

Safety Data Sheet

Barium Chloride, 0.1 M

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: Barium Chloride, 0.1 M
Recommended Use: Science education applications
Synonyms: Barium Chloride, Water 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. Harmful to aquatic life.

GHS Classification:

Acute Toxicity - Oral Category 3, Hazardous to the aquatic environment - Acute Category 3

Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Water	7732-18-5	97.6
Barium Chloride, Anhydrous	10361-37-2	2.4

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact: After contact with skin, wash immediately with plenty of water.
Ingestion: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Section 5 Firefighting Procedures

Extinguishing Media: Use dry chemical, CO₂ or appropriate foam.
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. Use appropriate containment to avoid environmental contamination.
Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

Section 6 Spill or Leak Procedures

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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. Ventilate the contaminated area. Isolate area. Keep unnecessary personnel away. 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.

Section 7

Handling and Storage

Handling: Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. 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. Keep container tightly closed in a cool, well-ventilated place.

Storage Code: Store in a secure area suitable for toxic material.
Blue - Toxic. Store separately in a secured area.

Section 8

Protection Information

<u>Chemical Name</u>	<u>ACGIH</u> <u>(TWA)</u>	<u>(STEL)</u>	<u>OSHA PEL</u> <u>(TWA)</u>	<u>(STEL)</u>
Barium Chloride, Anhydrous	0.5 mg/m3 TWA (as Ba)	N/A	0.5 mg/m3 TWA (as Ba)	N/A

Control Parameters

Engineering Measures:

No exposure limits exist for the constituents of this product. Use local exhaust ventilation or other engineering controls to minimize exposures and maintain operator comfort.

Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

Respiratory Protection:

No respiratory protection required under normal conditions of use.

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:

No information available

Section 9

Physical Data

Formula: BaCl₂ (aq)
Molecular Weight: N/A
Appearance: Colorless Liquid
Odor: None
Odor Threshold: No data available
pH: No data available
Melting Point: 0 C
Boiling Point: 100 C
Flash Point: No data available
Flammable Limits in Air: N/A N/A

Vapor Pressure: 14 mm (water)
Evaporation Rate (BuAc=1): N/A
Vapor Density (Air=1): 0.7 (water)
Specific Gravity: 1.01
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: Not generally reactive under normal conditions.
Chemical Stability: Stable under normal conditions.
Conditions to Avoid: None known.
Incompatible Materials: Water-reactive materials, Strong oxidizing agents
Hazardous Polymerization: Will not occur

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Section 11

Toxicity Data

Routes of Entry: Inhalation, ingestion, eye or skin contact.
Symptoms (Acute): Vomiting, Nausea, Diarrhea
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		
Barium Chloride, Anhydrous	10361-37-2	Oral LD50 MAMMAL 398 mg/kg Oral LD50 Rat 118 mg/kg		

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
No data available	7732-18-5 10361-37-2	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: Not listed as a carcinogen by IARC, NTP or OSHA.

Section 12

Ecological Data

Overview: Slight ecological hazard. In high concentrations, this product may be dangerous to plants and/or wildlife.
Mobility: No data
Persistence: No data
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
Water	7732-18-5	No data available
Barium Chloride, Anhydrous	10361-37-2	48 HR EC50 DAPHNIA MAGNA 14.5 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): D005

Section 14

Transport Information

Ground - DOT Proper Shipping Name: Not regulated for transport by DOT
Air - IATA Proper Shipping Name: Not regulated for air transport by IATA.

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
Barium Chloride, 0.1 M						

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Barium Chloride, Anhydrous

10361-37-2

Barium
chloride CAS-
No. 10361-37-
2 Revision
Date 2007-07-
01

No

No

SARA 302: No
chemicals in
this material
are subject
to the
reporting
requirements
of SARA
Title III,
Section 302.

California Prop 65:

No California Proposition 65 ingredients

Section 16

Additional Information

Revised: 08/21/2018

Replaces: 06/15/2018

Printed: 08-25-2018

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