

**Section 1: Identification**

**Product Name** Flavor, Lemon Oil  
**Commercial Name** Not available  
**Product Use** Not available  
**Restrictions On Use** Not available  
  
**Product Code** 30-1627  
  
**Company** PCCA  
 9901 South Wilcrest  
 Houston, TX 77099  
 Phone: 1-800-331-2498  
 Fax: 1-800-874-5760

In case of emergency contact:  
**CHEMTREC (24hr) 1-800-424-9300**

**Section 2: Hazard(s) Identification**

**OSHA Haz Com:** This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard(29 CFR  
**CFR 1910.1200** 1910.1200) Skin corrosion/irritation Category 2 Skin sensitization Category 1B Aspiration toxicity  
 Category 1 Flammable liquids Category 3

**Signal Word** DANGER

**Hazard Statement(s)** Causes skin irritation. May cause an allergic skin reaction. May be fatal if swallowed and enters airways.  
 Flammable liquid and vapor.

**Pictogram(s) or Symbol(s)**



**Precautionary Statement(s):**

**Prevention**

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Avoid breathing dust/fume/gas/mist/vapors/spray Contaminated work clothing should 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

**Response**

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Storage**

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

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Section 3: Composition/Information on Ingredients**

**Substance/Mixture** Mixture  
**Components** Lemon oil, California Type, Cold pressed  
**% By Weight** 10 -< 15%, >= 25%  
**CAS#** 8008-56-8, 5989-27-5  
**Molecular Weight** Not available  
**Chemical Formula** Not available  
**Synonym(s)** Lemon Oil, California Type

**Mixtures**

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Lemon oil, California Type, Cold Pressed	8008-56-8	10 -< 15%	N/A	ORAL (LD50): Acute: 2840 mg/kg [Rat]. DERMAL (LD50): Acute: >5000 mg/kg [Rabbit].
D-Limonene	5989-27-5	>= 25%	N/A	N/A
1,4-Cyclohexadiene,	99-85-4	5 -< 10%	N/A	N/A
1-methyl-4-(1-methylethyl)-				
Citral	5392-40-5	1-<5%	N/A	N/A
Myrcene	123-35-3	1-<5%	N/A	N/A

**Section 4: First-Aid Measures**

<b>Inhalation</b>	Move to fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Consult a physician. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.
<b>Skin Contact</b>	Wash off immediately with plenty of water. Remove and wash contaminated clothing before re-use. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water. Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Eye Contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
<b>Ingestion</b>	Do not induce vomiting. Drink plenty of water. If symptoms persist, call a physician. Rinse mouth. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.
<b>Symptoms/Effects</b>	
<b>Acute</b>	Not available.
<b>Delayed</b>	Not available.

**Immediate Medical Attention**

May cause sensitization of susceptible persons. Treat symptomatically. Remove all sources of ignition. Use personal protective equipment.

**Section 5: Fire-Fighting Measures****Suitable Extinguishing Media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable Extinguishing Media**

Do not use a solid water stream as it may scatter and spread fire.

**Products of Combustion**

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 by inhalation and skin contact. Flammable,

**Firefighters Special Equipment and Precautions**

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

**Section 6: Accidental Release Measures**

Personal precautions, protective equipment and emergency procedures: Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak.

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. Methods and materials for containment and cleaning up: Prevent further leakage or spillage if safe to do so. 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.

**Section 7: Handling and Storage**

Handling: Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded. Use local exhaust ventilation. Wear personal protective equipment/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Storage: Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep away from heat and sources of ignition. Keep containers tightly closed in a cool, well-ventilated place.

**Section 8: Exposure Controls/Personal Protection**

<b>Exposure Limits</b>	ACGIH TLV Beta Pinene 127-91-3: TWA: 20 ppm Citral 5392-40-5	TWA: 5 ppm Alpha Pinene 80-56-8
	TWA: 20 ppm	

**Engineering Controls**

Showers Eyewash stations Ventilation systems.

**Personal Protection**

Eye/Face Protection: Tightly fitting safety goggles. Face-shield. Skin and body protection: Chemical resistant apron. 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. Hygiene measures: When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing

**Section 9: Physical and Chemical Properties**

<b>Appearance</b>	Clear Green-Yello Liquid		
<b>Odor</b>	Characteristic		
<b>Odor Threshold</b>	Not available.		
<b>Melting Point</b>	Not available	<b>pH</b>	Not available.
<b>Freezing Point</b>	Not available.	<b>Vapor Pressure</b>	Not available.
<b>Boiling Point/Range</b>	410F/210C	<b>Vapor Density</b>	Not available
<b>Decomposition temperature</b>	Not available.	<b>Viscosity</b>	Not available
<b>Partition Coefficient: n-octanol/water</b>	Not available.	<b>Evaporation Rate</b>	Not available.
<b>Flash Point</b>	118F/48C	<b>Autoignition temperature</b>	Not available.
<b>Flammability</b>	Not available.	<b>Flammability or Explosive Limits:</b>	
		<b>Lower</b>	Not available.
		<b>Upper</b>	Not available.
<b>Solubility(ies)</b>	Insoluble in water.		
<b>Other</b>	Not available.		

