



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

Number:  
Issue Date

DLM-2835  
03/16/12

Page 1 of 7

## MATERIAL SAFETY DATA SHEET

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### 1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Description VERATROLE (4,5-D2, 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

Combustible Liquid, Harmful by ingestion

#### GHS Classification

Acute toxicity, Oral (Category 4)

#### GHS Label Information

Signal Word Warning

#### Hazards Identification

Exclamation mark

#### Hazard Statement(s)

Combustible liquid.  
Harmful if swallowed.

#### Precautionary Statement(s)

None

#### HMIS Ratings

Physical 0



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Page 2 of 7

## MATERIAL SAFETY DATA SHEET

---

Flammability 2  
Health 1

### NFPA Codes

Fire 2  
Health 1  
Reactivity 0

### Potential Health Effects

Eyes Contact may cause eye irritation.  
Ingestion 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.

## 3 COMPOSITION / INFORMATION ON INGREDIENTS

### Composition / Information on Ingredients

Synonyms Dimethoxybenzene  
Chemical Formula  $C_6D_2H_2(OCH_3)_2$   
Molecular Weight 140.18  
CAS No. 91-16-7 (unlabeled)  
EC No. 202-045-3

## 4 FIRST AID MEASURES

### First Aid Measures

Eyes Flush eyes with water as a precaution.  
Ingestion Do NOT induce vomiting. 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



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Number:  
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DLM-2835  
03/16/12

Page 3 of 7

## MATERIAL SAFETY DATA SHEET

---

**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

**Handling** Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the 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.



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Number:  
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DLM-2835  
03/16/12

Page 4 of 7

## MATERIAL SAFETY DATA SHEET

---

|                         |  |
|-------------------------|--|
| 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                      | Clear, Liquid               |
| Color                     | Colourless                  |
| pH                        | No data available           |
| Melting Point             | 15 °C (59 °F)               |
| Boiling Point             | 206 - 207 °C (403 - 405 °F) |
| Flashpoint                | 72 °C (162 °F) - closed cup |
| 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. |
| Conditions to Avoid              | Avoid Heat, Flames and Sparks.                 |
| Hazardous decomposition products | Formed under fire conditions: Carbon oxides    |
| Materials to avoid               | Strong oxidizing agents, Strong acids          |



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DLM-2835  
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Page 5 of 7

## MATERIAL SAFETY DATA SHEET

---

### 11 TOXICOLOGICAL INFORMATION

#### Acute Toxicity

LD50 Oral Rat 890 mg/kg  
Serious No data available  
Damage/Eye  
Irritation

Skin No data available  
Corrosion/Irritation

Inhalation No data available

Respiratory or Skin Not available  
Sensitization

Germ Cell Not available  
Mutagenicity

Carcinogenicity 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 Not available  
Toxicity

#### 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 CZ6475000



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Number:  
Issue Date

DLM-2835  
03/16/12

Page 6 of 7

## MATERIAL SAFETY DATA SHEET

---

### 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

|                          |  |
|--------------------------|--|
| Special Shipping Notes   | IMDG/IATA: Not dangerous goods                 |
| UN Number                | 1993   |
| NA Number                | 1993   |
| Prop. Ship. Name         | Combustable liquid, n.o.s., (Veratrole-4,5-D2) |
| Hazard Class             | CBL  |
| Packing Group            | III  |
| Marine Pollutant         | No   |
| Poison Inhalation Hazard | No   |

### 15 REGULATORY INFORMATION

#### Regulatory Information



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Number:  
Issue Date

DLM-2835  
03/16/12

Page 7 of 7

## MATERIAL SAFETY DATA SHEET

---

Combustible Liquid, Harmful 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

Fire (Y/N) Y

Acute (Y/N) Y

### 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 All components are on the Canadian DSL list.

### EU

Hazard Harmful

### Safety Statements

Wear suitable protective clothing.

### 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 03/16/12  
Version Number 2