



TRUE TERPENES

Safety Data Sheet Original Z

SECTION 1: Identification

1.1 GHS Product identifier

Product name	Original Z
Product number	TTP-CR-ORIZ

1.3 Recommended use of the chemical and restrictions on use

This product is concentrated and should not be used undiluted. Based on your use of this product, determine appropriate warnings and directions for your products and applications; also determine safety standards and conduct testing. Avoid contact between this undiluted product and skin, eyes, wood surfaces, and fabrics. Keep this undiluted product away from children and pets. Discontinue use if any adverse reaction occurs. This product has not been evaluated for safe use in e-cigarettes, or in any nicotine-containing or smoking-cessation product. Not for use with tobacco or nicotine.

This product is not intended for use by those who are pregnant, nursing, or by those with serious health conditions including but not limited to high blood pressure and diabetes. This product is not intended to diagnose, treat, cure or prevent any disease.

Store in original container, sealed tightly, in a cool, dry place away from sunlight or heat sources. This product should not be used beyond its stated expiry date. Products made with this item should be tested to determine suitable shelf life.

1.4 Supplier's details

Name	True Terpenes
Address	8210 NE Mauzey Court Hillsboro Oregon 97124 USA
Telephone	888-954-8550

1.5 Emergency phone number

Chemtrec USA: 800-424-9300
Chemtrec International: 1+ 703-527-3887

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

Safety Data Sheet

Original Z

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

- Skin corrosion/irritation, Cat. 3
- Sensitization, skin, Cat. 1
- Flammable liquids, Cat. 3
- Hazardous to the aquatic environment, short-term (acute), Cat. 1
- Hazardous to the aquatic environment, long-term (chronic), Cat. 1

2.2 GHS label elements, including precautionary statements

Pictograms



Signal word

Warning

Hazard statement(s)

H226	Flammable liquid and vapor
H316	Causes mild 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

Precautionary statement(s)

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/vapors/spray.
P272	Contaminated work clothing must not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P321	Specific treatment (Wash areas of contact with water).
P332+P313	If skin irritation occurs: Get medical advice/attention.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P370+P378	In case of fire: Use dry chemical, foam, or carbon dioxide to extinguish.
P391	Collect spillage.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local, state, federal and international regulations.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Safety Data Sheet

Original Z

Hazardous components

1. Beta-caryophyllene

Concentration Not specified
EC no. 201-746-1
CAS no. 87-44-5

- Aspiration hazard, Cat. 1
- Sensitization, skin, Cat. 1B

H304 May be fatal if swallowed and enters airways
H317 May cause an allergic skin reaction

2. Linalool

Concentration Not specified
EC no. 201-134-4
CAS no. 78-70-6
Index no. 603-235-00-2

- Sensitization, skin, Cat. 1B

H317 May cause an allergic skin reaction

3. Humulene

Concentration Not specified
EC no. 229-816-7
CAS no. 6753-98-6

- Flammable liquids, Cat. 4

H227 Combustible liquid

4. Alpha-Phellandrene

Concentration Not specified
EC no. 202-792-5
CAS no. 99-83-2

- Aspiration hazard, Cat. 1
- Flammable liquids, Cat. 3

H226 Flammable liquid and vapor
H304 May be fatal if swallowed and enters airways

5. Fenchyl Alcohol

Concentration Not specified
EC no. 216-639-5

Safety Data Sheet

Original Z

CAS no. 1632-73-1

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

H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation
H402 Harmful to aquatic life
H412 Harmful to aquatic life with long lasting effects

6. β -Ionone

Concentration Not specified
EC no. 238-969-9
CAS no. 14901-07-6

- Hazardous to the aquatic environment, short-term (acute), Cat. 2
- Hazardous to the aquatic environment, long-term (chronic), Cat. 2
- Skin corrosion/irritation, Cat. 3

H316 Causes mild skin irritation
H401 Toxic to aquatic life
H411 Toxic to aquatic life with long lasting effects

7. Borneol

Concentration Not specified
EC no. 208-080-0
CAS no. 507-70-0

- Flammable solids, Cat. 1
- Acute toxicity, oral, Cat. 4

H228 Flammable solid
H302 Harmful if swallowed

8. Camphene

Concentration Not specified
EC no. 201-234-8
CAS no. 79-92-5

- Eye damage/irritation, Cat. 2A
- Flammable solids, Cat. 2
- Hazardous to the aquatic environment, short-term (acute), Cat. 1
- Hazardous to the aquatic environment, long-term (chronic), Cat. 1

