

## SAFETY DATA SHEET

In accordance with REACH Regulation EC No.1907/2006

**Product:** Niaouli Essential Oil 381k

**Version:** 2

### Section 1. Identification of the substance or the mixture and of the supplier

#### 1.1 Product Identifier

**Product identifier:** Melaleuca Viridiflora Leaf Oil; CAS: 132940-73-9

**Other identifiers:** Pure Niaouli Essential Oil

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

**Product uses:** Flavours, Fragrances, Cosmetic Product

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

**Company name:** Amphora Aromatics Limited

**Company address:** Airfield House,  
Western Drive,  
Bristol,  
BS14 0AF

**Contact:** Regulatory Affairs

**E-Mail address:** info@amphora-aromatics.com

**Company phone:** +44 (0) 117 904 7212

#### 1.4 Emergency telephone number

**Emergency phone:** +44 (0) 117 904 7212

### Section 2. Hazards identification

#### 2.1 Classification of the substance or mixture

##### **Classification under Regulation (EC) No 1272/2008**

**Class and category of danger:** Flammable Liquid, Hazard Category 3  
Skin Corrosion / Irritation Category 2  
Sensitization - Skin Category 1  
Toxic to Reproduction Category 2  
Aspiration Hazard Category 1  
Hazardous to the Aquatic Environment - Acute Hazard Category 1  
Hazardous to the Aquatic Environment - Long-term Hazard Category 1  
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.  
H361, Suspected of damaging fertility or the unborn child (exposure route).  
H410, Very toxic to aquatic life with long lasting effects.

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### 2.2 Label elements

#### Classification under Regulation (EC) No 1272/2008

**Signal word:** Danger

**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.  
H361, Suspected of damaging fertility or the unborn child (exposure route).  
H410, Very toxic to aquatic life with long lasting effects.

**M factor:** None

**Supplemental Information:** None

**Precautionary statements:** P202, Do not handle until all safety precautions have been read and understood.  
P210, Keep away from heat, sparks, open flames and hot surfaces. - No smoking.  
P233, Keep container tightly closed.  
P240, Ground/bond container and receiving equipment.  
P241, Use explosion-proof electrical, ventilating and lighting equipment.  
P242, Use only non-sparking tools.  
P243, Take precautionary measures against static discharge.  
P261, Avoid breathing vapour or dust.  
P264, Wash hands and other contacted skin 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/eye protection/face protection.  
P301/310, IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P303/361/353, IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.  
P308/313, IF exposed or concerned: Get medical advice/attention.  
P331, Do not induce vomiting.  
P333/313, If skin irritation or rash occurs: Get medical advice/attention.  
P362, Take off contaminated clothing and wash before reuse.  
P370/378, In case of fire: Use carbon dioxide, dry chemical, foam for extinction.  
P391, Collect spillage.  
P403/235, Store in a well-ventilated place. Keep cool.  
P405, Store locked up.  
P501, Dispose of contents/container to approved disposal site, in accordance with local regulations.

