

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

Catalogue Number	CS-M-56388
Product Name	(1S,4S)-(-)-2-Boc-2,5-diazabicyclo[2.2.1]heptane
CAS No.	113451-59-5
Category	Chiral
Synonyms	(1S,4S)-(-)-2-Boc-2,5-diazabicyclo[2.2.1]heptane; (1S,4S)-2,5-Diaza-bicycl; [2.2.1]heptan-2-carboxylic acid tert-butyl ester; (1S,4S)-2-Boc-2,5-diazabicyclo[2.2.1]heptane; (1S,4S)-2-tert-Butoxycarbonyl-2,5-diazabicyclo[2.2.1]heptane; (1S,4S)-N-(tert-Butoxycarbonyl)-2,5-diazabicyclo[2.2.1]heptane; (1S,4S)-N-Boc-2,5-diazabicyclo[2.2.1]heptane; (1S,4S)-tert-Butyl 2,5-diazabicyclo[2.2.1]heptane-2-carboxylate; 1,1-Dimethylethyl (1S,4S)-2,5-diazabicyclo[2.2.1]heptane-2-carboxylate; 1,1-Dimethylethyl (S,S)-2,5-diazabicyclo[2.2.1]heptane-5-carboxylate; 2-Methylpropan-2-yl (1S,4S)-2,5-diazabicyclo[2.2.1]heptane-2-carboxylate
Brand	Clearsynth Labs Ltd.
Identified uses	Laboratory Chemicals
Uses advised against	Not available
Company	Clearsynth Labs Ltd. Mumbai, India
Emergency Phone #	+91-22-245045900
REACH No.	Not available

SECTION 2: Hazards identification

Disclaimer: This is sample MSDS. Please email sales@clearsynth.com for more details.

2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Skin irritation (Category 2)

Serious eye damage/eye irritation (Category 2)

2.2 Label Elements

Signal Word: Warning



Hazard Statement(s)

Code	Statement
H314	Not available
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	Not available

Precautionary Statement(s)

Code	Statement
P260	Not available
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P264+P265	Not available
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	Not available
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P302+P361+P354	Not available
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.
P305+P354+P338	Not available
P316	Not available
P319	Get medical help if you feel unwell.
P321	Specific treatment (see ... on this label).
P332+P317	If skin irritation occurs: Get medical help.
P337+P317	If eye irritation persists: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P363	Not available
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

P501

Dispose of contents/container in accordance with local/regional/national/international regulation

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : (1S,4S)-(-)-2-Boc-2,5-diazabicyclo[2.2.1]heptane

CAS Number : 113451-59-5

Molecular Formula : C₁₀H₁₈N₂O₂

Molecular Weight : 198.27

Parent Chemical : -

Synonyms : (1S,4S)-(-)-2-Boc-2,5-diazabicyclo[2.2.1]heptane; (1S,4S)-2,5-Diaza-bicycl; [2.2.1]heptan-2-carboxylic acid tert-butyl ester; (1S,4S)-2-Boc-2,5-diazabicyclo[2.2.1]heptane;

(1S,4S)-2-tert-Butoxycarbonyl-2,5-diazabicyclo[2.2.1]heptane;

(1S,4S)-N-(tert-Butoxycarbonyl)-2,5-diazabicyclo[2.2.1]heptane; (1S,4S)-N-Boc-2,5-diazabicyclo[2.2.1]heptane;

(1S,4S)-tert-Butyl 2,5-diazabicyclo[2.2.1]heptane-2-carboxylate; 1,1-Dimethylethyl

(1S,4S)-2,5-diazabicyclo[2.2.1]heptane-2-carboxylate; 1,1-Dimethylethyl

(S,S)-2,5-diazabicyclo[2.2.1]heptane-5-carboxylate; 2-Methylpropan-2-yl

(1S,4S)-2,5-diazabicyclo[2.2.1]heptane-2-carboxylate

Concentration : Not available

SECTION 4: First aid measures

SECTION 4: First-aid measures

4.1 Description of first aid measures

General advice:

- Show this safety data sheet to the doctor in attendance.
- Move out of dangerous area. Seek medical attention if symptoms persist.

If inhaled:

- Move person to fresh air.
- If breathing is difficult, seek medical attention.

In case of skin contact:

- Wash off with soap and plenty of water.
- Remove contaminated clothing and shoes. Wash clothing before reuse.

In case of eye contact:

- Rinse cautiously with water for several minutes.
- Remove contact lenses if present and easy to do. Continue rinsing.
- Seek medical attention if irritation persists.

If swallowed:

- Rinse mouth with water.
- Do NOT induce vomiting unless directed by medical personnel.
- Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

- Not available.

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically.
- No data available.

SECTION 5: Firefighting measures

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media:

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

Unsuitable extinguishing media:

- Not available.

5.2 Special hazards arising from the substance or mixture

- Combustible material.
- Hazardous combustion products may include carbon oxides and nitrogen oxides.
- Specific hazards: Not available.