H228 Flammable solid
H319 Causes serious eye irritation

Safety Data Sheet

Original Z

H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects

Trade secret statement (OSHA 1910.1200(i))

Exact percentage (concentration) of composition has been withheld as a trade secret. (OSHA 29 CFR 1910.1200 (i)(1)(i))

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

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 with plenty of water for at least 15 minutes. Call a poison center or doctor if irritation develops or persists. Acute and delayed symptoms and effects: May cause skin irritation. Signs/symptoms may include localized redness, swelling, and itching.
In case of eye contact	Flush eyes with water as a precaution.
If swallowed	Call a poison center or doctor if you feel unwell. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Acute and delayed symptoms and effects: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

4.2 Most important symptoms/effects, acute and delayed

Causes skin irritation. EYE CONTACT: May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva. SKIN CONTACT: May cause skin irritation. INHALATION: May cause irritation. INGESTION: May cause nausea, diarrhea.

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

Specific treatment (Wash areas of contact with water).

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

In case of fire: Use dry chemical, foam or carbon dioxide to extinguish.

5.2 Specific hazards arising from the chemical

Flammable liquid and vapor. Vapors can flow along surfaces to distant ignition source and flashback. Use water spray to blanket fire, cool fire exposed container, and to flush non-ignited spills or vapors away from fire.

β-Ionone: Carbon oxides

Safety Data Sheet

Original Z

5.3 Special protective actions for fire-fighters

Wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ground container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory protection.

6.3 Methods and materials for containment and cleaning up

Remove all sources of ignition. Contain spill. Absorb with suitable inert material (vermiculite, dry sand, etc.) and place in a chemical waste container for proper disposal in an approved waste disposal facility. Ventilate area of spill. Have extinguishing agent available in case of fire. Use non-sparking tools and equipment. Dispose of in accordance with local regulations.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Store locked up in original container with lid securely tightened. Store in a cool dry place away from heat, open flame, sunlight, combustible materials, hot surfaces, and other sources of ignition in a secure, preferably flammable, storage area. As with all chemicals, use PPE and wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Empty containers may be hazardous since they retain product residues.

SECTION 8: Exposure controls/personal protection

8.2 Appropriate engineering controls

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limit.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear protective gloves and eye protection. Safety glasses or goggles.

Skin protection

Wear protective gloves and eye protection. Chemical resistant gloves, PVA or Nitrile rubber.

Respiratory protection

Normal room ventilation is adequate. If the exposure limit is exceeded, a full facepiece respirator with organic vapor cartridge may be worn.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Clear, colorless to pale yellow liquid
Color	Colorless to pale yellow
Odor	Sweet, Berry, Tropical
Odor threshold	Data not available.

Safety Data Sheet

Original Z

Melting point/freezing point	Data not available.
Boiling point or initial boiling point and boiling range	Data not available.
Flammability	Data not available.
Lower and upper explosion limit/flammability limit	Data not available.
Flash point	Data not available.
Auto-ignition temperature	Data not available.
Decomposition temperature	Data not available.
pH	Data not available.
Kinematic viscosity	Data not available.
Solubility	Insoluble in water.
Partition coefficient n-octanol/water (log value)	Data not available.
Vapor pressure	Data not available.
Evaporation rate	Data not available.
Density and/or relative density	0.89 g/mL at 20°C
Relative vapor density	Data not available.
Particle characteristics	Data not available.

SECTION 10: Stability and reactivity

10.1 Reactivity

May form flammable/explosive vapour-air mixture.

10.2 Chemical stability

Data not available.

10.3 Possibility of hazardous reactions

Data not available.

10.4 Conditions to avoid

Keep away from heat, sparks and open flame. No smoking. Keep container tightly closed. Direct sunlight, extremely high or low temperatures, heat, sparks, open flame, strong acids and strong bases.

10.5 Incompatible materials

Data not available.

Linalool : Strong oxidizing agents

10.6 Hazardous decomposition products

Carbon oxides may form upon decomposition.

