

# Safety Data Sheet

## Eucalyptol



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### 1. Identification

#### 1.1 Product Identifier

<b>Trade Name or Designation</b>	Isolate: Eucalyptol
<b>Brand</b>	True Terpenes
<b>Product Name Other Identifying Product Numbers:</b>	TTI-SG-EUCA-02, TTI-SG-EUCA-4000, TTI-SG-EUCA-5GAL, TTI-SG-EUCA-10GAL
<b>CAS No.</b>	470-82-6

#### 1.2 Recommended Use and Restrictions on Use

This product is intended for use only by adults 21 or older. For lawful use only. This product is concentrated and should not be used undiluted. Not for use with tobacco or nicotine. Avoid contact with the skin, eyes, wood surfaces, and fabrics. Keep out of reach of children and pets. Consumers should determine and conduct their own safety standards and testing. The United States Food and Drug Administration, Center for Disease Control and Prevention, and multiple state governments are investigating numerous instances of severe respiratory illnesses and deaths associated with the use of vaping products. Symptoms include breathing difficulty, shortness of breath, chest pain, mild to moderate gastrointestinal illness, fever, or fatigue. To date, True Terpenes has not received any evidence confirming that this product has caused any adverse health consequences. However, the State of Oregon has taken steps to investigate the use of certain additives in vape pens which have been associated with these illnesses, including, among other chemicals, Squalane, Squalene and MCT oil. In late September, Oregon regulators proposed regulations that would prohibit the use of such substances in vape applications. None of True Terpenes' products currently contain any such substances; however, prior formulations of its Viscosity product and MCTxTerps product line may have. The State of Oregon's investigation is ongoing and, at any time, could be broadened to include additional ingredients currently for sale. Multiple state governments have enacted laws banning the sale of flavors, including terpenes, in vaping applications; however, these laws are in flux. Do not use this product if you are pregnant, nursing, or a person with or at risk of serious health conditions including but not limited to: heart disease, high blood pressure, diabetes, respiratory illness, or a person taking medicine for depression or asthma. Discontinue use and consult your doctor if an adverse reaction occurs. This product is not intended to diagnose, treat, cure, or prevent any disease. This product has not been evaluated for safe use in e - cigarettes or any vaping application where the product ( s ) is / are intentionally vaporized and inhaled. Discontinue use of this product upon the earlier of expiration or one year from the date of purchase.

#### 1.3 Company Information

<b>Company</b>	True Terpenes
<b>Address</b>	2416 N Hayden Island Dr. Portland, OR 97217 USA
<b>Telephone</b>	(888) 954-8550
<b>Website</b>	TrueTerpenes.com

#### 1.4 Emergency Contact

<b>CHEMTREC (USA)</b>	800-424-9300
<b>CHEMTREC (International)</b>	1+ 703-527-3887

### 2. Hazard(s) Identification

#### 2.1 Classification of the Substance or Mixture

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For the full text of the Hazard Statements listed below, see Section 16.

Hazard Class	Category	Hazard Statement	Precautionary Statements
Flammable Liquids	Category 3	H226	P210,P233, P240, P241, P242, P243, P280, P303+ P361+P353, P370+P378, P403+P235, P501
Acute toxicity, oral	Category 5	H303	P302 + P352
Skin corrosion/irritation	Category 3	H315	P264, P280, P302+P352, P321, P332+P313, P362
Sensitization, skin	Category 1	H317	P261, P272, P280, P302+P352, P333+P313, P321, P363, P501
Hazardous to the aquatic environment, acute hazard	Category 3	H402	P273, P391, P501
Hazardous to the aquatic environment, long-term hazard	Category 3	H411	P273, P391, P501

### 2.2 GHS Label Elements

#### Pictograms



#### Signal Word

Warning

#### Hazard Statements

##### Hazard Number

H226  
H303  
H315  
H317  
H402  
H411

##### Hazard Statement

Flammable liquid and vapour.  
May be harmful if swallowed or in contact with skin.  
Causes skin irritation.  
May Cause an allergic skin reaction.  
Harmful to aquatic life.  
Toxic to aquatic life with long lasting effects.

#### Precautionary Statements

##### Precautionary Number

P210  
P233  
P240  
P241  
P242  
P243  
P280  
P303+P361+P353  
  
P370 + P378  
P403 + P235  
P501

##### Precautionary Statement

Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
Keep container tightly closed.  
Ground/bond container and receiving equipment.  
Use explosion-proof electrical/ ventilating/ lighting equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Wear protective gloves/ eye protection/ face protection.  
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.  
Store in a well-ventilated place. Keep cool.  
Dispose of contents/ container to an approved waste disposal plant.

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### 2.3 Hazard(s) not Otherwise Classified (HNOC) - none.

