





**Appearance** Clear

**Physical state** Liquid

**Odor** Characteristic Odor

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace. 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. Wear protective gloves/eye protection/face protection.

**Precautionary Statements - Response**

Specific treatment (see .? on this label).

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 advice/attention.

If skin irritation or rash occurs: Get medical advice/attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. Wash contaminated clothing before reuse.

IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. Rinse mouth.

In case of fire: Use CO2, dry chemical, or foam to extinguish.

**Precautionary Statements - Storage**

Store locked up. Store in a well-ventilated place. Keep cool.

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant.

**Hazards not otherwise classified (HNOC)**

**Other Information**

- Very toxic to aquatic life with long lasting effects
- Very toxic to aquatic life

98.9812 % of the mixture consists of ingredient(s) of unknown toxicity

**3. Composition/information on Ingredients**

\* 100% of the composition has been withheld as a trade secret.

**4. First Aid Measures**

**Description of first aid measures**

**Eye Contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact** Wash skin with soap and water. Wash off immediately with plenty of water. Wash contaminated clothing before reuse. Consult a physician if necessary.

**Inhalation** Remove to fresh air. If breathing is difficult, give oxygen. Move to fresh air in case of accidental inhalation of vapors. If not breathing, give artificial respiration.

**Ingestion** Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Consult a physician if necessary.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

## 5. Fire-Fighting Measures

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** .

**Specific hazards arising from the chemical**

Flammable. May be ignited by heat, sparks or flames.

**Hazardous combustion products** Irritating or toxic substances may be emitted upon burning, combustion, or decomposition.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Special protective actions for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes and inhalation of vapors. Wear protective gloves/protective clothing and eye/face protection. Wash thoroughly after handling.

**Environmental precautions**

**Environmental precautions** See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. Handling and Storage

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Ensure adequate ventilation, especially in confined areas. Wash thoroughly after handling. When using do not eat, drink or smoke.

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

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from sunlight. Keep locked up and out of reach of children.

**Incompatible materials** None known based on information supplied.

## 8. Exposure Controls/Personal Protection

**Control parameters****Exposure guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
alpha-Pinene 80-56-8	TWA: 20 ppm	-	-
beta-Pinene 127-91-3	TWA: 20 ppm	-	-
delta-3-Carene 13466-78-9	TWA: 20 ppm	-	-

**Appropriate engineering controls**

**Engineering controls**                      Showers  
    Eyewash stations  
    Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection**                      Wear safety glasses with side shields (or goggles). Avoid contact with eyes.

**Skin and Body Protection**                Avoid contact with skin. Wear protective gloves and protective clothing.

**Respiratory protection**                    If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. Ensure adequate ventilation, especially in confined areas.

**General hygiene considerations**        Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. When using do not eat, drink or smoke. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Regular cleaning of equipment, work area and clothing is recommended. Avoid breathing (dust, vapor, mist, gas).

## 9. Physical and Chemical Properties

**Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid	<b>Odor</b>	Characteristic Odor
<b>Appearance</b>	Clear	<b>Odor threshold</b>	Not applicable
<b>Color</b>	Colorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not applicable	
Melting point / freezing point	Not applicable	
Boiling point / boiling range	No data available	
Flash Point	51.1 °C / 124 °F	
Evaporation Rate	Not applicable	
Flammability (solid, gas)	Not applicable	
Flammability Limit in Air		
Upper flammability limit:	Not applicable	
Lower flammability limit:	Not applicable	
Vapor pressure	Not applicable	
Vapor Density	Not applicable	
Specific gravity	Not applicable	
Water solubility	Not applicable	
Solubility in other solvents	Not applicable	
Partition coefficient	Not applicable	
Autoignition Temperature	Not applicable	
Decomposition temperature	Not applicable	
Kinematic viscosity	No data available	

Dynamic viscosity Not applicable  
 Explosive properties Not applicable  
 Oxidizing properties Not applicable

**Other Information**

Softening point not applicable  
 Molecular weight Not applicable  
 VOC content (%) Not applicable  
 Density Not applicable  
 Bulk Density Not applicable

**10. Stability and Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Extremes of temperature and direct sunlight.

**Incompatible materials**

None known based on information supplied.

