



Plant's Power Inc.
3-2700 St. Clair Ave West
Toronto, Ontario, M6N 1M2
Contact: 1-416-766-1254

Material Safety Data Sheet Lime Essential Oil

Section 1: Product and Company Identification

Product Name: Lime Essential Oil

Botanical Name: *Citrus aurantifolia*

INCI Name: Citrus aurantifolia oil

CAS #: 8008-26-2

EINECS #: 90063-52-8

FEMA #: 2631

Contact information:

Plant's Power Inc 3-2700 St.Clair Ave west Toronto, Ontario M6N 1M2 Contact: 1-416-766-1254 http://www.PlantPower.ca contactus@plantpower.ca	24 HOUR EMERGENCY TELEPHONE NUMBER: (647)-427-4480
--	---

Section 2: Composition and Information on Ingredients

Composition:

Citrus aurantifolia oil 100% by weight

Latin Name: *Citrus aurantifolia*

Hazardous Components: Limonene: CAS #: 5989-27-5, N, Xi, R10, R3, R50/53, <=60%
Beta Pinene: CAS #: 127-91-3, N, Xn, R43, R50/53, R65, <=20%
Gamma Terpinene: CAS #: 99-85-4, Xn, R65, <+16%
Citral (Geranial and Neral): CAS #: 5392-40-5, Xi, R38, R43, <=5%
Alpha Pinene: CAS #: 80-56-8, N, Xn, R43, R50/53, R65, <=4%
Myrcene: CAS #: 123-35-3, Xn, R65, <=3%
Para Cymene: CAS #: 99-87-6, N, Xn, %51/53, R65, <=2%
Alpha Terpineol: CAS #: 98-55-5, Xi, R38, <=1%

Allergens: Limonene (45-60%), Citral (Geranial + Neral) (<=5%), Geraniol (<=1.5%), Linalool (<=1%)

Toxicological Data: LD50 Oral [Rat]: >5,000 mg/kg
LD50 Dermal [Rabbit]: >5,000 mg/kg

CAS #: 8008-26-2
EINECS #: 90063-52-8
FEMA #: 2631

Section 3: Hazards Identification

Primary Hazard: Xn: Harmful
N: Dangerous for environment
Xn: Harmful
N: Dangerous for environment
R10: Flammable
R38: Irritating to skin
R43: May cause sensitization by skin contact
R50/53: Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment
R65: Harmful, may cause lung damage if swallowed
R10: Flammable
R38: Irritating to skin
R43: May cause sensitization by skin contact
R50/53: Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment
R65: Harmful, may cause lung damage if swallowed

Routes of Entry: Eyes
Skin
Ingestion
Inhalation

Eye Contact: Moderate irritation may occur.
Skin Contact: Irritation may occur with prolonged or repeated exposure.
Ingestion: Hazardous in case of ingestion.
Inhalation: Avoid gross inhalation of vapors.

Section 4: First Aid Measures

Eyes: Remove lenses if applicable. Flush with plenty of water or eye wash solution for 15 minutes holding lids apart. Get medical attention if irritation persists or if lesion is visible.

Skin: Remove contaminated clothing. Thoroughly wash the affected area with soap and water. Flush with large quantities of water. Cover with emollient or pure vegetable oil. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water. Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-

mouth resuscitation. Seek medical attention or contact local poison control center immediately.

Inhalation: Remove to fresh air. Seek medical attention if necessary.

Serious Inhalation: Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Section 5: Fire and Explosion Data

Flammability: Flammable

Flash Point: >46° C

Flammable Limits LEL: Not Established
UEL: Not Established

Auto Ignition Temperature: No information

Hazardous Combustion

Products: No information

Extinguishing Media: Dry Chemical
Carbon Dioxide

Note: Do not use water spray except to cool containers

Special Firefighting

Procedures: Wear positive pressure, self contained breathing apparatus.
Wear protective clothing to prevent contact with skin and eyes.
Remove containers from fire area.
Spray extinguishing media directly into the base of the flames.
Water is unsuitable for use on burning materials but may be used to cool containers exposed to heat.

Unusual Fire &

Explosion Hazards: None known

Section 6: Accidental Release Measures

Personal Protection: Chemical splash goggles should be worn.
If in a confined area, a certified/approved vapor respirator should be used.
Remove individuals if they do not have respiratory/dust protection.
Wear protective clothing and chemical resistant gloves.
Do not smoke.

Note: Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product

Environmental Protection: Notify authorities if large amounts of product enters sewer.

Methods for Cleaning Up: Remove any source of flame or sparks.
Ventilate area
Prevent liquid from entering the sewers.
Recover spilled material with pump or absorb onto an inert, absorbent substrate and sweep up.

Wash area with soap and water.

