



## Safety Data Sheet

### 01. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & THE COMPANY/UNDERTAKING

#### 1.1 Product Identifier

Product Name		Neroli Oil Natural.			
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 L. subsp. amara Engl.</i>			
INCI Name		Citrus aurantium amara Flower Oil			
Synonyms & Trade Names		Bitter Orange Flower Oil, Neroli Oil True			
CAS-No	68916-04-1 / 72968-50-4	EC No.	- / 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

Golden Bough Botanicals Inc 12-1585 Cliveden Ave Delta BC V3M 6M1

#### 1.4 Emergency Tel. No.

604-540-8700 (Monday-Friday 8:30 am-4:30 pm)

### 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.

#### 2.2 Label Elements

Label in accordance with (EC) No 1272/2008

GHS07

GHS09

GHS05



Signal Word

Danger.

Contains

601-029-00-7 (R)-P-MENTHA-1,8-DIENE  
 EC 203-377-1 GERANIOL  
 EC 204-872-5 B-PINENE  
 EC 201-291-9 ALPHA-PINENE X  
 EC 203-375-0 CITRONELLOL  
 EC 225-004-1 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 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
Supplementary Precautionary Statements	
P501 Dispose of contents/container to ...	
<b>2.3 Other Hazards</b>	
PBT or vPvB 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

<b>3.2 Mixtures</b>	
<b>25.0 – 50.0% Linalool</b> 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	
<b>10.0 – 25.0% Linalyl Acetate</b> CAS: 115-95-7, EC: 204-116-4	
Classification (EC 1272/2008) Skin Irrit. 2, H315; Eye Irrit. 2, H319	
<b>10.0 – 25.0% (R)-P-MENTHA-1,8-DIENE</b> CAS: 5989-27-5, EC: 227-813-5	
Classification (EC 1272/2008) Flam. Liq. 3, H226, Skin Irrit. 2, H315, Skin Sens. 1, H317, Aquatic Acute 1, H400 M Acute = 1, Aquatic Chronic 1, H410 M Chronic = 1	
<b>2.5 - 10.0% Nerol</b> CAS: 106-25-2, EC: 203-378-7	
Classification (EC 1272/2008) Eye Irrit. 2, H319, Skin Irrit. 2, H315	
<b>2.5 – 10.0% Geraniol</b> CAS: 106-24-1, EINECS: 203-377-1	
Classification (EC 1272/2008) Eye Dam. 1, H318; Skin Irrit. 2, H315; Skin Sens. 1, H317	
<b>2.5 - 10.0% B-Pinene</b> CAS: 127-91-3, EC: 204-872-5	
Classification (EC 1272/2008) Asp. Tox. 1, H304, Flam. Liq. 3, H226, Skin Irrit. 2, H315, Skin Sens. 1, H317	
<b>2.5 – 10.0% Terpinyl Acetate</b> CAS: 80-26-2, EC: 201-265-7	
Classification (EC 1272/2008) Aquatic Chronic 2, H411	
<b>2.5 – 10.0% Alpha-Pinene X</b> CAS: 80-56-8, EC: 201-291-9	
Classification (EC 1272/2008) Asp. Tox. 1, H304, Flam. Liq. 3, H226, Skin Irrit. 2, H315, Skin Sens. 1, H317	