## 3. Composition / Information on Ingredients

### 3.1 Components of Substance or Mixture

Chemical Name	Common name and synonyms	Formula	Molecular Weight	CAS Number	EC Number
Eucalyptol	4,7,7- trimethyl-8-oxabicyclo[2.2.2]octane 1,8-cineole 1,3,3-trimethyl oxabicyclo(2.2.2)octane 1,8-oxi-do-para-menthane	C10H18O	154.25 g/mol	470-82-6	207-431-5

### Hazardous Components

Component	Classification	Concentration
Eucalyptol	Flam. Liq. 3; H226	90.00 - 100.00%

## 4. First-Aid Measures

### 4.1 General First Aid Information

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

**If inhaled** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of eye contact** Flush eyes with water as a precaution.

**In case of skin contact** Wash off with soap and plenty of water. Consult a physician.

**If swallowed** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most Important Symptoms / Effects, Acute and Delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

### 4.3 Indication of any medical attention or special treatment needed

No data available.

## 5. Fire-Fighting Measures

### 5.1 Extinguishing Media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Specific Hazards Arising from the Substance or Mixture

Carbon Oxides

### 5.3 Special Protective Equipment for Firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further Information

Use water spray to cool unopened containers.

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### 6. Accidental Release Measures

#### 6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

#### 6.2 Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

#### 6.3 Cleanup and Containment Methods and Materials

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

#### 6.4 Reference to Other Sections

For disposal see section 13.

### 7. Handling and Storage

#### 7.1. Precautions for Safe Handling and Storage Conditions

Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): 3: Flammable liquids

### 8. Exposure Controls / Personal Protection

#### 8.1 Control Parameters

Contains no substances with occupational exposure limit values.

#### 8.2 Exposure Controls

##### Engineering Controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

##### Eye/Face Protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

##### Skin Protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm

Break through time: 480 min

Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 30 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

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If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an

industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

### Body Protection

Impervious clothing, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Respiratory Protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. Aldrich - 147524 Page 5 of 9 If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Control of Environmental Exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## 9. Physical and Chemical Properties

### 9.1. Basic Physical and Chemical Properties

<b>Appearance</b>	Clear, colorless to pale yellow liquid
<b>Physical State</b>	Liquid
<b>Odor</b>	Camphor, Fresh
<b>Odor Threshold</b>	Data not available.
<b>pH</b>	Data not available.
<b>Melting Point / Freezing Point</b>	34.7 °F (1.5 °C)
<b>Initial Boiling Point and Boiling Range</b>	Data not available.
<b>Flash Point</b>	113.0 °F (45.0 °C) Closed Cup
<b>Evaporation Rate</b>	Data not available.
<b>Flammability</b>	Data not available.
<b>Flammability / Explosive Limits</b>	Data not available.
<b>Vapor Pressure</b>	0.25 kPa (77 °F (25 °C))
<b>Vapor Density</b>	Data not available.
<b>Relative Density</b>	0.93 g/cm <sup>3</sup> at 20 °C
<b>Solubility (Water)</b>	insoluble
<b>Partition Coefficient:</b>	2.74
<b>Auto-ignition Temperature</b>	Data not available.
<b>Decomposition Temperature</b>	Data not available.
<b>Viscosity</b>	Data not available.
<b>Explosive Properties</b>	Data not available.
<b>Oxidizing Properties</b>	Data not available.
<b>Relative Vapour Density</b>	Data not available.

## 10. Stability and Reactivity

### 10.1. Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

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### 10.2. Chemical Stability

Stable under recommended storage conditions.

### 10.3. Possibility of Hazardous Reactions

No dangerous reaction known under conditions of normal use.

### 10.4. Conditions to Avoid

Avoid temperatures exceeding the flash point. Contact with incompatible materials.

### 10.5. Incompatible Materials

Strong oxidizing agents

### 10.6. Hazardous Decomposition Products

Hazardous decomposition products formed under fire conditions. - Carbon oxides Other decomposition products - No data available In the event of fire: see section 5

## 11. Toxicological Information

### 11.1. Information on Toxicological Effects

#### Acute Toxicity - Oral Exposure

LD50 Oral - Rat - 2,480 mg/kg Remarks: (RTECS)

#### Acute Toxicity - Dermal Exposure

LD50 - > 5000 mg/kg

#### Acute Toxicity - Inhalation Exposure

Data not available.

#### Acute Toxicity - Other Information

Data not available.

#### Skin Corrosion and Irritation

Causes mild skin irritation.

Skin - rabbit: Result: No skin irritation

#### Serious Eye Damage and Irritation

Due to partial or complete lack of data the classification is not possible.

#### Respiratory Sensitization

Due to partial or complete lack of data the classification is not possible.

#### Skin Sensitization

May cause an allergic skin reaction.

#### Germ Cell Mutagenicity

Hamster - ovary: Sister chromatid exchange Due to partial or complete lack of data the classification is not possible.

#### Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified 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 identified 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

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carcinogen by OSHA.

### Reproductive Toxicity

Reproductive toxicity - rat - Subcutaneous: Effects on Newborn: Biochemical and metabolic.

### Specific Target Organ Toxicity from Single Exposure

Data not available.

