

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 38035D-0 Calcium Reagent D

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

Irritating to eyes and skin.

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: > 0.5% - < 2.0%

SECTION 4: FIRST AID MEASURES

After Inhalation: Remove to fresh air. Call in a 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: Not available

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

Safety Data Sheet

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

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:

Keep container closed and protected from direct sunlight. Store at room temperature (+15°C to +25°C).

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:	1.02 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: Irritation of mucous membranes.

Skin Contact: Irritations.

Eye Contact: Irritations.

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

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 LC50: 45.4 mg/L /96 h (in hard water). L.macrochirus LC50: 99 mg/L /48h.

Daphnia toxicity: Daphnia magna EC50: 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

Land:	Sea:	Air:
Not subject to transport regulations	Not subject to transport regulations	Not subject to transport regulations

SECTION 15: REGULATORY INFORMATION

Labeling according to EC Directives:

Symbol: Xi: Irritant

R-phrases: 36/38: Irritating to eyes and skin.

S-phrases: 26-36: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

SECTION 16: OTHER INFORMATION

Text of R-phrases under Section 3

35: Causes severe burns.

Revision Information

Revision Date: 2009-06-10

Supersedes edition of: 2008-12-01

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

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.