5.3 Advice for firefighters

- Wear self-contained breathing apparatus and full protective gear.
- Use water spray to cool unopened containers.
- Avoid breathing fire gases/fumes.

Additional information

- No data available.

SECTION 6: Accidental release measures

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Avoid breathing dust/vapors.
- Avoid contact with skin and eyes.
- Use personal protective equipment as required (see Section 8).
- Ensure adequate ventilation.

6.2 Environmental precautions

- Prevent further leakage or spillage if safe to do so.
- Avoid release to the environment.
- No data available on specific environmental precautions.

6.3 Methods and material for containment and cleaning up

- Contain spill.
- Sweep up or collect without creating dust; place in a suitable, closed container for disposal.
- Clean contaminated area with appropriate cleaning method.

6.4 Reference to other sections

- See Section 8 for personal protective equipment.
- See Section 13 for disposal considerations.

SECTION-7: Handling and storage

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Avoid contact with skin and eyes.
- Avoid breathing dust.
- Use with adequate ventilation.
- Keep container tightly closed when not in use.
- Observe good industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

- Store in a cool, dry, well-ventilated place.
- Keep in original container, tightly closed.
- Protect from moisture.
- Incompatible materials: Not available.

7.3 Specific end use(s)

- Laboratory/research use.
- Specific uses: Not available.

SECTION 8: Exposure controls / personal protection

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits:

- Not available.

8.2 Exposure controls

Engineering controls:

- Use local exhaust ventilation or general ventilation to minimize exposure.

Personal protective equipment (PPE):

Eye/face protection:

- Safety glasses with side shields or chemical splash goggles.

Skin protection:

- Protective gloves (material not specified).
- Lab coat or protective clothing.

Respiratory protection:

- If ventilation is inadequate or dust is generated, use an appropriate particulate respirator.

Hygiene measures:

- Wash hands after handling.
- Remove contaminated clothing and wash before reuse.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Test	Result
Appearance	No data available
IR spectrum	No data available
pH	No data available
Solubility	No data available

Property	Value
a) Physical State	No data available
b) Color	No data available
c) Odor	No data available
d) pH	No data available
e) Vapour Pressure	No data available
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available
j) Flash Point	No data available
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available
q) Oxidizing Properties	No data available

SECTION 10: Stability and reactivity

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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

- Heat, flames, sparks.
- Moisture (if applicable).
- Other conditions: Not available.

10.5 Incompatible materials

- Not available.

10.6 Hazardous decomposition products

- Carbon oxides.
- Nitrogen oxides.
- Other decomposition products: Not available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- Acute toxicity: No data available.
- Skin corrosion/irritation: No data available.
- Serious eye damage/eye irritation: No data available.
- Respiratory or skin sensitization: No data available.
- Germ cell mutagenicity: No data available.
- Carcinogenicity: No data available.
- Reproductive toxicity: No data available.
- STOT-single exposure: No data available.
- STOT-repeated exposure: No data available.
- Aspiration hazard: No data available.

Likely routes of exposure

- No data available.

Symptoms related to the physical, chemical and toxicological characteristics

- Not available.

SECTION 12: Ecological information

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12.1 Toxicity

- Not available.

12.2 Persistence and degradability

- Not available.

12.3 Bioaccumulative potential

- Not available.

12.4 Mobility in soil

- Not available.

12.5 Results of PBT and vPvB assessment

- Not available.

12.6 Endocrine disrupting properties

- No data available.

12.7 Other adverse effects

- Not available.

SECTION 13: Disposal considerations

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product:

- Dispose of in accordance with local/regional/national/international regulations.
- Incineration or disposal via a licensed chemical waste contractor may be appropriate.

Contaminated packaging:

- Dispose of as unused product or according to local regulations.

Waste code:

- Not available.

SECTION 14: Transport information

SECTION 14: Transport information

14.1 UN number

- Not available.

14.2 UN proper shipping name

- Not available.

14.3 Transport hazard class(es)

- Not available.

14.4 Packing group

- Not available.

14.5 Environmental hazards

- Not available.

14.6 Special precautions for user

- Not available.

14.7 Maritime transport in bulk according to IMO instruments

- Not available.

SECTION 15: Regulatory information

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15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- Regulatory listings/status: Not available.

15.2 Chemical safety assessment

- No data available.

SECTION 16: Other information

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Product identification:

- Product name: (1S,4S)-(-)-2-Boc-2,5-diazabicyclo[2.2.1]heptane
- Catalog no.: CS-M-56388
- CAS no.: 113451-59-5
- Molecular weight: 198.27
- Supplier: Clearsynth Labs Ltd., Mumbai, India
- Emergency phone: +91-22-245045900

Recommended use:

- For laboratory/research use only.

Revision information:

- Not available.

Disclaimer:

- The information provided is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. No data available for certain properties; users should perform their own assessment for safe handling and use.

DISCLAIMER

This MSDS is system-generated. Please verify and confirm all data, statements, and values with the Support Team before use or distribution.