



Cambridge Isotope Laboratories, Inc.
3 Highwood Drive
Tewksbury, MA 01876

Number:
Issue Date

CLM-1399
12/04/14

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MATERIAL SAFETY DATA SHEET

1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Description L-GLUCOSE (2-13C, 99%)

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 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 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	*CC5H12O6
Molecular Weight	181.15
CAS No.	921-60-8 (unlabeled)
EC No.	213-068-3

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.
Hazardous Decomposition	Hazardous decomposition products formed under fire conditions: Carbon oxides
Fire Fighting Equipment	Wear self contained breathing apparatus for fire fighting if necessary.

6 ACCIDENTAL RELEASE MEASURES

Accidental Release Measures



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Personal Precautions Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see section 8.

Environmental Precautions Do not empty into drains.

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 at room temperature away from light and moisture.

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



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Color	White
Odor	No data available
Odor Threshold	No data available
pH	No data available
Melting Point	153 - 156 °C (307 - 313 °F)
Boiling Point	No data available
Flashpoint	No data available
Evaporation Rate	No data available
Fammability	No data available
Lower Explosion Limit	No data available
Upper Explosion Limit	No data available
Solubility in Water	No data available
Partition Coefficient	No data available
Auto Ignition Temperature	No data available

10 STABILITY AND REACTIVITY

Stability and Reactivity

Chemical Stability	Stable if stored under recommended conditions.
Possibility of Hazardous Reactions	Not available
Conditions to Avoid	Not available
Hazardous decomposition products	Formed under fire conditions - carbon oxides
Materials to avoid	Strong oxidizing agents

11 TOXICOLOGICAL INFORMATION

Acute Toxicity

Serious Damage/Eye Irritation	No data available
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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
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	
RTECS	Not available
General Comments	Developmental Toxicity - Hamster - Multiple Specific Developmental Abnormalities: Endocrine system Developmental Toxicity - Hamster - Multiple Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Eye, ear. Specific Developmental Abnormalities: Musculoskeletal system.

12 ECOLOGICAL INFORMATION

Toxicity

Persistence and Degradability	Not available
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Bioaccumulative Potential Not available

Mobility in Soil Not available

PBT and vPvB Assessment Not available

Other Adverse Effects Not available

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 Notes Not dangerous goods.

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 Yes



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to Know
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 All components are on the Canadian DSL 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 12/04/14
Version Number 1