### Specific Target Organ Toxicity from Repeated Exposure

Data not available.

### Aspiration Hazard

Data not available.

### Additional Toxicology Information

RTECS: OS9275000

Ingestion may provoke the following symptoms: Epigastric pain., Nausea, Vomiting, Dizziness, muscle weakness, tachycardia, Cyanosis, delirium, Convulsions, renal damage, Oedema

The following applies to ethers in general: the uptake of large quantities Nausea and vomiting after swallowing. Systemic effects: After uptake of large quantities:

Possible effects: somnolence, CNS disorders, drop in blood pressure However, when the product is handled appropriately, hazardous effects are unlikely to occur. Handle in accordance with good industrial hygiene and safety practice.

Stomach - Irregularities - Based on Human Evidence Stomach - Irregularities - Based on Human Evidence

## 12. Ecological Information

### 12.1. Toxicity

Toxicity to fish - LC50 - Pimephales promelas (fathead minnow) - 102 mg/l - 96 h(Cineole) Remarks: (ECOTOX Database)

### 12.2. Persistence and Degradability

Data not available.

### 12.3. Bioaccumulative Potential

Data not available.

### 12.4. Mobility in Soil

Data not available.

### 12.5. Other Adverse Ecological Effects

Discharge into the environment must be avoided.

## 13. Disposal Considerations

### 13.1 Waste Treatment Methods

#### Disposal instructions

Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations:** Dispose in accordance with all applicable regulations.

**Hazardous waste code:** Not established.

#### Waste from residues / unused products

Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

#### Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after the container is emptied. Empty containers

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should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport Information

#### 14.1 Transportation by Land-Department of Transportation (DOT, United States of America)

UN number: 1993                      Class: 3                      Packing group: III  
Proper shipping name: Flammable liquids, n.o.s. (Cineole)  
Poison Inhalation Hazard: No

#### 14.2 Transportation by Air - International Air Transport Association (IATA)

UN number: 1993                      Class: 3                      Packing group: III                      EMS-No: F-E, S-E  
Proper shipping name: FLAMMABLE LIQUID, N.O.S. (Cineole)

#### 14.3 Transportation -International Maritime Dangerous Goods (IMDG)

UN number: 1993                      Class: 3                      Packing group: III  
Proper shipping name: Flammable liquid, n.o.s. (Cineole)

#### Further Information

Data not available.

### 15. Regulatory Information

#### 15.1 Occupational Safety and Health Administration (OSHA) Hazards

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### 15.2 Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### 15.3 Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

#### 15.4 Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### 15.5 Massachusetts Right-to-Know Substance List

No components are subject to the Massachusetts Right to Know Act.

#### 15.6 Pennsylvania Right-to-Know Hazardous Substances

Cineole CAS#470-82-6

#### 15.7 New Jersey Worker and Community Right-to-Know Components

Cineole CAS#470-82-6

#### 15.8 California Proposition 65

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

### 16. Other Information

#### 16.1. Full Text of Hazard Statements referred to under sections 2 and 3.

Flam. Liq.                      Flammable Liquid

#### 16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class

Not Available.



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**Physical Hazards Not Otherwise Classified (PHNOC)**

Not Available.

**Health Hazards Not Otherwise Classified (HHNOC)**

Not Available.

**Biohazardous Infectious Materials Hazard Class**

Not Available.

### 16.3. National Fire Protection Association (NFPA) Rating

<b>Health Hazard</b>	2
<b>Fire Hazard</b>	2
<b>Reactivity Hazard</b>	0

### 16.4. HMIS Rating

<b>Health</b>	2
<b>Chronic Health Hazard</b>	*
<b>Flammability</b>	2
<b>Physical Hazard</b>	0

### 16.5 Document Revision

**Issue Date** 06/24/2021

**Revision Date** 01/10/2021

**Version #** 04

**Disclaimer**

True Terpenes cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to stay current with respect to applicable laws and regulatory investigations and findings, and to ensure safe conditions for use, handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on knowledge and experience currently available. To date, True Terpenes has not received any evidence confirming that this product has caused any adverse health consequences. This product has not been evaluated for safe use in e - cigarettes or any vaping application where the product (s) is / are intentionally vaporized and inhaled . True Terpenes has performed no testing on these products in e - cig / vaping applications . It is the sole responsibility of the individual(s) purchasing this product to assess its safety in the final application. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the handling, use, processing, storage, transportation, and disposal, and should not be considered as a guarantee or quality specification. The above information is based on data provided by and collected from recognized sources such as distributors, manufacturers, and technical groups and is considered to be accurate to the best of True Terpenes' knowledge-based upon current information as of the date of this document. It is the responsibility of the user to review all safety information about this product and determine its safety and suitability in their own uses, processes, and operations. Appropriate warnings and safe handling procedures should be provided to all handlers and users, taking into account the intended use and the specific.

**Revision Information**

This document has undergone significant changes and should be reviewed in its entirety.