



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 ON SKIN: Wash with plenty of soap and water  
 If skin irritation or rash occurs: Get medical advice/attention  
 Wash contaminated clothing before reuse

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****Other information**

- Causes mild skin irritation
- Toxic to aquatic life with long lasting effects
- Toxic to aquatic life

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
ETHYL ALCOHOL	64-17-5	50-90%	*
LIMONENE	5989-27-5	1-5%	*
PINENES	80-56-8	1-5%	*
CITRAL	5392-40-5	<1	*

### 4. FIRST AID MEASURES

**First aid measures for different exposure routes**

<b>General advice</b>	Immediate medical attention is required. Show this material safety data sheet to the doctor in attendance.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
<b>Skin contact</b>	Wash off immediately with plenty of water. Wash off immediately with soap and plenty of water.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, call a physician.
<b>Ingestion</b>	Do NOT induce vomiting. Drink plenty of water. Immediate medical attention is not required. Rinse mouth.
<b>Self-protection of the first aider</b>	Remove all sources of ignition.

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

**Main Symptoms** Hives.

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

**Note to physicians** May cause sensitization in susceptible persons.

### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

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

**Unsuitable extinguishing media**

Decomposition by contact with water may generate vapors which can be ignited by heat or open flame.

**Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes. May cause sensitization in susceptible persons.

**Explosion data**

**Sensitivity to Mechanical Impact** none.

**Sensitivity to Static Discharge** Yes.

**Protective Equipment and Precautions for Firefighters**

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** Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment.

**Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

**Methods and materials 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. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Soak up with inert absorbent material.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only in an area containing flame proof equipment. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

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

**Storage Conditions** Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep containers tightly closed in a cool, well-ventilated place.

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

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
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ETHYL ALCOHOL 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m <sup>3</sup>	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>
PINENES 80-56-8	TWA: 20 ppm	-	
CITRAL 5392-40-5	TWA: 5 ppm inhalable fraction and vapor S*	-	
NERAL 106-26-3	TWA: 5 ppm inhalable fraction and vapor S*	-	

NIOSH IDLH: *Immediately Dangerous to Life or Health*

**Other Exposure Guidelines** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Exposure controls**

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

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

**Eye/face protection** Tightly fitting safety goggles.

**Skin and body protection** Chemical resistant apron.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection must 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.

**General Hygiene Considerations** When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical and chemical properties

<b>Physical state</b>	liquid
<b>Appearance</b>	clear
<b>Odor</b>	typical of lemon and lime
<b>Color</b>	Pale yellow to green yellow

<u>Property</u>	<u>Values</u>	<u>Method</u>
<b>pH</b>		No information available
<b>Melting/freezing point</b>		FCC Method
<b>Boiling point/boiling range</b>		FCC Method
<b>Flash Point</b>	17 °C / 63 °F	Closed cup
<b>Evaporation rate</b>	No information available	No information available
<b>Flammability (solid, gas)</b>	No information available	No information available
<b>Flammability Limits in Air</b>		No information available
<b>Upper flammability limit</b>	No information available	
<b>lower flammability limit</b>	No information available	
<b>Vapor pressure mm Hg 20°C</b>		No information available
<b>Vapor density</b>		No information available
<b>Specific Gravity @ 25C</b>	0.85 - 0.86	FCC Method
<b>Specific Gravity @ 20C</b>	0.853 - 0.863	FCC Method
<b>Refractive Index</b>	1.366 - 1.376	FCC Method
<b>Water solubility</b>	Practically insoluble	
<b>Solubility in other solvents</b>		No information available
<b>Partition coefficient: n-octanol/water</b>		No information available
<b>Autoignition temperature</b>	No information available	No information available
<b>Decomposition temperature</b>		No information available
<b>Viscosity, kinematic</b>	No information available	No information available
<b>Viscosity, dynamic</b>	No information available	
<b>Explosive properties</b>	No information available	
<b>Oxidizing Properties</b>	No information available	

### Other information

<b>Softening point</b>	No information available
<b>Molecular Weight</b>	No information available
<b>VOC Content(%)</b>	No information available
<b>Density VALUE</b>	No information available
<b>Bulk Density VALUE</b>	No information available

## 10. STABILITY AND REACTIVITY

### 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

<b>Product Information</b>	Product does not present an acute toxicity hazard based on known information
<b>Inhalation</b>	There is no data available for this product.
<b>Eye contact</b>	There is no data available for this product.
<b>Skin contact</b>	There is no data available for this product.
<b>Ingestion</b>	There is no data available for this product.

