



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

Number:  
Issue Date

DLM-2941  
04/06/11

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## MATERIAL SAFETY DATA SHEET

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### 1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Description METHYLCYCLOPENTANE (D12, 99%)

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

Flammable liquid, Toxic by ingestion, Irritant

#### GHS Classification

Flammable liquids (Category 2)  
Acute toxicity, Oral (Category 4)  
Aspiration Hazard (Category 1)  
Skin irritation (Category 2)  
Eye irritation (Category 2)  
Specific Target Organ Toxicity - Single exposure (Category 3)

#### GHS Label Information

Signal Word Danger

#### Hazards Identification

Flame  
Health hazard  
Exclamation mark

#### Hazard Statement(s)



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Highly flammable liquid and vapour.  
Harmful if swallowed.  
May be fatal if swallowed and enters airways.  
Causes skin irritation.  
Causes serious eye irritation.  
May cause respiratory irritation.

### Precautionary Statement(s)

Keep away from heat/sparks/open flames/hot surfaces- No smoking.  
Avoid breathing dust/fume/gas/mist/vapours/spray.  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
IF IN EYES: Rinse with water for several minutes. Remove contact lenses.  
Do NOT induce vomiting.

### HMIS Ratings

Physical	0
Flammability	3
Health	2

### NFPA Codes

Fire	3
Health	2
Reactivity	0

### Potential Health Effects

Eyes	Causes eye irritation.
Ingestion	Toxic if swallowed. Aspiration hazard if swallowed - can enter lungs and cause damage.
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Skin	May be harmful if absorbed through the skin. Causes skin irritation.

## 3 COMPOSITION / INFORMATION ON INGREDIENTS

### Composition / Information on Ingredients

Chemical Formula	C5D9CD3
Molecular Weight	96.23
CAS No.	96-37-7 (unlabeled)
EC No.	202-503-2

## 4 FIRST AID MEASURES

### First Aid Measures

Eyes	Flush eye with water for 15 minutes. Get medical attention.
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.



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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	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

### 5 FIRE FIGHTING MEASURE

#### Fire Fighting Measures

Extinguishing Media	For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.
Fire Fighting Equipment	Wear self contained breathing apparatus for fire fighting if necessary.
Fire Fighting Procedures	Use water spray to cool unopened containers.

### 6 ACCIDENTAL RELEASE MEASURES

#### Accidental Release Measures

Personal Precautions	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental Precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and materials for containment and cleanup	Contain spillage, then collect with non-combustible absorbent material. Disposal should be in accordance with applicable Federal, State and local regulations.

### 7 HANDLING AND STORAGE

#### Precautions for Safe Handling



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Handling Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent build up of electrostatic charge.

### 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 Liquid

Color Colourless

pH No data available

Melting Point - 142.0 °C (- 223.6 °F)

Boiling Point 71.0 - 73.0 °C (159.8 - 163.4 °F)

Flashpoint - 29.0 °C (- 20.2 °F) - closed cup

Lower Explosion Limit 1.2% (V)

Upper Explosion Limit 8.35% (V)

Density 0.75 g/cm<sup>3</sup>

Solubility in Water No data available

Auto Ignition Temperature 329 °C (624 °F)



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### 10 STABILITY AND REACTIVITY

#### Stability and Reactivity

Chemical Stability Stable if stored under recommended conditions.

Possibility of  
Hazardous  
Reactions Vapors may form explosive mixture with air.

Conditions to Avoid Avoid Heat, Flames and Sparks.

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

Skin  
Corrosion/Irritation No data available

Inhalation The substance or mixture is known to cause human aspiration toxicity hazards.

Respiratory or Skin  
Sensitization Not available

Germ Cell  
Mutagenicity Not available

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.



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Reproductive Toxicity      Not available

### Specific Target Organ Toxicity

Single Exposure      Inhalation - May cause respiratory irritation  
Repeated Exposure      No data available

### Signs and Symptoms of Exposure

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

### Other Information

RTECS      GY4640000

## 12 ECOLOGICAL INFORMATION

### Toxicity

Persistence and Degradability      Not available

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

UN Number      2298



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Prop. Ship. Name	Methylcyclopentane
Hazard Class	3
Packing Group	II
Marine Pollutant	No
Poison Inhalation Hazard	No

### 15 REGULATORY INFORMATION

#### Regulatory Information

Flammable liquid, Toxic by ingestion, Irritant

#### 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.

#### SARA 311/312 Hazards

Fire (Y/N) Y

Acute (Y/N) Y

#### STATE REGULATIONS

Massachusetts Right to Know Yes

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 All components are on the Canadian DSL list.

#### EU

Hazard Flammable. Harmful.

#### Safety Statements

Keep away from sources of ignition - No smoking.

For waste disposal purposes, this product is not known to be defined or designated as hazardous by current



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provisions of the Federal (EPA) resource Conservation and Recovery Act (RCRA, 40CFR261).

Take precautionary measures against static discharges.

Wear suitable protective clothing.

If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

### Risk Statements

Highly flammable.

Irritating to eyes, respiratory system and skin.

Harmful: may cause lung damage 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**                      04/06/11  
**Version Number**                1