

MATERIAL SAFETY DATA SHEET

SODIUM AZIDE

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name:- SODIUM AZIDE.

Synonyms:- None

Company Identification

Alkali Metals Ltd.,

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SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	%	EINECS#
26628-22-8	SODIUM AZIDE	100.0	247-852-1

Hazard Symbols: T+

SECTION 3 - HAZARDS IDENTIFICATION - EMERGENCY OVERVIEW

Appearance : Colorless crystalline powder.
Danger : Causes respiratory tract irritation. Causes skin irritation. Causes eye irritation. May be fatal if swallowed. May be harmful if absorbed through the skin. Reacts with water. Causes digestive tract irritation. Poison! May cause cardiac disturbances.
Target Organs : Cardiovascular system.

Potential Health Effects :

Eye : Causes eye irritation. Contact with dust or vapor may cause systemic toxic effects.
Skin : Causes skin irritation. May be fatal if absorbed through the skin. Substance is rapidly absorbed through the skin.
Ingestion : May be fatal if swallowed. Causes gastrointestinal irritation with nausea, vomiting and diarrhoea. This chemical is rapidly absorbed from the gastrointestinal tract. Exposure may cause a rapid fall in blood pressure, weakness, headache, collapse and death. Solutions of sodium azide release hydrazoic acid vapor, which is highly toxic.
Inhalation : May be fatal if inhaled. Dust is irritating to the respiratory tract. May cause effects similar to those described for ingestion. Rapidly absorbed.
Chronic : Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion.

SECTION 4 - FIRST AID MEASURES

Eyes : Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical aid.
Skin : Get medical aid. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing and shoes. **SPEEDY ACTION IS CRITICAL!**
Ingestion : If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

Inhalation : Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician : Treat symptomatically and supportively.

SECTION 5 - FIRE FIGHTING MEASURES

General Information : As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Dust can be an explosion hazard when exposed to heat or flame. Will react with water to form toxic and corrosive fumes.

Extinguishing Media : Do not use water directly on fire. Use dry chemical to fight fire. Use carbon dioxide.

Autoignition Temperature : Not available.

Flash Point : Not available.

NFPA Rating : Not published.

Explosion Limits, Upper & Lower : Not available.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

General Information : Use proper personal protective equipment as indicated in Section 8.

Spills / Leaks : Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions.

SECTION 7 - HANDLING AND STORAGE

Handling : Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid breathing dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, sparks or open flames. Keep container tightly closed.

Storage : Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from water. Do not store in metal containers. Keep containers tightly closed.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls : Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Exposure Limits			
Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
SODIUM AZIDE	C 0.11 ppm; C 0.29 mg/m ³	none listed	none listed

OSHA Vacated PELs : SODIUM AZIDE :-as HN₃: C 0.1 ppm; as NaN₃: C 0.3 mg/m³

Personal Protective Equipment

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

- Skin** : Wear appropriate protective gloves to prevent skin exposure.
Clothing : Wear appropriate protective clothing to prevent skin exposure.
Respirators : Follow the OSHA respirator regulations found in 29CFR 1910.134. Always use a NIOSH-approved respirator when necessary.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Colorless crystalline Powder
Odour	Not available
pH	Not available
Vapor Pressure	Negligible.
Viscosity	Not applicable
Boiling Point	Not applicable.
Freezing /Melting Point	>527°F decomposes
Decomposition Temp.	>527°F
Solubility	41.7%(17C)
Specific Gravity /Density	1.846
Molecular Formula	NaN ₃
Molecular Weight	65.0099
Evaporation Rate	Negligible
Vapor Density	Not available

SECTION 10 - STABILITY AND REACTIVITY

- Chemical Stability** : Stable. However, may decompose if heated.
Conditions to Avoid : Contact with water, strong acids, oxidizers, temperatures above 300°C.
Incompatibilities with Other Materials : Sodium azide is self-reactive. It will decompose at 275°C. Incompatible with benzoyl chloride, potassium hydroxide, bromine, carbon disulfide, chromyl chloride, copper, dibromomalononitrile, dimethyl sulfate, lead, nitric acid, silver, mercury. Reacts with lead, silver, mercury to form shock sensitive and explosive metal azides.
Hazardous Decomposition Products: Nitrogen oxides, hydrazoic acid
Hazardous Polymerization : Has not been reported.

SECTION 11 - TOXICOLOGICAL INFORMATION

- RTECS#** : CAS# 26628-22-8: VY8050000
LD50/LC50 : CAS# 26628-22-8: Oral, mouse: LD50 = 27 mg/kg; Oral, rat: LD50 = 27 mg/kg; Skin, rabbit: LD50 = 20 mg/kg.
Carcinogenicity : SODIUM AZIDE -Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Epidemiology : No information available.
Teratogenicity : No data available.
Reproductive Effects : No information available.
Neurotoxicity : No information available.
Mutagenicity : No data available.
Other Studies : Laboratory experiments in animals have shown sodium azide to produce a profound hypotensive effect, demyelination of myelinated nerve fibers in the central nervous system, testicular damage, blindness, attacks of rigidity, hepatic and cerebral effects.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity : No information available.
Environmental Fate : No information reported.
Physical/Chemical : No information available.
Other : Not available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

RCRA D-Series Maximum Concentration of Contaminants: Not listed.
RCRA D-Series Chronic Toxicity Reference Levels: Not listed.
RCRA F-Series: Not listed.
RCRA P-Series: waste number P105
RCRA U-Series: Not listed.

This material is banned from land disposal according to RCRA.

SECTION 14 - TRANSPORT INFORMATION

US DOT : Shipping Name: SODIUM AZIDE, Hazard Class: 6.1, UN Number: UN1687 Packing Group: II
IMO : No information available.
IATA : No information available.
RID/ADR : No information available.
Canadian TDG : Shipping Name: SODIUM AZIDE, Hazard Class: 6.1, UN Number:- UN1687

SECTION 15 - REGULATORY INFORMATION

TSCA : CAS# 26628-22-8 is listed on the TSCA inventory.
Health & Safety Reporting List : None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules : None of the chemicals in this product are under a Chemical Test Rule.
Section 12b : None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule : None of the chemicals in this material have a SNUR under TSCA.
SARA : Section 302 (RQ) final RQ = 1000 pounds (454 kg)
Section 302 (TPQ) : CAS# 26628-22-8: TPQ = 500 pounds (This material is a reactive solid).
SARA Codes : CAS # 26628-22-8: acute, chronic, reactive.
Section 313 : No chemicals are reportable under Section 313.
Clean Air Act : This material does not contain any hazardous air pollutants or Class 1 Ozone depleters or Class 2 Ozone depleters.
Clean Water Act : None of the chemicals in this product are listed as Hazardous Substances under the CWA or as Priority Pollutants under the CWA or as Toxic Pollutants under the CWA.
OSHA : None of the chemicals in this product are considered highly hazardous by OSHA.
INTERNATIONAL : European Labeling in Accordance with EC Directives, Hazard Symbols: T+, Safety Phrases:-S 24/25 Avoid contact with skin and eyes. S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 45 In case of accident of if you feel unwell, seek medical advice immediately (show the label where possible).S 28B After contact with skin, wash immediately with plenty of water and soap.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.