Azide, 2% solution: sc-291918

MATERIAL SAFETY DATA SHEET

Section 1: Product & Company Identification

Product Name: Azide, 2% solution
Catalog Number: sc-291918
Supplier: Santa Cruz Biotechnology, Inc.
2145 Delaware Avenue
Santa Cruz, CA 95060
800.457.3801 or 831.457.3800
Emergency: ChemWatch
Within the US & Canada: 877-715-9305
Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

Section 2: Composition/Information on Ingredients

Formula: NaN3
Molecular Weight: 65.02

CAS-No.	*EC-No.*	*Index-No.*	*Concentration*
Sodium Azide			
26628-22-8	-	-	-
Water, deionized			
7732-18-5	-	-	-

Section 3: Hazard Identification

NFPA Ratings

Health: 2
Flammability: 0
Reactivity: 0

Emergency Overview: Poison! May be fatal if swallowed or absorbed through skin. May cause irritation to the skin and eyes. May affect central nervous system, kidneys, and cardiovascular system. Contact with acid release toxic Hydraxoic Acid. If ingested, dilute with water, induce vomiting then call a physician.
Target Organs: Eyes, skin, respiratory system, central nervous system, cardiovascular system, kidneys.
Inhalation: May cause irruption. Hydrazoic acid vapors, a by-product of Sodium Azide, causes irritation of the yes, nose, throat, and respiratory tract. Symptoms similar to ingestion.
Skin Contact: May cause irritation. Effects may be similar to inhalation and ingestion. May cause dermatitis.
Ingestion: Toxic! May cause breathlessness, pulmonary edema and rapid heart beat within 5 minutes. Nausea, vomiting, severe headache, restlessness, and diarrhea amy occur within 15 minutes. Other symptoms may include low blood pressure, abnormal breathing, reduced body temperature, reduced body pH, convulsions, collapse and death. Sodium Azide can significantly affect the blood's ability to transport oxygen. This can result in potentially dangerous low blood pressure, throbbing headaches, and rapid heart beat.
Chronic Effects/Carcinogenicity: Chronic exposure may lead to kidney and liver damage.

IARC - No.
NTP - No.
OSHA - No.

Reproductive Information: Not applicable.
Teratology (Birth Defect) Information: Mutation data cited in 'Registry of Toxic Effects of Chemical Substances' for Sodium Azide. Mutation data cited in 'Registry of Toxic Effect of Chemical Substances' for Sodium Azide.

Section 4: First Aid Measures

In all cases seek qualified evaluation
Eye contact: Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops.
Inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.
Skin Contact: Wash areas of contact with soap and water for at least 15 minutes. Call a physician if irritation develops.
Ingestion: Dilute immediately with water or milk. Induce vomiting. Call a physician.

Section 5: Fire Fighting Measures

Flash Point: Not available
LFL: Not available
Method Used: Not available
UFL: Not available
Extinguishing Media: Water, dry chemical, foam, or carbon dioxide. Water spray may be used to keep fire-exposed containers cool.
Fire & Explosion Hazards: Improper disposal down sink drains can cause Sodium Azide to react with Copper and Lead pipes to form highly explosive Lead Azide and Copper Azide. Plumbers can then accidentally detonate these compounds.
Fire Fighting Instructions: Use normal procedures/instructions. Poisonous gases may be produced in fire.
Fire Fighting equipment: Use protective clothing and NIOSH-approved breathing equipment appropriate for this surrounding fire.

Section 6: Accidental Release Measure

Do not flush to sewer. Absorb with suitable material. Containerize for disposal with a hazardous waste disposal facility. Dispose of in accordance with local regulations.

Section 7: Handling and Storage

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Do not mix acids. Contact with acid generates toxic Hydrazoic Acid fumes.
Safety Storage Code: Health. Store at 4 ºC.

Section 8: Exposure Control/Personal Protection:

Engineering Controls: No specific controls are needed. Normal room ventilation is adequate.
Respiratory Protection: Normal room ventilation is adequate.
Skin Protection: Chemical resistant gloves.
Eye Protection: Safety glasses or goggles.

Section 9: Physical and Chemical Properties:

Form	Liquid	pH	Not available
Odor	Odorless	Boiling point(ºC)	Approximately 100
Solubility in Water	Inifinite	Melting Point(ºC)	Approximately 0
Specific Gravity	Approximately 1	Vapor Pressure	Not available

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage
Incompatibility: Acids, metals, Copper, Lead, Brass, solder (in plumbing systems), Benzoyl Chloride and Potassium Hydroxide, Bromine, Carbon Disulfide. Reacts with water to form toxic Hydrazoic Acid.
Hazardous Decomposition Products: Emits very toxic fumes of Nitrogen Oxides and Sodium Oxides when heated to decomposition.
Hazardous Polymerization: Will not occur.

Section 11. Toxicological Information

LD50 Oral, Rat: (Sodium Azide) 27 mg/kg; LD50, Dermal, Rabbit: 20 mg/kg, details of toxic effects not reported other than lethal dose value. Investigated as a tumorigen and mutagen.

Section 12. Ecological Information

Ecotoxicological Information: Insufficient data are available to evaluate the short term and long term effects of Sodium Azide to plants, birds, or land animals. US EPA lists Sodium Azide as an acutely hazardous substance.
Chemical Fate Information: Because Sodium Azide reacts so rapidly in water, it is not expected to be persistent in the aquatic environment.

Section 13. Disposal Considerations

Absorb with suitable material and containerize for proper disposal with a hazardous waste disposal facility. Always dispose of in accordance with local, state and federal regulations.

Section 14. Transport Information

Part Numbers 7144-16, 7144-32, SS084450-1C
D.O.T. Shipping Name: Toxic liquid, Inorganic, n.o.s., (Sodium Azide)
D.O.T. Hazard Class: 6.1
U.N./N.A. Number: UN3287
Packing Group: III
D.O.T. Label: III

Section 15. Regulatory Information

(Not meant to be all inclusive - selected regulations represented)
OSHA Status: These items meet the OSHA Hazard Communication Standard (29 CFR 1910.1200) definition of hazardous material.
TSCA Status: All components of this solution are listed on the TSCA Inventory or are mixtures (hydrates) of items listed on the TSCA Inventory.
SARA Title III:

Section 302 Extremely Hazardous Substances: Not applicable
Section 311/312 Hazardous Categories: Acute, Chronic: Yes Fire, Pressure, Reactivity: No
Section 313 Toxic Chemicals: Not applicable.

California: None reported.
Pennsylvania: Sodium Azide is listed as an Environmental hazard on the state's Hazardous Substances List.
RCRA Status: P105
CERCLA Reportable Quantity: Sodium Azide - 1,000 pounds. Sodium Azide - 1,000 pounds
WHMiS: D-1B Poisonous and Infectious Material. Materials causing immediate and serious toxic effects - Toxic Material.

Section 16: Other information

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.
12/16/2011