

## TECHNICAL SHEET

# NIAOULI ESSENTIAL OIL 100% pure and natural MADAGASCAR

**Edition :** 18/05/2020  
**Version :** 26/02/2020

### MANUFACTURING PROCESS

Essential oil obtained by steam distillation of young branches and leaves of Niaouli Madagascar.  
***Melaleuca quinquenervia* (Cav.) S.T. Blake syn. *melaleuca viridiflora***

#### DESCRIPTION

**Odour** : aromatic, cineol-like  
**Appearance** : liquid at room temperature  
**Colour** : Colourless, light yellow  
**Afnor / ISO** : /  
**Main components :**  
Cineol-1.8, pinenes, limonene

#### PHYSICO-CHEMICAL DATA

**Relative density** : 0.906 - 0.925  
**Refractive index** : 1.463 - 1.472  
**Optical rotation at 20°C** : -4 - 1 °  
**Flash point** : 51 °C  
**Solubility** : Soluble in 4 parts max of 70% ethanol (V/V)

#### LEGISLATION

**CAS-No. (TSCA)** : 8014-68-4  
**CAS EINECS** : 132940-73-9  
**FEMA** : /  
**FDA** : /  
**CoE** : /  
**EINECS** : 310-217-5  
**FCC** : Not registered  
**RIFM monograph** : Yes

#### STORAGE - TRANSPORT - HANDLING

**Storage conditions :**  
Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up. Keep contents under nitrogen

**Shelf life :**  
12 months from despatching date on, under normal storage conditions.

**Labelling :**  
GHS02, GHS07, GHS08, GHS09  
H226, H304, H315, H317, H319, H411  
P210; P280; P301+P310+P331; P333+P313; P337+P313; P391

**Transport :**  
UN 1169 EXTRACTS, AROMATIC, LIQUID, 3, III, (D/E)

**Customs code :** 33012911

**INCI NAME** : MELALEUCA QUINQUENERVIA OIL

**Regulation (EC) 1334/2008** : Not conform for food use

**IFRA restrictions**  
(Amendment 48) : Niaouli essential oil is not explicitly regulated by IFRA. It contains maximum 0.01% benzyl alcohol, 0.02% cinnamyl alcohol, 0.1% citronellol, 1% eugenol, 0.1% geraniol, 0.5% benzaldehyde, 0.05% methyleugenol, 0.5% méthylchavicol classified "R" (restricted) and 0.2% linalol, 9% limonene classified "S" (specified) and 0.01% toluene classified "P" (prohibited).

**Résiduel solvent(s)** : not applicable

Analysis method : gas chromatography (GC/FID) area % according to normalization method (ISO 7609 and 11024). Detection limit : 100ppm.

# NIAOULI ESSENTIAL OIL 100% pure and natural MADAGASCAR

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
Revision date: 2/26/2020 Version: 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form	: Substance
Trade name	: NIAOULI ESSENTIAL OIL 100% pure and natural MADAGASCAR
EC-No.	: 310-217-5
CAS-No.	: 132940-73-9
REACH registration No	: 01-2120121078-65
Type of product	: UVCB substance

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Aromatic raw material for perfume compositions

##### 1.2.2. Uses advised against

Restrictions on use : Manufacture of food products

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

#### 1.4. Emergency telephone number

No additional information available

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 3	H226
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, category 1B	H317
Aspiration hazard, Category 1	H304
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411
Full text of H statements : see section 16	

##### Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May be fatal if swallowed and enters airways. Toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Hazard statements (CLP) :

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.  
H319 - Causes serious eye irritation.  
H411 - Toxic to aquatic life with long lasting effects.

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Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P310+P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P391 - Collect spillage.

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
NIAOULI ESSENTIAL OIL 100% pure and natural MADAGASCAR	(CAS-No.) 132940-73-9 (EC-No.) 310-217-5 (REACH-no) 01-2120121078-65	100	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

Full text of H-statements: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Call a doctor immediately.  
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.  
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
First-aid measures after ingestion : Do not induce vomiting. Call a doctor immediately.

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

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.  
Symptoms/effects after eye contact : Eye irritation.  
Symptoms/effects after ingestion : Risk of lung oedema.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Dry powder. Foam. Carbon dioxide. Water spray.  
Unsuitable extinguishing media : Do not use water jet.

