



Cambridge Isotope Laboratories, Inc.  
50 Frontage Road  
Andover, MA 01810

Number:  
Issue Date

NLM-3419  
06/21/11

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## MATERIAL SAFETY DATA SHEET

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### 1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Description L-GLUTAMINE-N-T-BOC (ALPHA-15N, 98%+)

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

E-mail [cilsales@isotope.com](mailto:cilsales@isotope.com)  
Web Site [www.isotope.com](http://www.isotope.com)

#### Phone Numbers

Emergency Contact Chemtrec  
Emergency Phone 1-800-424-9300 (24 hours)  
  
Customer Service 1-800-322-1174 (8:30-5:30 EST)  
Phone  
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

Fire 0  
Health 0  
Reactivity 0

#### 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.



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### 3 COMPOSITION / INFORMATION ON INGREDIENTS

#### Composition / Information on Ingredients

Chemical Formula	H <sub>2</sub> NCO(CH <sub>2</sub> ) <sub>2</sub> *CH(NH-t-BOC)*COOH
Molecular Weight	248.25
CAS No.	13726-85-7 (unlabeled)
EC No.	237-296-8

### 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 Equipment	Wear self contained breathing apparatus for fire fighting if necessary.

### 6 ACCIDENTAL RELEASE MEASURES

#### Accidental Release Measures

Personal Precautions	Avoid dust formation.
Environmental Precautions	Do not empty into drains.



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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 - 5 C) and dessicated. Protect from light.

### 8 EXPOSURE CONTROL / PERSONAL PROTECTION

#### Personal Protection

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

### 9 PHYSICAL AND CHEMICAL PROPERTIES

#### Physical and Chemical Properties (Unlabeled Compound)

Form Powder

Color White

pH No data available

Melting Point 113 - 116 °C (235 - 241 °F)

Boiling Point No data available



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Flashpoint	No data available
Lower Explosion Limit	No data available
Upper Explosion Limit	No data available
Solubility in Water	No data available
Auto Ignition Temperature	No data available

### 10 STABILITY AND REACTIVITY

#### Stability and Reactivity

Chemical Stability     Stable if stored under recommended conditions.

### 11 TOXICOLOGICAL INFORMATION

#### Acute Toxicity

Serious  
Damage/Eye  
Irritation             No data available

Skin  
Corrosion/Irritation     No data available

Inhalation             No data available

Respiratory or Skin  
Sensitization         Not available

Germ Cell  
Mutagenicity             Not available

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



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### 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

Persistence and      Not available  
Degradability

Bioaccumulative      Not available  
Potential

Mobility in Soil      Not available

PBT and vPvB        Not available  
Assessment

Other Adverse        Not available  
Effects

## 13 DISPOSAL CONSIDERATIONS

### Disposal Considerations

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

## 14 TRANSPORT INFORMATION

### Transportation Information-DOT/IATA/IMDG

Special Shipping      Not dangerous goods.  
Notes



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### 15 REGULATORY INFORMATION

#### Regulatory Information

No known OSHA hazards

#### SARA

Sara 302 Component No chemicals in this material are subject to the reporting requirements.

Sara 313 Component No chemicals in this material are subject to the reporting requirements.

#### STATE REGULATIONS

Massachusetts Right to Know No

Pennsylvania Right to Know Yes

New Jersey Right to Know Yes

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 Listed on the Canadian NDSL list.

### 16 OTHER INFORMATION

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.

Approved On 06/21/11  
Version Number 1