



Lime

Calmer Solutions Limited

## Safety Data Sheet

### 01. IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY UNDERTAKING

#### 1.1 Product Identifier

1.1 Product Identifier	Lime Oil Distilled				
Biological Definition	Citrus Aurantifolia Oil is the volatile oil obtained from the fruits of the Lime, Citrus aurantifolia, Rutaceae.				
INCI Name	Citrus Aurantifolia Oil				
Synonyms Trade Names	Lime Oil WI Distilled				
CAS Number	8008-26-2 90063-52-8	EC Number	290-010-3	EINECS No.	290-010-3

#### 1.2 Relative identified uses of the substance or mixture and uses advised against

Flavours, Fragrances: Use in accordance with good manufacturing and industrial hygiene practices.

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

Calmer Solutions Limited - Hadresham, Woolborough Lane, Outwood, Surrey, England RH1 5QR - Reg No 4992013

#### 1.4 Emergency Telephone Number

In case of a medical emergency following exposure to a chemical, call NHS Direct in England or Wales 0845 46 47 or NHS 24 in Scotland 08454 24 24 (UK Only)

### 02. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

The Full Text for all Hazard Statements displayed in Section 16.

Classification (EC 1272 / 2008)

Flammable Liquid, Hazard Category 3 Skin Corrosion / Irritation Category 2 Sensitization - Skin Category 1 Aspiration Hazard Category 1 Hazardous to the Aquatic Environment - Long-term Hazard Category 2 H226, Flammable liquid and vapour. H304, May be fatal if swallowed and enters airways. H315, Causes skin irritation. H317, May cause an allergic skin reaction. H411, Toxic to aquatic life with long lasting effects.

GHS02

GHS07

GHS08

GHS09

None



Signal Word

Danger

Contains

Hazard Statements

H226 Flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.

H317 May cause an allergic skin reaction.  
H411 Toxic to aquatic life with long lasting effects.

#### Precautionary Statements

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.  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264 Wash... thoroughly after handling.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301 IF SWALLOWED:  
P310 Immediately call a POISON CENTER or doctor/physician.  
P303 IF ON SKIN (or hair):  
P361 Remove/Take off immediately all contaminated clothing.  
P353 Rinse skin with water/shower.  
P331 Do NOT induce vomiting.  
P333 If skin irritation or rash occurs:  
P313 Get medical advice/attention.  
P362 Take off contaminated clothing and wash before reuse.  
P370 In case of fire:  
P378 Use... for extinction.  
P403 Store in a well-ventilated place.  
P235 Keep cool.  
P405 Store locked up.  
P501 Dispose of contents/container to...

#### Supplementary Precautionary Statements

None Identified

## 2.3 Other Hazards

PBT or PvB according to Annex XIII	No additional data available.
Adverse physio-chemical properties	No additional data available.
Adverse effects on human health	No additional data available.

## 03. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

**55.7 - 55.7 % d-limonene** CAS No: 5989-27-5 EC No: 227-813-5  
Classification (EC 1272/2008): Flam. Liq. 3 - H226, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410, Skin Irrit. 1 - H410, Skin Sens. 1 - H317

**17.4 - 17.4 %  $\gamma$ -Terpinene (p-mentha-1,4diene)** CAS No: 99-85-4 EC No: 202-794-6

Classification (EC 1272/2008): Flam. Liq. 3 - H226, Asp. Tox. 1 - H304

**9.65 - 9.65 % Terpinolene** CAS No: 586-62-9 EC No: 209-578-0

Classification (EC 1272/2008): FL 3-SCI 2-SS 1B-AH 1-EH A1-EH C1;H304-H317 - H410

**8.3 - 8.3 % P-Mentha-11,3-Diene** CAS No: 99-86-5 EC No: 202-795-1

Classification (EC 1272/2008): Asp. Toxic 1 - H304, Acute Tox. 4 - H302, Aquatic Chronic 2 - H411, Flam. Liq. 3 - H226

**3.51 - 3.51 % p-Cymene** CAS No: 99-87-6 EC No: 202-796-7

Classification (EC 1272/2008): Flam. Liq. 3 - H226, Asp. Tox. 1 - H304, Acute Tox. 5 - H303, Aquatic Chronic 2 - H411, Skin Irrit 3 - H316

**3.5 - 3.5 % Eucalyptol** CAS No: 470-82-6 EC No: 207-431-5

Classification (EC 1272/2008): Skin Irrit. 3 (316) (ECHA), Acute Tox. 5 (H503)(ECHA), Flam. Liq. 3 - H226 (ECHA)

