

**01. IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY UNDERTAKING****1.1 Product Identifier**

1.1 Product Identifier	Neroli Oil				
Biological Definition	A natural blend of the volatile oil obtained by steam distillation of the fragrant white blossoms of the bitter orange tree <i>Citrus aurantium</i> L. subsp. <i>Amara</i> Engl.				
INCI Name	Citrus aurantium amara Flower Oil				
Synonyms Trade Names	Bitter Orange Flower Oil, Neroli Oil True				
CAS Number	68916-04-1 72968-50-4	EC Number	277-143-2	EINECS No.	277-143-2

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

No additional data available.

**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)**

Serious eye damage, Category 1 (Eye Dam. 1, H318). Skin sensitisation, Category 1 (Skin Sens. 1, H317). Hazardous to the aquatic environment - Chronic hazard, Category 2 (Aquatic Chronic 2, H411). This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

GHS07

GHS09

GHS05

None

None



Signal Word

Danger

Contains

(R)-P-Mentha-1,8-Diene, Geraniol, Beta Pinene, Alpha-Pinene, Citronellol, Farnesol,

**Hazard Statements**

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects.

## Precautionary Statements

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.  
P305 IF IN EYES:  
P351 Rinse cautiously with water for several minutes.  
P338 Remove contact lenses, if present and easy to do. Continue rinsing.

## Supplementary Precautionary Statements

P501 Dispose of contents/container to...

## 2.3 Other Hazards

PBT or PvB according to Annex XIII	Not applicable.
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

**39.6 - 39.6 % Linalool** CAS No: 78-70-6 EC No: 201-134-4

Classification (EC 1272/2008): Acute Tox. 5 - H303, Skin Irrit. 2 - H315, Aquatic Acute 3 - H402

**10 - 25 % Linalyl Acetate** CAS No: 115-95-7 EC No: 204-116-4

Classification (EC 1272/2008): Skin Irrit. 2 - H315, Eye Irrit. 2 - H319

**10 - 13.9 % (R)-P-Mentha-1,8-Diene** CAS No: 5989-27-5 EC No: 227-813-5

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

**2.5 - 10 % Nerol** CAS No: 106-25-2 EC No: 203-378-7

Classification (EC 1272/2008): Skin Irrit 2 - H315, Eye Irrit. 2 - H319, Skin Sens. 1 - H317

**2 - 6.3 % Geranoil** CAS No: 106-24-1 EC No: 203-377-1

Classification (EC 1272/2008): SCI 2-EDI, 1-SS 1,;H315 - H317H319

**2.5 - 10 % 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

**2.5 - 10 % Terpinyl Acetate**

CAS No: 8007-35-0 EC No: 232-357-5

Classification (EC 1272/2008): Wng Aquatic Chronic 2 - H411

**2.5 - 10 % 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

**0 - 2 % Citronellol**

CAS No: 106-22-9 EC No: 203-375-0

Classification (EC 1272/2008): Skin Irrit. 2 - H315, Skin Sens. 1 - H317, Eye Irrit. 2 - H319

**2.5 - 10 % Nerolidol**

CAS No: 7212-44-4 EC No: 230-597-5

Classification (EC 1272/2008): EDI 2-EH A1-EH C1;H319 - H410

**2.5 - 10 % Geranyl Acetate**

CAS No: 105-87-3 EC No: 203-341-5

Classification (EC 1272/2008): Aquatic Chronic 2 - H411

**0 - 3.5 % Farnesol**

CAS No: 4602-84-0 EC No: 225-004-1

Classification (EC 1272/2008): Skin Irrit. 2 - H315, Eye Irrit. 2 - H319, Skin Sens. 1 - H317

**2.5 - 10 % Terpineol**

CAS No: 8000-41-7 EC No: 232-268-1

Classification (EC 1272/2008): Skin Irrit. 2 - H315, Eye Irrit. 2 - H319

## 04. FIRST AID MEASURES

### 4.1 Description of first aid measures

41 Inhalation:	Supply fresh air and to be sure call for a doctor. In case of unconsciousness place patient stably in side position for transportation. Supply fresh air.
41 Ingestion:	Do not give the patient anything orally. In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor. Seek medical attention immediately, showing the label.
41 Eye:	Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open. Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.
41 Skin:	Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner. Watch out for any remaining product between skin and clothing, watches, shoes, etc. In the event of an allergic reaction, seek medical attention. If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

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

No additional data available.

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

No additional data available.

## 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

Consult the safety measures listed under headings 7 and 8. For non first aid worker Avoid any contact with the skin and eyes. For first aid worker First aid workers will be equipped with suitable personal protective equipment (See section 8).

### 6.2 Environmental Precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal. Prevent any material from entering drains or waterways.

### 6.3 Methods and material for containment and clearing up

Clean preferably with a detergent, do not use solvents.

### 6.4 Reference to other sections

No additional data available.

## 07. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Requirements relating to storage premises apply to all facilities where the mixture is handled. Individuals with a history of skin sensitisation should not, under any circumstance, handle this mixture. Always wash hands after handling. Remove and wash contaminated clothing before re-using. Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly. Fire prevention : Prevent access by unauthorised personnel. Recommended equipment and procedures : For personal protection, see section 8. Observe precautions stated on label and also industrial safety regulations. Avoid eye contact with this mixture at all times. Prohibited equipment and procedures : No smoking, eating or drinking in areas where the mixture is used.

### 7.2 Conditions for safe storage, including and incompatibilities

Packaging Always keep in packaging made of an identical material to the original.

### 7.3 Specific end use(s)

No additional data available.