<p><b>2.5 – 10.0% Citronellol</b> CAS-No.: 106-22-9EC No.: 203-375-0</p> <p>Classification (EC 1272/2008) Eye Irrit. 2, H319, Skin Irrit. 2, H315, Skin Sens. 1, H317</p>
<p><b>2.5 – 10.0% Nerolidol (Isomer Unspecified)</b> CAS: 7212-44-4, EINECS: 230-597-5</p> <p>Classification (EC 1272/2008) Eye Irrit. 2, H319, Aquatic Acute 1, H400 M Acute = 1, Aquatic Chronic 1, H410 M Chronic = 1</p>
<p><b>2.5 – 10.0% Geranyl Acetate</b> CAS-No.: 105-87-3 EC No.: 203-341-5</p> <p>Classification (EC 1272/2008) Skin Irrit. 2, H315; Skin Sens. 1B, H317; Aquatic Chronic 3, H412</p>
<p><b>2.5 10.0% Farnesol</b> CAS: 4602-84-0, EINECS: 225-004-1</p> <p>Classification (EC 1272/2008) Eye Irrit. 2, H319, Skin Irrit. 2, H315, Skin Sens. 1, H317</p>
<p><b>2.5 – 10.0% Terpineol</b> CAS: 8000-41-7, EINECS: 232-268-1</p> <p>Classification (EC 1272/2008) Eye Irrit. 2, H319, Skin Irrit. 2, H315</p>

#### 04. FIRST AID MEASURES

<b>4.1 Description of first aid measures</b>	
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.
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.
Skin Contact	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.
Eye Contact	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.
<b>4.2 Most important symptoms and effects, both acute and delayed</b>	
No additional data available.	
<b>4.3 Indication of any immediate medical attention and special treatment needed</b>	
No additional data available.	

#### 05. FIRE-FIGHTING MEASURES

<b>5.1 Extinguishing Media</b>
Non-flammable.
<b>5.2 Special hazards arising from the product</b>
A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

<p>Do not breathe in smoke.          In the event of a fire, the following may be formed :          - carbon monoxide (CO)          - carbon dioxide (CO<sub>2</sub>)</p>
<b>5.3 Advice for firefighters</b>
No data available.

## 06. ACCIDENTAL RELEASE MEASURES

<b>6.1 Personal precautions, protective equipment and emergency procedures</b>
<p>Consult the safety measures listed under headings 7 and 8.  <b>For non first aid worker</b>          Avoid any contact with the skin and eyes.  <b>For first aid worker</b>          First aid workers will be equipped with suitable personal protective equipment (See section 8).</p>
<b>6.2 Environmental Precautions</b>
<p>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.</p>
<b>6.3 Methods and material for containment and cleaning up.</b>
Clean preferably with a detergent, do not use solvents.
<b>6.4 Reference to other sections</b>
No additional data available.

## 07. HANDLING AND STORAGE

<b>7.1 Precautions for safe handling</b>
<p>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.</p> <p>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.</p> <p><b>Fire prevention :</b>          Prevent access by unauthorised personnel.</p> <p><b>Recommended equipment and procedures :</b>          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.</p> <p><b>Prohibited equipment and procedures :</b>          No smoking, eating or drinking in areas where the mixture is used.</p>
<b>7.2 Conditions for safe storage, including any incompatibilities</b>
<p>Packaging          Always keep in packaging made of an identical material to the original.</p>
<b>7.3 Specific end use(s)</b>
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



Process Conditions	Provide eyewash station. Wash hands before breaks and at the end of work.
Engineering Measures	Provide adequate ventilation.
Respiratory Equipment	Not required.
Hand Protection	Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374. Gloves must be selected according to the application and duration of use at the workstation. Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required. Recommended properties : - Impervious gloves in accordance with standard EN374
Eye Protection	Avoid contact with eyes. Use eye protectors designed to protect against liquid splashes Before handling, wear safety goggles with protective sides in accordance with standard EN166. In the event of high danger, protect the face with a face shield. Prescription glasses are not considered as protection. Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours. Provide eyewash stations in facilities where the product is handled constantly.
Other Protection	Wear appropriate clothing to prevent any possibility of skin contact. Immediately remove all soiled and contaminated clothing.
Hygiene Measures	Good personal hygiene practices are always advisable, especially when working with chemicals / oils. Keep away from foodstuffs, beverages and feed.
Personal Protection	Use personal protection according to Directive 89/686/EEC.
Skin Protection	Avoid skin contact. Wear suitable protective clothing. Suitable type of protective clothing : In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact. In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact. Work clothing worn by personnel shall be laundered regularly. After contact with the product, all parts of the body that have been soiled must be washed.
Environmental Exposure	Avoid discharging into drainage water. Only eliminate by authorised companies.

