

Revision Date: 2012-05-30
Reason for Revision: Section 14 Updated

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Name: HI 93749-0 Chromium VI LR Reagent **Additional Product Codes:** HI 93749-01
HI 93749-03
Application: Determination of Chromium (VI) 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.

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

Component: Sulfamic Acid
EC-No.: 226-218-8
CAS-No.: 5329-14-6
Hazard: Xi
Phrases: R: 36/38-52/53
Content: > 30% - < 40%

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: 1.0 – 1.5 at 20 g/L in water

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**

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

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

Chronic Toxicity:

Not Available

Additional Data:

APPLICABLE TO MAIN COMPONENT:
The following applies to Sulfamic acid, as the pure substance:
Specific symptoms in animal studies:
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.

SECTION 12: ECOLOGICAL INFORMATION

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

APPLICABLE TO MAIN COMPONENT:

The following applies to Sulfamic acid, as the pure substance:

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

	<i>Land (ADR/RID):</i>	<i>Sea (IMDG):</i>	<i>Air (ICAO/IATA):</i>
UN No.:	3260	3260	3260
Proper Shipping Name:	Corrosive solid, acidic, inorganic, n.o.s. (potassium disulfate/sulphamic acid mixture)	Corrosive solid, acidic, inorganic, n.o.s. (potassium disulfate/sulphamic acid mixture)	Corrosive solid, acidic, inorganic, n.o.s. (potassium disulfate/sulphamic acid mixture)
Class (Sub Risk):	8	8	8
Packing Group:	II	II	II

SECTION 15: REGULATORY INFORMATION

Labeling according to EC Directives:

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 16: OTHER INFORMATION

Text of R-phrases under Section 3

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

Revision Information

Revision Date: 2012-05-30
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.