ALADDIN SCIENTIFIC CORPORATION
14078 Meridian Parkway, Riverside, CA. 92518

SAFETY DATA SHEET

Version: v1
Revision Date: 2025-09-16
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SECTION 1:Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	: Barium chloride dihydrate
Product Number	: B434890
Brand	: aladdin
CAS-No.	: 10326-27-9

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	: Laboratory chemicals,Manufacture of substances.

1.3 Company

Company	: ALADDIN SCIENTIFIC CORPORATION
Address	: 14078 Meridian Parkway,
Riverside, CA. 92518	
Telephone	: +1 (833) 552-7181
Fax	: no data available

1.4 Emergency telephone number

CHEMTREC®, Inside the USA	: 1-800-424-9300
CHEMTREC®, Outside the USA	:

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute oral toxicity Category 3

Acute Inhalation Toxicity - Dusts and Mists Category 4

Serious Eye Damage/Eye Irritation Category 2

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word Danger

Hazard statement(s)

H301	Toxic if swallowed

H319	Causes serious eye irritation
H332	Harmful if inhaled
Precautionary statement(s)	
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash hands [and ...] thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P312	Call a POISON CENTER or doctor/... if you feel unwell.
P330	Rinse mouth.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/...
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P337+P313	IF eye irritation persists: Get medical advice/attention.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms	: no data available
Formula	: BaCl2.2H2O
Molecular weight	: 244.26
CAS No.	: 10326-27-9
EC-NO.	: 233-788-1

Component	Classification	Concentration
Barium chloride dihydrate		
	no data available	≥98%

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

Remove to fresh air. Get medical attention if symptoms occur. If not breathing, give artificial respiration.

In case of skin contact

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.

In case of eye contact

In the case of contact with eyes,RinseImmediately with plenty of water and seek medical advice.

If swallowed

Do NOT induce vomiting. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray. Carbon dioxide (CO2). Dry chemical. Chemical foam.

Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

no data available

5.3 Advice for firefighters

wear self-contained breathing and full protective gear.

5.4 Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

6.2 Environmental precautions

Should not be released into the environment. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the environment. Avoid dust formation.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place.Moisture sensitive ， Storage with argon filling.

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU)2016/425 and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing.The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection,use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN(EU).

Control of environmental exposure

If safety requires, prevent further leakage or spillage. Do not let the product enter the sewer.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	form: Powder or Crystals color: White to Off-White
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	no data available
f) Initial boiling point and boiling range	no data available
g) Flash point	no data available
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapour pressure	no data available
l) Vapour density	no data available
m) Relative density	no data available
n) Water solubility	no data available
o) Partition coefficient: n-octanol/water	no data available
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties N	no data available
t) Oxidizing properties N	no data available

9.2 Other safety information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

There is an explosion hazard associated with its effect: Furan-2-Percarbonate Possible violent reactions may occur with it: Halogen halogen compounds Strong oxidizing agent strong reducing agent or reductant acid

10.4 Conditions to avoid

Incompatible products. Excess heat.

10.5 Incompatible materials

Multiple metals, (generating hydrogen gas)

10.6 Hazardous decomposition products

Hydrogen chloride gas

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Skin corrosion/irritation
Skin - Reconstructing the Human Epidermal (RhE) Result: No skin irritation -15 minutes Remarks: (ECHA)
Serious eye damage/eye irritation
Eyes - Rabbit Result: Stimulating (OECD Testing Guideline 405)
Respiratory or skin sensitisation
Local lymph node assay (LLNA) - Mouse Result: Negative (OECD Testing Guideline 429)
Germ cell mutagenicity
Test type: Ames test Testing System: Salmonella Typhimurium Metabolic activation: with or without metabolic activation effect Method: OECD Testing Guideline 471 Result: Negative Test type: Mutational (mammalian cell test): Chromosomal mutation negative Testing system: Chinese hamster ovary cells Metabolic activation: with or without metabolic activation effect Method: OECD Testing Guideline 473 Result: Negative Test type: In vitro mammalian cell gene mutation assay Testing System: Mouse lymphoma test Metabolic activation: with or without metabolic activation effect Method: OECD Testing Guidelines 476 Result: Negative
Carcinogenicity
This product is not or does not contain components listed as carcinogens by IARC, ACGIH, EPA, and NTP
Reproductive toxicity
no data available
Specific target organ toxicity - single exposure
no data available
Specific target organ toxicity - repeated exposure
no data available
Aspiration hazard
no data available
Additional Information
Registration of Toxic Effects of Chemical Substances: CQ8751000
Vomiting and diarrhea
To our knowledge, the chemical, physical, and toxic properties of this substance have not been fully studied.
The following data applies to general barium compounds: after ingestion: mucosal irritation, nausea, drooling, vomiting, dizziness, pain, colic, diarrhea System impact:
Arrhythmia, bradycardia, elevated blood pressure, shock, and weakness of the circulatory system and muscles
Chronic poisoning:
Destruction of respiratory tract
conjunctivitis

dermatitis
Cardiovascular disorders
Operate in accordance with good industrial hygiene and safety regulations.
Other hazards cannot be ruled out.

SECTION 12: Ecological information

12.1 Toxicity

Static toxicity test for fish LC50- Danio rerio (zebrafish) ->174 mg/l -96 h (OECD testing guidelines 203)
Toxicity static test for water fleas and other aquatic invertebrates LC50- Daphnia magna -14.5 mg/l -48 h Remarks: (ECHA) (for cations)
Static toxicity test on algae ErC50- Pseudokirchneriella subcapiata ->100 mg/l -72 h (OECD testing guidelines 201)
Static toxicity test on bacteria EC50- Activated sludge ->943.1 mg/l -3 h (OECD testing guidelines 209)
Toxicity to fish (chronic toxicity) semi static test NOEC - Danio rerio (zebrafish) ->=1.26 mg/l -33 days (OECD testing guidelines 210)

12.2 Persistence and degradability

This method for determining biodegradability is not applicable to inorganic compounds.

12.3 Bioaccumulative potential

Bioaccumulation Lepomis macrochirus -0.065 mg/l (barium chloride dihydrate) Bioaccumulation Factor (BCF): 22.8

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no data available

SECTION 13:

13.1 Disposal considerations

Product
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.
Contaminated packaging
Dispose of as unused product.

SECTION 14: Transport information

ALADDIN SCIENTIFIC CORPORATION
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DOT (US)

UN number: UN1564	Packing group: III	Class: 6.1
Proper shipping name: BARIUM COMPOUND, N.O.S. (Barium chloride dihydrate) (Barium chloride dihydrate)	Reportable Quantity(RQ): no data available	Poison Inhalation Hazard: no data available
Environmental Hazards: No		

IMDG

UN number: UN1564	Packing group: III	EMS-No: no data available
Proper shipping name: BARIUM COMPOUND, N.O.S. (Barium chloride dihydrate) (Barium chloride dihydrate)		

IATA

UN number: UN1564	Packing group: III	Class: 6.1
Proper shipping name: BARIUM COMPOUND, N.O.S. (Barium chloride dihydrate) (Barium chloride dihydrate)		

SECTION 15: Regulatory information

Please note that waste disposal should also meet local regulations. If applicable, the chemical meets the requirements of the Regulations on the Safety Management of Hazardous Chemicals (adopted by the State Council on December 4, 2013).

SECTION 16: Other information

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Disclaimer

 The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Aladdin Co. Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.