## 08. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control Parameters

Occupational exposure limits :-ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :CAS TWA : STEL : Ceiling : Definition : Criteria : 127-91-3 20  
ppm - - - -80-56-8 20 ppm - - -

## 8.2 Exposure controls

### Protective Equipment

Goggles



Gloves



Overalls



None

None

Process Conditions:	Provide eyewash station.
Engineering Measures:	Provide adequate ventilation.
Respiratory Equipment:	Avoid inhalation of vapour.
Hand Protection:	Avoid skin contact. Wear protective gloves.
Eye Protection:	Wear protective goggles to prevent eye contact.
Other Protection:	Slip proof shoes may be worn in event of spillages.
Hygiene Measures:	Good personal hygiene practices are always advisable, especially when working with chemicals / oils.
Personal Protection:	Avoid inhalation of vapour and contact with skin and eyes.
Skin Protection	Wear overalls or laboratory coat to protect from skin contact.
Environmental Exposure Controls:	Avoid discharging into drainage water.

## 09. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance:	Mobile viscous liquid.
Colour:	Light to pale yellow.
Flash Point:	61°C
Odour:	Characteristic, fresh, floral.
Relative Density:	0.866 to 0.880 @ 20°C
Refractive:	1.468 to 1.474 @ 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

No additional data available.

## 10.2 Chemical Stability

This mixture is stable under the recommended handling and storage conditions in section 7.

## 10.3 Possible hazardous reactions

No additional data available.

## 10.4 Conditions to avoid

No additional data available.

## 10.5 Incompatible materials

No additional data available.

## 10.6 Hazardous Decomposition Products

The thermal decomposition may release/form :- carbon monoxide (CO)- carbon dioxide (CO<sub>2</sub>)

# 11. TOXOLOGICAL INFORMATION

## 11.1 Information on toxicological effects

Acute Toxicity:

Acute toxicity : TERPINEOL (CAS: 8000-41-7) Oral route : LD50 = 4300 mg/kg  
CITRONELLOL (CAS: 106-22-9) Oral route : LD50 = 2650 mg/kg  
Dermal route : LD50 = 2650 mg/kg

Respiratory or skin sensitisation:

May have irreversible effects on the eyes, such as tissue damage in the eye, or serious physical decay of sight, which is not fully reversible by the end of observation at 21 days. Serious eye damage is typified by the destruction of cornea, persistent corneal opacity and iritis.

Skin corrosion/irritation:

ALPHA-PINENE X (CAS: 80-56-8) Oral route : LD50 = 3700 mg/kg  
GERANIOL (CAS: 106-24-1) Oral route : LD50 = 4200 mg/kg  
NEROL (CAS: 106-25-2) Oral route : LD50 = 4500 mg/kg  
LINALOOL (CAS: 78-70-6) Oral route : LD50 = 3000 mg/kg.

Serious Eye damage/irritation:

May cause an allergic reaction by skin contact. Corrosivity : No observed effect.

Germ Cell Mutagenicity:

May cause an allergic skin reaction.

Carcinogenicity:

No additional data available.

Reproductive toxicity:

CAS 5989-27-5 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

STOT Single exposure:

No additional data available.

STOT Repeated exposure:

No additional data available.

Photo-toxicity:

No additional data available.

Aspiration hazard:

No additional data available.

Other Information:

No additional data available.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxic to aquatic life with long lasting effects. The product must not be allowed to run into drains or waterways.

### 12.2 Persistence Degradability

CITRONELLOL (CAS: 106-22-9). Biodegradability : no degradability data is available, the substance is considered as not

### 12.3 Bioaccumulation Potential

CITRONELLOL (CAS: 106-22-9) Octanol/water partition coefficient :  $3 \leq \log K_{ow} < 4$ .

### 12.4 Mobility in soil

No additional data available.

### 12.5 Results of PBT and vPvB Assessment

No additional data available.

### 12.6 Other adverse effects

No additional data available.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Do not pour into drains or waterways. Waste : Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals. Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company. Do not contaminate the ground or water with waste, do not dispose of waste into the environment. Soiled packaging : Empty container completely. Keep label(s) on container. Give to a certified disposal contractor.

## 14. TRANSPORT INFORMATION

### 14.1 UN number

Road:	3082
Sea:	3082
Air:	3082

### 14.2 UN Proper shipping name

ENVIRONMENTAL

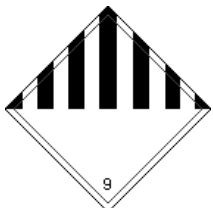
### 14.3 Transport hazard class(es)

ADR/RID/ADN Class; 9 ADR/RID/ADN Class: 9 IMDG Class: 9 ICAO Class/Division: 9 Transport Labels

Cl. 9\_140

ENVIRONMENTAL

ENVIRONMENTAL



### 14.4 Packing group

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

### 14.5 Environmental Hazards

Environmentally Hazardous Material

Umwelt\_140

ENVIRONMENTAL

ENVIRONMENTAL



## 14.6 Special precautions for users

ADR/RID Provis.	Class	Code	Pack gr.9	M6	IIIMDG	Class	2°Label	Pack gr.	LQ	EMS	Class	2°Label
		EQ 9	-	III	5 L	F-A,S-F	274 335 969		E1IATA		964	450
Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ 9	-	III			964	450
L	964	450 L	A97	E1A158 A1979	-	III		Y964	30 kg			
G	-	-	A97	E1A158 A1979	Not subject to this regulation if Q <= 5 l / 5 kg (IATA 4.4.4 - DS A197)							

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG. For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

## 14.7 Transport in bulk according to Annex II of MARLPOL73/78 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. H318 Causes serious eye damage. H319 Causes serious eye irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects H412 Harmful to aquatic life with long lasting effects
Other Information:::	None
Revision Date:	4/1/2022
Reason:	New SDS
Revision Number:	2

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