Safety Data Sheet

Alkaline Potassium Iodide Azide Solution

CAROLINA®
www.carolina.com

Section 1 Product Description

Product Name: Alkaline Potassium Iodide Azide Solution
Recommended Use: Science education applications
Synonyms: Potassium Iodide Azide
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec:

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

DANGER

Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. Harmful to aquatic life.

GHS Classification:
Skin Corrosion/Irritation Category 1, Serious Eye Damage/Eye Irritation Category 1, Hazardous to the aquatic environment - Acute Category 3, Acute Toxicity - Oral Category 4

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%
Water	7732-18-5	57
Potassium Hydroxide	1310-58-3	30
Potassium Iodide	7681-11-0	12
Sodium azide	26628-22-8	0.9

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin Contact: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Ingestion: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

Section 5 Firefighting Procedures

Extinguishing Media: Use media suitable to extinguish surrounding fire.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: Fire or excessive heat may produce hazardous decomposition products.
Hazardous Combustion Products: Carbon dioxide, Carbon monoxide, Hydrogen

Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits. Avoid the generation of dusts during clean-up.

Methods for Clean-up Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Do not allow the spilled product to enter public drainage system or open waterways.

Section 7 Handling and Storage

Handling: Do not breathe dust/fume/gas/mist/vapors/spray. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do no eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/vapor. Do not get in eyes, on skin, or on clothing. Retained residue may make empty containers hazardous; use caution.
Storage: Store locked up. Store in a secure area suitable for corrosives.
Storage Code: White - Corrosive. Separate acids from bases; separate oxidizer acids from organic acids.

Section 8 Protection Information

	ACGIH		OSHA PEL	
Chemical Name	**(TWA)**	**(STEL)**	**(TWA)**	**(STEL)**
Potassium Hydroxide	N/A	N/A	N/A	N/A
Potassium Iodide	0.01 ppm TWA (inhalable fraction and vapor)	N/A	N/A	N/A

Control Parameters
Engineering Measures: No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.
Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.
Respiratory Protection: No respiratory protection required under normal conditions of use.
Respirator Type(s): NIOSH approved air purifying respirator with HEPA filter. NIOSH approved air purifying respirator with dust/mist filter.
Eye Protection: Wear chemical splash goggles when handling this product. Have an eye wash station available.
Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.
Gloves: Neoprene, Nitrile, Nitrile - Extra Thick (8 mm), Butyl rubber, Polyvinyl chloride

Section 9 Physical Data

Formula: See Section 3
Molecular Weight: N/A
Appearance: Colorless White Liquid
Odor: None
Vapor Pressure: 2.3
Evaporation Rate (BuAc=1): N/A
Vapor Density (Air=1): 0.62
Specific Gravity: 1.5

Odor Threshold: No data available
pH: 14
Melting Point: 360 - 380 C
Boiling Point: 100 C
Flash Point: No data available
Flammable Limits in Air: N/A N/A

Solubility in Water: Soluble
Log Pow (calculated): No data available
Autoignition Temperature: No data available
Decomposition Temperature: No data available
Viscosity: No data available
Percent Volatile by Volume: N/A

Section 10 Reactivity Data

Reactivity: No data available
Chemical Stability: Stable under normal conditions.
Conditions to Avoid: Exposure to moisture Dusting.
Incompatible Materials: Water-reactive materials, Acids, Halogenated Hydrocarbons, Metals, Maleic Anhydride, Moisture, Water, Peroxides, Strong oxidizing agents
Hazardous Decomposition Products: Hydrogen, Carbon dioxide, Carbon monoxide
Hazardous Polymerization: Will not occur

Section 11 Toxicity Data

Routes of Entry Inhalation, ingestion, eye or skin contact.
Symptoms (Acute): Eye disorders, Respiratory disorders, Dermititis
Delayed Effects: Headache
Respiratory disorders
Eye disorders
Dermititis

Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Water	7732-18-5	Oral LD50 Rat 90000 mg/kg		
Potassium Hydroxide	1310-58-3	Oral LD50 Rat 273 mg/kg		
Potassium Iodide	7681-11-0			
Sodium azide	26628-22-8	Oral LD50 Rat 27 mg/kg	Dermal LD50 Rat 50 mg/kg	INHALATION LC50 Rat 37 MG/M3 INHALATION LC50 Mouse 32400 UG/M3

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
Potassium Hydroxide	1310-58-3	Not listed	Not listed	Not listed
Potassium Iodide	7681-11-0	Not listed	Not listed	Not listed

Chronic Effects:
Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: Evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.
Target Organ Effects:
Acute: Skin, Respiratory system, Eyes
Chronic: Skin, Eyes, Respiratory system

Safety Data Sheet

Section 12 Ecological Data

Overview: No ecological information available
Mobility: No data
Persistence: Dissolved into water
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
Water	7732-18-5	No data available
Potassium Hydroxide	1310-58-3	96 HR LC50 GAMBUSIA AFFINIS 80 MG/L [STATIC]
Potassium Iodide	7681-11-0	
Sodium azide	26628-22-8	96 HR LC50 PIMEPHALES PROMELAS 5.46 MG/L [FLOW-THROUGH] 96 HR LC50 LEPOMIS MACROCHIRUS 0.7 MG/L 96 HR LC50 ONCORHYNCHUS MYKISS 0.8 MG/L

Section 13 Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s): D002

Section 14 Transport Information

Ground - DOT Proper Shipping Name:
UN1719 CAUSTIC ALKALI LIQUID, N.O.S (SODIUM HYDROXIDE; SODIUM AZIDE SOLUTION)Class 8PG II

Air - IATA Proper Shipping Name:
UN1719 CAUSTIC ALKALI LIQUID, N.O.S (SODIUM HYDROXIDE; SODIUM AZIDE SOLUTION)Class 8PG II

Section 15 Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Potassium Hydroxide	1310-58-3	No	1000 lb RQ	1000 lb final RQ (454 kg)	No	No
Potassium Iodide	7681-11-0	No	No	No	No	No
Sodium azide	26628-22-8	Sodium azide	No	1000 lb final RQ; 454 kg final RQ	500 lb TPQ (This material is a reactive solid. The TPQ does not default to 10000 pounds for non-powder, non-molten, non-solution form)	No

California Prop 65: No California Proposition 65 ingredients

Section 16 Additional Information

Safety Data Sheet

Revised: 03/08/2024 **Replaces: 08/21/2018** **Printed: 01-17-2025**

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Service Number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOT	U.S. Department of Transportation
IARC	International Agency for Research on Cancer
N/A	Not Available
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
ppm	Parts per million
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
IDLH	Immediately dangerous to life and health