
SHANGHAI FUXIN PHARMACEUTICAL CO., LTD.

SAFETY DATA SHEET

According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
- Sixth revised edition

Version: 1.0

Creation Date: Mar. 19, 2018

Revision Date: Mar. 19, 2018

1. Identification

1.1 GHS Product identifier

Product name: N-Boc-(ethylamino)acetaldehyde

1.2 Other means of identification

CAS Number: 315718-06-0

Other names: tert-Butyl ethyl(2-oxoethyl)carbamate

1.3 Recommended use of the chemical and restrictions on use

Identified uses: For industry use/feed usage.

Uses advised against: No data available

1.4. Supplier's details

Company: Shanghai Fuxin Pharmaceutical Co., Ltd.

Address: Room 233, JuXin R&D Building-A, No.58-2 XiangKe Road, Pudong, Shanghai, China

Telephone: (86-21) 31300828

E-mail: contact@fuxinpharm.com

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Reproductive toxicity (Category 1B), H360Df

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS label elements, including precautionary statements

Labelling according Regulation (EC) No 1272/2008

Signal word Warning

Hazard statement(s)

H360Df May damage the unborn child. Suspected of damaging fertility.

Precautionary statement(s)

P201 Obtain special instructions before use.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

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Supplemental Hazard

Statements

none

Restricted to professional users..

2.3 Other Hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3. Composition / Information on Ingredients

3.1 Substances

| Chemical name | Common names and synonyms | CAS No. | EC No. | Concentration |
|--------------------------------|---------------------------------------|-------------|--------|---------------|
| N-Boc-(ethylamino)acetaldehyde | tert-Butyl ethyl(2-oxoethyl)carbamate | 315718-06-0 | None | 97.0% |

4. First Aid Measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

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

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

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

4.2 Most important symptoms and effects

No data available

4.3 Indication of any immediate medical attention

No data available

5. Firefighting measures

5.1 Extinguishing Media

Suitable extinguishing media

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

5.2 Specific hazards arising from the chemical

No data available

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus.

Wear protective clothing to prevent contact with skin and eyes.

6. Accidental Release Measures

6.1 Personnel Precautions

Evacuate the area immediately.

Do not attempt to take action without suitable protective clothing – see section 8 of SDS.

6.2 Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods & Materials

Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. Handling and Storage

7.1 Personnel Precautions

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store under inert gas. Moisture sensitive..

8. Exposure Controls/Personal Protection

8.1 Control Parameters

Occupational Exposure limit values

Not Applicable

8.2 Appropriate engineering controls

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

8.3. Individual protection measures, such as personal protective equipment (PPE)

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 EN 166(EU).

Skin 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 full-face 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).

Hand 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.

Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Thermal hazards

No data available

9. Physical and Chemical Properties
9.1 Physical and Chemical Properties

| | |
|--|----------------|
| Appearance | liquid |
| Odour | Not Applicable |
| PH | Not Applicable |
| Melting point | Not Applicable |
| Flash point | Not Applicable |
| Evaporation rate | Not Applicable |
| Flammability(solid,gas) | Not Applicable |
| Upper/lower flammability or explosive limits | Not Applicable |
| Vapour pressure | Not Applicable |
| Vapour density | Not Applicable |
| Relative density | Not Applicable |
| Solubility(ies): | Not Applicable |
| Partition coefficient: | Not Applicable |
| Auto-ignition temperature | Not Applicable |
| Decomposition temperature | Not Applicable |
| Viscosity at 85°C | Not Applicable |
| Explosive properties | Not Applicable |
| Oxidising properties | Not Applicable |

10. Stability and Reactivity
10.1 Reactivity

Stable under recommended storage conditions.

10.2 Stability

No data available.

10.3 Possibility of Hazardous Reactions

Vapours may form explosive mixture with air..

10.4 Conditions to Avoid

Heat, flames and sparks..

10.5 Incompatible Materials

No data available.

10.6 Hazardous Decomposition Products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sulphur oxides, silicon oxides Other decomposition products - no data available.

11. Toxicology informationAcute toxicity
11.1 Information

| | |
|----------------|--------------------|
| Acute Toxicity | No data available. |
|----------------|--------------------|

| | |
|-----------------------------------|--------------------|
| Skin corrosion/irritation | No data available. |
| Serious eye Damage/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. |

12. Ecological Information

12.1 Toxicity

Not known

12.2 Persistence and degradability

Not known

12.3 Bio-Accumulative Potential

Not known

12.4 Mobility and Soil

Not known

12.5 Results of PBT & vPvB assessment

Not known

12.6 Other adverse effects

Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.

13. Disposal Considerations

13.1 Waste Treatment Methods

Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14. Transport Information

14.1 UN number

ADR/RID: -

IMDG: -

IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

14.4 Packaging group

ADR/RID: -

IMDG: -

IATA: -

14.5 Environmental hazards

ADR/RID: NA

IMDG Marine pollutant: NA

IATA: NA

14.6 Special precautions for user

No data available

14. Safety, health and environmental regulations
15.1 Safety, health and environmental regulations specific for the product in question

| Chemical name | Common names and synonyms | CAS number | EC number |
|--|---------------------------------------|-------------|------------|
| N-Boc-(ethylamino)acetaldehyde | tert-Butyl ethyl(2-oxoethyl)carbamate | 315718-06-0 | None |
| European Inventory of Existing Commercial Chemical Substances (EINECS) | | | Not Listed |
| EC Inventory | | | Not Listed |
| United States Toxic Substances Control Act (TSCA) Inventory | | | Listed |
| China Catalog of Hazardous chemicals 2015 | | | Not Listed |
| New Zealand Inventory of Chemicals (NZIoC) | | | Listed |
| Philippines Inventory of Chemicals and Chemical Substances (PICCS) | | | Listed |
| Vietnam National Chemical Inventory | | | Not Listed |
| Chinese Chemical Inventory of Existing Chemical Substances (China IECSC) | | | Listed |

15.2 Safety Assessment

No Chemical Safety Assessment

16. Other Information
Information on revision
Creation Date: March. 19, 2018

Revision Date: March. 19, 2018

Abbreviations and acronyms

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

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. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.