

TRUE TERPENES

Safety Data Sheet Root Beer

SECTION 1: Identification

1.1 GHS Product identifier

Product name Root Beer

Product number TTP-ID-ROOT

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. 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

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

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

- Carcinogenicity, Cat. 2
- Eye damage/irritation, Cat. 2A
- Skin corrosion/irritation, Cat. 2
- Sensitization, skin, Cat. 1
- Toxic to reproduction, Cat. 2
- 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

| Н | azar | d s | tate | me | nt | (s) |) |
|---|------|-----|------|----|----|-----|---|
|---|------|-----|------|----|----|-----|---|

| Hazard statement(s) | |
|---------------------|--|
| H226 | Flammable liquid and vapor |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H319 | Causes serious eye irritation |
| 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 |
| | |

P337+P313

| Precautionary statement(s) | | | | | |
|---|--|--|--|--|--|
| Obtain special instructions before use. | | | | | |
| Do not handle until all safety precautions have been read and understood. | | | | | |
| Keep away from heat/sparks/open flames/hot surfaces. No smoking. | | | | | |
| Keep container tightly closed. | | | | | |
| Ground/bond container and receiving equipment. | | | | | |
| Use explosion-proof electrical/ventilating/lighting/equipment. | | | | | |
| Use only non-sparking tools. | | | | | |
| Take precautionary measures against static discharge. | | | | | |
| Avoid breathing dust/fume/gas/mist/vapors/spray. | | | | | |
| Wash arms, hands and face thoroughly after handling. | | | | | |
| Contaminated work clothing must not be allowed out of the workplace. | | | | | |
| Avoid release to the environment. | | | | | |
| Wear protective gloves/protective clothing/eye protection/face protection. | | | | | |
| IF ON SKIN: Wash with plenty of soap and water. | | | | | |
| IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. | | | | | |
| IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. | | | | | |
| IF exposed or concerned: Get medical advice/attention. | | | | | |
| Specific treatment (Wash areas of contact with water). | | | | | |
| If skin irritation occurs: Get medical advice/attention. | | | | | |
| If skin irritation or rash occurs: Get medical advice/attention. | | | | | |
| | | | | | |

If eye irritation persists: Get medical advice/attention.

P362+P364 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/container in accordance with local, state, federal and

international regulations.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. Beta-Pinene

Concentration Not specified EC no. 204-872-5 CAS no. 127-91-3

- Flammable liquids, Cat. 3

- Skin corrosion/irritation, Cat. 2
- Sensitization, skin, Cat. 1
- Aspiration hazard, Cat. 1
- Hazardous to the aquatic environment, short-term (acute), Cat. 1
- Hazardous to the aquatic environment, long-term (chronic), Cat. 1

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

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

2. Lime Terpenes

Concentration Not specified CAS no. 68917-71-5

- Flammable liquids, Cat. 3

- Skin corrosion/irritation, Cat. 2
- Sensitization, skin, Cat. 1A
- Toxic to reproduction, Cat. 2
- Aspiration hazard, Cat. 1

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

H361 Suspected of damaging fertility or the unborn child H410 Very toxic to aquatic life with long lasting effects H411 Toxic to aquatic life with long lasting effects

3. Alpha-Bisabolol

Concentration Not specified EC no. 208-205-9 CAS no. 515-69-5

4. Beta-caryophyllene

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

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

H304 May be fatal if swallowed and enters airways

H317 May cause an allergic skin reaction

5. D-Limonene

 Concentration
 Not specified

 EC no.
 227-813-5

 CAS no.
 5989-27-5

 Index no.
 601-096-00-2

Flammable liquids, Cat. 3Aspiration hazard, Cat. 1Skin corrosion/irritation, Cat. 2

- Sensitization, skin, Cat. 1B

- Hazardous to the aquatic environment, short-term (acute), Cat. 1 - Hazardous to the aquatic environment, long-term (chronic), Cat. 3

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

H400 Very toxic to aquatic life

H412 Harmful to aquatic life with long lasting effects

SCLs/M-factors/ATEs M=1

6. Myrcene

Concentration Not specified EC no. 204-622-5 CAS no. 123-35-3

- Flammable liquids, Cat. 3

- Skin corrosion/irritation, Cat. 2

- Eye damage/irritation, Cat. 2A

- Carcinogenicity, Cat. 2

- Toxic to reproduction, Cat. 2

- Aspiration hazard, Cat. 1

H226 Flammable liquid and vapor

H304 May be fatal if swallowed and enters airways

H315 Causes skin irritation

H319 Causes serious eye irritation 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

7. Methyl salicylate

Concentration Not specified EC no. 204-317-7 CAS no. 119-36-8 Index no. 607-749-00-8

- Toxic to reproduction, Cat. 2

- Acute toxicity, oral, Cat. 4

- Sensitization, skin, Cat. 1B

- Hazardous to the aquatic environment, long-term (chronic), Cat. 3

H302 Harmful if swallowed

H317 May cause an allergic skin reaction

H361d

H412 Harmful to aquatic life with long lasting effects

SCLs/M-factors/ATEs Oral: ATE = 890 mg/kg bw

8. Orange Terpenes

Concentration Not specified EC no. 232-433-8 CAS no. 68647-72-3

- Aspiration hazard, Cat. 1

- Flammable liquids, Cat. 3

- Hazardous to the aquatic environment, short-term (acute), Cat. 2 - Hazardous to the aquatic environment, long-term (chronic), Cat. 2

- Skin corrosion/irritation, 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

H411 Toxic to aquatic life with long lasting effects

9. Cadinene

Concentration Not specified

EC no. 249-580-9 CAS no. 29350-73-0

10. Lemon Terpenes

Concentration Not specified CAS no. 68917-33-9

Flammable liquids, Cat. 3Skin corrosion/irritation, Cat. 2

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

- Hazardous to the aquatic environment, long-term (chronic), 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

H411 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 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. Take off contaminated clothing and

wash it before reuse.

