

# MATERIAL SAFETY DATA SHEET

Lemon - Citrus limonum - Essential Oil

### 1. IDENTIFICATION OF SUBSTANCE/PREPARATION & COMPANY.

Product name: Lemon Oil

Product code: 30399

Supplier: Saffire Blue Inc.

1444 Bell Mill Road

Tillsonburg, ON N4G4G9 Canada

Tel: 519-286-0295

### 2. COMPOSITION / INFORMATION ON INGREDIENTS.

Definition/Botanical Origin: The volatile oil is obtained by cold pressing the peel from the fresh fruits of Citrus limonum (L.) Burm. (Fam. Rutaceae)

H-No: 3301.33 CAS No: 8008-56-8 Status: natural

# CoE No: 139 FEMA: 2625 Additives: none

FDA: §182.20 IFRA: restricted Application: Food products, skin care, aromatherapy, soaps etc

RIFM: monograph EC No: 284-515-8 FCC IV: official

EINECS-CAS No: 84929-31-7

INCI name: Citrus medica limonum (Lemon) Peel Oil

### 3. HAZARDS IDENTIFICATION:

Xn Harmful; N Dangerous for the environment

#### 4. FIRST-AID MEASURES:

Inhalation: Remove from exposure site to fresh air. Keep at rest. Obtain medical attention.

Eye contact: Rinse immediately with plenty of water for at least 15 mins. Contact a doctor if symptoms persist.

Skin contact: Remove contaminated clothes. Wash thoroughly with soap & water, flush with plenty of water. If irritation persists, seek medical advice.

Ingestion: Rinse mouth out with water. Seek medical advice **immediately**.

Other: When assessing action take Risk & Safety Phrases into account (Section 15)

#### 5. FIRE FIGHTING MEASURES.

Extinguishing media Use CO<sub>2</sub>, Dry Powder or Foam type Extinguishers, spraying recommended: extinguishing media to base of flames. Do not use direct water jet on burning material.

Special measures: Avoid vapour inhalation. Keep away from sources of ignition. Do not smoke. Wear positive pressure self-contained breathing apparatus & protective clothing.

Extinguishing procedures: Closed containers may build up pressure when exposed to heat and should be cooled with water spray.

### 6. ACCIDENTAL RELEASE MEASURES.

Personal precautions: Avoid inhalation & direct contact with skin & eyes. Use individual protective equipment (safety glasses, waterproof-boots, suitable protective clothing) in case of major spillages.

Environment precautions: Keep away from drains, soils, surface & groundwaters.

Cleaning up methods Remove all potential ignition sources. Contain spilled material. Cover for spillages: with an inert or non-combustible inorganic absorbent material, sweep up and remove to an approved disposal container. Observe state, federal & local disposal regulations.

### 7. HANDLING & STORAGE.

Precautions in handling: Apply good manufacturing practice & industrial hygiene practices, ensuring proper ventilation. Observe good personal hygiene, and do not eat, drink or smoke whilst handling. Avoid static discharges.

Storage conditions: Store in tightly closed original container, in a cool, dry & ventilated area away from heat sources & protected from light. Keep air contact to a minimum.

Fire protection: Keep away from ignition sources & naked flames. Take precautions to avoid static discharges in working area.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION.

Respiratory protection: Avoid breathing product vapour. Apply local ventilation where possible.

Ventilation: Ensure good ventilation of working area.

Hand protection: Avoid all skin contact. Use chemically resistant gloves if required.

Eye protection: Use safety glasses.

Work/Hygiene practices: Wash hands with soap & water after handling.

## 9. PHYSICAL & CHEMICAL PROPERTIES.

Colour: Pale yellow to greenish yellow

Appearance: Mobile liquid

Odour: Characteristic of fresh lemon peel

Flash point °C: 45

Specific gravity at  $20^{\circ}$ C: 0.840 - 0.865

Refractive index @ 20°C: 1.465 - 1.485

## 10. STABILITY & REACTIVITY.

Reactivity: It presents no significant reactivity hazards, by itself or in contact with water. Avoid contact with strong acids, alkali or oxidising agents.

Decomposition: Liable to cause smoke & acrid fumes during combustion: carbon monoxide, carbon dioxide & other non-identified organic compounds may be formed.

