

SECTION 1: Identification**1.1 Product identifier**

Product name Sativa Blend
Brand True Terpenes

1.4 Supplier's details

Name True Terpenes
Address Portland , Oregon

Telephone (888) 954-8550
email info@TrueTerpenes.com

1.5 Emergency phone number(s)

Poison Control Help Line:
1 (800) 222-1222

SECTION 2: Hazard identification**2.1 Classification of the substance or mixture**

Not a hazardous substance or mixture.

2.2 GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Other hazards which do not result in classification

Not a hazardous substance or mixture.

SECTION 3: Composition/information on ingredients**3.2 Mixtures****Hazardous components**

1. Beta Caryophyllene
Concentration Not specified
CAS no. 87-44-5

2. Myrcene

Concentration Not specified
CAS no. 123-35-3

- Aspiration hazard (chapter 3.10), Cat. 1
- Eye damage/irritation (chapter 3.3), Cat. 2A
- Flammable liquids (chapter 2.6), Cat. 3
- Skin corrosion/irritation (chapter 3.2), Cat. 2

H226 Flammable liquid and vapor
H226 Flammable liquid and vapor
H304 May be fatal if swallowed and enters airways
H315 Causes skin irritation
H319 Causes serious eye irritation

3. Limonene

Concentration Not specified
EC no. 227-813-5
CAS no. 5989-27-5

- Acute toxicity, dermal (chapter 3.1), Cat. 5
- Acute toxicity, oral (chapter 3.1), Cat. 5
- Aspiration hazard (chapter 3.10), Cat. 1
- Flammable liquids (chapter 2.6), Cat. 3
- Hazardous to the aquatic environment - acute hazard (chapter 4.1), Cat. 1
- Hazardous to the aquatic environment - long-term hazard (chapter 4.1), Cat. 1
- Sensitization, skin (chapter 3.4), Cat. 1
- Skin corrosion/irritation (chapter 3.2), Cat. 2

H226 Flammable liquid and vapor
H303+H313 May be harmful if swallowed or in contact with skin
H304 May be fatal if swallowed and enters airways
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects

4. Humulene

Concentration Not specified
CAS no. 6753-98-6

- Eye damage/irritation (chapter 3.3), Cat. 2A
- Flammable liquids (chapter 2.6), Cat. 4
- Skin corrosion/irritation (chapter 3.2), Cat. 2
- Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3

H227	Combustible liquid
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

5. Alpha Pinene

Concentration	Not specified
CAS no.	80-56-8

- Aspiration hazard (chapter 3.10), Cat. 1
- Flammable liquids (chapter 2.6), Cat. 3
- Hazardous to the aquatic environment - acute hazard (chapter 4.1), Cat. 3
- Sensitization, skin (chapter 3.4), Cat. 1
- Skin corrosion/irritation (chapter 3.2), Cat. 2

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
H402	Harmful to aquatic life

6. Alpha Bisabolol

Concentration	Not specified
CAS no.	515-69-5

- Hazardous to the aquatic environment - acute hazard (chapter 4.1), Cat. 2
- Hazardous to the aquatic environment - long-term hazard (chapter 4.1), Cat. 2

H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

7. Beta Pinene

Concentration	Not specified
EC no.	No data available.
CAS no.	127-91-3

- Acute toxicity, dermal (chapter 3.1), Cat. 4
- Acute toxicity, inhalation (chapter 3.1), Cat. 4
- Acute toxicity, oral (chapter 3.1), Cat. 4
- Aspiration hazard (chapter 3.10), Cat. 1
- Eye damage/irritation (chapter 3.3), Cat. 2A
- Flammable liquids (chapter 2.6), Cat. 3
- Sensitization, skin (chapter 3.4), Cat. 1
- Skin corrosion/irritation (chapter 3.2), Cat. 2
- Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3

H226	Flammable liquid and vapor
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H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation

8. Nerolidol

Concentration	Not specified
CAS no.	7212-44-4

- Eye damage/irritation (chapter 3.3), Cat. 2A
- Hazardous to the aquatic environment - acute hazard (chapter 4.1), Cat. 1
- Hazardous to the aquatic environment - long-term hazard (chapter 4.1), Cat. 1

H319	Causes serious eye irritation
H410	Very toxic to aquatic life with long lasting effects