Controls	
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## 09. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	Mobile viscous liquid.
Colour	Light yellow to yellow.
Odour	Characteristic, fresh, floral.
Relative Density	0.866 to 0.880 @ 20°C
Flash Point (°C)	61°C
Refractive Index	1.468 to 1.474 @ 20°C
Melting Point (°C)	No additional data available.
Boiling Point (°C)	No additional data available.
Vapour Pressure	No additional data available.
Solubility in Water @20°C	Insoluble in water.
Auto-ignition temperature (°C)	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	<p>Acute toxicity :</p> <p>TERPINEOL (CAS: 8000-41-7) Oral route : LD50 = 4300 mg/kg</p> <p>CITRONELLOL (CAS: 106-22-9) Oral route : LD50 = 2650 mg/kg Dermal route : LD50 = 2650 mg/kg</p> <p>ALPHA-PINENE X (CAS: 80-56-8) Oral route : LD50 = 3700 mg/kg</p>
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	<p>GERANIOL (CAS: 106-24-1) Oral route : LD50 = 4200 mg/kg</p> <p>NEROL (CAS: 106-25-2) Oral route : LD50 = 4500 mg/kg</p> <p>LINALOOL (CAS: 78-70-6) Oral route : LD50 = 3000 mg/kg.</p>
Skin corrosion / irritation	May cause an allergic reaction by skin contact. Corrosivity : No observed effect.
Serious eye damage / irritation	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.
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ Cell Mutagenicity	No additional data available.
Carcinogenicity	CAS 5989-27-5 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.
Reproductive toxicity	No additional data available.
STOT-single exposure	No additional data available.
STOT-repeated exposure	No additional data available.
Aspiration hazard	No additional data available.
Photo-toxicity	No additional data available.
Other Information	None.

## 12. ECOLOGICAL INFORMATION

<b>12.1 Toxicity</b>
Toxic to aquatic life with long lasting effects. The product must not be allowed to run into drains or waterways.
<b>12.2 Persistence &amp; degradability</b>
CITRONELLOL (CAS: 106-22-9). Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.
<b>12.3 Bioaccumulation Potential</b>
CITRONELLOL (CAS: 106-22-9) Octanol/water partition coefficient : $3 \leq \log K_{ow} < 4$ .
<b>12.4 Mobility in soil</b>
No additional data available.
<b>12.5 Results of PBT and vPvB Assessment</b>
No additional data available.
<b>12.6 Other adverse effects</b>
No additional data available.

## 13. DISPOSAL CONSIDERATIONS

<b>13.1 Waste treatment methods</b>
Do not pour into drains or waterways. <b>Waste :</b>

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**

UN No. Road	3082
UN No. SEA	3082
UN No. AIR	3082

**14.2 UN proper shipping name**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
((r)-p-mentha-1,8-diene).


**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	
	

**14.4 Packing group**

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

**14.5 Environmental hazards**

Environmentally Hazardous Material	
	

**14.6 Special precautions for user**

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	9	M6	III	9	90	5 L	274 335 375 601	E1	3	E
IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ			



	9	-	III	5 L	F-A,S-F	274 335 969	E1		
IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	9	-	III	964	450 L	964	450 L	A97 A158 A197	E1
	9	-	III	Y964	30 kg G	-	-	A97 A158 A197	E1
<p>Not subject to this regulation if Q &lt;= 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.</p>									
<b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code</b>									
No additional data available.									

## 15. REGULATORY INFORMATION

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

#### 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 and/or Precautionary Statements in Full	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	November 24, 2015
Reason for revision	Updated SDS and new format.
Rev No/Repl, SDS Generated	02

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