**3.5 - 3.5 % 1,4-Cineol** CAS No: 470-67-7 EC No: 20-428-9

Classification (EC 1272/2008): Flam. Liq. 3 - H226

**3.48 - 3.48 % Alpha-Terpinol** CAS No: Not Defined EC No: Not Defined

Classification (EC 1272/2008): SCI 2 - EDI 2; H315-H319

**2.84 - 2.84 % Alpha-Pinene** CAS No: 80-56-8 EC No: 201-291-9

Classification (EC 1272/2008): Aquatic Acute 2 - H400, Chronic Aquatic 1 - H410, Skin Sens. 1 - H317, Skin Irrit 2 - H315, Asp. Tox. 1 - H304, Acute Tox. 5 - H503, Flam. Liq. 3 - H226

**2.67 - 2.67 % Beta-Pinene** CAS No: 127-91-3 EC No: 20-872-5

Classification (EC 1272/2008): Flam. Liq. 3 - H226, Asp. Tox. 1 - H304, Skin Irrit. 2 - H315, Skin Sens. 1 - H317

**1.5 - 1.5 % Myrcene** CAS No: 123-35-3 EC No: 204-622-5

Classification (EC 1272/2008): Flam. Liq. 3 - H226, Asp. Tox. 1 - H304, Aquatic Chronic 3 - H412

**0.83 - 0.83 % l-Beta-Bisabolene**

CAS No: 495-61-4

EC No: 610-461-5

Classification (EC 1272/2008): Asp. Tox. 1 - H304, Skin Irrit. 2 - H315, Skin Sens. 1 - H317

**0.74 - 0.74 % Citral**

CAS No: 5392-40-5

EC No: 226-394-6

Classification (EC 1272/2008): Skin Irrit. 2 - H315, Skin Sens. 1 - H317

**0.5 - 0.5 % Camphene**

CAS No: 79-92-5

EC No: 201-234-8

Classification (EC 1272/2008): Flam. Liq. 2 - H225, Eye Irrit. 2 - H319, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410

**0.5 - 0.5 % Beta Caryophyllene**

CAS No: 87-44-5

EC No: 201-746-1

Classification (EC 1272/2008): Asp. Toxic 1 - H304

**0.5 - 0.5 % Alpha-Phellandrene**

CAS No: 99-83-2

EC No: 202-792-5

Classification (EC 1272/2008): Flam. Liq. 3 - H226

**0.33 - 0.33 % Decanal**

CAS No: 112-31-2

EC No: 203-872-5

Classification (EC 1272/2008): EDI 2-EH C3;H319-H412

## 04. FIRST AID MEASURES

### 4.1 Description of first aid measures

41 Inhalation:	Remove from exposure area to fresh air. Obtain medical advice immediately.
41 Ingestion:	Wash mouth out with water and obtain medical advice immediately.
41 Eye:	Flush with plenty of water and seek medical advice.
41 Skin:	Remove contaminated clothing. Wash thoroughly with soap and water. Seek medical advice if irritation persists or there is any sign of tissue damage.

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

May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction.

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

None expected, see Section 4.1 for further information.

## 05. FIRE FIGHTING MEASURES

### 5.1 Extinguishing Media

Carbon dioxide, Chemical Powder or Foam. Do not use a direct stream of water.

## 5.2 Special hazards arising from the product

In case of fire Carbon Monoxide and other unidentified organic compounds may be released.

## 5.3 Advice for firefighters

In case of insufficient ventilation use suitable respiratory equipment. Wear chemical protective clothing.

# 06. ACCIDENTAL RELEASE MEASURES

## 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation. Avoid contact with skin and eyes. See protective measures under Section 7 and 8.

## 6.2 Environmental Precautions

Do not discharge into drains, water courses or onto the ground.

## 6.3 Methods and material for containment and clearing up

Remove ignition sources. Provide adequate ventilation. Avoid excessive inhalation of vapours. Contain spillage immediately by use of sand or inert powder. Dispose of according to local regulations.

## 6.4 Reference to other sections

See sections 8 and 13.

# 07. HANDLING AND STORAGE

## 7.1 Precautions for safe handling

Keep away from heat, sparks, open flames and hot surfaces. - No smoking.

## 7.2 Conditions for safe storage, including and incompatibilities

Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

## 7.3 Specific end use(s)

Flavours, Fragrances: Use in accordance with good manufacturing and industrial hygiene practices.

# 08. EXPOSURE CONTROLS / PERSONAL PROTECTION

## 8.1 Control Parameters

Workplace exposure limits: Not Applicable

## 8.2 Exposure controls

Protective Equipment

Goggles

Gloves

None

None

None



Process Conditions:

Provide eyewash station.

Engineering Measures:

Provide adequate ventilation.

