

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Sodium Azide
CAS number	26628-22-8
Synonyms	Sodium salt of hydroazoic acid; smite

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Laboratory chemicals
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1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute oral toxicity	Category 2
Acute dermal toxicity	Category 1
Acute Inhalation Toxicity - Dusts and Mists	Category 2
Specific target organ toxicity - (repeated exposure)	Category 2
Target Organs - Central nervous system (CNS), Cardiovascular system, Liver, Kidney, Heart, spleen.	

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

Fatal if swallowed, in contact with skin or if inhaled.
May cause damage to organs through prolonged or repeated exposure.

Precautionary
Statements
Prevention

Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wear respiratory protection.

Response
Inhalation:

Get medical attention/advice if you feel unwell.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Skin

Immediately call a POISON CENTER or doctor/physician. IF ON SKIN: Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

Storage

Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Disposal

Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Very toxic to aquatic life with long lasting effects.

Contact with acids liberates very toxic gas.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Sodium azide	Sodium salt of hydrazoic acid; smite	26628-22-8	>99%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
If inhaled	Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the air of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
In case of skin contact	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
In case of eye contact	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If swallowed	Do NOT induce vomiting. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

None reasonably foreseeable.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Dry chemical, soda ash, lime or sand, approved class D extinguishers.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.

5.2 Specific hazards arising from the substance or mixture

In the event of fire, cool tanks with water spray. Containers may explode when heated or if contaminated with water. Thermal decomposition can lead to release of irritating gases and vapors. Runoff to sewer may create fire or explosion hazard. Flammable/toxic gases may accumulate in confined areas (basements, tanks, hopper/tank cars etc.). Do not allow run-off from fire-fighting to enter drains or water courses.

5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

5.4 Further information

Flash Point No information available.

Autoignition Temperature No information available.

Explosion limits

Upper No data available.
Lower No data available.
Sensitivity to Mechanical Impact No information available.
Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
4	1	2	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

6.4 Reference to other sections

See section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Wear personal protective equipment/face protection. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

Incompatibilities

Acids, peroxides, acid chlorides, metals, oxidizing agent.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value	
Sodium azide	PEL	0.1 ppm	0.3 mg/m ³

US. ACGIH Threshold Limit Values

Component	Type	Value	
Sodium azide	TLV	0.11 ppm	0.29 mg/m ³

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value	
Sodium azide	Ceiling	0.1 ppm	0.3 mg/m ³

Biological occupational exposure limits

No additional information.

8.2 Exposure controls

Appropriate engineering controls

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Body Protection

Wear appropriate protective clothing to prevent skin exposure.

Respiratory protection

Follow the OSHA respirator regulations found in 19 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Control of environmental exposure

No additional information available.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Physical State	Powder Solid
Appearance	White
Odor	Odorless
Odor Threshold	No information available
pH	10 1M aq.sol
Melting Point/Range	275 °C / 527 °F
Boiling Point/Range	300 °C / 572 °F @ 760 mmHg
Evaporation Rate	Not applicable available.
Flammability (solid)	No information available
Flammability or explosive limit	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available.
Vapor Density	Not applicable
Density	No information available.
Solubility	420 g/L (17°C)
Partition coefficient; n-octanol/water	No data available.
Autoignition Temp	No information available.
Decomposition Temp	> 275 °C
Viscosity	Not applicable
Molecular Formula	N3Na
Molecular Weight	65.01
VOC Content(%)	No information available.
Oxidizing properties	No information available.

9.2 Other safety information

No additional information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Reactive hazard.

10.2 Chemical stability

Stable under recommended storage conditions. Unstable if heated. Heating may cause an explosion.

10.3 Possibility of hazardous reactions

None under normal processing

10.4 Conditions to avoid

Avoid dust formation. Incompatible products. Heat, flames and sparks.

10.5 Incompatible materials

Acids, peroxides, acid chlorides, metals, oxidizing agent

10.6 Hazardous decomposition products

Nitrogen oxides (NO_x), Sodium oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium azide	27 mg/kg (rat)	20 mg/kg (rabbit)	0.054-0.52 mg/L (dust)

Skin corrosion/irritation

May cause skin irritation.

Serious eye damage/eye irritation

May cause eye irritation.

Respiratory or skin sensitization

May cause respiratory tract irritation.

Germ cell mutagenicity

Mutagenic effects have occurred in experimental animals.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Sodium azide	26628-22-8	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

None known

Specific target organ toxicity - repeated exposure

Central nervous system (CNS), Cardiovascular system, Liver, Kidney, Heart, spleen.

Reproductive toxicity

No information available

Chronic effects

No information available.

11.2 Additional Information

Tumorigenic effects have been reported in experimental animals.

SECTION 12: Ecological information

12.1 Toxicity

Product		Species	Test Results
Sodium azide	LC50	Lepomis macrochirus	0.7 mg/L, 96h
	LC50	Oncorhynchus mykiss	0.8 mg/L, 96h
	LC50	Pimephales promelas	5.46 mg/L, 96h flow-through

12.2 Persistence and degradability

Soluble in water. Persistence is unlikely based on information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

Will likely be mobile in the environment due to its water solubility.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

UN-No UN1687
Proper Shipping Name SODIUM AZIDE
Hazard Class 6.1
Packing Group II

IMDG

UN-No UN1687
Proper Shipping Name SODIUM AZIDE
Hazard Class 6.1
Packing Group II

IATA

UN-No UN1687
Proper Shipping Name SODIUM AZIDE
Hazard Class 6.1
Packing Group II

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Listed (Sodium Azide 26628-22-8)

CERCLA Hazardous Substance List (40 CFR 302.4)

Listed (Sodium Azide 26628-22-8). This material, as supplier, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

Component	Hazardous Substances RQs	CERCLA Extremely Hazardous Substances RQs	SARA Reportable Quantity (RQ)
Sodium azide	1000 lb	1000 lb	1000 lb 454 kg

SARA 304 Emergency release notification

Not regulated

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

SARA 313 (TRI reporting)

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	CAS No	Weight %	SARA 313 - Threshold Values %
Sodium azide	26628-22-8	<=100	1.0

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed

US state regulations

US. Massachusetts RTK - Substance List

Listed (Sodium Azide 26628-22-8)

US. New Jersey Worker and Community Right-to-Know Act

Listed (Sodium Azide 26628-22-8)

US. Pennsylvania Worker and Community Right-to-Know Law

Listed (Sodium Azide 26628-22-8)

California Proposition 65

Not listed

SECTION 16: Other information

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SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.