9. Phytol

Concentration	Not specified
CAS no.	7541-49-3

- Eye damage/irritation (chapter 3.3), Cat. 2A
- Skin corrosion/irritation (chapter 3.2), Cat. 2
- Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3

H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

10. Geranyl Acetate

Concentration	Not specified
CAS no.	105-87-3

- Eye damage/irritation (chapter 3.3), Cat. 2A
- Hazardous to the aquatic environment - acute hazard (chapter 4.1), Cat. 2
- Sensitization, skin (chapter 3.4), Cat. 1
- Skin corrosion/irritation (chapter 3.2), Cat. 2
- Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3

H315	Causes skin irritation
H315+H320	Causes skin and eye irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H401	Toxic to aquatic life

SECTION 4: First-aid measures**4.1 Description of necessary first-aid measures**

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 skin contact	Wash off with soap and plenty of water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and 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.
Personal protective equipment for first-aid responders	No data available.

4.2 Most important symptoms/effects, acute and delayed

No data available.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

No data available.

SECTION 5: Fire-fighting measures**5.2 Specific hazards arising from the chemical**

Beta Caryophyllene: Carbon oxides.

Limonene: Static charges generated by emptying package in or near flammable vapor may cause flash fire. Fire may produce irritating, corrosive and / or toxic gases.

Phytol: No data available.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

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 vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.2 Environmental precautions

No data available.

6.3 Methods and materials for containment and cleaning up

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.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition. No smoking. Take measures to prevent the buildup of electrostatic charge. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Container which are opened must be carefully resealed and kept upright to prevent leakage.

Specific end use(s)

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

SECTION 8: Exposure controls/personal protection**8.2 Appropriate engineering controls**

No data available.

8.3 Individual protection measures, such as personal protective equipment (PPE)**Eye/face protection**

No data available.

Skin protection

No data available.

Body protection

No data available.

Respiratory protection

No data available.

Thermal hazards

No data available.

Control banding approach

No data available.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties**Information on basic physical and chemical properties**

Appearance/form (physical state, color, etc.)	No data available.
Odor	No data available.
Odor threshold	No data available.
pH	No data available.
Melting point/freezing point	No data available.
Initial boiling point and boiling range	No data available.
Flash point	No data available.
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability limits	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	No data available.
Solubility(ies)	No data available.
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
Explosive properties	No data available.
Oxidizing properties	No data available.

SECTION 10: Stability and reactivity**10.5 Incompatible materials**

Beta Caryophyllene: Strong oxidizing agents.

Myrcene: Strong oxidizing agents. Heat, flames and sparks.

Alpha Pinene: Vapors may form explosive mixture with air. Heat, flames and sparks. Strong oxidizing agents.

Beta Pinene: Strong oxidizing agents. Heat, flames, and sparks. Vapors may form explosive mixture with air.

Phytol: No data available.

Geranyl Acetate: Avoid temperatures exceeding the flash point. Contact with incompatible materials. Strong oxidizing agents.

10.6 Hazardous decomposition products

Beta Caryophyllene: No data available.

Limonene: No hazardous decomposition products if stored and handled as indicated.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Beta Caryophyllene: No data available.

Limonene: Maybe fatal if swallowed and enters airways. May be harmful in contact with skin. May cause an allergic skin reaction.

Alpha Bisabolol: Dermal LD50 Rabbit: > 15,000 mg/kg

Oral LD50 Rat: > 20,000 mg/kg

Geranyl Acetate: LD50 Oral: Rat, 6,330 mg/kg

Remarks:

Behavioral: Somnolence (general depressed activity).

Behavioral: Coma

Skin corrosion/irritation

Beta Caryophyllene: No data available.

Limonene: Causes skin irritation.

Alpha Bisabolol: Prolonged skin contact may cause temporary irritation.

Geranyl Acetate: Causes skin irritation.

Species: Rabbit

Result: Irritant

Method: OECD Guideline 405

Serious eye damage/irritation

Beta Caryophyllene: No data available.

Limonene: Direct contact with eyes may cause temporary irritation.

Eyes - rabbit. Result: No eye irritation.

(OECD Test Guideline 405)

Geranyl Acetate: Causes serious eye irritation.

