

Revision Date: 2008-12-01

Reason for Revision: REACH Compliance and General Update

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Name: HI 7040 Zero Oxygen Solution

Application: Dissolved Oxygen Solution

Company Information (USA):

Additional Product Codes: HI 7040L
HI 7040M
HI 7040/G

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

Non-hazardous product as specified in Directives 67/548/EEC and 1999/45/EC.

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

Component: Sodium Metabisulfite

EC-No.: 231-673-0

CAS-No.: 7681-57-4

Hazard: Xn, Xi

Phrases: R: 22-31-41

Content: > 1% - < 10%

SECTION 4: FIRST AID MEASURES

After Inhalation: Remove to fresh air. Call a physician if breathing becomes difficult.

After Skin Contact: Wash effected 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: 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

Special Protective Equipment:

Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.

Additional Information:

Prevent fire-fighting water from entering surface water or groundwater.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Do not inhale vapors/aerosols. Avoid substance contact. Ensure supply of fresh air in enclosed rooms.

Environmental Precautions:

Do not allow to enter the sewerage system.

Additional Notes:

Take up dry. Clean up affected area and dispose according to local regulation.

SECTION 7: HANDLING AND STORAGE

Handling:

Avoid generation of vapors/aerosols. Do not inhale substance.

Storage:

Tightly closed. In a well-ventilated place at +15 to +25 °C.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Ingredients:

UK
 Name: Sodium Metabisulfite
 Type: LTEL
 Value: 5 mg/m³

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.

Respiratory Protection:

Required when vapors/aerosols are generated. Work under hood.

Protective Gloves:

Rubber or plastic

Eye Protection:

Goggles or face mask

Industrial Hygiene:

Change contaminated clothing. Wash hands after working with substance.

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

Appearance: Colorless

Odor: Odorless

Density at 20° C: 1.02 g/cm³

Melting Point: NA

Boiling Point: ND

Solubility: Soluble

pH at 20° C: 5

Explosion Limit: NA

Flash Point: NA

Thermal Decomp.: NA

SECTION 10: STABILITY AND REACTIVITY

Conditions to be Avoided:

Heating

Hazardous Polymerization:

Will not occur.

Further Information:

Not available

Hazardous Decomposition Products:

In the event of fire: See section 5.

Substances to be Avoided:

The generally known reaction partners of water

SECTION 11: TOXICOLOGICAL INFORMATION

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

APPLICABLE TO PARTIAL COMPONENT:

The following applies to Sodium metabisulfite, as the pure substance:

Acute toxicity

LD50 (oral, rat): 1540 mg/kg.

Specific symptoms in animal studies:

Eye irritation test (rabbit): Irritations.

Skin irritation test (rabbit): No irritation.

Subacute to chronic toxicity

Noncarcinogenic in animal experiments.

Mutagenicity (mammal cell test): micronucleus negative.

Bacterial mutagenicity: Ames test: negative.

No impairment of reproductive performance in animal experiments.

No teratogenic effect in animal experiments.

In Case of Inhalation: Irritations of the mucous membranes, coughing.

In Case of Skin Contact: Slight irritations.

In Case of Eye Contact: Irritations.

In Case of 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.

SECTION 12: ECOLOGICAL INFORMATION

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

APPLICABLE TO PARTIAL COMPONENT:

The following applies to Sodium metabisulfite, as the pure substance:

Biologic degradation:

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

Ecotoxic effects:

Biological effects:

Harmful effect on aquatic organisms.

When introduced properly, no impairments in the function of adapted biological waste-water-treatment plants are to be expected.

Fish toxicity: *Onchorhynchus mykiss* LC50: 150-220 mg/L /96 h.

Daphnia toxicity: *Daphnia magna* EC50: 89 mg/L /48 h.

Algal toxicity: *Desmodesmus subspicatus* IC50: 48 mg/L /72 h.

Bacterial toxicity: *Ps.putida* EC50: 56 mg/L /17 h.

COD: 0.168 g/g (calculated).

TOD: 0.154 g/g.

Further Data:

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**Labeling according to EC Directives:**

Symbol: Non-hazardous according to Directives 67/548/EEC and 1999/45/EC.

R-phrases:

S-phrases:

Contains:

SECTION 16: OTHER INFORMATION**Text of R-phrases under Section 3**

22: Harmful if swallowed.
31: Contact with acids liberates toxic gas.
41: Risk of serious damage to eyes.

Revision Information

Revision Date: 2008-12-01

Supersedes edition of: 2008-01-17

Reason for revision: REACH Compliance and General Update

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.**