Gravity/ Relative Density (water = 1; air =1):** 1.15 g/mL

**Viscosity:** Not determined

**Solubility:**

**Water:** Soluble

**Acid:** Not Applicable

**Other:** Not Determined

**Partition Coefficient (n-octanol / water):** Not applicable

**Coefficient of Water / Oil:** Not Applicable

**Melting Point:** Not Determined

**Decomposition Temperature:** Not determined

**Boiling Point:** Not Determined

**Vapor Pressure:** Not Determined

**Vapor Density (air = 1):** Not Determined

**Evaporation Rate (water = 1):** Not Determined

**Volatile Organic Compounds Content:** Not Applicable

**Flammable Properties:** Material will not burn.

**Flash Point:** Not Applicable

**Method:** Not applicable

**Flammability Limits:**

**Lower Explosion Limits:** Not Applicable

**Upper Explosion Limits:** Not Applicable

**Autoignition Temperature:** Not Applicable

**Explosive Properties:**

Not determined

**Oxidizing Properties:**

Not determined

**Reactivity Properties:**

Not determined

**Gas under Pressure:**

Not classified according to GHS criteria.

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## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable when stored under proper conditions.

**Mechanical Impact:** Not determined

**Static Discharge:** Not determined

**Reactivity / Incompatibility:** Incompatible with: Other pool/spa chemicals in their concentrated forms. acids oxidizers

**Hazardous Decomposition:** No hazardous decomposition products known.

**Conditions to Avoid:** Extreme temperatures Poor Ventilation Contamination

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## 11. TOXICOLOGICAL INFORMATION

**Toxicokinetics, Metabolism and Distribution:** No information available for mixture.

**Toxicologically Synergistic Products:** None reported

**Acute Toxicity:** Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity - Single Exposure (STOT-SE):** Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity - Repeat Exposure (STOT-RE):** Based on classification principles, the classification criteria are not met.

**Skin Corrosion/Irritation:** Corrosive to skin.

**Eye Damage:** Corrosive to eyes.

**Sensitization:** Based on classification principles, the classification criteria are not met.

**CMR Effects/Properties (carcinogenic, mutagenic or toxic to reproduction):** Based on classification principles, the classification criteria are not met.

This product does NOT contain any NTP listed chemicals.

This product does NOT contain any OSHA listed carcinogens.

**Symptoms/Effects:**

**Ingestion:** Causes: severe burns

**Inhalation:** Causes: severe burns

**Skin Absorption:** None Reported

**Chronic Effects:** Chronic overexposure may cause destruction of any tissue contacted

**Medical Conditions Aggravated:** Pre-existing: Eye conditions Respiratory conditions Skin conditions

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## 12. ECOLOGICAL INFORMATION

**Product Ecological Information:** --

No ecological data available for this product.

**Ingredient Ecological Information:** --

No ecological data available for the ingredients of this product.

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## 13. DISPOSAL CONSIDERATIONS

**EPA Waste ID Number:** D002

**Special Instructions (Disposal):** Work in an approved fume hood. Dilute to 3 to 5 times the volume with cold water. Adjust to a pH between 6 and 9 with an acid, such as sulfuric or citric. Open cold water tap completely, slowly pour the reacted material to the drain. Allow cold water to run for 5 minutes to completely flush the system.

**Empty Containers:** Rinse three times with an appropriate solvent. Dispose of empty container as normal trash. Rinsate from empty containers may contain sufficient product to require disposal as hazardous waste.

**NOTICE (Disposal):** These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information. In Europe: Chemical and analysis solutions must be disposed of in compliance with the respective national regulations. Product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

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## 14. TRANSPORT INFORMATION

**D.O.T.:**

**D.O.T. Proper Shipping Name:** Sodium Hydroxide Solution

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**Hazard Class:** 8

**Subsidiary Risk:** NA

**ID Number:** UN1824

**Packing Group:** II

**T.D.G.:**

**Proper Shipping Name:** Sodium Hydroxide Solution

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**Hazard Class:** 8

**Subsidiary Risk:** NA

**UN Number/PIN:** 1824

**Packing Group:** II

**I.C.A.O.:**

**I.C.A.O. Proper Shipping Name:** Sodium Hydroxide Solution

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**Hazard Class:** 8

**Subsidiary Risk:** NA

**ID Number:** UN1824

**Packing Group:** II

**I.M.O.:**

**Proper Shipping Name:** Sodium Hydroxide Solution

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**Hazard Class:** 8

**Subsidiary Risk:** NA

**ID Number:** UN1824

**Packing Group:** II

**Additional Information:** There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

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## 15. REGULATORY INFORMATION

**U.S. Federal Regulations:**

**O.S.H.A.:** This product meets the criteria for a hazardous substance as defined in the Hazard Communication Standard. (29 CFR 1910.1200)

**E.P.A.:**

**S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370):** Immediate (Acute) Health Hazard

**S.A.R.A. Title III Section 313 (40 CFR 372):** This product does NOT contain any chemical subject to the reporting requirements of Section 313 of Title III of SARA.

**302 (EHS) TPQ (40 CFR 355):** Not applicable

**304 CERCLA RQ (40 CFR 302.4):** Sodium Hydroxide 1000 lbs.

**304 EHS RQ (40 CFR 355):** Not applicable

**Clean Water Act (40 CFR 116.4):** Sodium Hydroxide - RQ = 1000 lbs. (454 kgs.)

**RCRA:** Contains RCRA regulated substances. See Section 13, EPA Waste ID Number.

**State Regulations:**

**California Prop. 65:** No Prop. 65 listed chemicals are present in this product.

**Identification of Prop. 65 Ingredient(s):** Not applicable

**California Perchlorate Rule CCR Title 22 Chap 33:** Not applicable

**Trade Secret Registry:** Not applicable

**National Inventories:**

**U.S. Inventory Status:** All ingredients in this product are listed on the TSCA 8(b) Inventory (40 CFR 710).

**CAS Number:** Not applicable

**Canadian Inventory Status:** All ingredients of this product are DSL Listed.

**EEC Inventory Status:** All ingredients used to make this product are listed on EINECS / ELINCS.

**Australian Inventory (AICS) Status:** Not determined

**New Zealand Inventory (NZIoC) Status:** Not determined

**Korean Inventory (KECI) Status:** Not determined

**Japan (ENCS) Inventory Status:** Not determined

**China (PRC) Inventory (MEP) Status:** Not determined

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## 16. OTHER INFORMATION

**References:** 29 CFR 1900 - 1910 (Code of Federal Regulations - Labor). Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. Technical Judgment. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. Vendor Information.

**Complete Text of H phrases referred to in Section 3:** H290 May be corrosive to metals. Not applicable H314 Causes severe skin burns and eye damage.

**Revision Summary:** Substantial revision to comply with EU Reg 1272/2008, Reg 1907/2006 and UN GHS (ST/SG/AC.10/36/Add.3).

**Date of MSDS Preparation:**

**Day:** 31

**Month:** December

**Year:** 2014

**MSDS Prepared:** MSDS prepared by Product Compliance Department extension 3350

**CCOHS Evaluation Note:** It is offered under exemption from WHMIS labeling as specified in the Controlled Products Regulation (CPR) Section 17.

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**Legend:**

NA - Not Applicable	w/w - weight/weight
ND - Not Determined	w/v - weight/volume
NV - Not Available	v/v - volume/volume

**USER RESPONSIBILITY:** Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

**THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.**

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