**Hazardous Decomposition Products**

None known based on information supplied.

**11. Toxicological Information**

**Information on likely routes of exposure**

**Product Information**

**Inhalation** Avoid breathing vapors or mists.  
**Eye Contact** Avoid contact with eyes. Causes serious eye irritation.  
**Skin contact** Avoid contact with skin. Irritating to skin. May cause an allergic skin reaction.  
**Ingestion** Harmful if swallowed. Potential for aspiration if swallowed.

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** Irritating to skin.  
**Serious eye damage/eye irritation** Causes serious eye irritation.  
**Sensitization** May cause sensitization by skin contact.  
**Germ cell mutagenicity** Not classified.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
d-Limonene 5989-27-5		Group 2A Group 3		X

<b>Reproductive toxicity</b>	This product does not contain any known or suspected reproductive hazards above the threshold value.
<b>STOT - single exposure</b>	Not classified.
<b>STOT - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	May be fatal if swallowed and enters airways.

**Numerical measures of toxicity - Product Information**

**Unknown acute toxicity** 98.9812 % of the mixture consists of ingredient(s) of unknown toxicity  
**The following values are calculated based on chapter 3.1 of the GHS document .**

**12. Ecological Information**

This product contains a chemical which is listed as a severe marine pollutant according to DOT.

**Ecotoxicity**

Very toxic to aquatic life with long lasting effects

31.2289 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
d-Limonene 5989-27-5		0.619 - 0.796: 96 h Pimephales promelas mg/L LC50 flow-through 35: 96 h Oncorhynchus mykiss mg/L LC50		
alpha-Pinene 80-56-8		0.28: 96 h Pimephales promelas mg/L LC50 static		41: 48 h Daphnia magna mg/L LC50
Linalool 78-70-6	88.3: 96 h Desmodemus subspicatus mg/L EC50	22 - 46: 96 h Leuciscus idus mg/L LC50 static		20: 48 h Daphnia magna mg/L EC50
Camphene 79-92-5	1000: 72 h Desmodemus subspicatus mg/L EC50	0.72: 96 h Brachydanio rerio mg/L LC50 flow-through 150: 96 h Brachydanio rerio mg/L LC50 static		22: 48 h Daphnia magna mg/L EC50
Eucalyptol 470-82-6		95.4 - 109: 96 h Pimephales promelas mg/L LC50 flow-through		

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available

**13. Disposal Considerations****Waste treatment methods**

<b>Disposal of wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Do not reuse container.

**14. Transport Information**

**DOT**

**UN/ID no** 1197  
**Proper Shipping Name** Extracts, Flavoring, Liquid  
**Hazard Class** 3  
**Packing group** III  
**Marine pollutant** This product contains a chemical which is listed as a severe marine pollutant according to DOT.  
**Description** (Limonene)

**15. Regulatory Information**

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

**Acute Health Hazard** Yes  
**Chronic Health Hazard** No  
**Fire Hazard** Yes  
**Sudden release of pressure hazard** No  
**Reactive Hazard** No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations**

**U.S. State Right-to-Know Regulations**

This product contains substance(s) regulated by state right-to-know regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island
alpha-Pinene 80-56-8	X	X	X	
Terpinolene 586-62-9	X			
Borneol 507-70-0	X	X	X	
para-Cymene 99-87-6		X	X	

**U.S. EPA Label information**

**EPA Pesticide registration number** Not applicable

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**16. Other Information**

**Issue date** 11-Apr-2018

**Revision date** 11-Apr-2018

**Revision note**

No information available

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Classification and labeling according to the IFRA/IOFI Labeling Manual 2017.

**End of Safety Data Sheet**