


ARKANSAS STATE UNIVERSITY EHS
LABORATORY CHEMICAL STANDARD OPERATING PROCEDURE

Chemical Name: Sodium azide **CAS #:** 26628-22-8

Hazard Classification: Health Hazard

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| Location Used: | Principal Investigator: |
| Processes for Which Chemical Is Used: | |

HAZARDS AND PROTECTION

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| <p>Hazard Information</p> <ul style="list-style-type: none"> Acute oral and dermal toxicity Organ Toxicity |  |
| <p>Routes of Exposure</p> <ul style="list-style-type: none"> Ingestion Inhalation Eye absorption Skin Absorption | <p>If exposed by:</p> <ul style="list-style-type: none"> Inhalation: Remove to fresh air. Do not use mouth to mouth; give artificial respiration through pocket mask, one-way valve or other respiratory medical device Ingestion: Fatal if swallowed. Do not induce vomiting. Eye or skin: Fatal in contact with skin. Rinse with plenty of water for 15 minutes. |
| <p>Symptoms of Exposure</p> <ul style="list-style-type: none"> Exposure can be fatal. May cause headaches, nausea and vomiting. Prolonged exposure can cause brain damage. May cause eye, skin and respiratory tract irritation | <p>If exposed by any route, seek immediate medical attention.</p> |
| <p>Exposure Limits</p> <p>All exposure limits are Time Weighted Averages (average exposure over an eight-hour day) unless otherwise indicated.</p> | <p>OSHA PEL: None indicated ACGIH TLV: 0.11 ppm (0.29 mg/m³) ceiling NIOSH REL: 0.1 ppm (0.3 mg/m³) ceiling</p> |
| <p>Engineering Controls</p> <ul style="list-style-type: none"> Chemical Fume Hood | <p>Never open sodium azide outside of a chemical fume hood.</p> |
| <p>Administrative Controls</p> <ul style="list-style-type: none"> Designated area sign Particularly hazardous substance label | <ul style="list-style-type: none"> Post designated area sign before each use. Label containers of sodium azide as a health hazard. Use as small a quantity as possible. |

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| | <ul style="list-style-type: none"> Do not use metal scoops with sodium azide. Use scoops made from other materials. |
| Personal Protective Equipment <ul style="list-style-type: none"> Gloves Safety glasses (for dry chemical) or splash goggles (for solutions) Lab coat Tyvek sleeves (for amounts exceeding 5 grams). | <p>Two pairs of nitrile gloves must be worn when handling sodium azide. Wash hands immediately after use. Splash goggles must be worn when working with solutions of sodium azide greater than 1%.</p> |

OTHER SAFETY INFORMATION

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| Transportation | <p>Follow guidance given in the laboratory safety manual for transport of chemicals.</p> |
| Storage <ul style="list-style-type: none"> Not not store in metal containers or in metal cabinets. Can be stored with other dry chemicals but in a dedicated section for toxic chemicals. Keep away from heat and open flames. | <p>Incompatible materials include:</p> <p>Benzoyl chloride, potassium hydroxide, bromine, carbon disulfide, chromyl chloride, copper, dibromalonitrile, dimethyl sulfate, lead, barium carbonate, acids (especially sulfuric and nitric), metals, metal salts, water.</p> |
| Spill/Accident Procedures For all spills: <ul style="list-style-type: none"> Wear two pairs of nitrile gloves, safety glasses and lab coat Evacuate the immediate area Exposure: <ul style="list-style-type: none"> If anyone exposed requires emergency medical attention, dial 911 (or 9-911 from landline). Follow procedures outlined in laboratory safety manual. | <p>Small spills (less than 10 g in a hood): Cover spills of dry chemical with sand. Sweep contents into a non-metal container collection by EHS. If the spill is liquids, cover with absorbent material and then place the absorbent materials in a non-metal container for collection by EHS. Clean area with soap and water once spill is removed.</p> <p>Large spills (greater than 10 g in a hood or any amount outside a fume hood): If the spill is in a chemical fume hood, contact the EHS director (864-710-2933). If he cannot be reached (does not answer phone, do not leave voicemail), then call 911, pull the fire alarm and exit the building. If the spill is outside of a hood, then call 911, pull the fire alarm and exit the building.</p> |
| Waste Disposal | <p>Waste sodium azide must be collected for disposal.</p> <p>Empty bottles of sodium azide must be collected by EHS. DO NOT rinse them! Do not throw them in the trash!</p> |

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By signing below, you indicate that you have reviewed this SOP and understand the contents thereof:

| Printed Name | Signature | Date |
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