

Revision: 22.12.2025

Fmoc-Pip(Boc)-OH

Product code: FAA4340

Page 1 of 10

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Fmoc-Pip(Boc)-OH

Further trade names

4-(((9H-fluoren-9-yl)methoxy)carbonylamino)-1-(tert-butoxycarbonyl)piperidine-4-carboxylic acid

4-(Fmoc-amino)-1-Boc-piperidine-4-carboxylic acid

alpha-(Boc-amino)-Fmoc-nipecotic acid

4-(9-Fluorenylmethoxycarbonyl)-1-(t-butoxycarbonyl)-piperidine-4-carboxylic acid

Boc-Pic(4)(4-NHFmoc)-OH

4-Fmoc-1-Boc-piperidine-4-carboxylic acid

Substance name: Fmoc-Pip(Boc)-OH

CAS No: 183673-66-7

EC No: 634-949-2

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 Marktreidwitz, Germany

Telephone: +49 9231 97121 0

Telefax: +49 9231 97121 99

E-mail: info@iris-biotech.de

Contact person: Health & Safety 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 Munich: 24 h)

number:**Further Information**

Voluntary safety information following the Safety Data Sheet format according to Regulation (EC) No. 1907/2006 (REACH)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**

Skin Irrit. 2; H315

Eye Irrit. 2; H319

STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

2.2. Label elements**Regulation (EC) No 1272/2008**

Signal word: Warning

Revision: 22.12.2025

Fmoc-Pip(Boc)-OH

Product code: FAA4340

Page 2 of 10

Pictograms:

Hazard statements

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

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Additional advice on labelling

Labelling according to Regulation (EC) No. 1272/2008 [CLP]: none (GHS/CLP criteria are not met.)
Warning - substance not yet tested completely.

Labelling of packages where the contents do not exceed 125 ml
Signal word: Warning

Pictograms:

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

4-(((9H-fluoren-9-yl)methoxy)carbonylamino)-1-(tert-butoxycarbonyl)piperidine-4-carboxylic acid

Sum formula: C₂₆H₃₀N₂O₆

Molecular weight: 466,53 g/mol g/mol

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
183673-66-7	Fmoc-Pip(Boc)-OH			100 %
	634-949-2			
	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H315 H319 H335			

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

SECTION 4: First aid measures
4.1. Description of first aid measures
General information

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

Fmoc-Pip(Boc)-OH

Revision: 22.12.2025

Product code: FAA4340

Page 3 of 10

After inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Consult a doctor.

After contact with skin

Wash with plenty of water and soap. Consult a doctor.

After contact with eyes

Flush with copious amounts of water for at least 15 minutes. Consult a doctor.

After ingestion

Never give anything by mouth to an unconscious person or a person with cramps. If swallowed, rinse mouth with water (only if the person is conscious). Consult a doctor.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

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**

Water spray jet, alcohol resistant foam, Dry extinguishing powder, Carbon dioxide (CO₂)

5.2. Special hazards arising from the substance or mixture

Carbon oxides

Nitrogen oxides (NO_x).

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

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

Wear personal protection equipment. Avoid dust formation. Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation. Remove persons to safety. Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up**For containment**

Take up dust-free and set down dust-free. Sweep up and shovel up. Collect in closed and suitable containers for disposal.

6.4. Reference to other sections

Disposal: see section 13

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

Avoid contact with eyes. Avoid contact with skin. Avoid dust formation.

Advice on general occupational hygiene

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and after work. Information on protective measures can be found in Section 2.2.

7.2. Conditions for safe storage, including any incompatibilities

Fmoc-Pip(Boc)-OH

Revision: 22.12.2025

Product code: FAA4340

Page 4 of 10

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.
Protect from moisture.
storage temperature: +2°C - 8°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

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust. 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

Tightly sealed safety glasses. For eye protection, only use equipment that has been tested and approved to government standards such as NIOSH (US) or EN 166 (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. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Skin protection

Impervious clothing, Flame retardant antistatic clothing. The type of protective equipment must be selected according to the concentration and amount of dangerous substance at the workplace.

Respiratory protection

Dust mask

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

Fmoc-Pip(Boc)-OH

Revision: 22.12.2025

Product code: FAA4340

Page 5 of 10

Boiling point or initial boiling point and boiling range:	No data available
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
Vapour pressure:	No data available
Density:	No data available
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.

Sustained combustibility: 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

The following applies to flammable, organic substances and mixtures in general: With appropriately fine distribution, when whirled up, a dust explosion potential can generally be assumed.

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.

Fmoc-Pip(Boc)-OH

Revision: 22.12.2025

Product code: FAA4340

Page 6 of 10

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 (NO_x).

Further information

In case of fire: See chapter 5.

SECTION 11: Toxicological information**11.1. Information on hazard classes****Toxicokinetics, metabolism and distribution**

No data available

Acute toxicity

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

Irritation and corrosivity

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/eye irritation: Causes serious eye irritation.

Sensitising effects

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

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

May cause respiratory irritation. (Fmoc-Pip(Boc)-OH)

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

Fmoc-Pip(Boc)-OH

Revision: 22.12.2025

Product code: FAA4340

Page 7 of 10

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 UK REACH.

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

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

Avoid release to the environment.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product 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)****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

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**

Fmoc-Pip(Boc)-OH

Revision: 22.12.2025

Product code: FAA4340

Page 8 of 10

EU regulatory informationInformation according to Directive
2012/18/EU (SEVESO III):

Not subject to 2012/18/EU (SEVESO III)

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile
work protection guideline' (94/33/EC).

Water hazard class (D):

3 - highly hazardous to water

15.2. Chemical safety assessment

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

SECTION 16: Other information

Fmoc-Pip(Boc)-OH

Revision: 22.12.2025

Product code: FAA4340

Page 9 of 10

Abbreviations and acronyms

Skin Irrit. 2: Skin irritation, hazard category 2
Eye Irrit. 2: Eye irritation, hazard category 2
STOT SE 3: Specific target organ toxicity - single exposure, hazard category 3
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
DNEL: 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>

Relevant H and EUH statements (number and full text)

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

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.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be

Fmoc-Pip(Boc)-OH

Revision: 22.12.2025

Product code: FAA4340

Page 10 of 10

transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.