

CHEMICAL INFORMATION SHEET: SODIUM AZIDE, NaN_3

SYNONYM(S)	Azide, Azium, Sodium salt of hydrazoic acid
CAS NUMBER	26628-22-8
MOLECULAR WEIGHT	65.02

PHYSICAL HAZARDS:*** REACTIVE**

INCOMPATIBILITIES: When mixed with water or an acid, or comes in contact with a solid metal **it changes rapidly to form a toxic gas with a pungent odor. It will react violently with nitric acid, bromine, carbon disulfide, dimethylsulfate, and heavy metals including, copper and lead.

* It is explosive when heated near its decomposition temperature of 275°C or reacted with metals; heating sodium azide should be avoided.

** Never flush sodium azide down the drain-the azide can react with lead or copper in drain lines and explode. Do not store on metal shelves or use metal items to handle (i.e., spatulas)

HEALTH HAZARDS:**TOXIC****MUTAGEN**

LD50= 27mg/kg

SIGNS AND SYMPTOMS OF EXPOSURE: Sodium azide is an acutely toxic chemical, meaning it can cause immediate signs and symptoms of exposure. If exposed to a small amount by inhaling it, absorbing it through skin or ingestion, signs and symptoms of exposure may occur within minutes. These include, rapid breathing, restlessness, dizziness, weakness, headache, nausea and vomiting, rapid heartbeat, red eyes, dripping nose, cough, burning or blistering of the skin. Exposure to large amounts of sodium azide may lead to convulsion, low blood pressure, slow heart rate, loss of consciousness, lung injury, respiratory failure and even death.

TRAINING AND ADMINISTRATIVE REQUIREMENTS:

All laboratory personnel must be up to date with the laboratory safety and hazardous waste training provided by Environmental Health and Safety (EHS). Employees who handle sodium azide must receive training on the hazards of them and what to do in the event of an exposure or spill. This Chemical Information Sheet (CIS) on sodium azide must always be kept in the immediate work area where it is used, along with a Material Safety Data Sheet (MSDS) on sodium azide.

USE LOCATION REQUIREMENTS:

Work being done with sodium azide must be performed in a chemical fume hood. Keep container sizes and quantities in work area as small as possible.

SPECIFIC PPE REQUIREMENTS:

All lab personnel handling sodium azide must wear a lab coat. With this, safety glasses or splash goggles and a face shield must be worn, dependent on the procedure being performed. Two pairs of nitrile gloves

provide adequate protection against small, accidental exposure to sodium azide. Lab personnel are required to wear full length pants and closed toe shoes.

STORAGE LOCATION REQUIREMENTS:

Store in a compatible container, preferably glass or polyethylene. Store the container in a compatible secondary container (i.e., polyethylene) large enough to contain the entire contents should the original container leak or rupture.

WASTE REQUIREMENTS:

Dispose of as hazardous waste by labeling the container with a BU provided Hazardous Waste Label. Spell out the full chemical name (do not use acronyms, abbreviations, or chemical formulas). Indicate that the waste is **TOXIC and REACTIVE** by checking the specific boxes, and store in a secondary containment bin that is compatible with the waste separate from incompatible waste, and virgin material. Date the bottle, and place a request for the waste to be picked up on the Boston University, Environmental Health and Safety website.

Sodium azide is among the P-listed hazardous wastes regulated by the US Environmental Protection Agency (EPA). Therefore all container residues or spill clean-up material must also be managed as a hazardous waste.

SPILL PROCEDURES:

Laboratory chemical spill kit should be kept easily accessible.

Clean up only very small quantities of sodium azide, and only if you have been properly trained. If you decide to clean up a spill, use materials appropriate for sodium azide:

- a. Never use metal instruments.
- b. Wipe up solutions with chemical absorbent pads (found in chemical spill kits, located in the labs "safety center")
- c. Cover solids with compatible absorbent material, sweep up, and place in a non-metal container.
- d. Dispose of all spill containment material as hazardous waste.

Know the location of safety equipment, including eyewash, emergency shower, and first aid kit. If your eye or skin is exposed to sodium azide, use the emergency eye wash or safety shower to immediately flush with large amounts of liquid for 15 minutes and then seek medical attention*.

*Please report all lab related injuries and illnesses to ROHP after seeking medical assistance

If the spill seems to be too large for the laboratory to handle or the personnel does not feel comfortable cleaning the spill contact EHS at (617) 353-7233 on the Charles River Campus and the Control Desk at (617) 414-6666 on the Medical campus and inform them of the situation.

This chemical information sheet is provided as a summary of the hazards and recommended procedures when working with this chemical. For additional information the MSDS from the manufacturer of this chemical should be consulted. Please contact Environmental Health and Safety at (617) 354-4094 on the Charles River Campus or (617) 638-8830 on the Medical Campus with any questions.