

1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Description CYCLOLEUCINE (CARBOXYL-13C, 99%; 2,2,5,5-D4, 96%+)

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

Target Organ Effect, Toxic by ingestion

Target Organs

Brain

GHS Label Information

Signal Word Danger

Hazards Identification Skull & crossbones Exclamation mark

Hazard Statement(s)

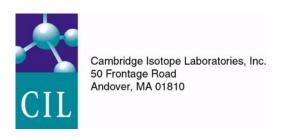
Harmful if swallowed.

Precautionary Statement(s)

Do not breathe dust/fume/gas/mist/vapours/spray.

Do not get in eyes, on skin, or on clothing.

Wear protective gloves/protective clothing/eye protection/face protection.



HMIS Ratings

Chronic Health *
Physical 0
Flammability 0
Health 2

NFPA Codes

Fire 0 Health 2 Reactivity 0

Potential Health Effects

Eyes Causes eye irritation. Ingestion Toxic if swallowed.

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

Skin May be harmful if absorbed through skin. May cause skin irritation.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Composition / Information on Ingredients

Synonyms 1-Aminocyclopentanecarboxylic acid

Chemical Formula H2NC5H4D4*COOH

Molecular Weight 134.17 CAS No. 201417-02-9 EC No. 200-144-6

4 FIRST AID MEASURES

First Aid Measures

Eyes Flush eye with water for 15 minutes. Get medical attention.

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

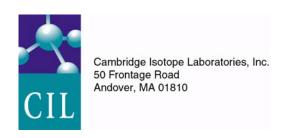
physician.

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

Additional

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

Information



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 Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate

Precautions ventilation.

Environmental

Precautions

Do not empty into drains.

Methods and materials for

containment and

cleanup

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for

disposal.

7 HANDLING AND STORAGE

Precautions for Safe Handling

Handling Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate

exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for Safe Storage

Storage Store at room temperature away from light and moisture.

8 EXPOSURE CONTROL / PERSONAL PROTECTION

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.

9 PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties (Unlabeled Compound)

Form Crystalline

Color White

pH No data available
Melting Point 320 °C (608 °F) - lit.
Boiling Point No data available
Flashpoint No data available
Lower Explosion No data available

Limit

Upper Explosion

Limit

No data available

Solubility in Water No data available
Auto Ignition No data available

Temperature

10 STABILITY AND REACTIVITY

Stability and Reactivity

Chemical Stability Stable if stored under recommended conditions.

Hazardous decomposition products

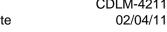
Formed under fire conditions: Carbon oxides, nitrogen oxides

Materials to avoid Strong oxidizing agents, Strong acids, Strong bases

11 TOXICOLOGICAL INFORMATION

Acute Toxicity

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MATERIAL SAFETY DATA SHEET

LD50 Oral Rat

290 mg/kg No data available

Serious Damage/Eye

Irritation

Skin No data available

Corrosion/Irritation

Inhalation No data available

Respiratory or Skin

Sensitization

Not available

Germ Cell

Not available

Mutagenicity

IARC No component of the 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 identified 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

Signs and Symptoms of Exposure

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

Other Information

RTECS GY2625000

ECOLOGICAL INFORMATION 12

Toxicity

Persistance and Degradability

Not available

Bioaccumulative

Potential

Not available

Mobility in Soil

Not available

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MATERIAL SAFETY DATA SHEET

PBT and vPvB

Not available

Assessment

Other Adverse

Not available

Effects

DISPOSAL CONSIDERATIONS 13

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

UN Number 2811

Proper Shipping

Toxic solids, organic, n.o.s., (1-Aminocyclopentane-1-carboxylic acid)

Name

6.1 **Hazard Class** Packing Group Ш Marine Pollutant No No

Poison Inhalation

Hazard

15 **REGULATORY INFORMATION**

Regulatory Information

Target Organ Effect, Toxic by ingestion

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

SARA 311/312 Hazards

Acute (Y/N) Υ

Chronic (Y/N) Υ



STATE REGULATIONS

Massachusetts

No

Right to Know

Pennsylvania Right

Yes

to Know

New Jersey Right

to Know

Yes

California

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

Proposition 65 defects, or any other reproductive harm.

Canada

DSL Status

Listed on the Canadian NDSL list.

ΕU

Hazard Harmful

Safety Statements

Do not breathe dust.

Avoid any inhalation, contact with skin and eyes. Wear suitable protective clothing and gloves.

Risk Statements

Harmful if swallowed.

16 OTHER INFORMATION

Additional MSDS Information

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

02/03/11

Version Number

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