



MANNITOL Mannitol Reagent Safety Data Sheet

According to Regulation (EC) No. 1907/2006 OSHA Regulation 29 CFR 1910.1200 Canadian Regulation SOR/88-66

Revision Date: 2009-06-10

Reason for Revision: 29 CFR 1910.1200 and SOR/88-66 Compliance

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Name: HI 38074D Mannitol Additional Product Codes: HI 38074D-0

Application: Determination of Boron 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

Non-hazardous product as specified in Directives 67/548/EEC and 1999/45/EC. Non-hazardous product as specified in OSHA Regulation 29 CFR 1910.1200. Non-hazardous product as specified in Canadian Regulation SOR/88-66.

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

Mixture of Crystalline Powders

<u>SECTION 4:</u> 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: 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: Carbon Monoxide, Carbon Dioxide

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.



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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's.

Additional Notes:

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

SECTION 7: HANDLING AND STORAGE

Handling: Storage:

No further requirements. Accessible only for authorized

Store at room temperature (+15 to +25 °C recommended). Tightly persons. closed. Protect from light and moisture.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering:

Maintain general industrial hygiene practice.

Personal Protective Equipment:

As appropriate to quantity handled.

Respiratory Protection: Protective Gloves: Eye Protection:

Required when dusts are generated. Rubber or plastic Goggles or face mask

Industrial Hygiene:

Change contaminated clothing. Wash hands after working with substance.

PHYSICAL/CHEMICAL PROPERTIES **SECTION 9:**

White powder Odor: Odorless Density at 20° C: ND Appearance:

Melting Point: ~ 165°C **Boiling Point:** NA Solubility: 213 g/L at 25°C

pH at 20° C: 5 - 7 at 100 g/L in Explosion Limit: NA Flash Point: NA

water

Thermal Decomp.: NA

SECTION 10: STABILITY AND REACTIVITY

Conditions to be Avoided: Hazardous Decomposition Products:

Stable. In the event of fire: See section 5.

Hazardous Polymerization: Substances to be Avoided:

Will not occur. Strong oxidizing agents

Further Information:

Not available



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SECTION 11: TOXICOLOGICAL INFORMATION

Product Toxicity

Acute toxicity: LD50 (oral, rat): 13500 mg/kg.

Subacute to chronic toxicity: No indication of carcinogenic activity.

Bacterial mutagenicity: Ames-Test: negative.

Potential Health Effects:

Inhalation: May be irritant to mucous membranes and upper respiratory tract.

Skin Contact: May cause skin irritations.

Eye Contact: May cause eye irritations.

Ingestion: After swallowing of large amounts: diarrhea.

Further Data: No toxic effects are to be expected when the product is handled with the usual care when dealing with chemicals.

Component Toxicity

Acute Toxicity: Chronic Toxicity:

Not Available

Not Available

Additional Data:
Not Available

SECTION 12: ECOLOGICAL INFORMATION

Behavior in environmental compartments:

Distribution: log P(oct): -3.10 (calculated);

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

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

Further Data: Degradability: Readily biodegradable. BOD: 68 % of COD; ThOD: 1.15 g/g; BOD 59 % of ThOD /5 d; COD 87 % of ThOD.

No ecological problems are to be expected when the product is handled and used with due care and attention.

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.

SECTION 14: TRANSPORTATION INFORMATION

Land: Sea: Air:

SECTION 15: REGULATORY INFORMATION

Labeling according to EC Directives:

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

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



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SECTION 16: OTHER INFORMATION

Text of R-phrases under Section 3 Revision Information Legend

NA Revision Date: 2009-06-10 NA: Not Applicable

ND: Not Determined

Supersedes edition of: 2008-12-01

Reason for revision: 29 CFR 1910.1200 and SOR/88-66

Compliance

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.