

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

Revision Date: 2012-06-01
Reason for Revision: Reviewed Only

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Name: HI 38035B-0 Calcium Reagent B

Application: Determination of Calcium 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

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

Component: Zinc Chloride

EC-No.: 231-592-0

CAS-No.: 7646-85-7

Hazard: C, N

Phrases: R: 22-34-50/53

Content: > 0.25% - < 2.5%

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: Make victim drink plenty of water (if necessary several liters), avoid vomiting. Call in physician. Do not attempt to neutralize.

General Information: Not available

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Powder, Foam

Special Risks:

Non-combustible. Development of hazardous combustion gases or vapours possible in the event of fire. The following may develop in event of fire:
Hydrochloric Acid

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:

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 with liquid-absorbent material. 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

| Type | Value | Source | Type | Value | Source |
|----------------------|----------------------------|-----------------|-----------|----------------------------|------------------|
| Zinc Chloride | | | | | |
| TWA (8hr) | 1 mg/m ³ (fume) | Belgium | TWA (8hr) | 1 mg/m ³ (fume) | Canada (Ontario) |
| TWA (8hr) | 1 mg/m ³ (fume) | Canada (Quebec) | TWA (8hr) | 1 mg/m ³ (fume) | France |
| TWA (8hr) | 1 mg/m ³ | Greece | TWA (8hr) | 1 mg/m ³ (fume) | Poland |
| TWA (8hr) | 1 mg/m ³ (fume) | Portugal | TWA (8hr) | 1 mg/m ³ (fume) | Spain |
| TWA (8hr) | 1 mg/m ³ (fume) | UK | TWA (8hr) | 1 mg/m ³ (fume) | USA (ACGIH) |
| TWA (8hr) | 1 mg/m ³ (fume) | USA (OSHA) | | | |

Engineering:

Safety shower and eye wash.

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.

Protective Gloves:

Rubber or plastic

Eye Protection:

Goggles or face mask

Industrial Hygiene:

Wash thoroughly after handling.

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

| | | | | | |
|-------------------------|--------------------|-------------------------|----------|-------------------------|--------------------------------|
| Appearance: | Colorless solution | Odor: | Odorless | Density at 20°C: | 1.05 g/cm ³ at 25°C |
| Melting Point: | NA | Boiling Point: | ND | Solubility: | Soluble |
| pH at 20°C: | 10-11 at 25°C | Explosion Limit: | NA | Flash Point: | NA |
| Thermal Decomp.: | NA | | | | |

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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:

Strong oxidizing agents

SECTION 11: TOXICOLOGICAL INFORMATION

Product Toxicity

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

Potential Health Effects:

Inhalation: Mucosal irritations, coughing, dyspnoea.

Skin Contact: Possibility of irritations.

Eye Contact: Possibility of irritant effect.

Ingestion: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Further Data: Toxic effect on: kidneys. The product should be handled with the usual care when dealing with chemicals.

Component Toxicity

Acute Toxicity:

Zinc Chloride

LD50: Oral - Rat - 350 mg/kg

Chronic Toxicity:

Not Available

Additional Data:

APPLICABLE TO PARTIAL COMPONENT:

The following applies to Zinc Chloride, as the pure substance:

Subacute to chronic toxicity

Mutagenicity (mammal cell test): chromosome aberration positive. (in vitro) (Lit.)

SECTION 12: ECOLOGICAL INFORMATION

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

APPLICABLE TO PARTIAL COMPONENT:

The following applies to Zinc Chloride, as the pure substance:

Biologic degradation:

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

Ecotoxic effects:

Biological effects:

Highly toxic for aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Hazard for drinking water supplies.

Fish toxicity: Br.rerio LC50: 38 mg/L /96 h (IUCLID).

Daphnia toxicity: Daphnia magna EC50: 0.33 mg/L /48 h (IUCLID).

Algal toxicity: Selenastrum capricornutum IC0: 0.1 mg/L /96 h (OECD 201)

Bacterial toxicity: activated sludge EC50: 45 mg/L (referred to the cation) (IUCLID).

Further Data: Do not allow to enter waters, waste water, 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.

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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: Not applicable
R-phrases: 52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrases: 61: Avoid release to the environment. Refer to special instructions/Safety data sheets.

SECTION 16: OTHER INFORMATION

| Text of R-phrases under Section 3 | Revision Information | Legend |
|--|---|--------------------|
| 22:Harmful if swallowed. | Revision Date: 2012-06-01 | NA: Not Applicable |
| 34:Causes burns. | Supersedes edition of: 2009-06-10 | ND: Not Determined |
| 50/53:Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. | Reason for revision: Reviewed Only | |

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.