Classified According to OSHA Hazard Communication Standard (HCS)



SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation:

Product Number: TTP-PN-GG4-R1

GG #4 **Terpene Strain Profile** Other Identifying Product Numbers: TTP-PN-GG4-R1-02, TTP-PN-GG4-R1-05, TTP-PN-GG4-R1-30, TTP-PN-GG4-R1-120, TTP-PN-GG4-R1-480

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, 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 confirming that this product has caused any adverse health consequences. The State of Oregon has enacted regulations which would prohibit the use of certain substances in vape applications. None of True Terpenes' products currently contain any such substances. Multiple state governments have enacted laws banning the sale of flavors, including terpenes, in vaping applications; however, these laws are in flux. 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 any adverse reaction occurs. This product is not intended to diagnose, treat, cure or prevent any disease. True Terpenes has not evaluated this product for safe use in e-cigarettes or any vaping application where the product(s) is/are intentionally vaporized and inhaled. Discontinue use of this product upon the earlier of expiration or one year from the date of purchase.

1.3. Details of the Supplier of the Safety Data Sheet

Company: True Terpenes Address: 8210 NE Mauzey Ct Hillsboro, OR 97124 USA **Telephone:** 888-954-8550

1.4. Emergency Telephone Number (24 hours)

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

SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture

Classified According to OSHA Hazard Communication Standard (HCS)

TERPENES

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

		Hazard	
Hazard Class	Category	Statements	Precautionary Statements:
Aspiration Hazard	Category 1	H304	P301+P310, P331, P405, P501
Skin Corrosion / Irritation	Category 2	H315	P264, P280, P302+P352, P321, P332+P313, P362
Respiratory Sensitizer	Category 1	H334	P261, P285, P304+P341, P342+P311, P501
Skin Sensitizer	Category 1	H317	P261, P272, P280, P302+P352, P332+P313, P321, P363, P501
Flammable Liquids	Category 3	H226	P210, P233, P240, P241, P242, P243, P280, P303+P361+P353, P370+P378, P403+P235, P501
Hazardous to the Aquatic Environment (Acute)	Category 1	H400	P273, P391, P501
Hazardous to the Aquatic Environment (Chronic)	Category 1	H410	P273, P391, P501
Eye Damage / Irritation	Category 2A	H319	P264, P280, P305+P351+P338, P337+P313
Carcinogenicity	Category 2	H351	P201, P202, P280, P308+P313, P405, P501
Reproductive Toxicity	Category 2	H361	P201, P202, P280, P308+P313, P405, P501

2.2. GHS Label Elements

Pictograms:



Danger

Signal Word:

Hazard Statements:

Hazard Number	Hazard Statement
H226	Flammable Liquid and Vapor.
H304	May be fatal if swallowed and enters airway.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

Precautionary Number Precautionary Statement

Classified According to OSHA Hazard Communication Standard (HCS)

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, sparks and open flame. No smoking.
P233	Keep container tightly closed.
P240	Ground container and receiving equipment.
P241	Use explosion-proof equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe fumes, mist, vapors, or spray.
P261	Avoid breathing fumes, mist, vapors, or spray.
P264	Wash arms, hands and face thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area
P272	Contaminated work clothing must not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye protection.
P285	In case of inadequate ventilation wear respiratory protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or physician.
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.
P304+P341	IF INHALED: If breathing is difficult, remove person to fresh air and keep
	comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact
	lenses, if present and easy to do.
P308+P313	IF exposed or concerned: Get medical attention.
P321	Specific treatment (Wash areas of contact with water.).
P331	Do NOT induce vomiting.
P332+P313	If skin irritation occurs: Get medical attention.
P337+P313	If eye irritation persists: Get medical attention.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER or physician.
P362	Take off contaminated clothing and wash it before reuse.
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.
P405	Store locked up.
P501	Dispose of contents in accordance with local, state, federal and international
	regulations.

2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

SECTION 3: Composition / Information on Ingredients

3.1. Components of Substance or Mixture

Formula

Molecular Weight CAS Number



Classified According to OSHA Hazard Communication Standard (HCS)



Beta Caryophyllene	C ₁₅ H ₂₄	204.35 g/mol 87-44-5
Limonene	C ₁₀ H ₁₆	136.23 g/mol 5989-27-5
Myrcene	C ₁₀ H ₁₆	136.23 g/mol 123-35-3
Humulene	C ₁₅ H ₂₄	204.35 g/mol 6753-98-6
Alpha Bisabolol	C ₁₅ H ₂₆ O	222.36 g/mol 515-69-5
Linalool	C ₁₀ H ₁₈ O	154.24 g/mol 78-70-6
Beta Pinene	C ₁₀ H ₁₆	136.23 g/mol 127-91-3
Nerolidol	C15H26O	222.36 g/mol 7212-44-4

Exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4: First-Aid Measures

4.1. General First Aid Information

Eye Contact:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue
	rinsing. Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops.
Inhalation:	IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
Skin Contact:	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. May cause skin irritation.
Ingestion:	IF SWALLOWED: Immediately call a POSION CENTER or a Physician. Dilute immediately with water or milk. Do not
	induce vomiting. Call a physician if necessary.

