



**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

Product identifier

Product Code(s) 482BEV, 482TTB  
 Product name FRESH LEMON GINGER EXTRACT, NATURAL WONF

UN/ID No 1197

Recommended use of the chemical and restrictions on use

Recommended Use No information available. No  
 Uses advised against information available

Manufacturer

Apex Flavors, Inc.  
 1361 Brass Mill Rd. Suite E  
 Belcamp, MD 21017 (410)  
 565-6600

Emergency telephone

Chemtrec: 1-800-424-9300 for US/ Outside US Chemtel 813-248-0585

**2. HAZARDS IDENTIFICATION**

Classification

Serious eye damage/eye irritation	Category 2A
Skin Sensitization	Category 1
Carcinogenicity	Category 1A
Flammable liquids	Category 3

GHS Label elements, including  
 precautionary statements

Emergency Overview

<p><b>Danger</b></p> <p><b>Hazard Statements</b>                  Causes serious eye irritation                  May cause an allergic skin reaction                  May cause cancer                  Flammable liquid and vapor</p> <div style="text-align: center;"> </div> <p><b>Appearance</b> clear</p>	<p><b>Physical state</b> liquid</p>	<p><b>Odor</b> Lemon ginger</p>
--	-------------------------------------	---------------------------------

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
 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  
 Wash contaminated clothing before reuse  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**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**

- Harmful 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	*
PINENES	80-56-8	<1	*

### 4. FIRST AID MEASURES

**First aid measures for different exposure routes**

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

**Skin contact** It is suggested that you use the following blend to clean the affected area: 50% Polysorbate, 40% Propylene Glycol and 10% water.

**Inhalation** Move to fresh air.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

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

**Main Symptoms** Hives.

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

**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**

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

**Specific hazards arising from the chemical**

No information available.

**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** Ensure adequate ventilation.**Environmental precautions****Environmental precautions** 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.**7. HANDLING AND STORAGE****Precautions for safe handling****Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.**Conditions for safe storage, including any incompatibilities****Storage Conditions** Keep containers tightly closed in a dry, cool and 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
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*	-	

*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

<b>Eye/face protection</b>	If splashes are likely to occur, wear:
<b>Skin and body protection</b>	Chemical resistant apron.
<b>Respiratory protection</b>	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.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical and chemical properties

<b>Physical state</b>	liquid
<b>Appearance</b>	clear
<b>Odor</b>	Lemon ginger
<b>Color</b>	pale yellow to amber

<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>	24 °C / 76 °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>	0.87270 to 0.89270	FCC Method
<b>Specific Gravity @ 20C</b>	0.87570 to 0.89570	FCC Method
<b>Refractive Index</b>	1.3516 to 1.3816	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**

**Product Information** Product does not present an acute toxicity hazard based on known information

**Inhalation** There is no data available for this product.

**Eye contact** There is no data available for this product.

**Skin contact** There is no data available for this product.

**Ingestion** There is no data available for this product.

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
ETHYL ALCOHOL 64-17-5	7060 mg/kg ( Rat )	-	124.7 mg/L ( Rat ) 4 h
PINENES 80-56-8	2100 mg/kg ( Rat )	5000 mg/kg ( Rat )	-

**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>	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

Harmful to aquatic life with long lasting effects

7.97926% 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

### Other adverse effects

No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment

<b>Waste Disposal Methods</b>	It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations.
<b>Contaminated packaging</b>	Do not reuse container.
<b>US EPA Waste Number</b>	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	III
ERG Code	127

**ICAO/IATA**

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

**IMDG / IMO**

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

<b>15. REGULATORY INFORMATION</b>
-----------------------------------

**International Inventories**

TSCA	-
DSL/NDSL	-
EINECS/ELINCS	-
ENCS	-
IECSC	-
KECL	-
PICCS	-
AICS	-

**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**

Acute Health Hazard	no
Chronic Health Hazard	no
Fire Hazard	Yes
Sudden Release of Pressure Hazard	no
Reactive Hazard	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

**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
PROPYLENE GLYCOL 57-55-6	X		X

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

<b>NFPA</b>	Health Hazard 2	Flammability 3	Instability 0	Physical and chemical hazards *
<b>HMIS</b>	Health Hazard 2	Flammability 3	Physical Hazard 0	Personal protection b

Revision Date 10-Apr-2017  
Revision Note No information available  
Revision# 1

**WARNING/DISCLAIMER:**

Our ingredients have not been tested, nor have they been determined safe, for inhalation or use in any electronic smoking devices, electronic nicotine delivery systems, electronic cigarettes, or other similar devices (collectively "E-Cigarettes") or in any E-Liquids used with E-Cigarettes. By receiving Apex Flavors, Inc ingredients, the recipient confirms that they will not use these ingredients in connection with the manufacture and distribution of E-Cigarettes, E-Liquids or any component thereof. WE DISCLAIM, TO THE FULLEST EXTENT PERMITTED BY LAW, ALL WARRANTIES, EXPRESS OR IMPLIED, and disclaim all liability in connection with the use of our ingredients in connection with E-Cigarettes and E-Liquids. All such risks are assumed by you and the user.

**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.

end