
Material Safety Data SheetRevision Date: 07/22/2026

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : Fmoc-(S)-2-Amino-4,4-difluorobutyric acid
CAS Number : 467442-21-3
MDL Number
Product ID : STA-AA10138
Product Use : For research use only
Manufacturer/Supplier : WuXi AppTec (Chengdu) Co., Ltd.
Address : No.388 Haifa Road, Chengdu Cross-Strait Science & Technology Industrial Development Park, Wenjiang, District of Chengdu, Sichuan, 611130, China
Telephone : +86-28-60353770
Fax : +86-28-60353770

2. HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Not a hazardous substance or mixture.

2.2 Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances**

Chemical Formula : C₁₉H₁₇F₂NO₄

Molecular Weight : 361.34 g/mol

EC-No.:

Component		Concentration
Fmoc-(S)-2-Amino-4,4-difluorobutyric acid		
CAS Number	467442-21-3	-

No components need to be disclosed according to the applicable regulations.

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.

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

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

No data available

5. FIRE-FIGHTING MEASURES**5.1 Extinguishing media****Suitable extinguishing media**

Alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: no data

5.2 Special hazards arising from the substance or mixture

In combustion toxic fumes may form.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Avoid breathing vapours, mist or gas.

For personal protection see section 8.

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.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE**7.1 Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in 0-5°C. 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.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Wear Protective safety goggles.

Wear chemical-resistant gloves.

Wear protective clothing and chemical resistant boots.

Ensure ventilation during use.

After contact with skin, wash immediately.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Offwhite solid
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Odour	Odorless
Odour Threshold	No data available
pH	No data available
Evaporation rate	No data available
Vapour pressure	No data available
Vapor Density	No data available
Solubility in/Miscibility with	CH ₃ CN, DMF
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Flash point	No data available
Relative density	No data available

Safety data

No data available

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

Avoid moisture.

10.5 Incompatible materials

Oxidizing agents.

10.6 Hazardous decomposition products

Other decomposition products - No data available.

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
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available

11.2 Additional

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

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

No data available.

12.6 Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

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

13.2 Contaminated packaging

Dispose of as unused product.

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: no IMDG: no IATA: no

14.6 Special precautions for user

No data available.

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

no data available

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

Caution: Substance not yet fully tested (EU).

16. OTHER INFORMATION

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).