



fern&petal

# Material Safety Data Sheet

Lime Oil Expressed (*CITRUS AURANTIFOLIA*)

## 1. Product & Company Identification:

### 1.1. Product Identifiers:

**Product Name:** Lime Oil Expressed

**Product Number:** 1130, 1130.1

**CAS-No:** 8008-26-2

### 1.2. Relevant identified uses of the substance or mixture and uses advised against:

**Identified uses:** Laboratory chemicals, Synthesis of substances

### 1.3. Details of the supplier of the safety data sheet:

**Company:** Fern & Petal

#206 - 12025 207A Street, Maple Ridge, BC, V2X 0R3

**Telephone:** (778) 668-3604

**Email:** info@fernandpetal.ca

## 2. Hazards Identification:

### 2.1. Classification of the substance or mixture

#### **GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Flammable liquids (Category 3), H226

For the full text of the H-Statements mentioned in this section, see Section 16

### 2.2. GHS Label elements, including precautionary statements

#### **Pictogram:**



**Signal word:** Warning

#### **Hazard statement(s):**

**H226** Flammable liquid and vapour

#### **Precautionary statement(s):**

**P210** Keep away from heat/sparks/open flames/hot surfaces.  
No smoking.

**P233** Keep container tightly closed

**P240** Ground/bond container and receiving equipment

**P241** Use explosion-proof  
electrical/ventilating/lighting/equipment

**P242** Use only non-sparking tools.

**P243** Take precautionary measures against static discharge

**P280** Wear protective gloves/protective clothing/eye  
protection/face protection.

**P303 + P361 + P353** IF ON SKIN (or hair): Remove/Take off immediately all  
contaminated clothing. Rinse skin with water/shower

**P370 + P378** In case of fire: Use dry sand, dry chemical or  
alcohol-resistant foam for extinction

**P403 + P235**

Store in a well-ventilated place. Keep cool.

**P501**

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

2.3. Hazards not otherwise classified (HNOC) or not covered by GHS

None

### 3. Composition/Information on Ingredients:

#### 3.1. Substances:

**Synonyms:** Citrus Aurantifolia Swingle

**CAS-No:** 8008-26-2

#### 3.2. Hazardous components

Component	Lime Oil
Classification	Flam. Liq. 3; H226
Concentration	<= 100%

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. First Aid Measures:

### 4.1. Description of first aid measures:

#### **General Advice:**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of the dangerous area.

#### **If Inhaled:**

If breathed in, move the person into fresh air. If not breathing, give artificial respiration. Consult a physician

#### **In case of skin contact:**

Wash off with soap and plenty of water. Consult a physician.

#### **In case of eye contact:**

Flush eyes with water as a precaution

#### **If swallowed:**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2. Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3. Indication of any immediate medical attention and special treatment needed

No data available

## 5. Firefighting Measures

### 5.1. Extinguishing media

#### **Suitable extinguishable media**

For small (incipient) fires, use media such as “alcohol” foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

### 5.2. Special hazards arising from the substance or mixture

Nature of decomposition products not known

### 5.3. Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4. Further Information

Use water spray to cool unopened containers.

## 6. Accidental Release Measures

- 6.1. Personal precautions, protective equipment and emergency procedures:

Avoid breathing vapours, mist or gas. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8

- 6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

- 6.3. Methods and materials for containment cleanup

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place it in a container for disposal according to local regulations (see section 13).

- 6.4. Reference to other sections

For disposal see section 13

## 7. Handling and Storage

### 7.1. Precautions for safe handling

Avoid inhalation of vapour or mist.

Keep away from sources of ignition - no smoking. Take measures to prevent the buildup of electrostatic charge. For precautions see section 2.2

### 7.2. Conditions for safe storage, including any incompatibilities

Store in a cool place. Keep the container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

### 7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated



## 8. Exposure controls/personal protection

### 8.1. Control parameters

#### **Components with workplace control parameters**

Contains no substances with occupational exposure limit values

### 8.2. Exposure controls

#### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### **Personal protective equipment:**

##### **Eye/face protection**

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching the glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

*Full contact*

<b>Material:</b>	Nitrile-Rubber
<b>Minimum Layer Thickness:</b>	0.4mm
<b>Break through time:</b>	480 min

**Material tested:** Camatril® (KCL 730 / Aldrich Z677442, Size M)

*Splash Contact*

**Material:** Nitrile-Rubber

**Minimum Layer Thickness:** 0.2mm

**Break through time:** 30 min

**Material tested:** Dermatril® P (KCL 743 / Aldrich Z677338), Size M)

**Data Source:** KCL GmbH,  
D-36124 Eichenzell,  
+49 (0)6659 87300  
[sales@kcl.de](mailto:sales@kcl.de)

**Test Method:** EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific situation.

**Body protection**

Impervious clothing, Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the

respirator

is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environment exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## 9. Physical and Chemical Properties

