according to Regulation (EC) No 1907/2006

Boc-L-Lys(Poc)-OH

Revision date: 22.04.2024

Product code: BAA1960

Page 1 of 10

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

1.1. Product identifier

Boc-L-Lys(Poc)-OH

Further trade names

(S)-2-(t-Butyloxycarbonylamino)-6-((prop-2-ynyloxy)carbonylamino)hexanoic acid N-alpha-t-Butyloxycarbonyl-N-epsilon-(prop-2-ynyloxycarbonyl)-L-lysine N2-[(1,1-Dimethylethoxy)carbonyl]-N6-[(2-propynyloxy)carbonyl]-L-lysine Boc-L-Lys(Pryoc)-OH Boc-Lys(Poc)-OH Destance name: Boc-L-Lys(Poc)-OH

| Substance name: | Boc-L-Lys(Poc)-OH |
|-----------------|-------------------|
| CAS No: | 1202704-91-3 |
| EC No: | 806-394-8 |

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

Use of the substance/mixture

Laboratory chemical. Manufacture of the substance.

Uses advised against

Do not use for private purposes (household). Restrictions on use: Pharmaceutical substance

1.3. Details of the supplier of the safety data sheet

| Company name: | Iris Biotech GmbH | |
|--------------------------|-------------------------------------|-----------------------------|
| Street: | Adalbert-Zoellner-Straße 1 | |
| Place: | D-95615 Marktredwitz, Germany | |
| Post-office box: | 568 | |
| | D-95605 Marktredwitz, Germany | |
| Telephone: | +49 9231 97121 0 | Telefax: +49 9231 97121 99 |
| E-mail: | info@iris-biotech.de | |
| Contact person: | Compliance Department | Telephone: +49 9231 97121 0 |
| E-mail: | sds@iris-biotech.de | |
| Internet: | www.iris-biotech.de | |
| Responsible Department: | Only available during office hours. | |
| 1.4. Emergency telephone | +49 (0)89 19240 (POISON CENTER | R Munich: 24 h) |

<u>number:</u>

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008 Skin Sens. 1; H317

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Signal word:

Pictograms:



according to Regulation (EC) No 1907/2006

Boc-L-Lys(Poc)-OH

Revision date: 22.04.2024

Product code: BAA1960

Page 2 of 10

Hazard statements

H317

May cause an allergic skin reaction.

Precautionary statements

| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
|-----------|---|
| P280 | Wear protective gloves/protective clothing/eye protection/face protection/hearing |
| | protection. |
| P302+P352 | IF ON SKIN: Wash with plenty of Water. |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P501 | Dispose of contents/container to an approved disposal site. |

Additional advice on labelling

Warning - substance not yet tested completely.

2.3. Other hazards

Product is not dust explosive in its original delivery form. The addition of particulate matter, however, results in a dust explosion risk.

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical characterization

(S)-2-(t-Butyloxycarbonylamino)-6-((prop-2-ynyloxy)carbonylamino)hexanoic acid

| Sum formula: | C15H24N2O6 |
|-------------------|--------------|
| Molecular weight: | 328,36 g/mol |

Relevant ingredients

| CAS No | Chemical name | | | Quantity |
|--------------|------------------------------------|------------|----------|----------|
| | EC No | Index No | REACH No | |
| | Classification (Regulation (EC) No | 1272/2008) | | |
| 1202704-91-3 | Boc-L-Lys(Poc)-OH | | | 100 % |
| | 806-394-8 | | | |
| | Skin Sens. 1; H317 | | | |

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

In all cases of doubt, or when symptoms persist, seek medical advice.

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice. Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary. After contact with skin, wash immediately with plenty of water and soap.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist. If product gets into the eye, keep eyelid open and rinse immediately with large quantities of



according to Regulation (EC) No 1907/2006

Boc-L-Lys(Poc)-OH

Revision date: 22.04.2024

Product code: BAA1960

Page 3 of 10

water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person or a person with cramps.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. Water spray. alcohol resistant foam. Dry extinguishing powder. Sand.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Non-flammable. Thermal decomposition can lead to the escape of irritating gases and vapours.

