

# SAFETY DATA SHEET

Version: v1

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

### 1.1 Product identifiers

Product name : Boc-Orn(Z)-OH  
Product Number : B116724  
Brand : aladdin  
CAS-No. : 2480-93-5

### 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

Warning

Hazard statement(s)

H315 Causes skin irritation  
H319 Causes serious eye irritation  
H335 May cause respiratory irritation

Precautionary statement(s)

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.  
P264 Wash hands [and ...] thoroughly after handling.

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|                |                                                                                                                                  |
|----------------|----------------------------------------------------------------------------------------------------------------------------------|
| P271           | Use only outdoors or in a well-ventilated area.                                                                                  |
| P280           | Wear protective gloves/protective clothing/eye protection/face protection.                                                       |
| P321           | Specific treatment (see ... on this label).                                                                                      |
| P302+P352      | IF ON SKIN: wash with plenty of water.                                                                                           |
| 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. |
| P362+P364      | Take off contaminated clothing and wash it before reuse.                                                                         |
| P405           | Store locked up.                                                                                                                 |
| P403+P233      | Store in a well-ventilated place. Keep container tightly closed.                                                                 |
| P501           | Dispose of contents/container to an approved waste disposal plant.                                                               |
| P264+P265      | Wash hands [and ...] thoroughly after handling. Do not touch eyes.                                                               |
| P337+P317      | If eye irritation persists: Get medical help.                                                                                    |
| P332+P317      | If skin irritation occurs: Get medical help.                                                                                     |
| P319           | Get medical help if you feel unwell.                                                                                             |

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

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

|                  |                                                                                                                                                                                              |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Synonyms         | : N $\alpha$ -Boc-N $\delta$ -Cbz-L-ornithine;(S)-5-(Benzyloxycarbonylamino)-2-(Boc-amino)pentanoic acid;N $\alpha$ -Boc-N $\delta$ -Z-L-ornithine;N $\delta$ -Z-N $\alpha$ -Boc-L-ornithine |
| Formula          | : C <sub>18</sub> H <sub>26</sub> N <sub>2</sub> O <sub>6</sub>                                                                                                                              |
| Molecular weight | : 366.41                                                                                                                                                                                     |
| CAS No.          | : 2480-93-5                                                                                                                                                                                  |
| EC-NO.           | : no data available                                                                                                                                                                          |

| Component     | Classification    | Concentration |
|---------------|-------------------|---------------|
| Boc-Orn(Z)-OH | no data available | ≥98%          |

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**General advice**

no data available

**If inhaled**

If breathed in, move person into fresh air.If not breathing, give artificial respiration.

**In case of skin contact**

Wash off with soap and plenty of water.

**In case of eye contact**

Flush eyes with water as a precaution.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water.

**4.2 Most important symptoms and effects, both acute and delayed**

no data available

**4.3 Indication of any immediate medical attention and special treatment needed**

no data available

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**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable extinguishing media**

no data available

**5.2 Special hazards arising from the substance or mixture**

Hazardous decomposition products formed under fire conditions.- Carbon oxides, nitrogen oxides (NOx)

**5.3 Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**5.4 Further information**

no data available

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**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Avoid breathing vapors, mist or gas. <br/>

**6.2 Environmental precautions**

Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up**

Sweep up and shovel. Keep in suitable, closed containers for disposal. <br/>

**6.4 Reference to other sections**

no data available

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**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

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Provide appropriate exhaust ventilation at places where dust is formed.Normal measures for preventive fire protection.<br/>

**7.2 Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place.<br/>Keep in a dry place.<br/>

**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**

General industrial hygiene practice.<br/>

**Personal protective equipment**

**Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH <br/>(US) or EN 166(EU).<br/>

**Skin protection**

Handle with gloves.Gloves must be inspected prior to use.Use proper glove removal technique (without touching <br/>glove's outer surface) to avoid skin contact with this product.Dispose of contaminated gloves after use in <br/>accordance with applicable laws and good laboratory practices.Wash and dry hands.<br/>

**Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the <br/>specific work-place., The type of protective equipment must be selected according to the concentration and amount <br/>of the dangerous substance at the specific workplace.<br/><br/>Aldrich - 15565 Page 3 of 6 <br/>

**Respiratory protection**

Respiratory protection is not required.Where protection from nuisance levels of dusts are desired, use type N95 <br/>(US) or type P1 (EN 143) dust masks.Use respirators and components tested and approved under appropriate <br/>government standards such as NIOSH (US) or CEN (EU).<br/>

**Control of environmental exposure**

no data available

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

|                                 |                   |
|---------------------------------|-------------------|
| a) Appearance                   | no data available |
| b) Odour                        | no data available |
| c) Odour Threshold              | no data available |
| d) pH                           | no data available |
| e) Melting point/freezing point | 94 &#176;C        |

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

no data available

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions.- Carbon oxides, nitrogen oxides (NOx)

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

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**Acute toxicity**

no data available

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitisation**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**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**

no data available

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**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**

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no data available

12.6 Other adverse effects

no data available

SECTION 13:

13.1 Disposal considerations

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

no data available

SECTION 14: Transport information

DOT (US)

|                                         |                                            |                                             |
|-----------------------------------------|--------------------------------------------|---------------------------------------------|
| UN number: no data available            | Packing group: no data available           | Class: no data available                    |
| Proper shipping name: no data available | Reportable Quantity(RQ): no data available | Poison Inhalation Hazard: no data available |
| Environmental Hazards: No               |                                            |                                             |

IMDG

|                                         |                                  |                           |
|-----------------------------------------|----------------------------------|---------------------------|
| UN number: no data available            | Packing group: no data available | EMS-No: no data available |
| Proper shipping name: no data available |                                  |                           |

IATA

|                                         |                                  |                          |
|-----------------------------------------|----------------------------------|--------------------------|
| UN number: no data available            | Packing group: no data available | Class: no data available |
| Proper shipping name: no data available |                                  |                          |

SECTION 15: Regulatory information

no data available

SECTION 16: Other information

|                  |                                                                                                                                                     |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Prepared By      | Regulatory Affairs<br>ALADDIN SCIENTIFIC CORPORATION<br>Email: <a href="mailto:QualityAssurance@aladdinsci.com">QualityAssurance@aladdinsci.com</a> |
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| Print Date       | 28-Sep-2025                                                                                                                                         |
| Revision Summary | SDS sections updated v1                                                                                                                             |

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