

**Revision Date:** 2012-04-23  
**Reason for Revision:** Section 14 Updated

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

**Product Name:** HI 38015A-0 Chloride Reagent A

**Application:** Determination of Chloride 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**

Non-hazardous product as specified in Directives 67/548/EEC and 1999/45/EC.  
Non-hazardous product as specified in OSHA Regulation 29 CFR 1910.1200.  
Non-hazardous product as specified in Canadian Regulation SOR/88-66.

**SECTION 3: COMPOSITION AND COMPONENT INFORMATION**

**Component:** Tris(Hydroxymethyl)Aminomethane

**EC-No.:** 201-064-4

**CAS-No.:** 77-86-1

**Hazard:** Xi

**Phrases:** R: 36/38

**Content:** > 1% - < 20%

**SECTION 4: FIRST AID MEASURES**

**After Inhalation:** Remove to fresh air.

**After Skin Contact:** Wash affected area with water and soap. Remove contaminated clothing.

**After Eye Contact:** Rinse out with plenty of water for at least 15 minutes. If pain persists, call in ophthalmologist.

**After Swallowing:** Immediately make victim Drink plenty of water. Summon doctor if pain persists.

**General Information:** Not available

**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: 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:**

No further requirements.

**Storage:**

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

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

**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>	1.0 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>	8.3	<b>Explosion Limit:</b>	NA	<b>Flash Point:</b>	NA
<b>Thermal Decomp.:</b>	NA				

## Safety Data Sheet

According to Regulation (EC) No. 1907/2006  
OSHA Regulation 29 CFR 1910.1200  
Canadian Regulation SOR/88-66

### **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, bases

### **SECTION 11: TOXICOLOGICAL INFORMATION**

**Product Toxicity**

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

**Potential Health Effects:**

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

**Eye Contact:** Irritations possible.

**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.

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**Component Toxicity**

**Acute Toxicity:**

Not Available

**Chronic Toxicity:**

Not Available

**Additional Data:**

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.

### **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.

**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.

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

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

**SECTION 16: OTHER INFORMATION****Text of R-phrases under Section 3**

36/38: Irritating to eyes and skin.

**Revision Information****Revision Date:** 2012-04-23**Supersedes edition of:** 2009-06-10**Reason for revision:** Section 14 Updated**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.**