# Safety Data Sheet

## BETA PINENE



## 1. Identification

**1.1 Product Identifier**

| | |
|---|---|
| **Trade Name or Designation** | Isolate: BETA PINENE |
| **Brand** | True Terpenes |
| **CAS No.** | 127-91-3 |
| **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.<br>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 |
| Aspiration hazard | Category 1 | H304 | P301+P310, P331, P405, 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 |
| Acute Aquatic Toxicity | Category 1 | H400 | P273, P391, P501 |
| Chronic Aquatic Toxicity | Category 1 | H410 | P273, P391, P501 |

**2.2 GHS Label Elements**

**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. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**Precautionary Statements**

| Precautionary Number | Precautionary Statement |
|---|---|
| P210 | Keep away from heat/sparks/open flames/hot surfaces. 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/ fume/ gas/ mist/ vapours/ 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/ face 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/shower. |
| 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 |
|---|---|---|---|---|
| Beta Pinene | C10H16 | 136.24 g/mol | 127-91-3 | 204-872-5 |

**Hazardous Components**

| Component | Classification | Concentration |
|---|---|---|
| Beta Pinene | Flam. Liq. 3; Skin Irrit. 2; Skin Sens. 1; Asp. Tox. 1; Aquatic Acute 1; Aquatic Chronic 1; H226, H315, H317, H304, H400, H410 | 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 the person to 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.

**Unsuitable Extinguishing media**

Data not available.

**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.

## 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

**7.2. Conditions for safe storage, including any incompatibilities**

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.

Recommended storage temperature 2 - 8 °C
Storage class (TRGS 510): 3: Flammable liquids

## 8. Exposure Controls / Personal Protection

| Component | CAS Number | Value | Control Parameters | Basis | Remarks |
|---|---|---|---|---|---|
| **Beta Pinene** | **127-91-3** | **TWA** | **20 ppm** | **USA. ACGIH Threshold Limit Value (TLV)** | **Dermal Sensitization<br>Lung Irritation<br>Not classifiable as a human carcinogen varies** |

| | |
|---|---|
| | 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.<br><br>Full contact<br>Material: Nitrile rubber<br>Minimum layer thickness: 0.4 mm<br>Break through time: 480 min<br>Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)<br><br>Splash contact<br>Material: Nitrile rubber<br>Minimum layer thickness: 0.4 mm<br>Break through time: 480 min<br>Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)<br>data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374<br><br>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** | Resinous-Piney Odor |
| **Odor Threshold** | Data not available. |
| **pH** | Data not available. |
| **Melting Point / Freezing Point** | < 20°C (< -4 °F) at 1013 hPa |

| | |
|---|---|
| **Initial Boiling Point and Boiling Range** | > 166 - 179°C > 331 - 354 °F at 1013 hPa - OECD Test Guideline 103 |
| **Flash Point** | 39 °C (102 °F) at ca.1,013.25 hPa - closed cup - Regulation (EC) No. 440/2008, Annex, A.9 |
| **Evaporation Rate** | Data not available. |
| **Flammability** | Data not available. |
| **Flammability / Explosive Limits** | Data not available. |
| **Vapor Pressure** | Data not available. |
| **Vapor Density** | Data not available. |
| **Relative Density** | 0.87 g/cm3 at 20 °C (68°F) |
| **Solubility (Water)** | ca.0.00695 g/l at 20 °C (68 °F) |
| **Partition Coefficient** | Data not available. |
| **Auto-ignition Temperature** | Data not available. |
| **Decomposition Temperature** | Data not available. |
| **Viscosity** | Data not available. |
| **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**

Data not available.

**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**

Skin - EPISKIN Human Skin Model Test
Result: irritating

**Serious Eye Damage and Irritation**

Eyes - Rabbit
Result: slight irritation
(OECD Test Guideline 405)

**Respiratory Sensitization**

Local lymph node assay (LLNA) - Mouse
Result: positive
(OECD Test Guideline 429)

**Skin Sensitization**

Data not available.

**Germ Cell Mutagenicity**

Ames test
Salmonella typhimurium
Result: negative

**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 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**

Aspiration may cause pulmonary oedema and pneumonitis.

**Additional Toxicology Information**

RTECS: Not available.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. Ecological Information

**12.1. Toxicity**

Data not available.

**12.2. Persistence and Degradability**

2 Persistence and degradability
Biodegradability aerobic - Exposure time 28 d
Result: 76 % - Readily biodegradable.
(OECD Test Guideline 301D)

**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.
Very toxic to aquatic life with long lasting effects.

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

## 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 afterburner and scrubber but exert extra care in igniting as this material is highly flammable.

**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
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**

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**

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

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

Beta Pinene CAS-No. 127-91-3

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

Beta Pinene CAS-No. 127-91-3

**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.**

| | |
|---|---|
| Flam. Liq. | Flammable Liquids |
| Skin Irrit. | Skin Irritation |
| Skin Sens. | Skin Sensitizer |
| Asp. Tox. | Aspiration Hazard |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| H226 | Flammable liquid and vapor. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H304 | May be fatal if swallowed and enters airways . |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic 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** | 1 |
| **Fire Hazard** | 3 |
| **Reactivity Hazard** | 0 |

### 16.4. HMIS Rating

| | |
|---|---|
| **Health** | 1 |
| **Chronic Health Hazard** | |
| **Flammability** | 3 |
| **Physical Hazard** | 0 |

### 16.5 Document Revision

| | |
|---|---|
| **Issue Date** | 11/01/2018 |
| **Revision Date** | 09/13/2019 |
| **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 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. |