



Safety Data Sheet

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

Revision Date: 2012-05-21
Reason for Revision: Section 14 Updated

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Name: HI 93720B-0 Calcium Hardness Reagent B, Alkali Solution

Application: Determination of Calcium Hardness 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

Causes severe burns.

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

Component: Sodium Hydroxide

EC-No.: 215-185-5

CAS-No.: 1310-73-2

Hazard: C

Phrases: R: 35

Content: > 15% - < 30%

SECTION 4: FIRST AID MEASURES

After Inhalation: Remove to fresh air. Call in physician.

After Skin Contact: Wash affected area with plenty of water. Immediately remove contaminated clothing.

After Eye Contact: Rinse out with plenty of water for at least 10 minutes with the eyelid held wide open. Immediately call in ophthalmologist.

After Swallowing: Make victim drink plenty of water (if necessary several liters. Immediately call in physician.

General Information: Remove contaminated, soaked clothing immediately and dispose of safely.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Foam, Dry Powder, Carbon Dioxide

Special Risks:

Non-combustible. Development of hazardous combustion gases possible in the event of fire.

Special Protective Equipment:

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

Additional Information:

NA

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SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:

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

Environmental Precautions:

Do not discharge into the drains/surface waters/groundwater.

Additional Notes:

Take up with liquid-absorbent material.

SECTION 7: HANDLING AND STORAGE

Handling:

Work under hood. Do not inhale substance. Avoid generation of vapors/aerosols. Accessible only for authorized persons.

Storage:

Tightly closed. In a well ventilated place. Store at room temperature (+15 to +25 °C recommended).

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Type	Value	Source	Type	Value	Source
Sodium Hydroxide					
Ceiling	2 mg/m ³	Belgium	Ceiling	2 mg/m ³	Canada (Ontario)
Ceiling	2 mg/m ³	Canada (Quebec)	TWA (8hr)	2 mg/m ³	France
TWA (8hr)	2 mg/m ³	Greece	TWA (8hr)	2 mg/m ³	Hungary
TWA (8hr)	0.5 mg/m ³	Poland	Ceiling	2 mg/m ³	Portugal
TWA (8hr)	1 mg/m ³	Romania	Ceiling	2 mg/m ³	Spain
TWA (15min)	2 mg/m ³	UK	Ceiling	2 mg/m ³	USA (ACGIH)
TWA (8hr)	2 mg/m ³	USA (OSHA)			

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. Apply skin-protective barrier cream. Wash hands after working with substance.

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

Appearance:	Colorless liquid	Odor:	Odorless	Density at 20°C:	1.25 g/cm ³
Melting Point:	ND	Boiling Point:	ND	Solubility:	Soluble
pH at 20°C:	Strongly basic	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:

No information available.

Substances to be Avoided:

Metals, oxidizing agents, reducing agents

SECTION 11: TOXICOLOGICAL INFORMATION

Product Toxicity

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

Potential Health Effects:

Inhalation: Burns of mucous membranes.

Skin Contact: Burns.

Eye Contact: Burns. Risk of blindness!

Ingestion: Burns in mouth, throat, oesophagus and gastrointestinal tract. Risk of perforation in the oesophagus and stomach. Burns.

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

Component Toxicity

Acute Toxicity:

Not Available

Chronic Toxicity:

Not Available

Additional Data:

APPLICABLE TO MAIN COMPONENT:

The following applies to Sodium hydroxide – as the pure substance

Acute toxicity

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

Specific symptoms in animal studies:

Eye irritation test (rabbit): burns.

Skin irritation test (rabbit): burns.

Subacute to chronic toxicity

Mutagenicity (mammal cell test): micronucleus negative.

Bacterial mutagenicity: Escherichia coli: negative.

Bacterial mutagenicity: Ames test: negative.

No teratogenic effect in animal experiments.

SECTION 12: ECOLOGICAL INFORMATION

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

APPLICABLE TO MAIN COMPONENT:

The following applies to Sodium hydroxide – as the pure substance

Biologic degradation:

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

Behavior in environmental compartments:

Concentration in organisms is not to be expected.

Ecotoxic effects:

Biological effects:

Harmful effect on aquatic organisms. Toxic effect on fish and plankton. Harmful effect due to pH shift. Forms corrosive mixtures with water even if diluted. Does not cause biological oxygen deficit.

Neutralization possible in waste water treatment plants.

Fish toxicity: Onchorhynchus mykiss LC 50: 45.4 mg/L /96 h (in hard water). L.macrochirus LC 50: 99 mg/L /48h.

Daphnia toxicity: Daphnia magna EC 50: 76 mg/L /24 h.

Further Data: Do not allow to enter waters, waste water, or soil!

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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

	<i>Land (ADR/RID):</i>	<i>Sea (IMDG):</i>	<i>Air (ICAO/IATA):</i>
UN No.:	1824	1824	1824
Proper Shipping Name:	Sodium hydroxide solution	Sodium hydroxide solution	Sodium hydroxide solution
Class (Sub Risk):	8	8	8
Packing Group:	II	II	II

SECTION 15: REGULATORY INFORMATION

Labeling according to EC Directives:

Symbol: C: Corrosive

R-phrases: 35: Causes severe burns.

S-phrases: 26-37/39-45: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Contains: Sodium hydroxide

SECTION 16: OTHER INFORMATION

Text of R-phrases under Section 3

35: Causes severe burns.

Revision Information

Revision Date: 2012-05-21

Supersedes edition of: 2009-06-10

Reason for revision: Section 14 Updated

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.