

**Safety Data Sheet**

according to UK REACH Regulation

**Fmoc-L-Aza-OH**

Revision date: 14.08.2017

Product code: FAA1820

Page 1 of 7

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

Fmoc-L-Aza-OH

**Further trade names**Fmoc-L-Dap(N3)-OH, Fmoc-L-beta-azidoalanine,  
N-alpha-(9-Fluorenylmethyloxycarbonyl)-3-azido-L-alanine,  
(S)-2-(9-Fluorenylmethyloxycarbonylamino)-3-azidopropanoic acid, with DIPE

CAS No: 684270-46-0

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

Laboratory chemical

**Uses advised against**

Do not use for private purposes (household).

**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 number:**

+49 (0)89 19240 (POISON CENTER Munich: 24 h)

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****GB CLP Regulation**

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Causes serious eye irritation.

May cause respiratory irritation.

Causes skin irritation.

**2.2. Label elements****GB CLP Regulation**

Signal word: Warning

Pictograms:



**Safety Data Sheet**

according to UK REACH Regulation

**Fmoc-L-Aza-OH**

Revision date: 14.08.2017

Product code: FAA1820

Page 2 of 7

**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.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/doctor if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**SECTION 3: Composition/information on ingredients**
**3.1. Substances**
**Chemical characterization**

Fmoc-L-Dap(N3)-OH, Fmoc-L-beta-azidoalanine,  
 N-alpha-(9-Fluorenylmethyloxycarbonyl)-3-azido-L-alanine,  
 (S)-2-(9-Fluorenylmethyloxycarbonylamino)-3-azidopropanoic acid, with DIPE

 Sum formula: C<sub>18</sub>H<sub>16</sub>N<sub>4</sub>O<sub>4</sub>

Molecular weight: 352,34

**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
684270-46-0	Fmoc-L-Dap(N3)-OH			100 %
	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**

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

**After inhalation**

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

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

**After contact with skin**

After contact with skin, wash immediately with plenty of water and soap.

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

**After contact with eyes**

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

**Safety Data Sheet**

according to UK REACH Regulation

**Fmoc-L-Aza-OH**

Revision date: 14.08.2017

Product code: FAA1820

Page 3 of 7

**After ingestion**

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

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

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Water spray. alcohol resistant foam. Dry extinguishing powder. Carbon dioxide (CO<sub>2</sub>). Sand.

**5.2. Special hazards arising from the substance or mixture**

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

In case of fire may be liberated: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide Nitrogen oxides (NO<sub>x</sub>).

**5.3. Advice for firefighters**

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

**Additional information**

Usual measures for fire prevention.

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

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.

**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****Other information**

Take up mechanically, placing in appropriate containers for disposal. Avoid dust formation.

Clear contaminated areas thoroughly.

**6.4. Reference to other sections**

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 dust formation. 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**

Avoid contact with skin, eyes and clothes. Provide adequate ventilation. When using do not eat, drink or smoke. Wash hands before breaks and after work.

**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.

**Safety Data Sheet**

according to UK REACH Regulation

**Fmoc-L-Aza-OH**

Revision date: 14.08.2017

Product code: FAA1820

Page 4 of 7

storage temperature: 2-8°C

**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/face protection.

**Hand protection**

Wear suitable gloves.

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.

**Skin protection**

Wear suitable protective clothing.

**Respiratory protection**

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state:	Powder
Colour:	off-white
Odour:	No data available

**Changes in the physical state**

Melting point/freezing point:	117 – 130 °C
Boiling point or initial boiling point and boiling range:	No data available
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available
:	No data available
Flash point:	No data available

**Flammability**

Solid/liquid:	No data available
Gas:	No data available

**Explosive properties**

No data available

Lower explosion limits:	No data available
Upper explosion limits:	No data available
Auto-ignition temperature:	No data available

**Self-ignition temperature**

**Safety Data Sheet**

according to UK REACH Regulation

**Fmoc-L-Aza-OH**

Revision date: 14.08.2017

Product code: FAA1820

Page 5 of 7

Solid:	No data available
Gas:	No data available
Decomposition temperature:	No data available
pH-Value:	No data available
Viscosity / dynamic:	not applicable
Viscosity / kinematic:	not applicable
Flow time:	not applicable
Water solubility:	No data available
<b>Solubility in other solvents</b>	
No data available	
Partition coefficient n-octanol/water:	No data available
Vapour pressure:	No data available
Density:	No data available
Bulk density:	No data available
Relative vapour density:	not applicable

**9.2. Other information****Information with regard to physical hazard classes**

Sustaining combustion: No data available

**Other safety characteristics**

Solvent separation test: No data available

Solvent content: No data available

Evaporation rate: not applicable

**Further Information**

No data available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No data available

**10.2. Chemical stability**

The product is under normal ambient conditions (room temperature) chemically stable.

**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 (CO<sub>2</sub>). Carbon monoxide Nitrogen oxides (NO<sub>x</sub>).**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in GB CLP Regulation****Acute toxicity**

**Safety Data Sheet**

according to UK REACH Regulation

**Fmoc-L-Aza-OH**

Revision date: 14.08.2017

Product code: FAA1820

Page 6 of 7

Based on available data, the classification criteria are not met.  
No data available

**Irritation and corrosivity**

Causes skin irritation.  
Causes serious eye irritation.  
Harmful by inhalation, in contact with skin and if swallowed.  
Irritating to eyes, respiratory system and skin.

**Sensitising effects**

Based on available data, the classification criteria are not met.  
No data available

**Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.  
No data available

**STOT-single exposure**

May cause respiratory irritation. (Fmoc-L-Dap(N3)-OH)

**STOT-repeated exposure**

Based on available data, the classification criteria are not met.  
No data available

**Aspiration hazard**

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

**Specific effects in experiment on an animal**

No data available

**Practical experience**

No data available

**SECTION 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

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

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.

**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)**

**Safety Data Sheet**

according to UK REACH Regulation

**Fmoc-L-Aza-OH**

Revision date: 14.08.2017

Product code: FAA1820

Page 7 of 7

<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of these transport regulations.
<b>Marine transport (IMDG)</b>	
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of these transport regulations.
<b>Air transport (ICAO-TI/IATA-DGR)</b>	
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of these transport regulations.

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information****Additional information**

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

**National regulatory information**

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****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**

Warning - substance not yet tested completely.

The product is intended for research, analysis and scientific education.

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

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 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 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.