Acute and delayed symptoms and effects: Causes skin irritation. Signs/symptoms may include localized redness, swelling, and itching.

In case of eye contact Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. If eye irritation persists: Get

medical attention/advice.

Acute and delayed symptoms and effects: Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or

hazy vision.

If swallowed Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention

immediately if symptoms occur.

4.2 Most important symptoms/effects, acute and delayed

Causes skin irritation. Causes serious eye 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.

D-Limonene: Carbon oxides

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

8.1 Control parameters

1. D-Limonene (CAS: 5989-27-5 EC: 227-813-5)

TLV® (Inhalation): 20 ppm (ACGIH)

2. Orange Terpenes (CAS: 8028-48-6)

TLV® [Orange oil] (Inhalation): 30 ppm (ACGIH)

3. Beta-Pinene (CAS: 127-91-3 EC: 204-872-5)

TLV® (Inhalation): 20 ppm (ACGIH)

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 Root Beer, Syrup, Fizzy, Lime

Odor threshold

Melting point/freezing point

Data not available.

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

Flash point

Data not available.

Data not available.

Auto-ignition temperature
Decomposition temperature
Deta not available.
Data not available.
Data not available.
Data not available.
Kinematic viscosity
Data not available.
Solubility
Insoluble in water.

Solubility Insoluble in water.
Partition coefficient n-octanol/water (log value) Data not available.
Vapor pressure Data not available.
Evaporation rate Data not available.

Evaporation rate Data not available.

Density and/or relative density 0.9 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.

D-Limonene: Strong oxidizing agents

Methyl salicylate: Strong bases, Strong oxidizing agents

10.6 Hazardous decomposition products

Carbon oxides may form upon decomposition.

SECTION 11: Toxicological information

Information on toxicological effects

Skin corrosion/irritation

Irritating to skin.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitization

May cause an allergic skin reaction

Carcinogenicity

Myrcene

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

Myrcene, Lime Terpenes

Suspected of damaging fertility or the unborn child

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

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, Chronic Health Hazard

Massachusetts Right To Know Components

D-Limonene

New Jersey Right To Know Components

D-Limonene

Chemical name: Methyl Salicylate

CAS number: 119-36-8

Orange terpenes

Pennsylvania Right To Know Components

D-Limonene

Chemical name: Methyl Salicylate

CAS number: 119-36-8

Orange terpenes

California Prop. 65 Components

Chemical name: Myrcene CAS number: 123-35-3 03/27/2015 - Cancer

Canadian Non-Domestic Substances List (NDSL)

Canadian Domestic Substances List (DSL)

Chemical name: Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-methylene-

CAS number: 127-91-3

Chemical name: Terpenes and Terpenoids, lime-oil

CAS number: 68917-71-5

Chemical name: 3-Cyclohexene-1-methanol, α,4-dimethyl-α-(4-methyl-3-pentenyl)-, (R,R)-

CAS number: 515-69-5

Chemical name: Bicyclo[7.2.0]undec-4-ene, 4,11,11-trimethyl-8-methylene-, [1R-(1R,4E,9S)]-

CAS number: 87-44-5

Chemical name: Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (R)-

CAS number: 5989-27-5

Chemical name: 1,6-Octadiene, 7-methyl-3-methylene-

CAS number: 123-35-3

Chemical name: Benzoic acid, 2-hydroxy-, methyl ester

CAS number: 119-36-8

Chemical name: Terpenes and Terpenoids, sweet orange-oil

CAS number: 68647-72-3

Chemical name: Naphthalene, decahydro-1,6-dimethyl-4-(1-methylethyl)-, [1S- $(1\alpha,4\alpha,4a\alpha,6\alpha,8a\beta)$]-, didehydro

eriv.

CAS number: 29350-73-0

Chemical name: Terpenes and Terpenoids, lemon-oil

CAS number: 68917-33-9

US EPA TSCA public inventory

Chemical name: Beta-Pinene CAS number: 127-91-3

Chemical name: Lime Terpenes CAS number: 68917-71-5

Chemical name: Alpha-Bisabolol

CAS number: 515-69-5

Chemical name: Beta-caryophyllene

CAS number: 87-44-5

Chemical name: D-Limonene CAS number: 5989-27-5

Chemical name: Myrcene CAS number: 123-35-3

Chemical name: Methyl salicylate

CAS number: 119-36-8

Chemical name: Orange Terpenes

CAS number: 68647-72-3

Chemical name: CADINENE CAS number: 29350-73-0

Chemical name: Lemon Terpenes

CAS number: 68917-33-9

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

Chemical name/INN: D-Limonene

CAS number: 5989-27-5

Chemical name/INN: Methyl salicylate

CAS number: 119-36-8

EU Table of Harmonised Entries (Annex VI to CLP)

Chemical name: D-Limonene

CAS number: 5989-27-5

Chemical name: Methyl salicylate

CAS number: 119-36-8

California Proposition 65 Chemicals List

WARNING: This product can expose you to chemicals including beta-Myrcene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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 quarantee or quality specification.

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.

This product uses ingredients which are considered FDA GRAS or have been evaluated for safe human consumption by FEMA, JECFA, CoE, and/or EFSA.