

Safety Data Sheet

DELTA 3-CARENE



Revision Date: 09/10/2019
Page 1 of 10

1. Identification

1.1 Product Identifier

Trade Name or Designation Isolate: DELTA 3-CARENE
Brand True Terpenes
CAS No. 13466-78-9

1.2 Recommended Use and Restrictions on Use

This product is intended for use only by adults 21 or older. This product is not to be used with tobacco or nicotine products. Consumers should determine and conduct their own safety standards and testing. Avoid contact with the skin, eyes, wood surfaces and fabrics. Keep out of the reach of children and pets. Do not use 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 or a person taking medicine for depression or asthma. Smoking and vaping may cause health problems. Discontinue use and consult your doctor if and adverse reaction occurs. This is not a smoking cessation product. 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.

1.3 Company Information

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

1.4 Emergency Contact

CHEMTREC (USA) 800-424-9300
CHEMTREC (International) 1+ 703-527-3887

2. Hazard(s) Identification

2.1 Classification of the Substance or Mixture

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
Skin Irritation	Category 2	H315	P264, P280, P302+P352, P321, P332+P313, P362
Skin Sensitisation	Category 1	H317	P261, P272, P280, P302+P352, P333+P313, P321, P363, P501
Aspiration hazard	Category 1	H304	P301+P310, P331, P405, P501
Chronic Aquatic Toxicity	Category 3	H412	P273, P391, P501

2.2 GHS Label Elements



Safety Data Sheet

DELTA 3-CARENE



Revision Date: 09/10/2019

Page 2 of 10

Pictograms



Signal Word

Danger

Hazard Statements

Hazard Number

Hazard Statement

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May Cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

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.
P243	Take precautionary measures against static discharge.
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



Safety Data Sheet

DELTA 3-CARENE



Revision Date: 09/10/2019
Page 3 of 10

3.1 Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	EC Number
δ 3-Carene	C10H16	136.23 g/mol	13466-78-9	236-719-3

Hazardous Components

Component	Classification	Concentration
δ 3-Carene	Flam. Liq. 3; Skin Irrit. 2; Skin Sens. 1; Asp. Tox. 1; Aquatic Chronic 2; H226, H304, H315, H317, H412	90.00 - 100.00%

4. First-Aid Measures

4.1 General First Aid Information

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

Dry powder Dry sand

Unsuitable Extinguishing media

Do NOT use water jet.

5.2 Specific Hazards Arising from the Substance or Mixture

Data not available.

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.



Safety Data Sheet

DELTA 3-CARENE



Revision Date: 09/10/2019

Page 4 of 10

6. Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Use personal protective equipment. Avoid breathing vapours, 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. 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. Discharge into the environment must be avoided.

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 contact with skin and eyes. 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

Components with workplace control parameters

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



Safety Data Sheet

DELTA 3-CARENE



Revision Date: 09/10/2019

Page 5 of 10

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 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

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. Discharge into the environment must be avoided.

9. Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Appearance	Clear, colorless to pale yellow liquid
Physical State	Liquid
Odor	Sweet, Pungent
Odor Threshold	Data not available.
pH	Data not available.
Melting Point / Freezing Point	Melting point/freezing point: < -80 °C (< -112 °F) at 1,013 hPa (760 mmHg) - OECD Test Guideline 102
Initial Boiling Point and Boiling Range	168 - 169 °C (334 - 336 °F) at 940 hPa (705 mmHg) - lit
Flash Point	47 °C (117 °F) at ca.1,013 hPa (760 mmHg) - closed cup
Evaporation Rate	Data not available.
Flammability	Data not available.
Flammability / Explosive Limits	Data not available.
Vapor Pressure	2.73 hPa (2.05 mmHg) at 20 °C (68 °F) - OECD Test Guideline 104
Vapor Density	Data not available.
Relative Density	0.857 g/cm ³ at 25 °C (77 °F) - lit
Solubility (Water)	0.0005 g/l at 20 °C (68 °F) - OECD Test Guideline 105 - slightly soluble
Partition Coefficient	log Pow: 4.38 at 37 °C (99 °F) - OECD Test Guideline 117
Auto-ignition Temperature	260 °C (500 °F) at 998 hPa (749 mmHg)
Decomposition Temperature	Data not available.
Viscosity	Data not available.



