

**Revision Date:** 2014-05-07  
**Reason for Revision:** Regulation (EC) No. 1272/2008 Compliance

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

**Product Name:** HI 93756A-0 Calcium Indicator Reagent A

**Application:** Determination of Calcium 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**

May intensify fire: oxidiser.

**According to Regulation (EC) No. 1272/2008:**

**Classification:** Oxidising Solid (Category 3)

**Signal Word:** **Warning**

**Pictograms:**



**Hazard Statements:** H272: May intensify fire; oxidiser

**Precaution Statements:** P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking

**Statements:** P220: Keep/Store away from clothing/.../combustible materials

**According to Directives 67/548/EEC and 1999/45/EC:**

**Symbol:** O: Oxidizing

**R-phrases:** 8: Contact with combustible material may cause fire.

**S-phrases:** 17-24/25: Keep away from combustible material. 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>
Potassium Nitrate	213-818-8	7757-79-1	Ox. Sol. 3 O	H272 R: 8	> 90%

**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 with the eyelid wide open. Summon eye specialist.

**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:**

Water

**Special Risks:**

Non-combustible. Fire-promoting. Keep away from combustible materials and sources of ignition and heat. Development of hazardous combustion gases or vapors possible in the event of fire. The following may develop in event of fire: Nitrous Gases, Potassium 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 ground water.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:**

Avoid generation of dusts. Do not inhale dusts. Avoid substance contact. Ensure supply of fresh air in enclosed rooms.

**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:**

Accessible only for authorized persons.

**Storage:**

Store tightly closed. Dry. Away from combustible materials and sources of ignition and heat. Protect from moisture.

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

**Engineering:**

Safety shower and eye wash.

**Personal Protective Equipment:**

As appropriate to quantity handled.

**Respiratory Protection:**

Required when dusts are generated.

**Protective Gloves:**

Rubber or plastic

**Eye Protection:**

Goggles or face mask

**Industrial Hygiene:**

Wash thoroughly after handling. Remove and wash contaminated clothing promptly.

**SECTION 9: PHYSICAL/CHEMICAL PROPERTIES**

<b>Appearance:</b>	Red powder	<b>Odor:</b>	Odorless	<b>Density at 20°C:</b>	~ 800 kg/m <sup>3</sup>
<b>Melting Point:</b>	400 °C (decomposition)	<b>Boiling Point:</b>	NA	<b>Solubility:</b>	320 g/L
<b>pH at 20°C:</b>	5.7 at 10 g/L in water	<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:**

Toxic gases: See section 5.

**Substances to be Avoided:**

Combustible substances, organic materials

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

**Product Toxicity**

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

**Potential Health Effects:**

**Inhalation:** Irritation of mucus membranes and upper respiratory tract.

**Skin Contact:** Irritations.

**Eye Contact:** Irritations.

**Ingestion:** Risk of mucosal irritations, nausea, vomiting and diarrhea. After absorption of large quantities: methaemoglobinaemia with headache, cardiac arrhythmia, drop in blood pressure, dyspnoea, and spasms, key symptoms: cyanosis (blue coloration of the blood).

**Further Data:** Further hazardous properties cannot be excluded. 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 Potassium nitrate – as the pure substance:

Acute toxicity

LD50, oral, rat: 3750 mg/Kg – calculated on the pure substance.

Subacute to chronic toxicity

Bacterial mutagenicity: Ames test: negative.

### **SECTION 12: ECOLOGICAL INFORMATION**

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

APPLICABLE TO PARTIAL COMPONENT:

The following applies to Potassium nitrate – as the pure substance:

Ecotoxicological effects

Test Type: LC50 Fish, Species: P. reticulata, time: 96 h: value: 1378 mg/L.

Test Type: EC50 Daphnia, Species: Daphnia magna, time: 48 h: value: 490 mg/L.

Biological effects:

The following applies to nitrates in general: may contribute to the eutrophication of water supplies.

Hazard for drinking water. Fish: LC50 > 500 mg/L.

Biologic degradation:

Methods for the determination of biodegradability are not applicable to inorganic substances.

**Further Data:** Do not allow to enter waters, waste waters, 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**

	<i>Land (ADR/RID):</i>	<i>Sea (IMDG):</i>	<i>Air (ICAO/IATA):</i>
<b>UN No.:</b>	1486	1486	1486
<b>Proper Shipping Name:</b>	Potassium nitrate mixture	Potassium nitrate mixture	Potassium nitrate mixture
<b>Class (Sub Risk):</b>	5.1	5.1	5.1
<b>Packing Group:</b>	III	III	III

**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***

H272: May intensify fire: oxidiser.  
 R8: Contact with combustible material may cause fire.

***Revision Information***

**Revision Date:** 2014-05-07  
**Supersedes edition of:** 2012-05-22  
**Reason for revision:** Regulation (EC) No. 1272/2008 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.**