HI 84432-50
Titrant Solution

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 84432-50 Titrant Solution

Application: For determination of titratable acidity.

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: >5% - <20%

SECTION 4: FIRST AID MEASURES

After Inhalation: Remove to fresh air. Summon doctor.

After Skin Contact: Wash off 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 ophthamologist.

After Swallowing: Drink plenty of water (if necessary several liters) and avoid vomiting (risk of perforation). Immediately seek medical advice. Do not attempt to neutralize.

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. Ambient fire may liberate hazardous vapors.

Special Protective Equipment:

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

Additional Information:

Contain escaping vapors with water.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:

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

Environmental Precautions:

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

Additional Notes:

Take up with liquid-absorbent material. Clean up affected area and dispose according to local regulation. Render harmless: neutralize with diluted sulfuric acid.

SECTION 7: HANDLING AND STORAGE

Handling:

Accessible only for authorized persons.

Storage:

Tightly closed. 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/m³	Belgium	Ceiling	2 mg/m³	Canada (Ontario)
Ceiling	2 mg/m³	Canada (Quebec)	TWA (8hr)	2 mg/m³	France
TWA (8hr)	2 mg/m³	Greece	TWA (8hr)	2 mg/m³	Hungary
TWA (8hr)	0.5 mg/m³	Poland	Ceiling	2 mg/m³	Portugal
TWA (8hr)	1 mg/m³	Romania	Ceiling	2 mg/m³	Spain
TWA (15min)	2 mg/m³	UK	Ceiling	2 mg/m³	USA (ACGIH)
TWA (8hr)	2 mg/m³	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. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory Protection:

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

Protective Gloves:

Rubber or plastic

Eye Protection:

Goggles or face mask

Industrial Hygiene:

Immediately change contaminated clothing. Apply skin-protective barrier cream. Wash hands and face after working with substance.

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

Appearance:	Colorless liquid	***Odor:***	Odorless	***Density at 20° C:***	1.050 g/cm³
Melting Point:	ND	***Boiling Point:***	ND	***Solubility:***	Soluble
pH at 20° C:	> 12	***Explosion Limit:***	NA	***Flash Point:***	NA
Thermal Decomp.:	NA				

SECTION 10: STABILITY AND REACTIVITY

Conditions to be Avoided:

Heating

Hazardous Decomposition Products:

In the event of fire: See section 5.

Hazardous Polymerization:

Will not occur.

Substances to be Avoided:

Acids, metals

Further Information:

Not available

SECTION 11: TOXICOLOGICAL INFORMATION

Product Toxicity

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

Potential Health Effects:

Inhalation:	Burns of mucous membranes.
Skin Contact:	Burns, necrosis.
Eye Contact:	Burns, necrosis. Risk of blindness.
Ingestion:	Burns mouth, mucous membranes, esophagus and gastrointestinal tract. Risk of perforation in the esophagus and stomach.
Further Data:	Further hazardous properties cannot be excluded. 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 PARTIAL COMPONENT:
The following applies to sodium hydroxide, as the pure substance:
Acute toxicity:
Specific symptoms in animal studies:
Eye irritation test (rabbit): burns (RTECS).
Skin irritation test (rabbit): burns (RTECS).
Subacute to chronic toxicity
Mutagenicity (mammal cell test): micronucleus negative (Lit.).
Bacterial mutagenicity: Escherichia coli: negative (Lit.).
Bacterial mutagenicity: Ames test: negative (Lit.).
No teratogenic effect in animal experiments (Lit.).

SECTION 12: ECOLOGICAL INFORMATION

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

APPLICABLE TO PARTIAL COMPONENT:
The following applies to sodium hydroxide, as the pure substance:
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 /96h (in hard water) (IUCLID).
L.macrochirus LC50 : 99 mg/L /48h (IUCLID).
Daphnia toxicity:
Daphnia magna EC50 : 76 mg/L /24h (External MSDS)

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

SECTION 14: TRANSPORTATION INFORMATION

Land:

ADR/RID: 8/UN 1824/PGII
Name: SODIUM HYDROXIDE SOLUTION

Sea:

IMDG: 8/UN 1824/PGII
Name: SODIUM HYDROXIDE SOLUTION

Air:

ICAO/IATA: 8/UN 1824/PGII
Name: SODIUM HYDROXIDE SOLUTION

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 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:	2009-06-10
Supersedes edition of:	2009-02-10
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.