

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

SAFETY DATA SHEET

Version: v1
Revision Date: 2024-01-19
Print Date: 2024-01-25

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Boron oxide
Product Number : B108405
Brand : aladdin
CAS-No. : 1303-86-2

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)

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H303

May be harmful if swallowed

H360

May damage fertility or the unborn child

Precautionary statement(s)

P201

Obtain special instructions before use.

P308+P313

IF exposed or concerned: Get medical advice/attention.

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

SECTION 3: Composition/information on ingredients

3.1 Substances

| | |
|------------------|--|
| Synonyms | : Diboron trioxide Boron oxide Boric anhydride |
| Formula | : B2O3 |
| Molecular weight | : 69.62 |
| CAS No. | : 1303-86-2 |
| EC-NO. | : 215-125-8 |

| Component | Classification | Concentration |
|-------------|-------------------|----------------------|
| Boron oxide | no data available | 99.999% metals basis |

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

no data available

If inhaled

no data available

In case of skin contact

no data available

In case of eye contact

no data available

If swallowed

Do not feed anything from the mouth to an unconscious person. Rinse your mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labels (see Chapter 2.2) and/or Chapter 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,Foam,Carbon dioxide (CO2),Dry powder

Unsuitable extinguishing media

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no data available

5.2 Special hazards arising from the substance or mixture

Borane/Boron oxide

5.3 Advice for firefighters

If necessary, wear a self-contained breathing apparatus to put out the fire.

5.4 Further information

no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not generate dust during collection and disposal. Sweep and shovel away. Place in a suitable closed container for processing

6.2 Environmental precautions

Do not allow the product to enter the sewer.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

No data available

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool place. Keep the container tightly closed and store in a dry and ventilated place.

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

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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**

no data available

Skin protection

Gloves must be checked before use. Please use proper methods to remove the gloves (do not touch the outer surface of the gloves), and avoid any skin parts contacting the product. After use, please handle the contaminated gloves carefully according to relevant laws and regulations and effective laboratory rules and procedures. Please clean and blow dry the protective gloves selected for your hands must meet the specifications given in regulation (EU) 2016 / 425 and the en 374 standard derived from it.

Body Protection

no data available

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK (EN 14387) 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

no data available

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

| | |
|---|---|
| a) Appearance | form: solid color: White |
| b) Odour | Odorless |
| c) Odour Threshold | no data available |
| d) pH | 5.46 at 25 °C |
| e) Melting point/freezing point | 450 °C (842 °F) - lit. |
| f) Initial boiling point and boiling range | no data available |
| g) Flash point | not applicable |
| h) Evaporation rate | no data available |
| i) Flammability (solid, gas) | This product is non-flammable. - Flammability (solid) |
| 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 | 2.46 g/mL at 25 °C |
| 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 |

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| | |
|---------------------------|-------------------|
| 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

no data available

10.4 Conditions to avoid

Exposure to moisture may affect product quality

10.5 Incompatible materials

acid, strong oxidant

10.6 Hazardous decomposition products

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

May cause eye irritation.

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

Cell Mutability - In vitro Test - Hamster - Uterus - With or Without Metabolic Activation - Negative Cell Mutability - In vitro Test - Ames Test (Ames Test) - Salmonella typhimurium - With or Without Metabolic Activation - Negative Cell Mutability - In vivo Test - Mouse - Male and Female - Oral - Negative

Carcinogenicity

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There are no components in this product at levels greater than or equal to 0.1% that have been identified by IARC as possible or definite human carcinogens.

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

SECTION 12: Ecological information

12.1 Toxicity

no data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

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

Recycle to process, if possible. Consult your local regional authorities and an expert of disposal. You may be able to dissolve or mix material with a combustible solvent and little by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount of the substance is burned at a time, an explosion may occur.

Observe all federal, state and local regulations when disposing of the substance.

Contaminated packaging

Dispose of as unused product.

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SECTION 14: Transport information

DOT (US)

| | | |
|---|--|------------------------------|
| UN number: no data available | Packing group: - | Class: - |
| Proper shipping name: Not dangerous goods | Reportable Quantity(RQ): no data available | Poison Inhalation Hazard: No |
| Environmental Hazards: No | | |

IMDG

| | | |
|---|------------------|------------|
| UN number: no data available | Packing group: - | EMS-No: No |
| Proper shipping name: Not dangerous goods | | |

IATA

| | | |
|---|------------------|----------|
| UN number: no data available | Packing group: - | Class: - |
| Proper shipping name: Not dangerous goods | | |

SECTION 15: Regulatory information

SECTION 16: Other information

| | |
|-------------------------|--|
| Prepared By | Regulatory Affairs ALADDIN SCIENTIFIC CORPORATION Email: QualityAssurance@aladdinsci.com |
| Creation Date | 10-Sep-2020 |
| Revision Date | 19-Jan-2024 |
| Print Date | 25-Jan-2024 |
| Revision Summary | SDS sections updated v1 |

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