### Information on toxicological effects

**Symptoms** No information available.

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

**Sensitization** No information available.  
**Germ Cell Mutagenicity** No information available.  
**Carcinogenicity** This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

Chemical Name	ACGIH	IARC	NTP	OSHA
ETHYL ALCOHOL 64-17-5	A3	Group 1	Known	X
LIMONENE 5989-27-5		Group 3		

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*A3 - Animal Carcinogen*

*IARC (International Agency for Research on Cancer)*

*Group 1 - Carcinogenic to Humans*

*Group 3 - Not Classifiable as to Carcinogenicity in Humans*

*NTP (National Toxicology Program)*

*Known - Known Carcinogen*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

*X - Present*

<b>Reproductive toxicity</b>	No information available.
<b>Specific target organ systemic toxicity (single exposure)</b>	No information available.
<b>Specific target organ systemic toxicity (repeated exposure)</b>	No information available.
<b>Chronic toxicity</b>	Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure. May cause adverse liver effects. Contains a known or suspected reproductive toxin.
<b>Target Organ Effects</b>	Blood, Central nervous system, Eyes, Liver, Reproductive system, Respiratory system, Skin.
<b>Aspiration hazard</b>	No information available.

### Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document

. mg/kg mg/l

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Toxic to aquatic life with long lasting effects

13.68698% of the mixture consists of component(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

Chemical Name	log Pow
ETHYL ALCOHOL 64-17-5	-0.32
PINENES 80-56-8	4.1
CITRAL 5392-40-5	2.76

**Other adverse effects**

No information available

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment**

**Waste Disposal Methods** Dispose of in accordance with local regulations.

**Contaminated packaging** Do not reuse container.

**US EPA Waste Number** D001

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
ETHYL ALCOHOL 64-17-5	Toxic Ignitable
LIMONENE 5989-27-5	Toxic

### 14. TRANSPORT INFORMATION

**DOT/ADR**

**UN/ID No** 1197  
**Proper shipping name** EXTRACTS, FLAVOURING, LIQUID  
**Hazard class** 3  
**Packing Group** II  
**ERG Code** 127

**ICAO/IATA**

**UN/ID No** 1197  
**Proper shipping name** EXTRACTS, FLAVOURING, LIQUID  
**Hazard class** 3  
**Packing Group** II

**IMDG / IMO**

<b>UN/ID No</b>	1197
<b>Proper shipping name</b>	EXTRACTS, FLAVOURING, LIQUID
<b>Hazard class</b>	3
<b>Packing Group</b>	II
<b>Marine pollutant</b>	This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO

<b>15. REGULATORY INFORMATION</b>
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**International Inventories**

<b>TSCA</b>	-
<b>DSL/NDSL</b>	-
<b>EINECS/ELINCS</b>	-
<b>ENCS</b>	-
<b>IECSC</b>	-
<b>KECL</b>	-
<b>PICCS</b>	Complies
<b>AICS</b>	-

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**U.S. 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**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	no
<b>Fire Hazard</b>	Yes
<b>Sudden Release of Pressure Hazard</b>	no
<b>Reactive Hazard</b>	no

**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.

**U.S. State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
ETHYL ALCOHOL - 64-17-5	Carcinogen



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

Chemical Name	New Jersey	Massachusetts	Pennsylvania
ETHYL ALCOHOL 64-17-5	X	X	X
PINENES 80-56-8	X	X	X

**U.S. EPA Label information****16. OTHER INFORMATION**

<b>NFPA</b>	Health Hazard 2	Flammability 4	Instability 0	Physical and chemical hazards *
<b>HMIS</b>	Health Hazard 2	Flammability 4	Physical Hazard 0	Personal protection B

**Revision Date** 05-Jul-2018  
**Revision Note** No information available  
**Revision#** 1

**WARNING/DISCLAIMER:**

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