

**Revision Date:** 2008-12-01  
**Reason for Revision:** REACH Compliance and General Update

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

**Product Name:** HI 93752A-0 Mg Magnesium Buffer Reagent A **Additional Product Codes:** HI 93752A-0 MG

**Application:** Determination of Magnesium 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 and skin.

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

<b>Component:</b>	Hydrochloric Acid	Tris(Hydroxymethyl)Aminomethane
<b>EC-No.:</b>	231-595-7	201-064-4
<b>CAS-No.:</b>	7647-01-0	77-86-1
<b>Hazard:</b>	C	Xi
<b>Phrases:</b>	R: 34-37	R: 36/38
<b>Content:</b>	> 1% - < 10%	> 25% - < 35%

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

**After Inhalation:** Remove to fresh air. Call a physician if breathing becomes difficult.  
**After Skin Contact:** Wash effected 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:** Immediately make victim drink plenty of water. Summon doctor if pain persists.  
**General Information:**

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

**Suitable Extinguishing Media:**  
Water Spray, Foam, Dry Powder, Carbon Dioxide

**Special Risks:**  
Non-combustible. Development of hazardous combustion gases or vapors possible in the event of fire. The following may develop in the event of fire: Hydrochloric Acid, Nitrogen Oxides

**Special Protective Equipment:**  
Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.

**Additional Information:**  
Contain escaping vapors with water.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:**

Do not inhale vapors/aerosols.

**Environmental Precautions:**

NA

**Additional Notes:**

Take up with liquid-absorbent material. Forward for disposal. Clean up affected area.

**SECTION 7: HANDLING AND STORAGE**

**Handling:**

Cannot be stored indefinitely.

**Storage:**

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

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

**Ingredients:**

HYDROGEN CHLORIDE  
EXPOSURE LIMITS - GERMANY (max. workplace conc.)  
Name : Hydrogen Chloride  
Value : 5 mL/m<sup>3</sup>; 7.6 mg/m<sup>3</sup>

Peak limit I local irritating substance  
Embryotoxic cat. C no risk expected by maintaining TLV EXPOSURE LIMITS - EC  
Source Type Value  
OEL OEL 8 mg/m<sup>3</sup>, 5 ppm

**Engineering:**

Maintain general industrial hygiene practice.

**Personal Protective Equipment:**

As appropriate to quantity handled.

**Respiratory Protection:**

Required when vapors/aerosols are generated.

**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**

<b>Appearance:</b>	Colorless liquid	<b>Odor:</b>	Odorless	<b>Density at 20° C:</b>	1.1 g/cm <sup>3</sup>
<b>Melting Point:</b>	NA	<b>Boiling Point:</b>	ND	<b>Solubility:</b>	Soluble
<b>pH at 20° C:</b>	8.4	<b>Explosion Limit:</b>	NA	<b>Flash Point:</b>	NA
<b>Thermal Decomp.:</b>	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:**

Oxidizing agents

**SECTION 11: TOXICOLOGICAL INFORMATION**

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

**APPLICABLE TO PARTIAL COMPONENT:**

The following applies to Tris(hydroxymethyl)aminomethane as the pure substance:

Acute toxicity

LD50 (oral, rat): 5900 mg/kg.

Subacute to chronic toxicity

No impairment of reproductive performance suspected.

**APPLICABLE TO PARTIAL COMPONENT:**

The following applies to Hydrochloric acid as the pure substance:

Acute toxicity

LC50 (inhalation, rat): 3124 ppm(V) /1 h (calculated on the pure substance).

Subacute to chronic toxicity

Applicable to the toxicologically determinant component:

An embryotoxic effect need not be feared when the threshold limit value is observed.

**In Case of Inhalation:**

**In Case of Skin Contact:** Irritations. Cannot be excluded: dermatitis. Degreasing effect on the skin, possibly followed by secondary inflammation.

**In Case of Eye Contact:** Irritations. Risk of corneal clouding

**In Case of Ingestion:** nausea, vomiting, agitation, confusion, cyanosis, collapse, spasms, muscular symptoms, coma. Risk of aspiration upon vomiting. Effect increased by: ethanol.

**Further Data:** The product should be handled with the usual care when dealing with chemicals. Property of this product must be anticipated on the basis from the components of the preparation:

**SECTION 12: ECOLOGICAL INFORMATION**

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

**APPLICABLE TO PARTIAL COMPONENT:**

The following applies to Tris(hydroxymethyl)aminomethane as the pure substance:

Biologic degradation:

(in analogy to similar compounds): Readily biodegradable. Biodegradation: 89 % /28 d (hydrochloride).

Behavior in environmental compartments:

Distribution: log p(o/w): -1.56 (calculated).

No bioaccumulation is to be expected (log P(o/w) <1).

Ecotoxic effects:

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

**APPLICABLE TO PARTIAL COMPONENT:**

The following applies to Hydrochloric acid as the pure substance:

Ecotoxic effects:

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

Further ecologic data:

The following applies to HCl in general: Harmful effect on aquatic organisms. Harmful effect due to pH shift. Biological effects: hydrochloric acid (including such due to reaction): lethal for fish as from 25 mg/L; *Leuciscus idus* LC50: 862 mg/L (1N-solution). Harmful effects begin at: plants 6 mg/L. Does not cause biological oxygen deficit.

**Further Data:** Do not allow to enter waters, waste water, or soil!

**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:** 36/38: Irritating to eyes 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.**Contains:****SECTION 16: OTHER INFORMATION****Text of R-phrases under Section 3**34: Causes burns.  
36/38: Irritating to eyes and skin.  
37: Irritating to respiratory system**Revision Information****Revision Date:** 2008-12-01  
**Supersedes edition of:** 2008-01-03  
**Reason for revision:** REACH Compliance and General Update**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.**