Linalool : Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Skin corrosion/irritation

May cause skin irritation.

Safety Data Sheet

Original Z

Respiratory or skin sensitization

May cause an allergic skin reaction

SECTION 12: Ecological information

Toxicity

Very toxic to aquatic life. Avoid release to the environment. Collect spillage. Dispose of contents in accordance with local, state, federal and international regulations. Very toxic to aquatic life with long lasting effects. Avoid release to the environment. Collect spillage. Dispose of contents in accordance with local, state, federal and international regulations.

Persistence and degradability

Data not available.

Bioaccumulative potential

Data not available.

Mobility in soil

Data not available.

Other adverse effects

Data not available.

SECTION 13: Disposal considerations

Disposal methods

Waste treatment

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

SECTION 14: Transport information

DOT (US)

UN Number: UN2319

Class: 3

Packing Group: III

Proper Shipping Name: Terpene hydrocarbons, n.o.s.

Marine pollutant: Yes (hazardous to aquatic life)

IMDG

UN Number: UN2319

Class: 3

Packing Group: III

EMS Number: F-E, S-D

Proper Shipping Name: Terpene hydrocarbons, n.o.s.

IATA

UN Number: UN2319

Class: 3

Packing Group: III

Safety Data Sheet

Original Z

Proper Shipping Name: Terpene hydrocarbons, n.o.s.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

SARA 302 Components

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

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.

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard

Massachusetts Right To Know Components

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

New Jersey Right To Know Components

Linalool

CAS-No. 78-70-6

Common name: BORNEOL

CAS number: 507-70-0

Camphene

CAS-No. 79-92-5

Pennsylvania Right To Know Components

Linalool

CAS-No. 78-70-6

Chemical name: Borneol

CAS number: 507-70-0

Camphene

CAS-No. 79-92-5

California Prop. 65 Components

Canadian Non-Domestic Substances List (NDSL)

Chemical name: Humulene

CAS number: 6753-98-6

Canadian Domestic Substances List (DSL)

Chemical name: Beta-Caryophyllene

CAS number: 87-44-5

Safety Data Sheet

Original Z

Chemical name: Linalool
CAS number: 78-70-6

Chemical name: Alpha-Phellandrene
CAS number: 99-83-2

Chemical name: Fenchyl Alcohol
CAS number: 1632-73-1

Chemical name: Beta-Ionone
CAS number: 14901-07-6

Chemical name: Borneol
CAS number: 507-70-0

Chemical name: Camphene
CAS number: 79-92-5

US EPA TSCA public inventory

Chemical name: Beta-caryophyllene
CAS number: 87-44-5

Chemical name: Linalool
CAS number: 78-70-6

Chemical name: Humulene
CAS number: 6753-98-6

Chemical name: Alpha-Phellandrene
CAS number: 99-83-2

Chemical name: Fenchyl Alcohol
CAS number: 1632-73-1

Chemical name: β -Ionone
CAS number: 14901-07-6

Chemical name: BORNEOL
CAS number: 507-70-0

Chemical name: Camphene
CAS number: 79-92-5

EU Cosmetics Restricted Substances List, (EC) 2009/1223 Annex III

Chemical name/INN: Linalool
CAS number: 78-70-6

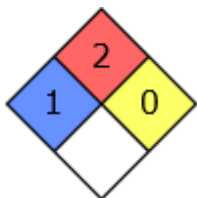
EU Table of Harmonised Entries (Annex VI to CLP)

Chemical name: Linalool
CAS number: 78-70-6

Safety Data Sheet

Original Z

NFPA Rating



SECTION 16: Other information

16.1 Further information/disclaimer

WARNING

True Terpenes cannot anticipate all conditions under which this information and this product, or the products of other manufacturers in combination with this 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. The user assumes all liability for loss, injury, damage or expense due to unauthorized or improper use, and True Terpenes disclaims all such liability. The information in this 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. 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.

True Terpenes has performed no testing on this product in e-cig/vaping applications. Applying heat to a compound or mixture of compounds may promote new product formation by thermal degradation. New products could include harmful or potentially harmful compounds.

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, based upon current information as of the publish 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 of this product, taking into account the intended use and the specific conditions and factors relating to such use in accordance with all applicable laws and regulations.