Safety Data Sheet

DELTA 3-CARENE



Revision Date: 09/10/2019

Page 6 of 10

Explosive Properties

Data not available.

Oxidizing Properties

Data not available.

10. Stability and Reactivity

10.1. Reactivity

Data not available.

10.2. Chemical Stability

Stable under recommended storage conditions.

10.3. Possibility of Hazardous Reactions

Data not available.

10.4. Conditions to Avoid

Heat, flames and sparks.

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 - 4,800 mg/kg

Acute Toxicity - Dermal Exposure

Data not available.

Acute Toxicity - Inhalation Exposure

Data not available.

Acute Toxicity - Other Information

Data not available.

Skin Corrosion and Irritation

Data not available.

Serious Eye Damage and Irritation

Eyes - Rabbit Result: No eye irritation (OECD Test Guideline 405)

Respiratory Sensitization

Data not available.

Skin Sensitization

- Guinea pig Result: May cause sensitisation by skin contact

Germ Cell Mutagenicity

Ames test

S. typhimurium

Result: negative

Carcinogenicity



Safety Data Sheet

DELTA 3-CARENE



Revision Date: 09/10/2019

Page 7 of 10

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 carcinogen by OSHA.

Reproductive Toxicity

Data not available.

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: FH8400000

12. Ecological Information

12.1. Toxicity

Data not available.

12.2. Persistence and Degradability

Biodegradability aerobic - Exposure time 28 d Result: 53% - Not readily biodegradable. (OECD Test Guideline 301B)

12.3. Bioaccumulative Potential

Data not available.

12.4. Mobility in Soil

Data not available.

12.5. Other Adverse Ecological Effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.

13. Disposal Considerations

13.1 Waste Treatment Methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Burn in a chemical incinerator equipped with an



Safety Data Sheet

DELTA 3-CARENE



Revision Date: 09/10/2019

Page 8 of 10

afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. Transport Information

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

UN number: 2319 Class: 3 Packing group: III

Proper shipping name: Terpene hydrocarbons, n.o.s.

Reportable Quantity (RQ):

Poison Inhalation Hazard: No

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

UN number: 2319 Class: 3 Packing group: III

Proper shipping name: Terpene hydrocarbons, n.o.s.

14.2 Transportation -International Maritime Dangerous Goods (IMDG)

UN number: 2319 Class: 3 Packing group: III EMS-No: F-E, S-D

Proper shipping name: TERPENE HYDROCARBONS, N.O.S.

Further Information

Data not available.

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

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

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

3-Carene CAS#13466-78-9

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

3-Carene CAS#13466-78-9

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.



Safety Data Sheet

DELTA 3-CARENE



Revision Date: 09/10/2019

Page 9 of 10

16. Other Information

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

Aquatic Chronic	Chronic aquatic toxicity
Asp. Tox.	Aspiration hazard
Flam. Liq.	Flammable liquids
Skin Irrit.	Skin Irritation
Skin Sens.	Skin sensitisation
H226	Flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

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	2
Fire Hazard	2
Reactivity Hazard	0

16.4. HMIS Rating

Health	2
Chronic Health Hazard	
Flammability	2
Physical Hazard	0

16.5 Document Revision

Issue Date	11/01/2018
Revision Date	09/10/2019
Version #	01

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 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 the best knowledge and experience currently available. 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 safe handling, use, processing, storage, transportation, and disposal and should not be considered as a guarantee or quality specification. This product has not been



Safety Data Sheet

DELTA 3-CARENE



Revision Date: 09/10/2019

Page 10 of 10

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 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 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 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.

