

# SAFETY DATA SHEET Fmoc-L-Ser(Trt)-OH

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

GHS Product identifier		
Product name	Fmoc-O-trityl-L-serine	
Other means of identification		
Cas No.	111061-56-4	
Other names	Fmoc-L-Ser(Trt)-OH	
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
Fmoc-O-trityl-L-serine	Fmoc-L-Ser(Trt)-OH	111061-56-4	None	A034

#### **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.

#### 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

## 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.				
Notificati	ion status				
notinout	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			
	DOL:	not on the Canadian DSL nor NDSL.			
		Hot on the canadian DSE nor NDSE.			

## **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=O&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.