

**Revision Date:** 2009-06-10  
**Reason for Revision:** 29 CFR 1910.1200 and SOR/88-66 Compliance

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

**Product Name:** HI 3842-0 Hardness High Range Reagent      **Additional Product Codes:** HI 3842-S  
HI 3842  
**Application:** Determination of Hardness in Water Samples  
**Company Information (USA):** 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**

Irritating to eyes, respiratory system and skin.

**SECTION 3: COMPOSITION AND COMPONENT INFORMATION**

**Component:** EDTA Tetrasodium Salt  
Dihydrate  
**EC-No.:** 200-573-9  
**CAS-No.:** 10378-23-1  
**Hazard:** Xi  
**Phrases:** R: 36/37/38  
**Content:** > 15% - < 30%

**SECTION 4: FIRST AID MEASURES**

**After Inhalation:** Remove to fresh air. Call a physician if breathing becomes difficult.  
**After Skin Contact:** Wash affected area with water and soap.  
**After Eye Contact:** Rinse out with plenty of water for at least 15 minutes. If pain persists, summon medical advice.  
**After Swallowing:** Wash out mouth with plenty of water, provided person is conscious. Obtain medical attention if feeling unwell.  
**General Information:** Remove contaminated, soaked clothing immediately and dispose of safely.

**SECTION 5: FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media:**  
Water spray, Carbon Dioxide, Dry Chemical Powder, Appropriate Foam.  
**Special Risks:**  
Non-combustible. Development of hazardous combustion gases or vapors possible in the event of fire. The following may develop in event of fire:  
Hydrochloric Acid, Nitrogen Oxides, Carbon Monoxide  
**Special Protective Equipment:**  
Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.  
**Additional Information:**  
Prevent fire-fighting water from entering surface water or groundwater.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:**

Do not inhale vapors/aerosols. Avoid substance contact. Ensure supply of fresh air in enclosed rooms.

**Environmental Precautions:**

Do not allow to enter the sewerage system.

**Additional Notes:**

Take up with liquid-absorbent material. Clean up affected area and dispose according to local regulation.

**SECTION 7: HANDLING AND STORAGE**

**Handling:**

Avoid generation of vapors/aerosols. Do not inhale substance.

**Storage:**

Tightly closed. In a well-ventilated place at +15 to +25 °C.

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

**Engineering:**

Maintain general industrial hygiene practice.

**Personal Protective Equipment:**

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled.

**Respiratory Protection:**

Required when vapors/aerosols are generated. Work under hood.

**Protective Gloves:**

Rubber or plastic

**Eye Protection:**

Goggles or face mask

**Industrial Hygiene:**

Change contaminated clothing. Wash hands after working with substance.

**SECTION 9: PHYSICAL/CHEMICAL PROPERTIES**

**Appearance:** Dark blue liquid

**Odor:** Odorless

**Density at 20° C:** 1.22 g/cm<sup>3</sup>

**Melting Point:** NA

**Boiling Point:** ND

**Solubility:** Soluble

**pH at 20° C:** 10.3

**Explosion Limit:** NA

**Flash Point:** NA

**Thermal Decomp.:** NA

**SECTION 10: STABILITY AND REACTIVITY**

**Conditions to be Avoided:**

Heating

**Hazardous Polymerization:**

Will not occur.

**Further Information:**

Not available

**Hazardous Decomposition Products:**

In the event of fire: See section 5.

**Substances to be Avoided:**

The generally known reaction partners of water

**Safety Data Sheet**According to Regulation (EC) No. 1907/2006  
OSHA Regulation 29 CFR 1910.1200  
Canadian Regulation SOR/88-66**SECTION 11: TOXICOLOGICAL INFORMATION****Product Toxicity**

Quantitative data on the toxicity of this product is not available.

**Potential Health Effects:**

- Inhalation:** May be harmful if inhaled. Mucosal irritations. Sensitization possible in predisposed persons.
- Skin Contact:** Irritations. Sensitization possible in predisposed persons.
- Eye Contact:** Irritations.
- Ingestion:** May be harmful if swallowed. Irritations of mucous membranes in the mouth, pharynx, esophagus and gastrointestinal tract.
- Further Data:** The product should be handled with the usual care when dealing with chemicals.

**Component Toxicity****Acute Toxicity:**

Not Available

**Chronic Toxicity:**

Not Available

**Additional Data:**

Not Available

**SECTION 12: ECOLOGICAL INFORMATION**

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

**Further Data:** No ecological problems are to be expected when the product is handled and used with due care and attention.**SECTION 13: DISPOSAL CONSIDERATIONS****Waste Disposal:** Chemical residues are generally classified as special waste and thus covered by local regulations. Contact local authorities or disposal companies for advice. Handle contaminated packaging in the same way as the substance itself.**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:** Xi: Irritant**R-phrases:** 36/37/38: Irritating to eyes, respiratory system and skin.**S-phrases:** 26-36: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

**SECTION 16: OTHER INFORMATION**

***Text of R-phrases under Section 3***

36/37/38: Irritating to eyes, respiratory system and skin

***Revision Information***

**Revision Date:** 2009-06-10

**Supersedes edition of:** 2008-12-01

**Reason for revision:** 29 CFR 1910.1200 and SOR/88-66 Compliance

***Legend***

NA: Not Applicable

ND: Not Determined

**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.**