4.2. Most important Symptoms and Effects, Acute and Delayed

Causes skin irritation. Causes serious eye irritation. Cause damage to organs. 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. Medical Attention or Special Treatment Needed

Specific treatment (Wash areas of contact with water).

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

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

5.2. Specific Hazards Arising from the Substance or Mixture

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.

5.3. Special Protective Equipment for Firefighters

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

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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.

6.2. Cleanup and Containment Methods and Materials

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 and Storage Conditions

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

8.1. Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Beta Pinene	TLV-TWA	USA	20 ppm TWA (listed under Turpentine and selected monoterpenes)	ACGIH - Threshold Limit Values – Time Weighted Averages (TLV-TWA)

8.2. Exposure Controls

Engineering Controls:	A system of local and/or general exhaust is recommended to keep employee exposures
	below the Airborne Exposure Limit.
Respiratory Protection:	Normal room ventilation is adequate. If the exposure limit is exceeded, a full facepiece
	respirator with organic vapor cartridge may be worn.
Skin Protection: Eye Protection:	Wear protective gloves and eye protection. Chemical resistant gloves, PVA or Nitrile rubber. Wear protective gloves and eye protection. Safety glasses or goggles.

8.3. Personal Protective Equipment

Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory. Normal room ventilation is adequate. If the exposure limit is exceeded, a full facepiece respirator with organic vapor cartridge may be worn. Chemical resistant gloves, PVA, or Nitrile rubber. Safety glasses or goggles.

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Product Number: TTP-PN-GG4-R1

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SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Appearance: Clear, colorless to pale yellow liquid **Physical State:** Liquid Odor: Clove, Earth, Wood Odor Threshold: Data not available pH: Data not available Melting/Freezing Point: Data not available Initial Boiling Point/Range: Data not available Flash Point: Data not available Data not available Evaporation Rate: Flammability/Explosive Limits: Data not available Vapor Pressure: Data not available Vapor Density: Data not available **Relative Density:** Data not available Insoluble in water Solubility: 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

SECTION 10: Stability and Reactivity

10.1. Reactivity and Chemical Stability

May form flammable/explosive vapour-air mixture.

10.2. Possibility of Hazardous Reactions

Data not available.

10.3. Conditions to Avoid and Incompatible Materials

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.

10.4. Hazardous Decomposition Products

Carbon oxides may form upon decomposition.

SECTION 11: Toxicological Information

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Third-Party Audited and Certified ISO 9001:2015 & FSSC 22000



Classified According to OSHA Hazard Communication Standard (HCS)



11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Not applicable.

Acute Toxicity - Dermal Exposure:

Not applicable.

Acute Toxicity – Inhalation Exposure:

Not applicable.

Acute Toxicity – Other Information:

LD50, Oral (calculated): 3665 mg/kg

Contains ingredients with unknown oral toxicity.

Skin Corrosion and Irritation:

Causes skin irritation. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF ON SKIN: Wash with plenty of soap and water. Specific treatment (Wash areas of contact with water). If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.

Serious Eye Damage and Irritation:

Causes serious eye irritation. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists. Get medical attention.

Respiratory Sensitization:

May cause allergy or asthma symptoms or breathing difficulties if inhaled. Avoid breathing fumes, mist, vapors, or spray. In case of inadequate ventilation wear respiratory protection. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician. Dispose of contents in accordance with local, state, federal and international regulations.

Skin Sensitization:

May cause an allergic skin reaction. Avoid breathing fumes, mist, vapors, or spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves and eye protection. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical attention. Specific treatment (Wash areas of contact with water.). Wash contaminated clothing before reuse. Dispose of contents in accordance with local, state, federal and international regulations.

Germ Cell Mutagenicity:

Not applicable.

Carcinogenicity:

Suspected of causing cancer. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store

locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Reproductive Toxicity:



Classified According to OSHA Hazard Communication Standard (HCS)

Suspected of damaging fertility or the unborn child. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Specific Target Organ Toxicity from Single Exposure:

Causes damage to organs. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF exposed: Call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Specific Target Organ Toxicity for Repeated Exposure:

Not applicable.