Respiratory Equipment:

Under normal conditions of use and where adequate ventilation is available to prevent build up of excessive vapour, this material should not require special engineering controls. However, in conditions of high or prolonged use, or high temperature or other conditions which increase exposure, the following engineering controls can be used to minimise

	exposure to personnel: a) Increase ventilation of the area with local exhaust ventilation. b) Personnel can use an approved, appropriately fitted respirator with organic vapour cartridge or canisters and particulate filters. c) Use closed systems for transferring and processing this material. Also refer to Sections 2 and 7.	
Hand Protection:	Wear protective gloves/eye protection/face protection.	
Eye Protection:	Wear protective gloves/eye protection/face protection.	
Other Protection:	No additional data available.	
Hygiene Measures:	Good personal hygiene practices are always advisable, especially when working with chemicals / oils. Keep away from foodstuffs, beverages and feed.	
Personal Protection:	Avoid inhalation and contact with skin and eyes.	
Skin Protection	Wear apron or protective clothing in case of splashes.	
Environmental Exposure Controls:	Avoid discharging into drainage water. Only eliminate by authorised companies.	

## 09. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance:	Liquid, Virtually colourless to pale yellow / green.
Colour:	Virtually colourless to pale yellow / green.
Flash Point:	40
Odour:	Characteristic – Fresh, citrus, lime
Relative Density:	0.849 – 0.859 @ 20°C
Refractive:	1.470 to 1.478 @ 20°C
Melting Point:	No additional data available.
Boiling:	No additional data available.
Vapour:	No additional data available.
Solubility:	Insoluble in water.
Auto Ignition:	No additional data available.

### 9.2 Other Information

No additional data available.

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Presents no significant reactivity hazards, by itself or in contact with water.

### 10.2 Chemical Stability

Stable under normal temperature and storage conditions and recommended use.

### 10.3 Possible hazardous reactions

Not expected under normal temperature conditions and recommended use.

### 10.4 Conditions to avoid

Avoid extreme heat.

## 10.5 Incompatible materials

Avoid contact with strong acids, alkalis and oxidising agents.

## 10.6 Hazardous Decomposition Products

Not expected under normal temperature conditions and recommended use.

# 11. TOXOLOGICAL INFORMATION

## 11.1 Information on toxicological effects

Acute Toxicity:	Assumed Toxicity Value (LD50 or ATE) for Acute Oral Toxicity: 5934.41 Assumed Toxicity Value (LD50 or ATE) for Acute Dermal Toxicity: n/a Assumed Toxicity Value (LC50 or ATE) for Acute Inhalation Toxicity: n/a Inhalation Route: n/a
Respiratory or skin sensitisation:	May cause an allergic skin reaction (H317).
Skin corrosion/irritation:	Causes skin irritation (H315).
Serious Eye damage/irritation:	No additional data available.
Germ Cell Mutagenicity:	No additional data available.
Carcinogenicity:	No additional data available.
Reproductive toxicity:	No additional data available.
STOT Single exposure:	No additional data available.
STOT Repeated exposure:	No additional data available.
Photo-toxicity:	May be fatal if swallowed and enters airways (H304).
Aspiration hazard:	No additional data available.
Other Information:	No additional data available.

# 12. ECOLOGICAL INFORMATION

## 12.1 Toxicity

Marine pollutant. Toxic to aquatic life with long lasting effects.

## 12.2 Persistence Degradability

No additional data available.

## 12.3 Bioaccumulation Potential

No additional data available.

## 12.4 Mobility in soil

No additional data available.

## 12.5 Results of PBT and vPvB Assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

## 12.6 Other adverse effects

Do not discharge into the environment especially not into waterways, sewers and the sea.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. TRANSPORT INFORMATION

### 14.1 UN number

Road:	UN 1169
Sea:	UN 1169
Air:	UN 1169

### 14.2 UN Proper shipping name

Extracts, Aromatic

### 14.3 Transport hazard class(es)

ADR/RID/ADN Class: 3 Flammable Liquid. IMDG Class: 3 Flammable Liquid. ICAO Class/Division: 3  
Flammable Liquid. Transport Labels

Cl. 3\_140\_s

Extracts, Aromatic

Extracts, Aromatic



### 14.4 Packing group

ADR/RID/ADN Packing group III IMDG Packing group III ICAO Packing group III

### 14.5 Environmental Hazards

Environmentally Hazardous Substance/Marine Pollutant.

Umwelt\_140

Extracts, Aromatic

Extracts, Aromatic



### 14.6 Special precautions for users

No additional data available.

### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No additional data available.

## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance

Statutory Instruments The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).



Guidance Notes Workplace Exposure Limits EH40. CHIP for everyone HSG(108). EU Legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

## 15.2 Chemical safety assessment

No additional information available.

## 16. OTHER INFORMATION

Hazard or precaution	H226, Flammable liquid and vapour. H304, May be fatal if swallowed and enters airways. H315, Causes skin irritation. H317, May cause an allergic skin reaction. H411, Toxic to aquatic life with long lasting effects.
Other Information::	Complies with REACH guidance for SDS as circulated by ECHA 2011.
Revision Date:	4/1/2022
Reason:	New SDS
Revision Number:	2

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