### 9.1. Information on Basic Physical and Chemical Properties

9.1.1.	<b>Appearance:</b>	Form: Liquid Colour: Clear, Amber, Green
9.1.2.	<b>Odour:</b>	No Data Available
9.1.3.	<b>Odour Threshold:</b>	No Data Available
9.1.4.	<b>pH:</b>	No Data Available
9.1.5.	<b>Melting Point / Freezing Point:</b>	No Data Available
9.1.6.	<b>Initial Boiling Point &amp; Boiling Range:</b>	182°C (360° F)
9.1.7.	<b>Flash Point:</b>	48.9°C (120°F) - closed cup.
9.1.8.	<b>Evaporation Rate:</b>	No Data Available
9.1.9.	<b>Flammability Rate:</b>	No Data Available
9.1.10.	<b>Flammability (solid, gas):</b>	No Data Available
9.1.11.	<b>Upper/Lower flammability or Explosive Limits:</b>	No Data Available
9.1.12.	<b>Vapour Pressure:</b>	No Data Available
9.1.13.	<b>Vapour Density:</b>	No Data Available
9.1.14.	<b>Relative Density:</b>	(See Certificate of Analysis)
9.1.15.	<b>Water Solubility:</b>	No Data Available
9.1.16.	<b>Partition Coefficient:</b>	No Data Available
9.1.17.	<b>Auto-Ignition Temperature:</b>	No Data Available
9.1.18.	<b>Decomposition Temperature:</b>	No Data Available
9.1.19.	<b>Viscosity:</b>	No Data Available
9.1.20.	<b>Explosive Properties:</b>	No Data Available

9.1.21. **Oxidizing Properties:**

No Data Available

9.2. Other Safety Information

No Data Available

## 10. Stability and Reactivity

### 10.1. Reactivity

No Data Available

### 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

No Data Available

### 10.4. Conditions to avoid

Heat, flames and sparks.

### 10.5. Incompatible Materials

No Data Available

### 10.6. Hazardous decomposition products

**Other decomposition products:** No Data Available

**In the event of fire:** See section 5

## 11. Toxicological Information

### 11.1. Information on toxicological effects

#### **Carcinogenicity:**

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**OSHA;** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### **Reproductive toxicity:**

No Data Available

#### **Specific Target Organ Toxicity - Single Exposure**

Inhalation - May cause respiratory irritation.

#### **Specific target organ toxicity - repeated exposure**

No Data Available

#### **Aspiration Hazard**

No Data Available

#### **Additional Information:**

**RTECS:** RIR7270000

Dermatitis, to the best of our knowledge the chemical, physical, and toxicological

properties have not been thoroughly investigated.



## 12. Ecological Information

### 12.1. Toxicity

No Data Available

### 12.2. Persistence and Degradability

No Data Available

### 12.3. Bioaccumulative potential

No Data Available

### 12.4. Mobility in Soil

No Data Available

### 12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6. Other Adverse Effects

No Data Available

## 13. Disposal Considerations

### 13.1. Waste treatment methods

#### **Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

#### **Contaminated Packaging**

Dispose of as unused product

## 14. Transportation Information

### 14.1. DOT (US)

<b>UN-Number:</b>	1993
<b>Class:</b>	3
<b>Packing Group:</b>	III
<b>Proper Shipping Name:</b>	Flammable liquids, n.o.s (Lime oil)
<b>Poison Inhalation Hazard:</b>	No

### 14.2. IMDG

<b>UN-Number:</b>	1993
<b>Class:</b>	3
<b>Packing Group:</b>	III
<b>EMS-No:</b>	F-E, S-E
<b>Proper Shipping Name:</b>	Flammable liquid, n.o.s (Lime oil)

### 14.3. IATA

<b>UN-Number:</b>	1993
<b>Class:</b>	3
<b>Packing Group:</b>	III
<b>Proper Shipping Name:</b>	Flammable liquids, n.o.s (Lime oil)

## 15. Regulatory Information

### 15.1. SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### 15.2. 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.

### 15.3. SARA 311/312 hazards

Fire Hazard

## 16. Other Information

16.1. Full text of H-Statements referred to under sections 2 and 3

**Flam. Liq:** Flammable Liquid

**H226:** Flammable Liquid and vapour

**HMIS Rating:**

Health Hazard: 0

Chronic Health Hazard:

Flammability: 2

Physical Hazard: 0

**NFPA Rating:**

Health Hazard: 0

Fire Hazard: 2

Reactivity Hazard: 0

**Further information:**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Fern & Petal shall not be held liable for any damage resulting from handling or from contact with the above product.