

**Revision Date:** 2008-12-01

**Reason for Revision:** REACH Compliance and General Update

### **SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY**

**Product Name:** HI 5004 pH 4.01 Technical Buffer Solution

**Application:** pH 4.01 Technical Buffer Solution

**Company Information (USA):**

**Additional Product Codes:** HI 5004-01  
HI 5004-12  
HI 5004-36

Hanna Instruments, Inc.  
584 Park East Dr, Woonsocket, Rhode Island, USA 02895

**Technical Service Contact Information:**

1-800-426-6287 (8:30AM - 5:00PM ET)  
+1-401-766-4260 (8:30AM - 5:00PM ET)

**USA Emergency Contact Information:**

1-800-424-9300 (Chemtrec 24Hr. Emergency)

**International Emergency Contact Information:**

+1-703-527-3887 (Chemtrec 24Hr. Emergency)

**E-mail Address:**

tech@hannainst.com

### **SECTION 2: HAZARD IDENTIFICATION**

Non-hazardous product as specified in Directives 67/548/EEC and 1999/45/EC.

### **SECTION 3: COMPOSITION AND COMPONENT INFORMATION**

**Component:** Aqueous Buffer Solution

**EC-No.:**

**CAS-No.:**

**Hazard:**

**Phrases:**

**Content:**

### **SECTION 4: FIRST AID MEASURES**

**After Inhalation:** If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

**After Skin Contact:** In case of contact, immediately wash skin with soap and copious amounts of water.

**After Eye Contact:** In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

**After Swallowing:** If swallowed, wash out mouth with water provided person is conscious. Call a physician.

**General Information:** Not available

### **SECTION 5: FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media:**

Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

**Special Risks:**

Emits toxic fumes under fire conditions.

**Special Protective Equipment:**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Additional Information:**

Contain escaping vapors with water.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****Personal Precautions:**

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

**Environmental Precautions:**

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

**Additional Notes:**

None

**SECTION 7: HANDLING AND STORAGE****Handling:**

Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

**Storage:**

Keep container closed and protected from direct sunlight. Store at room temperature (+15°C to +25°C).

**SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION****Ingredients:****Engineering:**

Mechanical exhaust required. Safety shower and eye bath.

**Personal Protective Equipment:**

As appropriate to quantity handled.

**Respiratory Protection:**

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

**Protective Gloves:**

Compatible chemical-resistant gloves.

**Eye Protection:**

Chemical safety goggles.

**Industrial Hygiene:**

Wash thoroughly after handling.

**SECTION 9: PHYSICAL/CHEMICAL PROPERTIES**

**Appearance:** Colorless liquid.

**Odor:** Odorless

**Density at 20° C:** 1.0 g/cm<sup>3</sup> at 25°C

**Melting Point:** NA

**Boiling Point:** > 100 °C

**Solubility:** Soluble

**pH at 20° C:** 4.01 at 25°C

**Explosion Limit:** NA

**Flash Point:** NA

**Thermal Decomp.:** NA

**SECTION 10: STABILITY AND REACTIVITY****Conditions to be Avoided:**

None

**Hazardous Polymerization:**

Will not occur.

**Further Information:**

Not available

**Hazardous Decomposition Products:**

In the event of fire, see section 5.

**Substances to be Avoided:**

Strong oxidizing agents.

**SECTION 11: TOXICOLOGICAL INFORMATION**

Toxicological properties have not been thoroughly investigated.

**In Case of Inhalation:** Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

**In Case of Skin Contact:** Causes skin irritation. May be harmful if absorbed through the skin.

**In Case of Eye Contact:** Causes eye irritation.

**In Case of Ingestion:** May be harmful if swallowed.

**Further Data:**

**SECTION 12: ECOLOGICAL INFORMATION**

Quantitative data on the ecological effect of this product is not available.

**Further Data:**

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste Disposal:** Can be safely disposed of as an ordinary refuse.

**SECTION 14: TRANSPORTATION INFORMATION**

**Land:**

Not subject to transport regulations

**Sea:**

Not subject to transport regulations

**Air:**

Not subject to transport regulations

**SECTION 15: REGULATORY INFORMATION**

**Labeling according to EC Directives:**

**Symbol:** Non-hazardous according to Directives 67/548/EEC and 1999/45/EC.

**R-phrases:**

**S-phrases:**

**Contains:**

**SECTION 16: OTHER INFORMATION*****Text of R-phrases under Section 3******Revision Information******Legend*****Revision Date:** 2008-12-01

NA: Not Applicable

**Supersedes edition of:** 2008-06-01

ND: Not Determined

**Reason for revision:** REACH Compliance and General Update

**THE INFORMATION CONTAINED HEREIN IS BASED ON THE PRESENT STATE OF OUR KNOWLEDGE. IT CHARACTERIZES THE PRODUCT WITH REGARD TO THE APPROPRIATE SAFETY PRECAUTIONS. IT DOES NOT REPRESENT A GUARANTEE OF THE PROPERTIES OF THE PRODUCT.**