

Revision Date: 2010-12-01

Reason for Revision: Regulation (EC) No. 1272/2008 Compliance

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Name: HI 3845A-0 Chromium MR & HR Reagent A

Application: Determination of Chromium 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. Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

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

Classification: Eye Irritation (Category 2)
Skin Irritation (Category 2)
Chronic Aquatic Toxicity (Category 3)

Signal Word: **Warning**

Pictograms:



Hazard Statements: H315: Causes skin irritation.
H319: Causes serious eye irritation.
H412: Harmful to aquatic life with long lasting effects.

Precaution Statements: P273: Avoid release to the environment.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

Symbol: Xi: Irritant

R-phrases: 36/38-52/53: Irritating to eyes and skin. Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

S-phrases: 26-28.1-61: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water. Avoid release to the environment. Refer to special instructions/Safety data sheet.

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

Component:	EC No:	CAS No:	Hazard Class:	Phrases:	Concentration:
Sulfamic acid	226-218-8	5329-14-6	Eye Irrit. 2 Skin Irrit. 2 Aquatic Chronic 3 Xi	H315, H319, H412 R: 36/38-52/53	-

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 held wide open. Call in ophthalmologist.
- After Swallowing:** Make victim drink plenty of water. Call in physician.
- General Information:** Not available

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:
Sulfur Oxides, 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. Prevent fire residues and contaminated fire fighting water from entering surface water or groundwater.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- Personal Precautions:**
Avoid formation of dusts. Do not inhale dusts. Avoid substance contact.
- 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. Avoid generation of dusts.

SECTION 7: HANDLING AND STORAGE

- | | |
|---|--|
| Handling:
Avoid generation of dusts. Work under hood. | Storage:
Store at room temperature (+15 to +25 °C recommended). Tightly closed in a dry and well-ventilated place. |
|---|--|

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. The resistance of the protective clothing to chemicals should be determined with the respective supplier.
- | | | |
|--|--|--|
| Respiratory Protection:
Required when dusts are generated. | Protective Gloves:
Rubber or plastic | Eye Protection:
Goggles or face mask |
|--|--|--|
- Industrial Hygiene:**
Change contaminated clothing. Application of skin-protective barrier cream recommended. Wash hands after working with substance.

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

Appearance:	White powder	Odor:	Odorless	Density at 20 °C:	ND
Melting Point:	205 °C	Boiling Point:	NA	Solubility:	213 g/L
pH at 20 °C:	1.2 @ 10 g/L	Explosion Limit:	NA	Flash Point:	NA
Thermal Decomp.:	209 °C				

SECTION 10: STABILITY AND REACTIVITY

Conditions to be Avoided:

Strong Heating

Hazardous Polymerization:

Will not occur.

Further Information:

Stable in the recommended storage conditions.

Hazardous Decomposition Products:

In the event of fire: See section 5.

Substances to be Avoided:

Halogens, alkalis, oxidizing agents, metals with water

SECTION 11: TOXICOLOGICAL INFORMATION

Product Toxicity

Eye irritation test (rabbit): Severe irritations (OECD 405).

Skin irritation test (rabbit): Irritations (OECD 404).

Subacute to chronic toxicity

No sensitizing effect.

Bacterial mutagenicity: Ames test: negative.

Mutagenicity (mammal cell test): micronucleus negative.

Potential Health Effects:

Inhalation: Irritation symptoms in the respiratory tract. Coughing, dyspnoea.

Skin Contact: Irritations.

Eye Contact: Severe irritations.

Ingestion: 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:

Sulfamic Acid

LD50: Oral - Rat - 3160 mg/kg

Additional Data:

Not Available

Chronic Toxicity:

Not Available

SECTION 12: ECOLOGICAL INFORMATION

Biologic degradation:
Methods for the determination of biodegradability are not applicable to inorganic substances.
Behavior in environmental compartments:
Distribution: log p(o/w): -4.34 (calculated).
No bioaccumulation is to be expected (log P(o/w) <1).
Ecotoxic effects:
Biological effects:
Harmful effect on aquatic organisms. May cause long-term adverse effects in the aquatic environment.
Harmful effect due to pH shift.
Fish toxicity: P.promelas LC50: 70.3 mg/L /96 h.
Bacterial toxicity: Ps.putida EC10: = 1000 mg/L /16 h.

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

Land:	Sea:	Air:
ADR/RID: 9 PGIII UN-N: 3316 Name: CHEMICAL KIT.	IMDG: 9/UN 3316/PGIII Name: CHEMICAL KIT. Ems: F-A S-B	ICAO/IATA: 9/UN 3316/PGIII Name: CHEMICAL KIT.

Transport data applies to the COMPLETE KIT!

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

R36/38: Irritating to eyes and skin
R52/53: Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H412: Harmful to aquatic life with long lasting effects.

Revision Information

Revision Date: 2010-12-01
Supersedes edition of: 2009-06-10
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.