Species: Rabbit

Result: Irritant

Method: OECD Guideline 405

Respiratory or skin sensitization

Beta Caryophyllene: No data available.

Limonene: May cause an allergic skin reaction.

Mouse. Result: May cause sensitisation by skin contact.

(OECD Test Guideline 429)

Alpha Bisabolol: Not a respiratory sensitizer.

Geranyl Acetate: Not a respiratory sensitizer.

May cause an allergic skin reaction.

Species: Guinea Pig

Result: Non-sensitizing

Germ cell mutagenicity

Beta Caryophyllene: No data available.

Limonene: Mouse
Lymphocyte
Result: Negative

Rat - Male
Result: Negative

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

Carcinogenicity

Beta Caryophyllene: IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probably, possibly 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 probably, possibly or confirmed human carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as probably, possibly or confirmed human carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as probably, possibly or confirmed human carcinogen by OSHA.

Myrcene: 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 probable, possible or confirmed human carcinogen by ACGIH.

NTP: 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 NTP.

OSHA: 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 OSHA.

Limonene: IARC Monographs: Overall Evaluation of Carcinogenicity - CARVENE (CAS 5989-27-5) 3 Not classifiable as to carcinogenicity to humans.

OSHA: Specifically Regulated Substances (29 CFR 1910.1001-1050) Not listed.

Alpha Pinene: 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.

NTP: 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 NTP.

OSHA: 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 OSHA.

Alpha Bisabolol: OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed.

Phytol: 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

Beta Caryophyllene: No data available.

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

Summary of evaluation of the CMR properties

Beta Caryophyllene: No data available.

STOT-single exposure

Beta Caryophyllene: No data available.

Limonene: Not classified.

Phytol: Inhalation - May cause respiratory irritation.

STOT-repeated exposure

Beta Caryophyllene: No data available.

Limonene: Repeated dose toxicity - mouse - male and female - No observed adverse effect level - 1,650 mg/kg -
Lowest observed adverse effect level - 3,300 mg/kg.

Alpha Bisabolol: Not classified.

Aspiration hazard

Beta Caryophyllene: No data available.

Alpha Bisabolol: Not an aspiration hazard.

SECTION 12: Ecological information

Toxicity

Beta Caryophyllene: No data available.

Limonene: Very toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

Alpha Bisabolol: EC10 *Pseudomonas putida*: > 10,000 mg/l, 16 hours

LC50 *Leuciscus idus* (Golden orfe): 4.6 - 10 mg/l, 96 hours

Geranyl Acetate: Green Algae (*Chlamydomonas variabilis*): EC50 3.72 mg/l, 72 hours OECD Guideline 201 static.
The statement of the toxic effect relates to the analytically determined concentration.

Daphnia magna: EC50 14.1 mg/l, 48 hours Directive 84/449/EEC, C.2 static. The statement of the toxic effect
relates to the analytically determined concentration.

Fish: LC50 68.12 mg/l, 96 hours *Cyprinus carpio*. OECD Guideline 203 static. The product has not been tested. The
statement has been derived from products of a similar structure or composition.

Bacterium: EC10 >10,000 mg/l, 0.5 hours DIN 38412 Part 27 (draft) aquatic. The statement of the toxic effect
relates to the analytically determined concentration. The product has low solubility in the test medium. An aqueous
solution prepared with solubilizers has been tested.

Persistence and degradability

Beta Caryophyllene: No data available.

Limonene: Biodegradability: Result: 71% - Readily biodegradable. (OECD Test Guideline 301B)

Geranyl Acetate: Biological / Abiological Degradation
Test Method: OECD Guideline 301F (aerobic), activated sludge, domestic
Method of Analysis: BOD of the ThOD
Degree of Elimination: >70% (28d)
Evaluation: Readily biodegradable (according to OECD criteria)

Hydrolysis
Test Method: OECD Guideline 111 (abiotic)
pH7
Half-life: 1.539 h (25°C)

Environmental Mobility:
Transportation between environmental compartments:
Calculated absorption / water-soil
KOC: 1151
Log KOC: 3.06

Bioaccumulative potential

Beta Caryophyllene: No data available.

Mobility in soil

Beta Caryophyllene: No data available.

Results of PBT and vPvB assessment

Beta Caryophyllene: No data available.

