Material Safety Datasheet for Sodium Azide (NaAz)

Identification of the substance / preparation and of the company / undertaking

Product name	Sodium azide
Preparation	Lyophilised or reconstituted with water / buffer at a concentration of no greater than 0.02%.
Supplier identification	Everest Biotech Ltd, Cherwell Innovation Centre, 77 Heyford Park, Upper Heyford, OX25 5HD.

Composition / information on ingredients

Chemical characterisation	Inorganic salt
Chemical name	Sodium azide
CAS number	26628-22-8
EEC-No	247-852-1

Hazards identification

Very toxic if swallowed. Contact with acids liberates very toxic gas.

First aid measures

Eye contact	Irrigate thoroughly with water for at least 10 minutes. Seek medical advice.
Skin contact	Wash skin thoroughly with water. Remove contaminated clothing and wash before re-use. In severe cases, obtain medical attention.
Inhalation	Remove from exposure, rest and keep warm. In severe cases, seek medical advice.
Ingestion	Wash out mouth thoroughly with water and give plenty of water to drink. Seek medical advice.

Fire fighting measures

Special risks	May explode if heated. May evolve toxic fumes in fire.
Suitable extinguishing media	Not applicable.

Accidental release measures

Wear appropriate protective clothing. Inform others to keep a safe distance.
Spread soda ash liberally over spillage.
If local regulations permit, mop up cautiously with plenty of water and run to waste, diluting greatly with running water.
Otherwise transfer to container and arrange removal by disposal company.
Wash site of spillage thoroughly with water.

Handling and storage

Handling	Avoid prolonged contact with copper or lead, especially in drainage systems or mercury and other heavy metals which may result in the formation of explosive azides. Under no circumstances eat, drink or smoke while handling this material. Wash hands thoroughly after working with this material. Contaminated clothing should be removed and washed before re-use.

Storage	Store at 4°C Keep container closed and protected from direct sunlight and moisture. Store away from combustible materials.

Exposure controls / personal protection

As appropriate to quantity handled.

Respirator	Dust respirator.
Ventilation	Extraction hood.
Gloves	Rubber or plastic.
Eye protection	Goggles or face shield.
Other precautions	Plastic apron, sleeves, boots - if handling large quantities.

Physical and chemical properties

Form	Solid
Colour	Pink/White
Odour	Odourless
Melting point	No data available.
Boiling temperature	No data available.
Density	No data available.
Vapour pressure	No data available.
Solubility in water	Very soluble.
Flash point	
Explosion limits	No data available.
Ignition temperature	No data available.

Stability and reactivity

Stable unless heated.
Slow reaction at ambient temperature unless water contains dissolved carbon dioxide. Decomposes violently with bromine or chromyl chloride.
Contact with acids liberates highly toxic gas: forms readily detonatable salts with many metals, particularly heavy metals.

Toxicological information

After ingestion, irritation of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract. Danger of skin absorption.

Systemic effect	Cardiovascular disorders, NS disorders, diarrhoea, tiredness.
Toxic effects	Kidneys
Further data	LD50 27 mg/kg oral, rat. No evidence of carcinogenic properties. Evidence of mutagenic effects.

Ecological information

The following applies to azides in general azides are toxic for aquatic organisms.

Biological effects	Fish *L. macrochirus* toxic from 1.5ppm upwards in 24h.
Approximate acute toxicity for lower organisms	5mg/l;</< p>
Approximate toxicity for cold blooded animals	1mg/l (values stated for sodium azide).

Disposal considerations

Chemical residues are generally classified as special waste, and as such covered by regulations which vary according to location. Contact your local waste disposal authority for advice, or pass to a chemical disposal company. Rinse out empty containers thoroughly before disposal.

Transportation information

UN-No.	1687
ADR/RID	6.1,42'(b)
IMO	6.1/1687
IMDG class	6.1
IATA	1687
Packaging group	II
Correct technical name	Sodium Azide

Regulatory information

Labelling according to EEC directives

Symbol	T+ Very toxic.
R-phrases	R28-32 Very toxic if swallowed. Contact with acids liberates very toxic gas.
S-phrases	S28-45 After contact with skin, wash immediately with plenty of water. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible)
EEC-No.	247-852-1
UK exposure limits:	OES, Short term, mg/m^3: 0.3 - Sodium azide (as NaN_3)