**Section 10: Stability and Reactivity**

<b>Reactivity</b>	Exothermic reaction
<b>Chemical Stability</b>	Stable under recommended storage conditions.
<b>Hazardous Polymerization</b>	None
<b>Conditions to Avoid</b>	Heat, flames and sparks.
<b>Incompatible Materials</b>	None known based on information supplied.
<b>Hazardous Decomposition Products</b>	None known based on information supplied.

**Section 11: Toxicological Information****RTECS****Acute Toxicity**

LD50 Oral: 2840 mg /kg(Rat)

LD50 Dermal: 5 g/kg(Rabbit)

**Skin Corrosion/Irritation**

Not available.

**Serious Eye Damage/Irritation**

Not available.

**Respiratory or Skin Sensitization**

Not available.

**Germ Cell Mutagenicity**

Not available.

**Carcinogenicity**

Not available

**Reproductive Toxicity**

Not available.

**Routes of Entry**

Not available

**Symptoms Related to Exposure**

Not available.

**Potential Health Effects**

Not available.

**Target Organ(s)**

Not available.

**Section 12: Ecological Information****Ecotoxicity**

This product contains a chemical which is listed as a marine pollutant according to DOT. Very toxic to aquatic life with long lasting effects 25.89% of the mixture consists of components(s) of unknown hazards to the aquatic environment

**Persistence and Degradability**

Not available.

**Bioaccumulative Potential**

Not available.

**Mobility in Soil**

Not available.

**Other Adverse Effects**

Not available.

**Section 13: Disposal Considerations****Waste Disposal**

Dispose of in accordance with local regulations.

**Disposal of Container**

Do not re-use empty containers.

**Other Considerations**

US EPA Waste Number: D001

**Section 14: Transport Information****DOT Classification**

DOT BULK PACKAGING NA Number 1993 Proper shipping name Combustible liquid, n.o.s. Hazard Classification 3 Packing Group III Marine Pollutant This product contains a chemical which is listed as a marine pollutant according to DOT. DOT NON BULK PACKAGING Note: According to 49 CFR §173.150(f)(1), this material was reclassified as a combustible liquid. This provision does not apply to transportation by vessel or aircraft, except where other means of transportation is impractical. Marine Pollutant This product contains a chemical which is listed as a marine pollutant according to DOT. IMDG/IMO UN Number 1197 Proper shipping name Extracts, flavouring , liquid Hazard Classification 3 Packaging Group III Marine Pollutant This product contains a chemical which is listed as a marine pollutant according to TDG. MEX UN Number 1197 Proper shipping name Extracts, flavouring , liquid Hazard Classification 3 Packaging Group III ICAO UN Number 1197 Proper shipping name Extracts, flavouring , liquid Hazard Classification 3 Packaging Group III ICAO/IATA UN Number 1197 Proper shipping name Extracts, flavouring , liquid Hazard Classification 3 Packaging Group III TDG UN Number 1197 Proper shipping name Extracts, flavouring , liquid Hazard Classification 3 Packaging Group III Marine pollutant This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO RID UN Number 1197 Proper shipping name Extracts, flavouring , liquid Hazard Classification 3 Packaging Group III ADR/RID UN Number 1197 Proper shipping name Extracts, flavouring , liquid Hazard Classification 3 Packaging Group III ADN UN Number 1197 Proper shipping name Extracts, aromatic , liquid Hazard Classification 3 Packaging Group III

**Section 15: Regulatory Information****Regulations**

International Inventories TSCA Complies DSL/NDSL Complies EINECS/ELINCS Complies ENCS Complies IECSC Complies KECL Complies PICCS Complies AICS Complies 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 Commercial Chemical Substances/EU 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 Yes 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 does not contain any Proposition 65 chemicals. U.S. State Right-to-Know Regulations

**Other**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**Section 16: Other Information**

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. This material has not been evaluated for safe use in e-cigarettes, therefore Ungerer & Company's position is that it is not intended to be used in this particular application