

SODIUM AZIDE

SECTION 1: PRODUCT IDENTIFICATION

Product Name: SODIUM AZIDE

Product Code: 424

CAS#: 26628-22-8

Chemical Formula: Na₂N₃

Molecular Formula: 65.01

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Composition:

Name: SODIUM AZIDE

Toxicological Data on Ingredients:

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Acute toxicity, Oral (Category 2), H300, R28.

Acute aquatic toxicity (Category 1), H400, R50/53.

Chronic aquatic toxicity (Category 1), H410, R50/53

SECTION 3: HAZARDS IDENTIFICATION

Potential Acute Health Effects: Very hazardous in case of skin contact (permeator), of ingestion. Hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation. Severe over-exposure can result in death.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not Available

MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast

TERATOGENIC EFFECTS: Not Available

DEVELOPMENTAL TOXICITY: Not Available. Repeated or prolonged exposure is not known to aggravate medical condition

SECTION 4: FIRST AID MEASURES

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water.

Skin Contact: In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Serious Skin Contact: Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Serious Inhalation: Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention

Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Serious Ingestion: Not available

SECTION 5: FIRE FIGHTING MEASURES

Flammability of the Product: May be combustible at high temperature

Auto-Ignition Temperature: Not Available



Flash Points: Not Applicable

Flammable Limits: Not Applicable

Products of Combustion: Sodium oxides

Fire Hazards in Presence of Various Substances: Slightly flammable to flammable in presence of open flames and sparks, of heat.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not Available

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: COMBUSTIBLE. It may burn, but does not readily ignite. Not considered flammable unless heated above 300°C. When heated to decomposition it emits very toxic fumes of nitrogen oxides and disodium oxide.

Special Remarks on Explosion Hazards: Carbon disulfide and aqueous solutions of metal azides interact to produce metal azidodithioformates most of which are explosive, with varying degrees of power and sensitivity to shock or heat /metal azides. Nitrogen-diluted bromine vapor passed over silver or sodium azide formed bromine azide, and often caused explosions/metal azides. REACTION OF SODIUM AZIDE AND CHROMYL CHLORIDE IS AN EXPLOSIVE ONE

SECTION 6: ACCIDENTAL RELEASE MEASURES

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill: Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

SECTION 7: HANDLING AND STORAGE

Precautions: Keep away from heat. Keep away from sources of ignition. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as metals, acids, moisture.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Personal Protection in Case of a Large Spill: Splash goggles, Full suit, Dust respirator, Boots, Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product

Exposure Limits: TWA: 0.29 (mg/m₃) from ACGIH (TLV) [United States] Inhalation.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance Form	: White color powder
Odour	: Not available
Taste	: Not available
Molecular Weight	: Not available



Colour	: Not available
pH	: Not available
Boiling Point	: Not available
Melting Point	: Not available
Critical Temperature	: Not available
Specific Density	: Not Available
Vapor Pressure	: Not Available
Vapor Density	: Not available
Volatility	: Not Available
Odor Threshold	: Not Available
Water/Oil Dist. Coeff.	: Not Available
Ionicity (in Water)	: Not Available
Dispersion Properties	: Not Available
Solubility	: Not available

SECTION 10: STABILITY AND REACTIVITY DATA

Stability: The product is chemically stable under standard ambient conditions (room temperature).

Instability Temperature: Not available.

Conditions of Instability: Excess heat (heat over 300 °C, incompatible materials, water/moisture

Incompatibility with various substances: Halogenated hydrocarbon, Metals, Acids, Acid chlorides

Special Remarks on Reactivity: Electrolysis of sodium chloride in presence of nitrogenous compounds to produce chlorine may lead to formation of explosive nitrogen trichloride. Potentially explosive reaction with dichloromaleic anhydride + urea

Special Remarks on Corrosivity: Extremely corrosive in presence of aluminum. Corrosive in presence of copper. Non-corrosive in presence of glass.

Polymerization: Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

Routes of Entry: Inhalation, Ingestion.

Toxicity to Animals:

LD₅₀: Oral – rabbit – 10 mg/k

LC₅₀: Inhalation - rat - 37 mg/m₃

Chronic Effects on Humans: Not Available

Other Toxic Effects on Humans: Not Available

Special Remarks on Toxicity to Animals: Not Available

Special Remarks on Chronic Effects on Humans: May affect genetic material (mutagenic)

Special Remarks on other Toxic Effects on Humans: Prolonged or repeated ingestion may affect the kidneys, liver, cardiovascular system, behavior/central nervous system/nervous system, respiration, and cause symptoms similar to that of ingestion. It may also cause weight loss

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not Available

BOD and COD: Not Available

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: Not Available

Special Remarks on the Products of Biodegradation: Not Available

SECTION 13: DISPOSAL CONSIDERATIONS



Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

SECTION 14: TRANSPORT INFORMATION

DOT Classification: CLASS 6.1: Poisonous material.

Identification: UNNA: 1687 : Sodium azide PG: II.

Special Provisions for Transport: Not applicable

SECTION 15: OTHER REGULATORY INFORMATION

Federal and State Regulations: TSCA 8(b) inventory: Sodium Azide

Other Regulations: Not available.

Other Classifications:

WHMIS (Canada): CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).

DSCL (EEC): This product is not classified according to the EU regulations.

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 1

Reactivity: 3

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 1

Reactivity: 2

Specific hazard: Not Available.

Protective Equipment: Gloves, Lab coat, Safety glasses, Dust respirator - be sure to use an approved/certified respirator or equivalent.

SECTION 16: OTHER INFORMATION

References: Full text of H AND R-Statements.

EUH032 Contact with acids liberates very toxic gas.

H300 Fatal if swallowed.

H300 + H310 Fatal if swallowed or in contact with skin

Other Special Considerations: Not available

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