

Safety Data Sheet

Barritt's Reagent B

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: Barritt's Reagent B
Recommended Use: Science education applications
Synonyms: Caustic Potash Solution
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: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

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

DANGER



Toxic if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

GHS Classification:

Skin Corrosion/Irritation Category 1A, Serious Eye Damage/Eye Irritation Category 1, Acute Toxicity - Oral Category 3, Hazardous to the aquatic environment - Acute Category 3, Hazardous to the aquatic environment - Chronic Category 3

Acute Toxicity Dermal Contains	15 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Vapor Contains	15 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Dust/Mist Contains	15 % 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	85
Potassium Hydroxide	1310-58-3	15

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: After contact with skin, wash immediately with plenty of water.
Ingestion: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

Section 5 Firefighting Procedures

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Extinguishing Media:	Use alcohol resistant foam, carbon dioxide, dry chemical, or water spray when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the fire. Do not direct a water stream directly into the hot burning liquid.
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:	Potassium Oxide

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. Ventilate the contaminated area. Isolate area. Keep unnecessary personnel away. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Contain the discharged material. Do not allow the spilled product to enter public drainage system or open waterways. Do not flush spill to drain.
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Section 7 Handling and Storage

Handling:	Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Avoid contact with skin and eyes. Do not ingest or take internally.
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

Chemical Name	ACGIH		OSHA PEL	
	(TWA)	(STEL)	(TWA)	(STEL)
Potassium Hydroxide	N/A	N/A	N/A	N/A

Control Parameters

Engineering Measures:	Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure. Good general room ventilation should be sufficient to control airborne contaminants to safe levels.
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.
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)

Section 9 Physical Data

Formula: KOH (aq)	Vapor Pressure: 2.6664 - 3.9997 hPa at 15.6 °C
Molecular Weight: 56.11 (Potassium Hydroxide)	Evaporation Rate (BuAc=1): N/A
Appearance: Colorless Liquid	Vapor Density (Air=1): N/A
Odor: None	Specific Gravity: > 1
Odor Threshold: No data available	Solubility in Water: Soluble
pH: 13, conc: 1 % (solution)	Log Pow (calculated): No data available
Melting Point: 0 C	Autoignition Temperature: No data available
Boiling Point: 100 C	Decomposition Temperature: No data available
Flash Point: No data available	Viscosity: No data available
Flammable Limits in Air: N/A	Percent Volatile by Volume: N/A

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Section 10

Reactivity Data

Reactivity:	No data available
Chemical Stability:	Stable under normal conditions.
Conditions to Avoid:	Exposure to moisture
Incompatible Materials:	Water-reactive materials, Acids, Halogenated Hydrocarbons, Metals, Maleic Anhydride, Moisture, Water, Peroxides
Hazardous Decomposition Products:	Potassium Oxide
Hazardous Polymerization:	Will not occur

Section 11

Toxicity Data

Routes of Entry	Inhalation and skin contact.
Symptoms (Acute):	
Delayed Effects:	No data available

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		

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
Potassium Hydroxide	1310-58-3	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:	No evidence of a sensitization effect.
Reproductive:	No evidence of negative reproductive effects.
Target Organ Effects:	
Acute:	See Section 2
Chronic:	Mutation data cited., Not listed as a carcinogen by IARC, NTP or OSHA.

Section 12

Ecological Data

Overview:	Moderate ecological hazard. This product may be dangerous to plants and/or wildlife. Keep out of waterways.
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]

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):	Not Determined

Section 14

Transport Information

Ground - DOT Proper Shipping Name:	Air - IATA Proper Shipping Name:
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UN1814
POTASSIUM HYROXIDE SOLUTION
Class 8
P.G. II

UN number: 1814 Class: 8 Packing group: II Proper shipping
name: Potassium hydroxide solution

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

Section 16

Additional Information

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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