

**Revision Date:** 2013-07-16  
**Reason for Revision:** Regulation (EC) No. 1272/2008 Compliance

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

**Product Name:** HI 93702T-0 Total Copper Reagent      **Additional Product Codes:** HI 93702T-01  
 HI 93702T-03  
**Application:** Determination of Total Copper 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.  
 Non-hazardous product as specified in Regulation (EC) 1272/2008.

**According to Directives 67/548/EEC and 1999/45/EC:**  
**S-phrases:** 22-24/25: Do not breathe dust. Avoid contact with skin and eyes.

**SECTION 3: COMPOSITION AND COMPONENT INFORMATION**

<b>Component:</b>	<b>EC No:</b>	<b>CAS No:</b>	<b>Hazard Class:</b>	<b>Phrases:</b>	<b>Concentration:</b>
Sodium Hydrosulphite	231-890-0	7775-14-6	Self-heat. 1 Acute Tox. 4 Xn	H251, H302 R7, R31, R22	> 1% - < 10%
Trans-1,2-diaminocyclohexane-N,N,N',N'-Tetracetic acid monohydrate	236-308-9	123333-90-4	Skin Irritation (Category 2) Eye Irritation (Category 2) Specific Target Organ Toxicity, Single Exposure (Category 3) Xi	H315, H319, H335 R: 36/37/38	> 5% - < 20%

**SECTION 4: FIRST AID MEASURES**

**After Inhalation:** Remove to fresh air.  
**After Skin Contact:** Wash affected area with plenty of water. Remove contaminated clothing.  
**After Eye Contact:** Rinse out with plenty of water. If pain persists, summon medical advice.  
**After Swallowing:** Drink plenty of water, induce vomiting. Obtain medical attention.  
**General Information:** Remove contaminated, soaked clothing immediately and dispose of safely.

**SECTION 5: FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media:**

Foam, Powder, Dry Sand

**Special Risks:**

Development of hazardous combustion gases or vapors possible in the event of fire. The following may develop in event of fire: Nitrogen Oxides, Sulfur 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. Prevent fire-fighting water from entering surface water or groundwater.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:**

Avoid generation of dusts. Do not inhale dusts.

**Environmental Precautions:**

Do not discharge into the drains/surface waters/groundwater.

**Additional Notes:**

Take up dry. Clean up affected area and dispose according to local regulation.

**SECTION 7: HANDLING AND STORAGE**

**Handling:**

Avoid generation of dusts. Do not inhale substance.  
 Accessible only for authorized persons.

**Storage:**

Store at room temperature (+15°C to +25°C). Tightly closed in a dry and well-ventilated place. Keep away from sources of ignition and heat.

**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 dusts 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:**

White powder

**Odor:**

Odorless

**Density at 20°C:** ND

**Melting Point:**

NA (decomposition)

**Boiling Point:**

NA

**Solubility:** Soluble

**pH at 20°C:**

7.0 ÷ 7.5 at 20 g/L in water

**Explosion Limit:**

NA

**Flash Point:** NA

**Thermal Decomp.:**

NA

**SECTION 10: STABILITY AND REACTIVITY**

**Conditions to be Avoided:**

Heating (risk of decomposition).

**Hazardous Polymerization:**

Will not occur.

**Further Information:**

Not available

**Hazardous Decomposition Products:**

In the event of fire: See section 5.

**Substances to be Avoided:**

Acids, oxidizing agents, salts of oxyhalogenic acids

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Product Toxicity**

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

**Potential Health Effects:**

**Inhalation:** Irritations. Other possible symptoms are: coughing, dyspnoea.

**Skin Contact:** Irritations.

**Eye Contact:** Irritations.

**Ingestion:** Nausea, pain, muscular weakness, diarrhea, bloody vomiting, disturbed electrolyte balance, burns in esophagus and stomach, collapse, respiratory paralysis.

**Further Data:** Further hazardous properties cannot be excluded. 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:**

APPLICABLE TO PARTIAL COMPONENT:

Sodium Hydrosulfite: acute toxicity:

LD50 (oral, rat): 2500 mg/Kg.

**SECTION 12: ECOLOGICAL INFORMATION**

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

APPLICABLE TO PARTIAL COMPONENT:

Biological effects: applicable to partial component(s):the following applies to Sodium Hydrosulfite: reacts with water to form toxic decomposition products.

**Further Data:** APPLICABLE TO PARTIAL COMPONENT:

The following applies to Sodium Hydrosulfite: fish toxicity: L.idus LC50 10-100 mg/L /96 h; daphnia toxicity: Daphnia EC50 10-100 mg/L /48 h; algal toxicity: algal IC50 > 100 mg/L 72h; bacterial toxicity: bacteria EC10 62 mg/L /17 h.

**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**

Complies with European Regulations (EC) No. 1907/2006 and No. 1272/2008.  
Complies with European Council Directives 67/548/EEC and 1999/45/EC.  
Complies with OSHA Regulation 29 CFR 1910.1200.  
Complies with Canadian Regulation SOR/88-66

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

H251: Self-heating: may catch fire.  
H302: Harmful if swallowed.  
H315: Causes skin irritation.  
H319: Causes serious eye irritation.  
H335: May cause respiratory irritation.  
R36/37/38: Irritating to eyes, respiratory system and skin.  
R7: May cause fire.  
R22: Harmful if swallowed.  
R31: Contact with acids liberates toxic gas.

***Revision Information***

**Revision Date:** 2013-07-16  
**Supersedes edition of:** 2012-06-01  
**Reason for revision:** Regulation (EC) No. 1272/2008  
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**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.**