

**Revision Date:** 2010-12-01  
**Reason for Revision:** Regulation (EC) No. 1272/2008 Compliance

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

**Product Name:** Formaldehyde Reagent  
**Application:** Determination of Formaldehyde 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**

Contact with acids liberates toxic gas.

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

**Classification:** Eye Irritation (Category 2)

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

**Pictograms:**



**Hazard Statements:** H319: Causes serious eye irritation.  
EUH031: Contact with acids liberates toxic gas.  
**Precaution Statements:** 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:** -

**R-phrases:** 31: Contact with acids liberates toxic gas.

**S-phrases:** 22-24/25: Do not breathe dust. Avoid contact with skin and eyes.

**SECTION 3: COMPOSITION AND COMPONENT INFORMATION**

Component:	EC No:	CAS No:	Hazard Class:	Phrases:	Concentration:
Sodium sulfite	231-821-4	7757-83-7	Eye Irrit. 2	H319, EUH031 R: 31	-

**SECTION 4: FIRST AID MEASURES**

**After Inhalation:** Remove to fresh air. Call a physician if breathing becomes difficult.  
**After Skin Contact:** Wash affected area with water and soap.  
**After Eye Contact:** Rinse out with plenty of water for at least 15 minutes. If pain persists, summon medical advice.  
**After Swallowing:** Wash out mouth with plenty of water, provided person is conscious. Obtain medical attention if feeling unwell.  
**General Information:** Remove contaminated, soaked clothing immediately and dispose of safely.

**SECTION 5: FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media:**

Foam, Powder, Dry Sand, Carbon Dioxide

**Special Risks:**

Development of hazardous combustion gases or vapors possible in the event of fire. The following may develop in event of fire: 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. Avoid contact with eyes, skin and clothing. Accessible only for authorized persons.

**Storage:**

Store at room temperature (+15 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:**

Safety shower and eye wash. Mechanical exhaust required.

**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:**

Wash thoroughly after handling.

**SECTION 9: PHYSICAL/CHEMICAL PROPERTIES**

<b>Appearance:</b>	White powder	<b>Odor:</b>	Odorless	<b>Density at 20 °C:</b>	2.63 g/cm <sup>3</sup>
<b>Melting Point:</b>	NA	<b>Boiling Point:</b>	NA	<b>Solubility:</b>	220 g/L
<b>pH at 20 °C:</b>	9 - 10 @ 50 g/L	<b>Explosion Limit:</b>	NA	<b>Flash Point:</b>	NA
<b>Thermal Decomp.:</b>	500 °C				

### **SECTION 10: STABILITY AND REACTIVITY**

**Conditions to be Avoided:**

Heating Sensitive to moisture.

**Hazardous Polymerization:**

Will not occur.

**Further Information:**

Not available

**Hazardous Decomposition Products:**

In the event of fire: See section 5.

**Substances to be Avoided:**

Strong acids, strong oxidizing agents

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

**Product Toxicity**

Acute toxicity

LD50 (oral, rat): 2610 mg/kg.

Specific symptoms in animal studies:

Eye irritations test (rabbit): slight irritations

Skin irritation test (rabbit): no irritation.

Subacute to chronic toxicity

Bacterial mutagenicity: Salmonell typhimurium: negative.

Bacterial mutagenicity: Ames test: negative.

Bacterial mutagenicity: Escherichia coli: negative.

No teratogenic effects in animal experiments.

Sensitization

Sensitization: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

**Potential Health Effects:**

**Inhalation:** Material is irritating to mucous membranes and upper respiratory tract.

**Skin Contact:** Irritations.

**Eye Contact:** Irritations.

**Ingestion:** Irritation of the gastrointestinal tract. Large doses may cause violent colic and diarrhea, circulatory disturbances, central nervous depression, and even death.

**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:**

Not Available

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

Behavior in environmental compartments:

Distribution: log p(o/w): -4 (25°C) (experimental).

No bioaccumulation is to be expected (log P(o/w) <1).

Biological effects: fish toxicity: L.idus LC50 220-460 mg/L /96 h;

Daphnia toxicity: Daphnia magna EC50 273 mg/L /48 h;

Bacterial toxicity: Ps. putida EC50 770 mg/L /17 h

**Further Data:** COD: 0.125 g/g.

### **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***

R31: Contact with acids liberates toxic gas.  
H319: Causes serious eye irritation.  
EUH031: Contact with acids liberates toxic gas.

***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.**