Material Safety Data Sheet
Alkaline Iodide Azide Solution I

Section 1 - Chemical Product and Company Identification

MSDS Name:
Alkaline Iodide Azide Solution I
Catalog Numbers:
LC10670
Synonyms:
None

Section 2 – Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	34
1310-73-2	Sodium hydroxide	50
7681-11-0	Potassium iodide	15
26628-22-8	Sodium azide	1

Section 3 - Hazards Identification

Emergency Overview

Appearance: *Clear, colorless solution*
Danger! *Corrosive. Causes severe skin burns and eye damage. Harmful if in contact with skin.*
Target Organs: *Eyes, skin, respiratory tract, cardiovascular and central nervous systems, kidneys.*

Potential Health Effects

Eye:
Causes severe eye burns. May cause irreversible damage.
Skin:
Causes severe skin burns.
Ingestion:
Causes burns to gastrointestinal tract with severe abdominal pain, nausea, vomiting, diarrhea, coma and possible death. Perforation of gastrointestinal tract can occur, even after several days.

Inhalation:
Inhalation may cause sore throat, coughing, irritation or burns to respiratory tract.
Chronic:
Prolonged or repeated skin contact may cause dermatitis, conjunctivitis, corneal burns, irritation to respiratory tract and gastrointestinal tract.

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 until no evidence of chemical remains. Get medical aid at once.
Skin:
Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid at once.
Ingestion:
Do NOT induce vomiting. If victim is conscious, give 2-4 glasses of water to dilute alkali. Get medical aid at once.
Inhalation:
Move victim to fresh air. Give artificial respiration if necessary. Get medical aid at once.
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. Corrosive vapors may be generated during a fire. Sodium azide forms explosive compounds with lead and copper.
Extinguishing Media:
For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.
Autoignition Temperature:
No information found.
Flash Point:
No information found.
NFPA Rating:
Health- 3, Flammability- 0, Instability- 1.
Explosion Limits:
Lower: n/a Upper: n/a

Section 6 - Accidental Release Measures

General Information:
Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks:
Absorb spill with sand or other absorbent materials and transfer to suitable containers labeled for proper disposal.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Do not breathe dusts or mists. Do not get in eyes, on skin, or on clothing.

Storage:

Store tightly capped at room temperature. Protect from light.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities using or storing this material should be equipped with an eye wash and safety shower. Provide local exhaust or general dilution ventilation to keep airborne levels below the permissible exposure limits.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None of the components are on this list	None of the components are on this list	None of the components are on this list
Sodium hydroxide	2 mg/m3 STEL	2 mg/m3 Ceiling	2 mg/m3 TWA; 2 mg/m3 Ceiling
Potassium iodide	None of the components are on this list	None of the components are on this list	None of the components are on this list
Sodium azide	0.29 mg/m3 TWA	0.1 ppm Ceiling	0.1 ppm Ceiling

OSHA Vacated PELs:

None.

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: Liquid
Color: Colorless
Odor: Odorless
pH: Alkaline
Vapor Pressure: No information found.
Vapor Density: No information found.

Evaporation Rate:	>1 (ether=1)
Viscosity:	No information found.
Boiling Point:	No information found.
Freezing/Melting Point:	No information found.
Decomposition Temperature:	No information found.
Solubility in water:	Soluble.
Specific Gravity/Density:	1.5
Molecular Formula:	No information found.
Molecular Weight:	No information found.

Section 10 - Stability and Reactivity

Chemical Stability:
Stable under normal temperatures and pressures.
Conditions to Avoid:
Incompatible materials, excess heat, light.
Incompatibilities with Other Materials:
Acids, acid anhydrides, metals, oxidizers, reducing agents.
Hazardous Decomposition Products:
Sodium, nitrogen, hydrogen iodide, iodine, potassium oxide.
Hazardous Polymerization:
Has not been reported.

Section 11 - Toxicological Information

RTECS:
CAS# 7732-18-5: ZC0110000.
CAS# 1310-73-2: WB4900000.
CAS# 7681-11-0: TT2975000.
CAS# 26628-22-8: VY8050000.
LD50/LC50:
CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg
CAS# 1310-73-2:
Dermal, rat: LD50 = 1350 mg/kg
CAS# 7681-11-0:
No information found.
CAS# 26628-22-8:
Oral, rat: LD50 = 27 mg/kg
Skin, rabbit: LD50 = 20 mg/kg
Carcinogenicity:
CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 1310-73-2: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 7681-11-0: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 26628-22-8: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:
Corrosive to eye, skin, and mucous membranes.
Teratogenicity:
Potassium iodide may cause developmental thyroid damage.
Reproductive:
Potassium iodide may be a female reproductive toxin.
Mutagenicity:
Sodium azide and potassium iodide are mutagenic for mammalian somatic cells.
Neurotoxicity:
No information found

Section 12 - Ecological Information

No information found

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Sodium Hydroxide Solution
Hazard Class: 8
UN Number: UN1824
Packing Group: PG II

Section 15 - Regulatory Information

US Federal

TSCA:
CAS# 7732-18-5 is listed on the TSCA Inventory.
CAS# 1310-73-2 is listed on the TSCA Inventory.
CAS# 7681-11-0 is listed on the TSCA Inventory.
CAS# 26628-22-8 is listed on the TSCA Inventory.
SARA Reportable Quantities (RQ):
CAS# 1310-73-2: final RQ = 1000 pounds (454 kg)
CAS# 26628-22-8: final RQ = 1000 pounds (454 kg)
CERCLA/SARA Section 313:
This material contains Sodium azide (CAS# 26628-22-8, 1%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.
OSHA - Highly Hazardous:
None of the components are on this list.

US State

State Right to Know:

Sodium hydroxide can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

Sodium azide can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

California Regulations:

None.

European/International Regulations

Canadian DSL/NDSL:

CAS# 7732-18-5 is listed on Canada's DSL List.
CAS# 1310-73-2 is listed on Canada's DSL List.
CAS# 7681-11-0 is listed on Canada's DSL List.
CAS# 26628-22-8 is listed on Canada's DSL List.

Canada Ingredient Disclosure List:

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.
CAS# 1310-73-2 is listed on Canada's Ingredient Disclosure List.
CAS# 7681-11-0 is listed on Canada's Ingredient Disclosure List.
CAS# 26628-22-8 is listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

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