

# Safety Data Sheet

## Alkaline Potassium Iodide Azide

**CAROLINA**<sup>®</sup>  
www.carolina.com

### Section 1 Product Description

**Product Name:** Alkaline Potassium Iodide Azide  
**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 1A, Serious Eye Damage/Eye Irritation Category 1, Hazardous to the aquatic environment - Acute Category 3, Acute Toxicity - Oral Category 4

<b>Acute Toxicity Dermal Contains</b>	43 % of the mixture consists of ingredient(s) of unknown toxicity
<b>Acute Toxicity Inhalation Vapor Contains</b>	43 % of the mixture consists of ingredient(s) of unknown toxicity
<b>Acute Toxicity Inhalation Dust/Mist Contains</b>	43 % of the mixture consists of ingredient(s) of unknown toxicity

### Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
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

# Safety Data Sheet

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

## Section 6 Spill or Leak Procedures

<b>Steps to Take in Case Material Is Released or Spilled:</b>	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. 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.
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## Section 7 Handling and Storage

<b>Handling:</b>	Do not breathe dust/fume/gas/mist/vapors/spray. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not 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.
<b>Storage:</b>	Store locked up. Store in a secure area suitable for corrosives.
<b>Storage Code:</b>	White - Corrosive. Separate acids from bases; separate oxidizer acids from organic acids.

## Section 8 Protection Information

<u>Chemical Name</u>	<u>ACGIH</u>		<u>OSHA PEL</u>	
	<u>(TWA)</u>	<u>(STEL)</u>	<u>(TWA)</u>	<u>(STEL)</u>
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

<b>Control Parameters</b>	
<b>Engineering Measures:</b>	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.
<b>Personal Protective Equipment (PPE):</b>	Lab coat, apron, eye wash, safety shower.
<b>Respiratory Protection:</b>	No respiratory protection required under normal conditions of use.
<b>Respirator Type(s):</b>	NIOSH approved air purifying respirator with HEPA filter. NIOSH approved air purifying respirator with dust/mist filter.
<b>Eye Protection:</b>	Wear chemical splash goggles when handling this product. Have an eye wash station available.
<b>Skin Protection:</b>	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.
<b>Gloves:</b>	Neoprene, Nitrile, Nitrile - Extra Thick (8 mm), Butyl rubber, Polyvinyl chloride

## Section 9 Physical Data

<b>Formula:</b> See Section 3	<b>Vapor Pressure:</b> 2.3
<b>Molecular Weight:</b> N/A	<b>Evaporation Rate (BuAc=1):</b> N/A
<b>Appearance:</b> Colorless White Liquid	<b>Vapor Density (Air=1):</b> 0.62
<b>Odor:</b> None	<b>Specific Gravity:</b> 1.5
<b>Odor Threshold:</b> No data available	<b>Solubility in Water:</b> Soluble
<b>pH:</b> 14	<b>Log Pow (calculated):</b> No data available

# Safety Data Sheet

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

**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, Dermatitis  
**Delayed Effects:** Headache  
Respiratory disorders  
Eye disorders  
Dermatitis

### 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

## 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]

# Safety Data Sheet

Potassium Iodide  
Sodium azide

7681-11-0  
26628-22-8

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

## Section 16

## Additional Information

**Revised: 09/09/2015**

**Replaces: 09/03/2014**

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