# SAFETY DATA SHEET

Version 6.0 Revision Date 05/26/2018 Print Date 11/18/2018

#### 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : Fmoc-Leu-OPfp

Product Number : 47468 Brand : Aldrich

CAS-No. : 86060-88-0

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

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.

3050 Spruce Street ST. LOUIS MO 63103 UNITED STATES

Telephone : +1 314 771-5765 Fax : +1 800 325-5052

1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

#### 2. HAZARDS IDENTIFICATION

# 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

## 2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms : Fmoc-<SC>L</>-leucine pentafluorophenyl ester

Molecular weight : 519.46 g/mol CAS-No. : 86060-88-0

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

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#### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

#### If inhaled

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

### 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. FIREFIGHTING MEASURES

# 5.1 Extinguishing media

#### Suitable extinguishing media

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

#### 5.2 Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NOx), Hydrogen fluoride

## 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

No data available

## 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

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature 2 - 8 °C

Storage class (TRGS 510): 13: Non Combustible Solids

#### 7.3 Specific end use(s)

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

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

# Components with workplace control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

# Appropriate engineering controls

General industrial hygiene practice.

## Personal protective equipment

## Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### Skin 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.

#### **Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## Control of environmental exposure

Do not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

a) Appearance

### 9.1 Information on basic physical and chemical properties

Form: solid

u)	Appearance	i oiiii. oolid
b)	Odour	No data available
c)	Odour Threshold	No data available
d)	рН	No data available
e)	Melting point/freezing point	No data available
f)	Initial boiling point and boiling range	No data available
g)	Flash point	No data available
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapour pressure	No data available
I)	Vapour density	No data available
m)	Relative density	No data available
n)	Water solubility	No data available
0)	Partition coefficient: n-octanol/water	No data available
p)	Auto-ignition	No data available

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temperature

q) Decomposition temperature

No data available

r) Viscosity No data available
 s) Explosive properties No data available
 t) Oxidizing properties No data available

### 9.2 Other safety information

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

No data available

#### 10.5 Incompatible materials

Strong oxidizing agents

#### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Hydrogen fluoride

Other decomposition products - No data available

In the event of fire: see section 5

#### 11. TOXICOLOGICAL INFORMATION

# 11.1 Information on toxicological effects

# **Acute toxicity**

## Skin corrosion/irritation

**Irritations** 

## Serious eye damage/eye irritation

slight irritation

## Respiratory or skin sensitisation

## Germ cell mutagenicity

### Carcinogenicity

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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's

list of regulated carcinogens.

## Reproductive toxicity

## Specific target organ toxicity - single exposure

Acute oral toxicity - Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

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## Specific target organ toxicity - repeated exposure

#### **Aspiration hazard**

#### **Additional Information**

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Quantitative data on the toxicity of this product are not available.

Further data:

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

## 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

### 12.2 Persistence and degradability

### 12.3 Bioaccumulative potential

### 12.4 Mobility in soil

#### 12.5 Results of PBT and vPvB assessment

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

#### 12.6 Other adverse effects

We have no quantitative data concerning the ecological effects of this product.

Further information on ecology

Discharge into the environment must be avoided.

#### 13. DISPOSAL CONSIDERATIONS

# 13.1 Waste treatment methods

### **Product**

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

## Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

**IMDG** 

Not dangerous goods

**IATA** 

Not dangerous goods

## 15. REGULATORY INFORMATION

## SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### **SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

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#### No SARA Hazards

### **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

## Pennsylvania Right To Know Components

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**New Jersey Right To Know Components** 

CAS-No. Revision Date

Fmoc-L-leucine pentafluorophenyl ester 86060-88-0

# California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

### 16. OTHER INFORMATION

#### **HMIS Rating**

Health hazard: 0
Chronic Health Hazard:
Flammability: 0
Physical Hazard 0

**NFPA Rating** 

Health hazard: 0
Fire Hazard: 0
Reactivity Hazard: 0

#### **Further information**

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### **Preparation Information**

Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

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