Aspiration Hazard:

May be fatal if swallowed and enters airways. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Additional Toxicology Information:

Data not available.

SECTION 12: Ecological Information

12.1. Ecotoxicity

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.

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

Data not available.

SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods



Classified According to OSHA Hazard Communication Standard (HCS)

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: Transportation Information

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

UN Number: UN2319 Hazard Class: 3 Packing Group: III Hazard Label(s):

Sizes: 2 mL, 5 mL, 30 mL, 120 mL, 480 mL Proper Shipping Name: Terpene hydrocarbons, n.o.s.

14.2. Transportation by Air – International Air Transport Association (IATA)

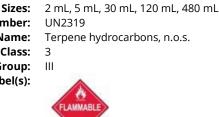
UN Number: UN2319 Hazard Class: 3 Packing Group: III Hazard Label(s):

Sizes: 2 mL, 5 mL, 30 mL, 120 mL, 480 mL Proper Shipping Name: Terpene hydrocarbons, n.o.s.



14.3.2 Transportation of Dangerous Goods (TDG, Canada)

UN Number: UN2319 Proper Shipping Name: Hazard Class: 3 Packing Group: Ш Hazard Label(s):



SECTION 15: Regulatory Information

15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

Classified According to OSHA Hazard Communication Standard (HCS)

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

Not listed.

15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Not listed.

15.5. Massachusetts Right-to-Know Substance List

Not Listed.

15.6. Pennsylvania Right-to-Know Hazardous Substances

Not Listed.

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

Limonene (CAS # 5989-27-5): sn 0792

15.8. California Proposition 65

Myrcene (CAS# 123-35-3): carcinogen, 3/24/2015

15.9. Canada Domestic Substances List / Non-Domestic Substances Lists (DSL/NDSL)

Myrcene (CAS# 123-35-3): Present (DSL)

Beta Caryophyllene (CAS # 87-44-5): Present (DSL)

Limonene (CAS # 5989-27-5): Present (DSL)

Humulene (CAS # 6753-98-6): Present (NDSL)

Alpha Bisabolol (CAS # 515-69-5): Present (DSL)

Linalool (CAS # 78-70-6): Present (DSL)

Beta Pinene (CAS # 127-91-3): Present (DSL)

Nerolidol (CAS # 7212-44-4): Present (DSL)

15.10. United States of America Toxic Substances Control Act (TSCA) List

Myrcene (CAS# 123-35-3): Present

Beta Caryophyllene (CAS # 87-44-5): Present

Limonene (CAS # 5989-27-5): Present

Humulene (CAS # 6753-98-6): Present

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Alpha Bisabolol (CAS # 515-69-5): Present Linalool (CAS # 78-70-6): Present Beta Pinene (CAS # 127-91-3): Present

Nerolidol (CAS # 7212-44-4): Present

15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Myrcene (CAS# 123-35-3): 204-622-5

Beta Caryophyllene (CAS # 87-44-5): 201-746-1

Limonene (CAS # 5989-27-5): 205-341-0

Limonene (CAS # 5989-27-5): 227-813-5

Humulene (CAS # 6753-98-6): 229-816-7

Alpha Bisabolol (CAS # 515-69-5): 208-205-9

Alpha Bisabolol (CAS # 515-69-5): 246-973-7

Linalool (CAS # 78-70-6): 201-134-4

Linalool (CAS # 78-70-6): 245-083-6

Beta Pinene (CAS # 127-91-3): 208-872-5

Beta Pinene (CAS # 127-91-3): 245-424-9

Nerolidol (CAS # 7212-44-4): 230-597-5

SECTION 16: Other Information

16.1. Previous Revisions

Previous revisions of this document are no longer valid.

16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable. Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable. Health Hazards Not Otherwise Classified (HHNOC): Not Applicable. Biohazardous Infectious Materials Hazard Class: Not Applicable.

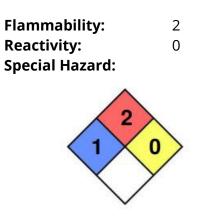
16.3. National Fire Protection Association (NFPA) Rating

Health:

1

Classified According to OSHA Hazard Communication Standard (HCS)





16.4. Document Revision

Last Revision Date: 2023-01-18

DISCLAIMER

WARNING

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 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, 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 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 not evaluated this product 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. 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 such as aldehydes, ketones, quinones, organic acids, and aromatic hydrocarbons (including benzene). 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 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, taking into account the intended use and the specific conditions and factors relating to such use in accordance with all applicable laws and regulations.