# **SAFETY DATA SHEETS**

According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS) - Sixth revised edition

Creation Date: Aug 12, 2017 Revision Date: Aug 12, 2017

### 1.Identification

### 1.1 GHS Product identifier

**Product name** Nalpha-Fmoc-L-tyrosine

1.2 Other means of identification

Product number Fmoc-yrosine

1.3 Recommended use of the chemical and restrictions on use For industry use only. no data available

Uses advised against

1.4 Supplier's details

Company Echemi.com Echemi.com Telephone Echemi.com Echemi.com

1.5 Emergency phone number

**Emergency phone number** Echemi.com

Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

### 2. Hazard identification

### 2.1 Classification of the substance or mixture

no data available

# 2.2 GHS label elements, including precautionary statements

Pictogram(s) Signal word no data available Hazard statement(s) no data available Precautionary statement(s)

no data available Response no data available

no data available Storage Disposal no data available

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

no data available

# 3. Composition/information on ingredients

### 3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Nalpha-Fmoc-L-tyrosine	Nalpha-Fmoc-L-tyrosine	92954-90-0	none	100%

# 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 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

### 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

#### 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

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.

# 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.

### 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

# Thermal hazards

no data available

### 9.Physical and chemical properties

Physical state White to off-white crystalline powder Colour no data available

 Odour
 no data available 207°C(lit.)

 Melting point or initial boiling point and boiling Point or initial boiling point and boiling range
 112°C(lit.)

 Flammability
 no data available Lower and upper explosion limit / flammability limit no data available Flash point
 16°C(lit.)

 Auto-ignition temperature
 no data available Decomposition temperature
 no data available no data available no data available pH

 Kinematic viscosity
 no data available no

Solubility
Partition coefficient n-octanol/water (log value)
Vapour pressure
Density and/or relative density
Relative vapour density
Particle characteristics
no data available
1.336g/cm3
no data available
no data available
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

no data available

### 10.6 Hazardous decomposition products

no data available

# 11. Toxicological information

#### 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

### 12. Ecological information

### 12.1 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

# 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

# 13.Disposal considerations

# 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.

# 14.Transport information

### 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

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

no data available

# 15.Regulatory information

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

Chemical name	Common names and synonyms	CAS number	EC number
Nalpha-Fmoc-L-tyrosine	Nalpha-Fmoc-L-tyrosine	92954-90-0	none
European Inventory of Existing Commercial Chemical Substances (EINECS)			
EC Inventory			Not 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 Subst	ances (PICCS)		Not Listed.
Vietnam National Chemical Inventory			Not Listed.
Chinese Chemical Inventory of Existing Chemical Subst	tances (China IECSC)		Not Listed.

# 16.Other information

### Information on revision

Aug 12, 2017 Aug 12, 2017 Creation Date

### 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 Manthine 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: http://www.phmsa.dot.gov/hazmat/library/erg
- Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- ECHA European Chemicals Agency, website: https://echa.europa.eu/

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