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**Pictograms:**



### 2.3 Other hazards

**Other hazards:** Hydrocarbon Concentration %: 55.3000%

### Section 3. Composition / information on ingredients

#### 3.1 Substances

**Product identifier:** Melaleuca Viridiflora Leaf Oil; CAS: 132940-73-9

**Contains:**

Name	CAS	EC	REACH Registration No.	%	Classification for (CLP) 1272/2008	Specific Conc. Limits, M-factors and ATEs
Eucalyptol	470-82-6	207-431-5		100.00%	Flam. Liq. 3-Skin Sens. 1B;H226-H317,-	oral: ATE = 2480 mg/kg bw
alpha-Pinene	80-56-8	201-291-9		20.00%	Skin Irrit. 2-Skin Sens. 1B-Asp. Tox 1;H304-H315-H317,-	M = 1-M = 1-oral: ATE = 3500 mg/kg bw
alpha-Terpineol	98-55-5	202-680-6		10.00%	Skin Irrit. 2-Eye Irrit. 2; H315-H319,-	oral: ATE = 4300 mg/kg bw
d-Limonene	5989-27-5, 138-86-3, 7705-14-8, 5989-54-8	227-813-5		9.30%	Flam. Liq. 3-Skin Irrit. 2-Skin Sens. 1B-Asp. Tox 1-Aquatic Acute 1-Aquatic Chronic 1; H226-H304-H315-H317-H410,-	M = 1
Myrcene	123-35-3	204-622-5		5.00%	Flam. Liq. 3-Skin Irrit. 2-Eye Irrit. 2-Asp. Tox 1;H226-H304-H315-H319,-	
beta-Pinene	127-91-3	204-872-5		5.00%	Flam. Liq. 3-Skin Irrit. 2-Skin Sens. 1B-Asp. Tox 1-Aquatic Acute 1-Aquatic Chronic 1; H226-H304-H315-H317-H410,-	M = 1-M = 1
p-Cymene	99-87-6	202-796-7		5.00%	Flam. Liq. 3-Asp. Tox 1-Aquatic Chronic 2; H226-H304-H411,-	oral: ATE = 4750 mg/kg bw
p-Mentha-1,4-diene	99-85-4	202-794-6		5.00%	Flam. Liq. 3-Asp. Tox 1;H226-H304,-	oral: ATE = 3850 mg/kg bw
trans-Nerolidol	40716-66-3	255-053-4		5.00%	Eye Irrit. 2-Aquatic Acute 1-Aquatic Chronic 1;H319-H410,-	M = 1-M = 1
beta-Caryophyllene	87-44-5	201-746-1		2.50%	Asp. Tox 1;H304,-	
Terpinolene	586-62-9	209-578-0		1.50%	Skin Sens. 1B-Asp. Tox 1-Aquatic Acute 1-Aquatic Chronic 1; H304-H317-H410,-	M = 1-oral: ATE = 3850 mg/kg bw

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Camphene	79-92-5	201-234-8		1.00%	Flam. Sol. 2-Eye Irrit. 2-Aquatic Acute 1-Aquatic Chronic 1; H228-H319-H410,-	
Styrene	100-42-5	202-851-5		1.00%	Flam. Liq. 3-Acute Tox. 4-Skin Irrit. 2-Repr. 2-STOT SE 3-STOT RE 1-Asp. Tox 1;H226-H304-H315-H332-H335-H361-H372,-	inhalation: ATE = 11 mg/l (vapour)
dl-Citronellol	106-22-9, 26489-01-0	203-375-0, 247-737-6		0.20%	Skin Irrit. 2-Eye Irrit. 2-Skin Sens. 1B;H315-H317-H319,-	dermal: ATE = 2650 mg/kg bw-oral: ATE = 3450 mg/kg bw
Citronellal	106-23-0	203-376-6		0.10%	Skin Irrit. 2-Eye Irrit. 2-Skin Sens. 1B;H315-H317-H319,-	dermal: ATE = 2500 mg/kg bw-oral: ATE = 2500 mg/kg bw
Eugenol	97-53-0	202-589-1		0.10%	Eye Irrit. 2-Skin Sens. 1B;H317-H319,-	oral: ATE = 2300 mg/kg bw
Eugenyl methyl ether	93-15-2	202-223-0		0.10%	Acute Tox. 4-Muta. 2-Carc. 2;H302-H341-H351,-	oral: ATE = 810 mg/kg bw
Farnesol	4602-84-0	225-004-1		0.10%	Skin Irrit. 2-Eye Irrit. 2-Skin Sens. 1B;H315-H317-H319,-	
Geraniol	106-24-1	203-377-1		0.10%	Skin Irrit. 2-Eye Dam. 1-Skin Sens. 1;H315-H317-H318,-	oral: ATE = 3600 mg/kg bw

### Substances with Community workplace exposure limits:

Name	CAS	EC	REACH Registration No.	%	Classification for (CLP) 1272/2008	Specific Conc. Limits, M-factors and ATEs
Styrene	100-42-5	202-851-5		1.00%	Flam. Liq. 3-Acute Tox. 4-Skin Irrit. 2-Repr. 2-STOT SE 3-STOT RE 1-Asp. Tox 1;H226-H304-H315-H332-H335-H361-H372,-	inhalation: ATE = 11 mg/l (vapour)

## Section 4. First-aid measures

### 4.1 Description of first aid measures

**Inhalation:** Remove from exposure site to fresh air, keep at rest, and obtain medical attention.

**Eye exposure:** Flush immediately with water for at least 15 minutes. Contact physician if symptoms persist.

**Skin exposure:** IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

**Ingestion:** IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

### 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.

Suspected of damaging fertility or the unborn child (exposure route).

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

None expected, see Section 4.1 for further information.

## **Section 5: Firefighting measures**

### **5.1 Extinguishing media**

Suitable media: Carbon dioxide, Dry chemical, Foam.

### **5.2 Special hazards arising from the substance or mixture**

In case of fire, may be liberated: Carbon monoxide, Unidentified organic compounds.

### **5.3 Advice for fire fighters:**

In case of insufficient ventilation, wear suitable respiratory equipment.

