

Revision Date: 2011-11-22

Reason for Revision: (1st edition)

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Name: HI 7040-1 Zero Oxygen Solution, Component I

Additional Product Codes: HI 7040L
 HI 7040-2

Application: Calibration of Dissolved Oxygen Sensors

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

Harmful if swallowed. Contact with acids liberates toxic gases. Risk of serious damage to eyes.

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

Classification: Acute Toxicity, Oral (Category 4)
 Eye Damage (Category 1)

Signal Word: **Danger**

Pictograms:



Hazard Statements: H302: Harmful if swallowed.
 H318: Causes serious eye damage.
 EUH031: Contact with acids liberates toxic gas.

Precaution Statements: P280: Wear protective gloves/eye protection/face protection.

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: Xn: Harmful

R-phrases: 22-31-41: Harmful if swallowed. Contact with acids liberates toxic gases. Risk of serious damage to eyes.

S-phrases: 26-39-46: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye/face protection. If swallowed, seek medical advice immediately and show this container or label.

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

Component:	EC No:	CAS No:	Hazard Class:	Phrases:	Concentration:
Sodium metabisulfite	231-673-0	7681-57-4	Acute Tox. 4 Eye Dam. 1 Xn, Xi	H302, H318, EUH031 R: 22-31-41	-

SECTION 4: FIRST AID MEASURES

- After Inhalation:** If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.
- After Skin Contact:** In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.
- After Eye Contact:** In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.
- After Swallowing:** If swallowed, wash out mouth with water provided person is conscious. Call a physician.
- General Information:** Not available

SECTION 5: FIRE-FIGHTING MEASURES

- Suitable Extinguishing Media:**
Dry chemical powder.
- Special Risks:**
Emits toxic fumes under fire conditions.
- Special Protective Equipment:**
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
- Additional Information:**
NA

SECTION 6: ACCIDENTAL RELEASE MEASURES

- Personal Precautions:**
Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.
- Environmental Precautions:**
Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.
- Additional Notes:**
None

SECTION 7: HANDLING AND STORAGE

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| <p>Handling:</p> <p>Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.</p> | <p>Storage:</p> <p>Keep tightly closed. Keep away from acids and oxidizers.</p> |
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SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Type	Value	Source	Type	Value	Source
Sodium Metabisulfite					
TWA (8hr)	5 mg/m ³	Belgium	TWA (8hr)	5 mg/m ³	Canada (Ontario)
TWA (8hr)	5 mg/m ³	Canada (Quebec)	TWA (8hr)	5 mg/m ³	France
TWA (8hr)	5 mg/m ³	Greece	TWA (8hr)	5 mg/m ³	Portugal
TWA (8hr)	5 mg/m ³	Spain	TWA (8hr)	5 mg/m ³	UK

Engineering:

Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment:

As appropriate to quantity handled.

Respiratory Protection:

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator.

Protective Gloves:

Compatible chemical-resistant gloves.

Eye Protection:

Chemical safety goggles.

Industrial Hygiene:

Wash thoroughly after handling.

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

Appearance:	White crystals	Odor:	Pungent	Density at 20 °C:	1.48 g/cm ³
Melting Point:	300 °C	Boiling Point:	NA	Solubility:	650 g/L
pH at 20 °C:	4.5	Explosion Limit:	NA	Flash Point:	NA
Thermal Decomp.:	NA				

SECTION 10: STABILITY AND REACTIVITY

Conditions to be Avoided:

Air sensitive. Moisture sensitive.

Hazardous Polymerization:

Will not occur.

Further Information:

Not available

Hazardous Decomposition Products:

Sulfur oxides.

Substances to be Avoided:

Acids, oxidizers.

SECTION 11: TOXICOLOGICAL INFORMATION**Product Toxicity****ACUTE TOXICITY**

LD50 (Oral, Rat): > 2000 mg/kg

LD50 (Skin, Rat): > 2000 mg/kg

LD50 (Intravenous, Rat): 115 mg/kg

LD50 (Parenteral, Mouse): 910 mg/kg

IRRITATION DATA

Skin, Rabbit: 500 mg

Potential Health Effects:

- Inhalation:** Coughing, wheezing. May be irritating to mucous membranes and upper respiratory tract. May cause asthma symptoms.
- Skin Contact:** May cause skin irritation. May be harmful if absorbed through the skin.
- Eye Contact:** Causes severe eye irritation.
- Ingestion:** Abdominal pain, nausea, vomiting.
- Further Data:** No toxic effects are to be expected when the product is handled appropriately.

Component Toxicity**Acute Toxicity:**

Not Available

Chronic Toxicity:

Not Available

Additional Data:

Not Available

SECTION 12: ECOLOGICAL INFORMATION

IC50 Algae: 48 mg/L (72 h)

EC50 Daphnia: 89 mg/L (24 h)

LC50 Fish: 150-220 mg/L (96 h)

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

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***

R22: Harmful if swallowed.
R31: Contact with acids liberates toxic gas.
R41: Risk of serious damage to eyes.
H302: Harmful if swallowed.
H318: Causes serious eye damage.
EUH031: Contact with acids liberates toxic gas.

Revision Information**Revision Date:** 2011-11-22**Supersedes edition of:** (1st edition)**Reason for revision:** (1st edition)**Legend** NA: Not Applicable
ND: Not Determined

This product is intended to be mixed with HI 7040-2. Please refer to the SDS for HI 7040-2 for additional information.

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.