In case of fire may be liberated: Carbon dioxide (CO2). Carbon monoxide (CO). Nitrogen oxides (NOx).

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Usual measures for fire prevention.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Avoid dust formation. Do not breathe dust. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Provide adequate ventilation. Avoid breathing

dust/fume/gas/mist/vapours/spray.

Avoid contact with skin, eyes and clothes.

Wear personal protection equipment.

In case of fire: Evacuate area.

For non-emergency personnel

Remove all sources of ignition. Provide adequate ventilation.

Use personal protection equipment.

For emergency responders

Wear personal protection equipment (refer to section 8). Take up mechanically, placing in appropriate containers for disposal. Take up dust-free and set down dust-free.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil.

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For containment

Avoid dust formation.

For cleaning up

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal. Take up mechanically.



according to Regulation (EC) No 1907/2006

Boc-L-Lys(Poc)-OH

Revision date: 22.04.2024

Product code: BAA1960

Page 4 of 10

Other information

Take up mechanically, placing in appropriate containers for disposal. Avoid dust formation. Clear contaminated areas thoroughly.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

Treat the recovered material as prescribed in the section on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide adequate ventilation. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. Provide adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Handle and store contents under inert gas. Protect from moisture. storage temperature: $+2^{\circ}C - 8^{\circ}C$

Hints on joint storage

No special measures are necessary.

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls



Appropriate engineering controls

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye protection/face protection.

Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and



according to Regulation (EC) No 1907/2006

Boc-L-Lys(Poc)-OH

Revision date: 22.04.2024

Product code: BAA1960

Page 5 of 10

approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Wear suitable gloves.

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.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

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).

Thermal hazards

No data available

Environmental exposure controls

Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state: | solid | |
|--|-------------------|-------------------|
| Colour: | white/ whitish | |
| Odour: | No data available | |
| Odour threshold: | No data available | |
| Melting point/freezing point: | | No data available |
| Boiling point or initial boiling point and | | No data available |
| boiling range: | | |
| Flammability: | | not determined |
| Lower explosion limits: | | No data available |
| Upper explosion limits: | | No data available |
| Flash point: | | No data available |
| Auto-ignition temperature: | | No data available |
| Decomposition temperature: | | No data available |
| pH-Value: | | No data available |
| Viscosity / kinematic: | | not applicable |
| Water solubility: | | No data available |
| Solubility in other solvents | | |
| not determined | | |
| Dissolution rate: | | No data available |
| Partition coefficient n-octanol/water: | | No data available |
| Dispersion stability: | | No data available |



according to Regulation (EC) No 1907/2006

Boc-L-Lys(Poc)-OH Product code: BAA1960 Revision date: 22.04.2024 Page 6 of 10 No data available Vapour pressure: No data available Density: Relative density: No data available Bulk density: No data available Relative vapour density: No data available Particle characteristics: No data available 9.2. Other information Information with regard to physical hazard classes Explosive properties The product is not: Explosive. Product is not dust explosive in its original delivery form. The addition of particulate matter, however, results in a dust explosion risk. Sustaining combustion: No data available Self-ignition temperature Solid: No data available Gas: not applicable Oxidizing properties No data available Other safety characteristics Solvent content: No data available Viscosity / dynamic: not applicable Flow time: not applicable

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

Protect from moisture. Keep away from heat.

10.5. Incompatible materials

Oxidizing agents, strong.

10.6. Hazardous decomposition products

Thermal decomposition can lead to the escape of irritating gases and vapours. In case of fire may be liberated: Carbon dioxide (CO2). Carbon monoxide (CO). Nitrogen oxides (NOx).

Further information

In case of fire: See chapter 5.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicocinetics, metabolism and distribution

No data available

Acute toxicity

Based on available data, the classification criteria are not met.

