

Safety Data Sheet

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

Revision Date: 2016-11-02

Reason for Revision: Removed DSD/DPD regulation info

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Name: Alkali-Azide Reagent

Application: Alkali Azide Reagent

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 skin burns and eye damage. Harmful to aquatic life with long lasting effects. Harmful if swallowed. Contact with acids liberates very toxic gas.

According to Regulation (EC) No. 1272/2008:

Classification: Skin Corrosion (Category 1A)
 Chronic Aquatic Toxicity (Category 3)
 Acute Toxicity, Oral (Category 4)

Signal Word: **Danger**

Pictograms:



Hazard Statements: H314: Causes severe skin burns and eye damage.
 H412: Harmful to aquatic life with long lasting effects.
 EUH032: Contact with acids liberates very toxic gas.
 H302: Harmful if swallowed.

Precaution Statements: P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

Component:	EC No:	CAS No:	Hazard Class:	Phrases:	Concentration:
Sodium Azide	247-852-1	26628-22-8	Acute Tox. 2 Aquatic Acute 1 Aquatic Chronic 1	H300, H400, H410, EUH032	> 0.1% - < 1%
Sodium Hydroxide	215-185-5	1310-73-2	Skin Corr. 1A	H314	> 15% - < 35%

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SECTION 4: FIRST AID MEASURES

- After Inhalation:** Remove to fresh air.
- After Skin Contact:** Wash affected area with plenty of water. Remove contaminated clothing. Call in physician.
- After Eye Contact:** Rinse out with plenty of water with the eyelid held wide open. Call in ophthalmologist.
- After Swallowing:** If victim is still conscious, make him drink plenty of water, induce vomiting, administer activated charcoal (20-40 g in 10% slurry). Immediately call in physician.
- General Information:** Remove contaminated, soaked clothing immediately and dispose of safely.

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 the event of fire: Nitrous Gases.
- 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. Prevent fire-fighting water from entering surface water or groundwater.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- Personal Precautions:**
Do not inhale vapors/aerosols. Avoid substance contact. Ensure supply of fresh air in enclosed rooms. Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.
- Environmental Precautions:**
Do not allow to enter sewerage system.
- Additional Notes:**
Carefully Take up with liquid-absorbent material. Forward for disposal. Clean up affected area.

SECTION 7: HANDLING AND STORAGE

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|---|--|
| <p>Handling:</p> <p>Work under hood. Avoid generation of vapors/aerosols.
Do not inhale substance.</p> | <p>Storage:</p> <p>Store at room temperature (+15 to +25°C). Tightly closed in a dry and well-ventilated place. Accessible only for authorized persons.</p> |
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SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

<i>Type</i>	<i>Value</i>	<i>Source</i>	<i>Type</i>	<i>Value</i>	<i>Source</i>
Sodium Azide					
Ceiling	0.1 mg/m ³	Belgium	Ceiling	0.26 mg/m ³	Canada (Ontario)
Ceiling	0.3 mg/m ³	Canada (Quebec)	TWA (8hr)	0.1 mg/m ³	France
TWA (8hr)	0.2 mg/m ³	Germany	TWA (8hr)	0.3 mg/m ³	Greece
TWA (8hr)	0.1 mg/m ³	Hungary	TWA (8hr)	0.1 mg/m ³	Italy
TWA (8hr)	0.1 mg/m ³	Netherlands	TWA (8hr)	0.1 mg/m ³	Poland
TWA (8hr)	0.29 mg/m ³	Portugal	TWA (8hr)	0.1 mg/m ³	Romania
TWA (8hr)	0.1 mg/m ³	Spain	TWA (8hr)	0.1 mg/m ³	UK
Ceiling	0.29 mg/m ³	USA (ACGIH)			
Sodium Hydroxide					
Ceiling	2 mg/m ³	Australia	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	Ceiling	2 mg/m ³	New Zealand
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:

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. 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. Wash hands and face after working with substance. Work under hood. Do not inhale substance. Avoid generation of vapors/aerosols. Under no circumstances eat or drink at workplace.

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

<i>Appearance:</i>	Colorless liquid	<i>Odor:</i>	Odorless	<i>Density at 20°C:</i>	1.40 g/cm ³
<i>Melting Point:</i>	NA	<i>Boiling Point:</i>	ND	<i>Solubility:</i>	Soluble
<i>pH at 20°C:</i>	14	<i>Explosion Limit:</i>	NA	<i>Flash Point:</i>	NA
<i>Thermal Decomp.:</i>	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:

Toxic gases or vapors in the event of fire, See section 5.

Substances to be Avoided:

Acids

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SECTION 11: TOXICOLOGICAL INFORMATION

Product Toxicity

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

Potential Health Effects:

- Inhalation:** Burns of mucosal membranes.
Skin Contact: Burns. Danger of skin absorption.
Eye Contact: Burns. Risk of blindness!
Ingestion: Burns in mouth, throat, oesophagus and gastrointestinal tract.
Further Data: The product should be handled with particular care.

Component Toxicity

Acute Toxicity:

Chronic Toxicity:

Not Available

Sodium Azide

- LC50:** Inhalation - Rat - 37 mg/m³
LD50: Oral - Rat - 27 mg/kg
LD50: Dermal - Rat - 50 mg/kg

Additional Data:

APPLICABLE TO PARTIAL COMPONENT:

The following applies to Sodium Azide – as the pure substance:

Subacute to chronic toxicity

No teratogenic effect in animal experiments.

Further toxicological information

After inhalation of dusts/aerosols: Severe irritations of: mucous membranes, respiratory tract.

Possible damages: pulmonary oedema. Latency time until onset of action.

After skin contact: Slight irritations. Danger of skin absorption.

After eye contact: Slight irritations.

After swallowing: irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Systemic effects: CNS disorders, cardiovascular failure, tachycardia, drop in blood pressure, coughing, dyspnoea, spasms, headache, dizziness, nausea, vomiting, collapse, unconsciousness

APPLICABLE TO PARTIAL 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.

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SECTION 12: ECOLOGICAL INFORMATION

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

APPLICABLE TO PARTIAL COMPONENT:

The following applies to Sodium Azide – as the pure substance:

Ecotoxic effects:

Biological effects:

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

Forms toxic mixtures in water, dilution measures notwithstanding. Herbicidal effect. Nematocidal effect.

Fish toxicity: *L.macrochirus* LC50 : 0.7 mg/L /96 h

Daphnia toxicity: *Daphnia pulex* EC50 : 4.2 mg/L /96 h

Algal toxicity: mixed culture of green algae IC50 : 272 mg/L

Bacterial toxicity: *Photobacterium phosphoreum* EC50 : 38.5 mg/L

Pseudomonas fluorescens EC5 : 2.6 mg/L

APPLICABLE TO PARTIAL 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!

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):	Sea (IMDG):	Air (ICAO/IATA):
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
Marine Pollutant:		No	

SECTION 15: REGULATORY INFORMATION

Complies with European Regulations (EC) No. 1907/2006 and No. 1272/2008.

Complies with OSHA Regulation 29 CFR 1910.1200.

Complies with Canadian Regulation SOR/88-66.

All chemical substances in this product are listed on the TSCA Inventory.

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SECTION 16: OTHER INFORMATION***Text of phrases under Section 3***

H300: Fatal if swallowed.
H314: Causes severe skin burns and eye damage.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.
EUH032: Contact with acids liberates very toxic gas.

Revision Information

Revision Date: 2016-11-02
Supersedes edition of: 2013-11-25
Reason for revision: Removed DSD/DPD regulation info

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.