



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

Number:
Issue Date

CLM-4833-L
10/28/11

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MATERIAL SAFETY DATA SHEET

1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Description TRIETHYL ORTHOACETATE (1,2-¹³C₂, 96%) 95% CHEMICAL PURITY

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

Flammable liquid, Irritant

GHS Classification

Flammable liquids (Category 2)
Skin irritation (Category 2)
Eye irritation (Category 2)

GHS Label Information

Signal Word Warning

Hazards Identification

Flame
Exclamation mark

Hazard Statement(s)

Flammable liquid and vapour.
Causes skin irritation.
Causes serious eye irritation.

Precautionary Statement(s)

IF IN EYES: Rinse with water for several minutes. Remove contact lenses.



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HMIS Ratings

Physical	0
Flammability	3
Health	2

NFPA Codes

Fire	3
Health	2
Reactivity	0

Potential Health Effects

Eyes	Causes eye irritation.
Ingestion	May be harmful if swallowed.
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	*CH ₃ *C(OCH ₂ CH ₃) ₃
Molecular Weight	164.21
CAS No.	78-39-7 (unlabeled)
EC No.	201-112-4

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.
Inhalation	If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin	Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Additional Information	Move out of dangerous area. Consult a physician and show this safety data sheet.



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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 Do not empty into 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. 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.



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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	No data available
Boiling Point	142 °C (288 °F)
Flashpoint	32 °C (90 °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.
Possibility of Hazardous Reactions	Vapors may form explosive mixture with air.



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Conditions to Avoid Avoid Heat, Flames and Sparks.

Hazardous
decomposition
products Formed under fire conditions: Ethanol

Materials to avoid Strong oxidizing agents

11 TOXICOLOGICAL INFORMATION

Acute Toxicity

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

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.



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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.
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14 TRANSPORT INFORMATION

Transportation Information-DOT/IATA/IMDG

UN Number	3272
Prop. Ship. Name	Esters, n.o.s., (TRIETHYL ORTHOACETATE)
Hazard Class	3
Packing Group	III
Marine Pollutant	No
Poison Inhalation Hazard	No

15 REGULATORY INFORMATION

Regulatory Information

Flammable liquid, Irritant



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