### 11. TOXICOLOGICAL INFORMATION.

For Lemon oil, Opdyke D.J. (1974) found expressed lemon oil to be non- toxic and non-irritating to human skin, but to be irritating to mouse skin. (However see section 126). Photo-toxic effects were caused by furanocoumarin content (*FCT* 12,725 Binder p491). IFRA recommends that for application of areas of skin exposed to sunshine, expressed lemon oil be limited to a maximum of 2% in the final product except for bath preparations, soaps and other products to be washed off the skin: Code of Practice (Amendments 1992)

LD<sub>50</sub> orl rat >2840mg/Kg (NIOSH 1975)

## 12. ECOLOGICAL INFORMATION.

Very toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

Biodegradability: Data not available

Precautions: Prevent surface contamination of soil, ground & surface water.

## 13. DISPOSAL CONSIDERATIONS.

Avoid disposing to drainage systems and into the environment. Seek expert advice.

## 14. TRANSPORT REGULATIONS.

UN 1169: applies

Road (ADR/RID: Class 3 item 31/c

Air (IATA/ICAO): Class 3 Packaging group III

Sea (IMDG): page 3036-1, Class 3

CHIP: See section 15

### 15. REGULATORY INFORMATION.

Hazards: Harmful

Symbols: Xn

Risk Phrases: R10 Flammable liquid

R38 Irritating to the skin

## R43 May cause sensitisation 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

Safety Phrases: S24 Avoid contact with skin

S37 Wear suitable gloves

S61 Avoid release to the environment. Refer to special

instructions/safety data

S62 If swallowed, do not induce vomiting, but seek medical advice

immediately and show this container or label

### 16. OTHER INFORMATION.

Cosmetics Directive 7<sup>th</sup> Amendment: Restrictions may apply. A source of Citral, Geraniol, Limonene and Linalool, listed as sensitisers. Check maximum usage levels for skin care products.

#### **PACKAGING:**

Type	Suitability
JI	

Glass	Yes
Lacquer lined steel/tin	Yes
Aluminium	Yes
НРРЕ	No
F/HDPE	Yes
Other plastic	No

## SHELF LIFE

When stored within advised conditions, re-test after 12 months then at 3 monthly intervals up a maximum of 24 months.

### **Q.C. REQUIREMENTS.**

In-line with general product specification. Always satisfy suitability for specific application.

The data provided in this material safety data sheet is meant to represent typical data/analysis for this product and is correct to the best of our knowledge. The data was obtained from current and reliable sources, but is supplied without warranty, expressed or implied, regarding its' correctness or accuracy. It is the user's responsibility to determine safe conditions for the use of this product, and to assume liability for loss, injury, damage or expense arising from improper use of this product. The information provided does not constitute a contract to supply to any specification, or for any given application, and buyers should seek to verify their requirements and product use.

### **DECLARATION OF ALLERGENS**

PRODUCT	Lemon Oil 30399
SUPPLIED TO	Saffire Blue Inc.

MATERIAL	CAS	TOTAL ALLERGEN
	NUMBER	INCLUSION LEVEL (%)
AMYL CINNAMAL	122-40-7	-
BENZYL ALCOHOL	100-51-6	-
CINNAMYL ALCOHOL	104-51-6	-
CITRAL	5392-40-5	3.00

EUGENOL	97-53-0	-
HYDROXYCITRONELLAL	107-75-5	-
ISO EUGENOL	97-54-1	-
AMYL CINNAMYL ALCOHOL	101-85-9	-
BENZYL SALICYLATE	118-58-1	-
CINNAMAL	104-55-2	-
COUMARIN	91-64-5	-
GERANIOL	106-24-1	0.20
HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE	31906-04-4	-
ANISE ALCOHOL	105-13-5	-
BENZYL CINNAMATE	103-41-3	-
FARNESOL	4602-84-0	-
BUTYYLPHENYL METHYLPROPIONAL	80-54-6	-
LINALOOL	78-70-6	0.30
BENZYL BENZOATE	120-51-4	-
CITRONELLOL	106-22-9	-
HEXYL CINNAMAL	101-86-0	-
LIMONENE	5989-27-5	73.00
METHYL 2-OCTYNOATE	111-12-6	-
ALPHA-ISOMETHYL IONONE	127-51-5	-
EVERNIA PRUNASTRI EXTRACT	90028-68-5	-
EVERNIA FURFURACEA EXTRACT	90028-67-4	-