



# MSDS

## Material Safety Data Sheet

**HVC/Aqua Science, LLC**  
1601 Woodland Avenue  
Columbus, Ohio 43219  
(614) 257-1222  
fax (614) 257-0008

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Calcium Buffer Solution (Code 31174)  
Product Use: Used as a Analytical Reagent

Company: HVC/Aqua Science, LLC  
Address: 1601 Woodland Avenue, Columbus, Ohio 43219-1135  
Telephone Number: (614) 257-1222  
Emergency Phone: (800) 424-9300 CHEMTREC  
Issue Date: 27-Oct-04  
Revision Date: 1-Jan-96

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENT	CAS NO	PCT	TLV	CARCINOGEN?
SODIUM HYDROXIDE	1310-73-2	< 5	2 mg / cu M	No

### 3. HAZARDOUS IDENTIFICATION

#### POTENTIAL HEALTH EFFECTS

**EYES:** Exposure to this product may cause eye irritation and/or redness.

**SKIN CONTACT:** Material may be irritating to the skin. Extended or prolonged exposure may be defatting but is not expected to cause irreversible damage.

**SKIN ABSORPTION:** This material is expected to be essentially non-toxic by this route.

**INGESTION:** Swallowing this product may be possibly irritating or somewhat harmful. Symptoms may include stomach or intestinal irritation, nausea and vomiting.

**INHALATION:** Inhaling this product may cause irritation in the nose, throat, and respiratory tract.

#### PRECAUTIONARY MEASURES

This product is intended for industrial use only. Keep out of the reach of children.

### 4. FIRST-AID MEASURES

**SKIN:** In case of contact, flush affected area with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Seek medical attention. Launder clothing before reuse.

**EYES:** Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.

**INHALATION:** If symptoms develop as a result of inhalation, immediately move affected person away from exposure and into fresh air.

**INGESTION:** This product is not considered to be toxic. If problems occur as a result of swallowing this product, seek medical attention immediately.

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## 5. FIRE-FIGHTING MEASURES

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### FLAMMABILITY PROPERTIES

**FLASHPOINT:** Not Flammable.

**LOWER FLAME LIMIT:** No data available

**UPPER FLAME LIMIT:** No data available.

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### EXTINGUISHING MEDIA

This product is nonflammable under usual conditions of use. In case of fire, use an agent suitable for extinguishing the type of surrounding fire.

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### SPECIAL FIREFIGHTING INSTRUCTIONS

Treat as with any chemical: under fire conditions, irritating and/or toxic gases and aerosols may be present. As in any fire, firefighters should wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear.

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## 6. ACCIDENTAL RELEASE MEASURES / SPILL PROCEDURES

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In the event of a spill, absorb spilled product into inert material and scoop into containers for proper disposal. Avoid run-off into storm sewers and ditches that may lead to natural waterways.

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## 7. HANDLING AND STORAGE / DISPOSAL

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Take all reasonable steps to prevent contact between this product and any part of the body. Store this product in a cool, dry place and ensure that there is adequate ventilation. Keep containers of this product closed when not in use. Do not allow this product to freeze.

Containers of this material may be hazardous when empty because emptied containers retain product residue. All precautions outlined in this material safety data sheet must be observed.

The user of this material has the responsibility to dispose of unused material, residues, and containers in compliance with all relevant federal, state, and local laws and regulations regarding treatment, storage, and disposal for hazardous and non-hazardous wastes.

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## 8. PERSONAL PROTECTION

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**SKIN:** Where contact may occur, wear chemical resistant gloves and long sleeves.

**EYES:** Wear safety glasses; where industrial use occurs, chemical goggles or a full impermeable suit may be required.

**RESPIRATORY:** No exposure limits have been established. Engineering controls (e.g. general and/or local exhaust) are preferred, to provide sufficient mechanical ventilation for general chemical handling.

**GENERAL:** Use local exhaust ventilation to minimize dust levels where industrial use occurs. Otherwise, use good general ventilation.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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**APPEARANCE:** Water-white liquid

**ODOR:** No characteristic odor

**SOLUBILITY IN WATER:** Complete

**pH:** > 12

**FREEZING POINT:** < 32° F

**VAPOR DENSITY:** > 1 (air = 1)

**SPECIFIC GRAVITY:** 1.05 (typical)

**VAPOR PRESSURE:** < 1 mm Hg @ 68°F

**BOILING POINT:** 212°F

**PERCENT VOLATILE:** Approx. 92 - 96 % (water)

**EVAPORATION RATE:** < 0.1 (n-Butyl Acetate=1)

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## 10. STABILITY AND REACTIVITY

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**STABILITY:** Stable

**HAZARDOUS POLYMERIZATION:** Will not occur.

**INCOMPATIBILITY:** Avoid contact between this product and strong mineral acids.

**DECOMPOSITION PRODUCTS:** Decomposition of this product could yield phosgene gas.

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## 11. OTHER INFORMATION

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**DISCLAIMER:** The information accumulated herein is believed to be accurate but is not warranted to be as such, whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is correct and suitable to their circumstances. (Signed) Philip J. Anderson, Technical Director