

Rev 03 11/2020

## SAFETY DATA SHEET

Product Name Fmoc-L-Leu-OH

#### **SECTION 1: IDENTIFICATION**

#### 1.1 GHS Product identifier

Product name (2S)-2-(9H-fluoren-9-ylmethoxycarbonylamino)-4-methylpentanoic acid

#### 1.2 Other means of identification

Cas No. 35661-60-0

Other names N-[(9H-Fluoren-9-ylmethoxy)carbonyl]-L-leucine

#### 1.3 Recommended use of the chemical and restrictions on use

Identified uses For industry use only.
Uses advised against no data available

1.4 Supplier's details

Company CEM Corporation

3100 Smith Farm Rd Matthews, NC 28106

1.5 Emergency phone number

Emergency phone number 704-821-7015

Service hours Monday to Friday, 8:30am-5pm (EST)

# **SECTION 2: HAZARD(S) IDENTIFICATION**

#### 2.1 Classification of the substance or mixture

Not classified.

# 2.2 GHS label elements, including precautionary statements

Pictogram(s) No symbol Signal word No signal word.

Hazard statement(s) none

Precautionary statement(s)

Prevention none. Response none

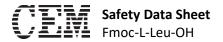
Storage none Disposal none

#### 2.3 Other hazards which do not result in classification

None

# **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	Common names and	CAS No	EC	Part
	svnonvms		Number	Number



Part Number: 600711 Rev 03 11/2020

(2S)-2-(9H-fluoren-9-	(2S)-2-(9H-fluoren-9-	35661-60-0	None	A011
ylmethoxycarbonylamino)	ylmethoxycarbonylamino)			
-4-methylpentanoic acid	-4-methylpentanoic acid			

#### **SECTION 4: FIRST-AID MEASURES**

#### 4.1 Description of necessary 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. Consult a physician.

# In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## 4.2 Most important symptoms/effects, acute and delayed

no data available

# 4.3 Indication of immediate medical attention and special treatment needed, if necessary

no data available

# **SECTION 5: FIRE-FIGHTING MEASURES**

#### 5.1 Extinguishing media

Suitable extinguishing media

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

# 5.2 Specific hazards arising from the chemical

no data available

#### 5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

# 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

#### **6.2 Environmental precautions**



Part Number: 600711 Rev 03 11/2020

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

# 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal

# **SECTION 7: HANDLING AND STORAGE**

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

#### 7.2 Conditions for safe storage, including any incompatibilities

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

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

## 8.1 Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

#### 8.2 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

# 8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

# **Skin protection**

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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 EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### **Respiratory protection**

Wear dust mask when handling large quantities.



Rev 03 11/2020

#### Thermal hazards

no data available

#### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Physical state White to off-white crystalline powder

no data available

Colourno data availableOdourno data available

Melting point/ freezing point
Boiling point or initial boiling point

and boiling rangeno data availableFlammabilityno data available

Lower and upper explosion limit /

flammability limitno data availableFlash pointno data availableAuto-ignition temperatureno data availableDecomposition temperatureno data availablepHno data availableKinematic viscosityno data availableSolubilityno data available

Partition coefficient n-octanol/water

(log value)no data availableVapour pressureno data available

**Density and/or relative density**no data available **Relative vapour density**no data available

Particle characteristics no data available

#### **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

no data available

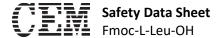
# 10.5 Incompatible materials

no data available

# 10.6 Hazardous decomposition products

no data available

# **SECTION 11: TOXICOLOGICAL INFORMATION**



Rev 03 11/2020

# **Acute toxicity**

Oral: no data available

inhalation: no data available

Dermal: no data available

Skin corrosion/irritation

no data available

Serious eye damage/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

STOT-single exposure

no data available

**STOT-repeated exposure** 

no data available

# **Aspiration hazard**

no data available

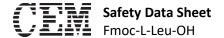
# SECTION 12: ECOLOGICAL INFORMATION (NON-MANDATORY) 12.1Toxicity

Toxicity to fish: no data available

Toxicity to daphnia and other aquatic invertebrates: no data available

Toxicity to algae: no data available

Toxicity to microorganisms: no data available



Rev 03 11/2020

#### 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 Other adverse effects

no data available

# **SECTION 13: DISPOSAL CONSIDERATIONS (NON-MANDATORY) 13.1 Disposal methods**

#### **Product**

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

# **Contaminated packaging**

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

# **SECTION 14: TRANSPORT INFORMATION (NON-MANDATORY)**

#### 14.1 UN Number

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

#### 14.2 UN Proper Shipping Name

ADR/RID: unknown IMDG: unknown IATA: unknown

# 14.3 Transport hazard class(es)

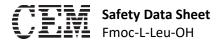
ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

# 14.4 Packing group, if applicable

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

# **14.5 Environmental hazards**ADR/RID: no IMDG: no IATA: no **14.6 Special precautions for user**

no data available



Rev 03 11/2020

# 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

# **SECTION 15: REGULATORY INFORMATION (NON-MANDATORY)**

15.1 Safety, health and environmental regulations specific for the product in question

#### **SECTION 16: OTHER INFORMATION**

Chemical Name	Common names and synonyms	CAS No	EC Number		Part Number	
(2S)-2-(9H-fluoren-9-	(2S)-2-(9H-fluoren-9-	35661-60-0	None		A011	
ylmethoxycarbonylamino)	ylmethoxycarbonylamino)					
-4-methylpentanoic acid	-4-methylpentanoic acid					
European Inventory of Existing Commercial Chemical Substances (EINECS)					Listed.	
EC Inventory					Listed.	
United States Toxic Substances Control Act (TSCA) Inventory					Not Listed.	
China Catalog of Hazardous chemicals 2015					Not Listed.	
New Zealand Inventory of Chemicals (NZIoC)					Not Listed.	
Philippines Inventory of Chemicals and Chemical Substances (PICCS)					Not Listed.	
Vietnam National Chemical Inventory					ot Listed.	
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)					Listed.	

#### Information on revision

Revision Date Aug 08/2020

# **Abbreviations and acronyms**

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average STEL: Short term exposure limit LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

#### References

IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home

HSDB - Hazardous Substances Data Bank, website:

https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/

eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple



Part Number: 600711 Rev 03 11/2020

ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: htt
p://www.phmsa.dot.gov/hazmat/library/erg
Germany GESTIS-database on hazard substance, website:
http://www.dguv.de/ifa/gestis/gestisstoffdatenbank/index-2.jsp
ECHA - European Chemicals Agency, website: https://echa.europa.eu/

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.