Section 7: Handling and Storage

Handling

Safe Handling: Wear safety glasses and chemical resistant gloves.
Keep away from oxidizing agents, excessive heat, light and sources of ignition.

Storage

Requirements for Storage Areas and

Containers: Store in a cool, dry location, in a sealed container in a well ventilated area away from sources of ignition.

Section 8: Exposure Controls/Personal Protection

Engineering Controls: Provide exhaust ventilation or other engineering controls to minimize vapors.
Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection

Eye: Chemical splash goggles or face shield should be worn.
Skin/Body: Lab coats, boots and chemical resistant gloves should be worn.
Respiratory: Use adequate ventilation or NIOSH-approved respiratory devices if vapor concentration is high due to heat.
Ventilation: Handle in well ventilated areas. Ventilation meeting ACGIH Standards should be employed.
Other: Evaluate need based on application. Slip proof shoes may be worn where spills may occur.
Work/Hygiene Practice: Use good personal hygiene practices. Limit exposure to product whenever possible. Wash contaminated clothing or shoes before each use.

Section 9: Physical and Chemical Properties

Physical State: Liquid
Color: Clear
Odor: Characteristic of lime peel
Specific Gravity @ 20°C: 0.862-0.880
Refractive Index @ 20°C: 1.478-1.488
Optical Rotation @ 20°C: +1° to +60°
Flash Point: >46° C
Boiling Point: Not determined
Solubility in Water: Insoluble

Section 10: Stability and Reactivity Data

Stability: Stable under normal conditions of use
Conditions to Avoid: Keep away from sources of ignition, flame and heat. Avoid hot work and sources of ignition on or near empty containers.

Incompatibility

(Materials to Avoid): Strong oxidizing agents, PVC
Hazardous Decomposition: No decomposition if use is appropriate
Hazardous Polymerization: Will Not Occur

Section 11: Toxicological Information

Acute Toxicity Data: LD50 Oral [Rat]: >5,000 mg/kg
LD50 Dermal [Rabbit]: >5,000 mg/kg
Sensitization: Not Available
Irritation: Not Available
Phototoxicity: Not Available
Carcinogenicity: Not Regulated
Mutagenicity: Not Regulated
Toxic Effects of Reproductive System: Not Regulated
IFRA Restrictions: This substance and/or some of its components are covered by the Code of Practice of the IFRA, the 42nd Amendment of May 16, 2007, available on the internet website www.IFRAorg.org.
Other Information: Handle this product with all precautions in light of unpredictable synergistic effects in especially sensitive people.

Section 12: Ecological Information

Mobility: Low mobility in soil.
Aquatic Toxicity: Very toxic to aquatic organisms, may cause long term effects in the aquatic environment.
Toxicity by Daphnia (CE50): 55.90 mg/l/48h
Bioaccumulation Potential: No impact according to known information
Other Harmful Effects: No other serious according to known information
Precautions: Avoid release into the environment (surface water, sewers, groundwater and air in the middle and natural). Comply with national regulations and regional legislation.

Water Hazard Class (WGK) (5)
according to Annex 2 of the German
directive Hazardous Materials (No.
Carac.: 814; 17.05.1999 organics
materials):

Section 13: Disposal Considerations

Waste Disposal Methods: Do not put into sewer lines. Do not contaminate soil and water with waste. Dispose of according to local, state and federal regulations.

Section 14: Transport Information

Customs Rate Code: 3301 19 20 00

Transport Classification:

(according to international regulations)

Land: ADR/RID:

Class 3

UN #: 1169

Packing Group: III

Label Name: Liquid Aromatic Extract

Sea: IMDG:

Class 3

UN #: 1169

Packing Group: III

Label Name: Liquid Aromatic Extract

Marine Pollutant: YES

Air: ICAO-TI and IATA-DGR:

Class 3

UN #: 1169

Packing Group: III

Label Name: Liquid Aromatic Extract

Section 15: Other Regulatory Information

DSCL (EEC):

Xn: Harmful

N: Dangerous for environment

R10: Flammable

R38: Irritating to skin

R43: May cause sensitization by skin contact

R50/53: Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment

R65: Harmful, may cause lung damage if swallowed

S24: Avoid contact with eyes

S26: In case of contact with skin, wash area immediately with soap and water and cover the effected area with vegetable oil

S37: Wear suitable gloves

S61: Avoid release to the environment. Refer to special instructions/safety data sheet.

S62: In case of ingestion, do NOT induce vomiting. Seek medical attention immediately.

Protective Equipment:

Gloves, Lab Coat, Vapor Respirator, Splash Goggles

Section 16: Other Information

Disclaimer:

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Plant's Power be liable for any claims, losses, or damages of any third party or for lost