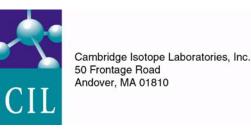
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# **MATERIAL SAFETY DATA SHEET**

#### CHEMICAL PRODUCT AND COMPANY INFORMATION

L-ASPARAGINE-N-FMOC (U-13C4, 97-99%; U-15N2, 97-99%) **Product Description** 

Cambridge Isotope Laboratories, Inc. 50 Frontage Rd ANDOVER, MA 01810 USA

E-mail cilsales@isotope.com Web Site www.isotope.com

**Phone Numbers** 

**Emergency Contact** Chemtrec

**Emergency Phone** 1-800-424-9300 (24 hours)

**Customer Service** 

Phone

1-800-322-1174 (8:30-5:30 EST)

Transportation 1-202-483-7616 (24 hours)

#### 2 HAZARDS IDENTIFICATION

#### **OSHA Hazards**

No known OSHA hazards

### **HMIS Ratings**

Physical 0 Flammability 0 Health 0

### NFPA Codes

0 Fire Health 0 0 Reactivity

### Potential Health Effects

Eyes Contact may cause eye irritation. Ingestion May be harmful if swallowed.

Inhalation May be harmful if inhaled. May cause respiratory tract irritation. Skin May be harmful if absorbed through skin. May cause skin irritation.



# **MATERIAL SAFETY DATA SHEET**

#### 3 COMPOSITION / INFORMATION ON INGREDIENTS

Composition / Information on Ingredients

Synonyms Fmoc-Asn-OH. Fmoc-L-asparagine

Chemical Formula H2\*N\*CO\*CH2\*CH(\*NH-FMOC)\*COOH

Molecular Weight 360.31

CAS No. 71989-16-7 (unlabeled)

EC No. 276-252-2

#### 4 FIRST AID MEASURES

First Aid Measures

Eyes Flush eyes with water as a precaution.

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

physician.

Inhalation If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a

physician.

Skin Wash with soap and plenty of water. Consult a physician.

Additional Information

Move out of dangerous area. Consult a physician and show this safety data sheet.

#### 5 FIRE FIGHTING MEASURE

Fire Fighting Measures

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

Fire Fighting

Wear self contained breathing apparatus for fire fighting if necessary.

Equipment

### 6 ACCIDENTAL RELEASE MEASURES

Accidental Release Measures

Personal Avoid dust formation.

Precautions

Page 3 of 7

# **MATERIAL SAFETY DATA SHEET**

Environmental

Do not empty into drains.

Precautions

Methods and materials for containment and

cleanup

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

#### 7 HANDLING AND STORAGE

Precautions for Safe Handling

Handling Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for

preventive fire protection.

Conditions for Safe Storage

Storage Store refrigerated (-5 C to 5 C) and desiccated.

#### **EXPOSURE CONTROL / PERSONAL PROTECTION** 8

Personal Protecton

Eyes - Face Wear safety glasses with side shields (or goggles) and a face shield.

Skin Choose body protection according to the amount and concentration of the dangerous substance at

the work place.

Respiratory When appropriate, use NIOSH/CEN approved respirator.

**Protective Clothing** Wear suitable protective clothing and gloves.

Work Hygienic

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks

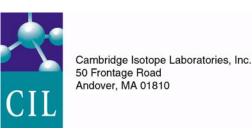
**Practices** and at the end of workday.

### PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties (Unlabeled Compound)

Form Solid

рΗ No data available Melting Point 190 °C (374 °F) **Boiling Point** No data available



MATERIAL SAFETY DATA SHEET

Flashpoint Lower Explosion No data available No data available

Limit

Upper Explosion

Limit

No data available

Solubility in Water Auto Ignition No data available No data available

Temperature

### 10 STABILITY AND REACTIVITY

Stability and Reactivity

Chemical Stability Stable if stored under recommended conditions.

Possibility of

Not available

Hazardous Reactions

Conditions to Avoid Not available

Hazardous

products

decomposition

Formed under fire conditions: Carbon oxides, nitrogen oxides

Materials to avoid Strong oxidizing agents

### 11 TOXICOLOGICAL INFORMATION

**Acute Toxicity** 

Serious No data available

Damage/Eye Irritation

Skin No data available

Corrosion/Irritation

Inhalation No data available

Respiratory or Skin

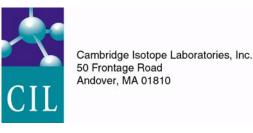
Sensitization

Not available

Germ Cell

Not available

Mutagenicity



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# **MATERIAL SAFETY DATA SHEET**

**IARC** No component of this product present at levels greater than or equal to 0.1% is identifiable 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 identifiable 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 identifiable 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 identified as a

carcinogen or potential carcinogen by OSHA.

Reproductive **Toxicity** 

Not available

Specific Target Organ Toxicity

Single Exposure No data available Repeated Exposure No data available

Signs and Symptoms of Exposure

The chemical, physical, and toxicological properties have not been thoroughly investigated.

Other Information

General Comments Not available

#### 12 **ECOLOGICAL INFORMATION**

#### **Toxicity**

Persistance and Degradability

Not available

Bioaccumulative

Potential

Not available

Mobility in Soil

Not available

PBT and vPvB

Not available

Assessment

Other Adverse

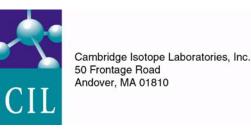
Not available

**Effects** 

#### **DISPOSAL CONSIDERATIONS** 13

**Disposal Considerations** 

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# **MATERIAL SAFETY DATA SHEET**

**Product Disposal** 

Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.

#### TRANSPORT INFORMATION

Transportation Information-DOT/IATA/IMDG

Special Shipping

Notes

Not dangerous goods.

#### 15 **REGULATORY INFORMATION**

Regulatory Information

No known OSHA hazards

SARA

Sara 302

No chemicals in this material are subject to the reporting requirements.

Component

Sara 313

No chemicals in this material are subject to the reporting requirements.

Component

#### STATE REGULATIONS

Massachusetts

No

Right to Know

Pennsylvania Right

Yes

to Know

New Jersey Right

Yes

to Know

California

Proposition 65

This product does not contain any chemicals known to State of California to cause cancer, birth

defects, or any other reproductive harm.

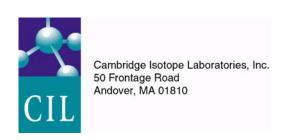
Canada

**DSL Status** No

#### OTHER INFORMATION 16

Manufacturer Disclaimer

This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.



# **MATERIAL SAFETY DATA SHEET**

Approved On Version Number

06/22/11