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met. Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.



according to Regulation (EC) No 1907/2006

Boc-L-Lys(Poc)-OH

Revision date: 22.04.2024

Product code: BAA1960

Page 7 of 10

Sensitising effects

May cause an allergic skin reaction. (Boc-L-Lys(Poc)-OH)

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

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.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Information on likely routes of exposure

No data available

Specific effects in experiment on an animal

No data available

Practical experience

No data available

11.2. Information on other hazards

Endocrine disrupting properties

No data available

Other information

This substance is classified as hazardous according to Regulation (EC) No 1272 (2008).

Further information

RTECS: No data available

To our knowledge, the chemical, physical and toxicological properties have not been extensively studied. Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information

12.1. Toxicity

Based on available data, the classification criteria are not met.

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

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

The product has not been tested.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

Warning - substance not yet tested completely.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

according to Regulation (EC) No 1907/2006

Boc-L-Lys(Poc)-OH

Revision date: 22.04.2024

Product code: BAA1960

Page 8 of 10

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Consult the appropriate local waste disposal expert about waste disposal.

Handle contaminated packages in the same way as the substance itself.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

| Land transport (ADR/RID) | |
|---------------------------|--|
| AAO UNU waxa ay ah baadaa | |

| 14.2. UN proper shipping name: | No dangerous good in sense of these transport regulations. |
|----------------------------------|--|
| Inland waterways transport (ADN) | |
| 14.2. UN proper shipping name: | No dangerous good in sense of these transport regulations. |
| Marine transport (IMDG) | |
| 14.2. UN proper shipping name: | No dangerous good in sense of these transport regulations. |
| Air transport (ICAO-TI/IATA-DGR) | |
| 14.2. UN proper shipping name: | No dangerous good in sense of these transport regulations. |
| 14.5. Environmental hazards | |
| ENVIRONMENTALLY HAZARDOUS: | No |

ENVIRONMENTALLY HAZARDOUS:

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

| Information according to Directive 2012/18/EU (SEVESO III): | Not subject to 2012/18/EU (SEVESO III) |
|---|---|
| Additional information | |
| Safety Data Sheet according to Rec | gulation (EC) No. 1907/2006 (REACH) |
| National regulatory information | |
| Employment restrictions: | Observe restrictions to employment for juveniles according to the 'juvenile |

Water hazard class (D): Skin resorption/Sensitization: work protection guideline' (94/33/EC). 3 - highly hazardous to water Causes allergic hypersensitivity reactions.

.

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information



according to Regulation (EC) No 1907/2006

Boc-L-Lys(Poc)-OH

Revision date: 22.04.2024

Product code: BAA1960

Page 9 of 10

Abbreviations and acronyms Skin Sens: Skin sensitisation ADR: Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road). IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service LC50: Lethal concentration, 50% LD50: Lethal dose, 50% CLP: Classification, labelling and Packaging REACH: Registration, Evaluation and Authorization of Chemicals GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals UN: United Nations CAS: Chemical Abstracts Service DNFL: Derived No Effect Level DMEL: Derived Minimal Effect Level PNEC: Predicted No Effect Concentration ATE: Acute toxicity estimate LL50: Lethal loading, 50% EL50: Effect loading, 50% EC50: Effective Concentration 50% ErC50: Effective Concentration 50%, growth rate NOEC: No Observed Effect Concentration BCF: Bio-concentration factor PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative RID: Regulations concerning the international carriage of dangerous goods by rail ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures) EmS: Emergency Schedules MFAG: Medical First Aid Guide IATA: International Air Transport Association ICAO: International Civil Aviation Organization MARPOL: International Convention for the Prevention of Marine Pollution from Ships IBC: Intermediate Bulk Container SVHC: Substance of Very High Concern For abbreviations and acronyms, see table at http://abbrev.esdscom.eu EC/EEC: European Community/European Economic Community EU: European Union M-factor: Multiplying factor ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IATA: International Air Transport Association DGR: Dangerous Goods Regulations ICAO: International Civil Aviation Organization TI: Technical Instructions For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Relevant H and EUH statements (number and full text)

H317 May cause an allergic skin reaction.



according to Regulation (EC) No 1907/2006

Boc-L-Lys(Poc)-OH

Product code: BAA1960

Page 10 of 10

Revision date: 22.04.2024

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.