Other adverse effects

Beta Caryophyllene: No data available.

Limonene: EC50 Water Flea (*Daphnia pulex*) 69.6 mg/l, 48 hours
LC50 Fathead minnow (*Pimephales promelas*) 0.619 - 0.796 mg/l, 96 hours

LC50 Rainbow trout, donaldson trout (*Oncorhynchus mykiss*) 35 mg/l, 4 days

EC50 Activated sludge 3.94 mg/l

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

SECTION 13: Disposal considerations

Disposal of the product

Burn in a chemical incinerator equipped with an 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.

Disposal of contaminated packaging

Offer surplus and non-recyclable solutions to a licensed disposal company.

Waste treatment

No data available.

Sewage disposal

No data available.

SECTION 14: Transport information

DOT (US)

UN Number:

Class:

Packing Group:

Proper Shipping Name:

Reportable quantity (RQ):

Marine pollutant:

Poison inhalation hazard:

IMDG

UN Number:

Class:

Packing Group:

EMS Number:

Proper Shipping Name:

IATA

UN Number:

Class:

Packing Group:

Proper Shipping Name:

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations specific for the product in question****CAA Section 112 HAPs List**

Not regulated.

CAA Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

California Prop. 65 Components

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

CERCLA Hazardous Substance List (40 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Massachusetts Right to Know Components

Chemical name: α -Pinene

CAS number: 80-56-8. No components are subject to the Massachusetts Right to Know Act.

New Jersey Right to Know Components

Chemical Name: Caryophyllene

CAS Number: 87-44-5. Chemical Name: 7-Methyl-3-methyleneocta-1,6-diene,

CAS Number: 123-35-3. Chemical Name: Humulene

CAS Number: 6753-98-6. (-)-Pin-2(10)-ene, CAS No: 127-91-3. 2-Hexadecen-1-ol,3,7,11,15-tetramethyl- CAS-No:

7541-49-3. Chemical name: α -Pinene

CAS number: 80-56-8

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Pennsylvania Right to Know Components

Chemical Name: Caryophyllene

CAS Number: 87-44-5. Chemical Name: 7-Methyl-3-methyleneocta-1,6-diene,

CAS Number: 123-35-3. Chemical Name: Humulene

CAS Number: 6753-98-6. (-)-Pin-2(10)-ene, CAS No: 127-91-3. 2-Hexadecen-1-ol,3,7,11,15-tetramethyl- CAS-No:

7541-49-3. Chemical name: α -Pinene

CAS number: 80-56-8

Right to Know Components (Pennsylvania, New Jersey)

3,7,11-Trimethyldodeca-1,6,10-trien-3-ol,mixed isomers, CAS-No. 7212-44-4

SARA 302 Components

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

SARA 302 Extremely Hazardous Substance

Not listed.



SARA 304 Emergency Release Notification

Not regulated.

SARA 311 / 312

No SARA hazards.

SARA 311 / 312 Hazardous Chemical

Yes. No.

SARA 311 / 312 Hazards

Fire hazard, acute health hazard. Fire hazard, acute health hazard. Acute Health Hazard. Acute Health Hazard.

SARA 311/312 Hazardous Chemical

No.

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard

SARA 313 (TRI Reporting)

Not regulated.

SARA 313 Components

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

SARA Hazard Categories

Immediate Hazard - Yes

Delayed Hazard - No

Fire Hazard - Yes

Pressure Hazard - No

Reactivity Hazard - No. Immediate Hazard - No

Delayed Hazard - No

Fire Hazard - No

Pressure Hazard - No

Reactivity Hazard - No. Immediate Hazard - Yes

Delayed Hazard - No

Fire Hazard - No

Pressure Hazard - No

Reactivity Hazard - No

SDWA

Not regulated.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt.D)

Not regulated.

US California Proposition 65 CRT: Listed Substance

Not listed.

US Federal Regulations

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



US Federal Regulations

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

US Massachusetts RTK - Substance List

Not regulated.

US New Jersey Work and Community Right-to-Know Act

Not listed.

US Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US Rhode Island RTK

Not regulated.

US. California Proposition 65 CRT: Listed Substance

Not listed.

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

CARVENE (CAS 5989-27-5). Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

SECTION 16: Other information

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, 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, manufactures, 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.