

# Safety Data Sheet

## CADINENE



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### 1. Identification

#### 1.1 Product Identifier

<b>Trade Name or Designation</b>	Isolate: CADINENE
<b>Brand</b>	True Terpenes
<b>CAS No.</b>	29350-73-0

#### 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, and 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 to suggest that this product has caused any adverse health consequences. 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. Multiple state governments have banned the sale of flavors, including terpenes, in vaping applications. These laws are in flux.

#### 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

The substance does not meet the criteria for classification.

#### Precautionary Statements

##### Precautionary Number    Precautionary Statement

P210	Keep away from heat, sparks and open flame. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use only non-sparking tools.

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P261	Avoid breathing dust, fumes, gas, mist, vapors, or spray.
P264	Wash skin thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves, eye protection and skin protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P331	Do NOT induce vomiting.
P333 + P313	If skin irritation or rash occurs: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P391	Collect spillage.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant

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

## 3. Composition / Information on Ingredients

### 3.1 Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	EC Number
Cadinene	C15H26	204.357 g/mol	29350-73-0	Not available

### Hazardous Components

Component	Classification	Concentration
Cadinene	Not classified	90.00 - 100.00%

## 4. First-Aid Measures

### 4.1 General First Aid Information

<b>General Advice</b>	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
<b>If inhaled</b>	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Consult a physician if symptoms develop or persist.
<b>In case of eye contact</b>	Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists. Promptly wash eyes with plenty of water while lifting the eyelids.
<b>In case of skin contact</b>	Take off immediately all contaminated clothing. Get medical attention if irritation develops or persists. Wash skin thoroughly with soap and water for several minutes.
<b>If swallowed</b>	Call a physician or poison control center immediately. If swallowed, rinse mouth with water (only if the person is

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conscious). Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that the stomach vomit doesn't enter the lungs.

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

Direct contact with eyes may cause temporary irritation.

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

Not available.

## 5. Fire-Fighting Measures

### 5.1 Extinguishing Media

#### Suitable extinguishing media

Water spray, fog, CO<sub>2</sub>, dry chemical, or alcohol resistant foam.

#### Unsuitable Extinguishing media

Do NOT use a solid water stream as it may scatter and spread fire.

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

Fire may produce irritating, corrosive and/or toxic gases.

### 5.3 Special Protective Equipment for Firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection. Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.

### 5.4 Fire Fighting Equipment/Instructions

In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage. Ventilate closed spaces before entering them. Keep runoff water out of sewers and water sources. Dike for water control.

### 5.5 Further Information

Use water spray to cool unopened containers. Static charges generated by emptying package in or near flammable vapour may cause flash fire.

## 6. Accidental Release Measures

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

Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Eliminate all sources of ignition. Avoid contact with skin or inhalation of spillage, dust or vapor.

### 6.2 Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. Contact local authorities in case of spillage to drain/aquatic environment.

### 6.3 Cleanup and Containment Methods and Materials

Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps.

The product is immiscible with water and will spread on the water surface.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Prevent product from entering drains. Do not allow material to contaminate ground water system. Absorb in vermiculite, dry sand or earth and place into containers.

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Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste. Collect and dispose of spillage as indicated in section 13 of the SDS.

### 6.4 Reference to Other Sections

For disposal see section 13.

## 7. Handling and Storage

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

Do not handle or store near an open flame, heat or other sources of ignition. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Avoid breathing vapour. Avoid contact with eyes, skin and clothing. Avoid prolonged exposure. Wash thoroughly after handling. Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area.

## 8. Exposure Controls / Personal Protection

### 8.1 Control Parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure Controls

#### Engineering Controls

Use explosion-proof ventilation equipment to stay below exposure limits.

#### 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: 0.4 mm

Break through time: 480 min

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

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

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

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should not be construed as offering an approval for any specific use scenario.

### Body Protection

Complete suit protecting against chemicals, 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

Respiratory protection not required. If ventilation is insufficient, suitable respiratory protection must be provided.

### Control of Environmental Exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 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>	Herbaceous, Woody, Earthy
<b>Odor Threshold</b>	Data not available.
<b>pH</b>	Data not available.
<b>Melting Point / Freezing Point</b>	Data not available.
<b>Initial Boiling Point and Boiling Range</b>	Data not available.
<b>Flash Point</b>	> 200.0 °F (> 93.3 °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 mm Hg at 20 °C
<b>Vapor Density</b>	7.2
<b>Relative Density</b>	0.9129 g/cm <sup>3</sup> at 25 °C (77°F)
<b>Solubility (Water)</b>	Insoluble.
<b>Partition Coefficient</b>	Data not available.
<b>Auto-ignition Temperature</b>	501.8 - 503.6 °F (261 - 262 °C)
<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.

## 10. Stability and Reactivity

### 10.1. Reactivity

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

### 10.2. Chemical Stability

Stable under recommended storage conditions.

### 10.3. Possibility of Hazardous Reactions

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No dangerous reaction known under normal conditions of 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

No hazardous decomposition products if stored and handled as indicated.

## 11. Toxicological Information

### 11.1. Information on Toxicological Effects

#### Acute Toxicity - Oral Exposure

LD50 Oral - Rat - > 5,000 mg/kg

#### Acute Toxicity - Dermal Exposure

LD50 Dermal - Rabbit - > 5,000 mg/kg

#### Acute Toxicity - Inhalation Exposure

No adverse effects due to inhalation are expected.

#### Acute Toxicity - Other Information

Data not available.

#### Skin Corrosion and Irritation

Prolonged skin contact may cause temporary irritation.

#### Serious Eye Damage and Irritation

Direct contact with eyes may cause temporary irritation. .

#### Respiratory Sensitization

Data not available.

#### Skin Sensitization

This product is not expected to cause skin sensitization.

#### Germ Cell Mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

#### Carcinogenicity

OSHA Specifically Regulated Substances (29 CFR 1910. 1001-1050)  
Not listed.

#### Reproductive Toxicity

This product is not expected to cause reproductive or developmental effects.

#### Specific Target Organ Toxicity from Single Exposure

Not classified.

#### Specific Target Organ Toxicity from Repeated Exposure

Not classified.

#### Aspiration Hazard

Data not available.

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## 12. Ecological Information

### 12.1. Toxicity

This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

### 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

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal Considerations

### 13.1 Waste Treatment Methods

#### Product

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.

#### Hazardous Waste Code

Not established.

#### Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport Information

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

Not regulated as dangerous goods.

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

Not regulated as dangerous goods.

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

Not regulated as dangerous goods.

#### Further Information

Data not available.

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### 15. Regulatory Information

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

No OSHA hazards.

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

Not listed.

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

No SARA hazards

#### 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

Not regulated.

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

Not listed.

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

Not listed.

#### 15.8 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.

### 16. Other Information

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

Data not available.

#### 16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class	Not Available.
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

Health Hazard	1
Fire Hazard	1
Reactivity Hazard	0

#### 16.4. HMIS Rating

Health	1
Flammability	1
Physical Hazard	0

#### 16.5 Document Revision



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**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 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 to suggest that this product has caused any adverse health consequences. 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. It should not be considered as a guarantee or quality specification. 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 conditions and factors relating to such use in accordance with all applicable laws and regulations.

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