## **Section 6. Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures:**

Avoid inhalation. Avoid contact with skin and eyes. See protective measures under Section 7 and 8.

### **6.2 Environmental precautions:**

Keep away from drains, surface and ground water, and soil.

### **6.3 Methods and material for containment and cleaning 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:**

Also refer to sections 8 and 13.

## **Section 7. 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 any incompatibilities:**

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

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### 7.3 Specific end use(s):

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

### Section 8. Exposure controls/personal protection

#### 8.1 Control parameters

Workplace exposure limits:

Ingredient	CAS	EC	Description	Value
Styrene	100-42-5	202-851-5	UK WEL Long term ppm	100
			UK WEL Long term mgm3	430
			UK WEL Short term ppm	250
			UK WEL Short term mgm3	1080

#### 8.2 Exposure Controls

##### Eye / Skin Protection

Wear protective gloves/eye protection/face protection

##### Respiratory Protection

Ensure adequate and ongoing ventilation is maintained in order to prevent build up of excessive vapour and to ensure occupational exposure limits are adhered to. If appropriate, and depending on your patterns and volumes of use, the following engineering controls may be required as additional protective measures: a) Isolate mixing rooms and other areas where this material is used or openly handled. Maintain these areas under negative air pressure relative to the rest of the plant. b) Employ the use of Personal protective equipment - an approved, properly fitted respirator with organic vapour cartridges or canisters and particulate filters. c) Use local exhaust ventilation around open tanks and other open sources of potential exposures in order to avoid excessive inhalation, including places where this material is openly weighed or measured. In addition, use general dilution ventilation of the work area to eliminate or reduce possible worker exposures. d) Use closed systems for transferring and processing this material.

Also refer to Sections 2 and 7.

### Section 9. Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

<b>Physical State/Colour:</b>	Mobile oily clear liquid colourless to pale yellow.
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	Not determined
<b>Melting point / freezing point:</b>	Not determined
<b>Boiling point or initial boiling point and boiling range:</b>	Not determined
<b>Flammability:</b>	Not determined

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**Lower and upper explosion limit:** Not determined

**Flash point:** 50 °C

**Auto-ignition temperature:** Not determined

**Decomposition temperature:** Not relevant

**pH:** Not determined

**Kinematic viscosity:** Not determined

**Solubility:** Not determined

**Partition coefficient: n-octanol/water (log value):** Not determined

**Vapour pressure:** Not determined

**Density and/or relative density:** 0.9030 - 0.9240

**Relative vapour density:** Not determined

**Particle characteristics:** Not determined

**9.2 Other information:** None available

### Section 10. Stability and reactivity

#### **10.1 Reactivity:**

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

#### **10.2 Chemical stability:**

Good stability under normal storage conditions.

#### **10.3 Possibility of hazardous reactions:**

Not expected under normal conditions of use.

#### **10.4 Conditions to avoid:**

Avoid extreme heat.

#### **10.5 Incompatible materials:**

Avoid contact with strong acids, alkalis or oxidising agents.

#### **10.6 Hazardous decomposition products:**

Not expected.

### Section 11. Toxicological information

#### **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Acute Toxicity:** Based on available data the classification criteria are not met.

Acute Toxicity Oral 1957

Acute Toxicity Dermal Not Applicable

Acute Toxicity Inhalation Not Available

**Skin corrosion/irritation:** Skin Corrosion / Irritation Category 2

**Serious eye damage/irritation:** Based on available data the classification criteria are not met.

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**Respiratory or skin sensitisation:** Sensitization - Skin Category 1  
**Germ cell mutagenicity:** Based on available data the classification criteria are not met.  
**Carcinogenicity:** Based on available data the classification criteria are not met.  
**Reproductive toxicity:** Toxic to Reproduction Category 2  
**STOT-single exposure:** Based on available data the classification criteria are not met.  
**STOT-repeated exposure:** Based on available data the classification criteria are not met.  
**Aspiration hazard:** Aspiration Hazard Category 1

### Information about hazardous ingredients in the mixture

Ingredient	CAS	EC	LD50/ATE Oral (mg/kg)	LD50/ATE Dermal (mg/kg)	LC50/ATE Inhalation	LC50 Route
Styrene	100-42-5	202-851-5	Not available	Not available	11	Vapour

Refer to Sections 2 and 3 for additional information.

### 11.2 Information on other hazards

Not Applicable

## Section 12. Ecological information

### 12.1 Toxicity:

Very toxic to aquatic life with long lasting effects.

