

SAFETY DATA SHEET **Fmoc-Lys(Alloc)-OH**

SECTION 1: IDENTIFICATION

| GHS Product identifier | | |
|---|------------------------------------|--|
| Product name | NaFmoc-N&Alloc-L-lysine | |
| Other means of identification | | |
| Cas No. | 146982-27-6 | |
| Other names | NaFmoc-N&Alloc-L-lysine | |
| Recommended use of the chemical and restrictions on use | | |
| Identified uses | For industry use only. | |
| Uses advised against | no data available | |
| Supplier's details | | |
| Company | CEM Corporation | |
| | 3100 Smith Farm Rd | |
| | Matthews, NC 28106 | |
| Emergency phone number | | |
| Emergency phone number | 704-821-7015 | |
| Service hours | Monday to Friday, 8:30am-5pm (EST) | |

SECTION 2: HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

Not classified.

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 | | |
| Other hazards which do not result in classification | | | |
| none | | | |
| | | | |

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS



| Chemical Name | Common names and | CAS No | EC | Part |
|-------------------------|--------------------|-------------|--------|--------|
| | synonyms | | Number | Number |
| NaFmoc-N&Alloc-L-lysine | Fmoc-Lys(Alloc)-OH | 146982-27-6 | None | A044 |

SECTION 4: FIRST-AID MEASURES

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.

Most important symptoms/effects, acute and delayed no data available Indication of immediate medical attention and special treatment needed, if necessary

no data available

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media

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

Specific hazards arising from the chemical
 no data available
Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

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.

Environmental precautions

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

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

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.

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

Control parameters

Occupational Exposure limit values no data available Biological limit values no data available

Appropriate engineering controls

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

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.

Thermal hazards

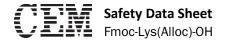
no data available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| Physical state Colour Odour Melting point/ freezing point | White to off-white crystalline powder no data available no data available no data available |
|--|--|
| Boiling point or initial boiling point | |
| and boiling range | no data available |
| Flammability | no data available |
| Lower and upper explosion limit / | |
| flammability limit | no data available |
| Flash point | no data available |
| Auto-ignition temperature | no data available |
| Decomposition temperature | no data available |
| рН | no data available |
| Kinematic viscosity | no data available |
| Solubility | no data available |
| Partition coefficient n-octanol/water | |
| (log value) | no data available |
| Vapour pressure | no 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

Reactivity no data available Chemical stability Stable under recommended storage conditions. Possibility of hazardous reactions no data available Conditions to avoid no data available Incompatible materials no data available Hazardous decomposition products no data available



SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Oral: no data available inhalation: no data available Dermal: no data available

Skin corrosion/irritation no data available

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)

Toxicity

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

Persistence and degradability

no data available

Bioaccumulative potential



no data available

Mobility in soil No data available

Other adverse effects no data available

SECTION 13: DISPOSAL CONSIDERATIONS (NON-MANDATORY)

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14: TRANSPORT INFORMATION (NON-MANDATORY)

Land transport (DOT) Not classified as dangerous in the meaning of transport regulations. Air transport (IATA) Not classified as dangerous in the meaning of transport regulations. Sea transport (IMDG) Not classified as dangerous in the meaning of transport regulations.

SECTION 15: REGULATORY INFORMATION (NON-MANDATORY)

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

United States of America

SARA 313

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 302

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

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.



This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311. Table 117.3. DEA List I Not listed **DEA List II** Not listed **US State Regulations Massachusetts Right To Know** Remarks No components are subject to the Massachusetts Right to Know Act. **California Prop 65 Components** This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects. **Notification status** TSCA: Not Listed on TSCA inventory. For Research and Development Use only. Not For Manufacturing or Commercial Purposes. DSL: This product contains one or several components that are not on the Canadian DSL nor NDSL.

SECTION 16: OTHER INFORMATION

Information on revision

Revision Date Nov/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

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.