**12.2 Persistence and degradability:** Not available

**12.3 Bioaccumulative potential:** Not available

**12.4 Mobility in soil:** Not available

### 12.5 Results of PBT and vPvB assessment:

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

**12.6 Endocrine disrupting properties:** Not Applicable

**12.7 Other adverse effects:** Not available

## Section 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.

## Section 14. Transport information

	14.1 UN number:	14.2 UN Proper Shipping Name:	14.3 Transport hazard class (es):	Sub Risk:	14.4 Packing Group:
UN Model Regulations	UN1197	EXTRACTS, LIQUID	3	-	III



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<b>IMDG</b>	UN1197	EXTRACTS, LIQUID (alpha-Pinene) MARINE POLLUTANT	3	-	III
<b>ADR,RID,ADN</b>	UN1197	EXTRACTS, LIQUID	3	-	III
<b>ICAO TI</b>	UN1197	EXTRACTS, LIQUID	3	-	III

**14.5 Environmental hazards:** This is classified as an environmentally hazardous substance under the UN Model Regulations. This is classified as a Marine Pollutant under the IMDG Code.

**14.6 Special precautions for user:** None additional

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

Not applicable

### Section 15. Regulatory information

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

None additional

**15.2 Chemical Safety Assessment**

A Chemical Safety Assessment has not been carried out for this product.

### Section 16. Other information

**Concentration % Limits:** SCI 2=19.88% EDI 2=43.48% SS 1=1.00000000% STO-RE 2=100.00%  
AH 1=18.08% EH C2=11.21% EH C3=1.12% EH C4=93.28%

**Total Fractional Values:** SCI 2=5.03 EDI 2=2.30 SS 1=100.00 STO-RE 2=1.00 AH 1=5.53 EH  
C2=8.92 EH C3=89.20 EH C4=1.07

**Key to revisions:**

Classification under Regulation (EC) No 1272/2008

**Key to abbreviations:**

Abbreviation	Meaning
Acute Tox. 4	Acute Toxicity - Inhalation Category 4
Acute Tox. 4	Acute Toxicity - Oral Category 4
Aquatic Acute 1	Hazardous to the Aquatic Environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the Aquatic Environment - Long-term Hazard Category 1
Aquatic Chronic 2	Hazardous to the Aquatic Environment - Long-term Hazard Category 2
Asp. Tox 1	Aspiration Hazard Category 1
Carc. 2	Carcinogenicity Category 2
Eye Dam. 1	Eye Damage / Irritation Category 1
Eye Irrit. 2	Eye Damage / Irritation Category 2
Flam. Liq. 3	Flammable Liquid, Hazard Category 3
Flam. Sol. 2	Flammable Solid, Hazard Category 2
H226	Flammable liquid and vapour.
H228	Flammable solid.

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H302	Harmful if swallowed.
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.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects (exposure route).
H351	Suspected of causing cancer (exposure route).
H361	Suspected of damaging fertility or the unborn child (exposure route).
H372	Causes damage to organs (organs) through prolonged or repeated exposure (exposure route).
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
Muta. 2	Germ Cell Mutagenicity Category 2
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical, ventilating and lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe vapour or dust.
P261	Avoid breathing vapour or dust.
P264	Wash hands and other contacted skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection/face protection.
P281	Use personal protective equipment as required.
P301/310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301/312	IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell.
P302/352	IF ON SKIN: Wash with plenty of soap and water.
P303/361/353	IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P304/340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305/351/338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308/313	IF exposed or concerned: Get medical advice/attention.
P310	Immediately call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTRE or doctor/physician if you feel unwell.
P330	Rinse mouth.

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P331	Do not induce vomiting.
P332/313	If skin irritation occurs: Get medical advice/attention.
P333/313	If skin irritation or rash occurs: Get medical advice/attention.
P337/313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P363	Wash contaminated clothing before reuse.
P370/378	In case of fire: Use carbon dioxide, dry chemical, foam for extinction.
P391	Collect spillage.
P403/233/235	Store in a well-ventilated place. Keep container tightly closed. Keep cool.
P403/235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to approved disposal site, in accordance with local regulations.
Repr. 2	Toxic to Reproduction Category 2
STOT RE 1	Specific Target Organ Toxicity (Repeated Exposure) Category 1
STOT SE 3	Specific Target Organ Toxicity (Single Exposure) Category 3
Skin Irrit. 2	Skin Corrosion / Irritation Category 2
Skin Sens. 1	Sensitization - Skin Category 1
Skin Sens. 1B	Sensitization - Skin Category 1B

The information in this safety data sheet is to the best of our knowledge true and accurate but all data, instructions, recommendations and/or suggestions are made without guarantee.