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

Fire hazard : Flammable liquid and vapour.  
Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

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### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up. Keep contents under nitrogen.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### Hand protection:

Protective gloves

#### Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

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

Physical state : Liquid  
Appearance : liquid at room temperature.  
Colour : Colourless. light yellow.  
Odour : aromatic. cineol-like.  
Odour threshold : No data available  
pH : No data available  
Relative evaporation rate (butylacetate=1) : No data available  
Melting point : Not applicable  
Freezing point : No data available  
Boiling point : No data available  
Flash point : 51 °C

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Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 0.906 - 0.925
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: < 20 mm <sup>2</sup> /s
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

Refractive index	: 1.463 - 1.472
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Flammable liquid and vapour.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

### NIAOULI ESSENTIAL OIL 100% pure and natural MADAGASCAR (132940-73-9)

LD50 oral rat	≈ 2500 mg/kg
LD50 dermal rabbit	> 5000 mg/kg

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.

### NIAOULI ESSENTIAL OIL 100% pure and natural MADAGASCAR (132940-73-9)

Viscosity, kinematic	< 20 mm <sup>2</sup> /s
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## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Toxic to aquatic life with long lasting effects.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Toxic to aquatic life with long lasting effects.

### 12.2. Persistence and degradability

No additional information available

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### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations






### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Additional information : Flammable vapours may accumulate in the container.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
UN 1169	UN 1169	UN 1169	UN 1169	UN 1169
<b>14.2. UN proper shipping name</b>				
EXTRACTS, AROMATIC, LIQUID	EXTRACTS, AROMATIC, LIQUID	Extracts, aromatic, liquid	EXTRACTS, AROMATIC, LIQUID	EXTRACTS, AROMATIC, LIQUID
<b>Transport document description</b>				
UN 1169 EXTRACTS, AROMATIC, LIQUID, 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS	UN 1169 EXTRACTS, AROMATIC, LIQUID, 3, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 1169 Extracts, aromatic, liquid, 3, III, ENVIRONMENTALLY HAZARDOUS	UN 1169 EXTRACTS, AROMATIC, LIQUID, 3, III, ENVIRONMENTALLY HAZARDOUS	UN 1169 EXTRACTS, AROMATIC, LIQUID, 3, III, ENVIRONMENTALLY HAZARDOUS
<b>14.3. Transport hazard class(es)</b>				
3	3	3	3	3
				
<b>14.4. Packing group</b>				
III	III	III	III	III
<b>14.5. Environmental hazards</b>				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
Marine Pollutant : Dipentene				

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR) : F1  
Special provisions (ADR) : 601  
Limited quantities (ADR) : 5I  
Excepted quantities (ADR) : E1  
Packing instructions (ADR) : P001, IBC03, LP01, R001  
Mixed packing provisions (ADR) : MP19  
Portable tank and bulk container instructions (ADR) : T2  
Portable tank and bulk container special provisions (ADR) : TP1  
Tank code (ADR) : LGBF  
Vehicle for tank carriage : FL  
Transport category (ADR) : 3

# NIAOULI ESSENTIAL OIL 100% pure and natural MADAGASCAR

## Safety Data Sheet

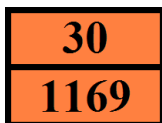
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Special provisions for carriage - Packages (ADR) : V12

Special provisions for carriage - Operation (ADR) : S2

Hazard identification number (Kemler No.) : 30

Orange plates :



Tunnel restriction code (ADR) : D/E

EAC code : 3YE

### Transport by sea

Special provisions (IMDG) : 223, 955

Limited quantities (IMDG) : 5 L

Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : P001, LP01

IBC packing instructions (IMDG) : IBC03

Tank instructions (IMDG) : T2

Tank special provisions (IMDG) : TP1

EmS-No. (Fire) : F-E

EmS-No. (Spillage) : S-D

Stowage category (IMDG) : A

Properties and observations (IMDG) : Usually consist of alcoholic solutions. Miscibility with water depends upon the composition.

### Air transport

PCA Excepted quantities (IATA) : E1

PCA Limited quantities (IATA) : Y344

PCA limited quantity max net quantity (IATA) : 10L

PCA packing instructions (IATA) : 355

PCA max net quantity (IATA) : 60L

CAO packing instructions (IATA) : 366

CAO max net quantity (IATA) : 220L

Special provisions (IATA) : A3

ERG code (IATA) : 3L

### Inland waterway transport

Classification code (ADN) : F1

Special provisions (ADN) : 601

Limited quantities (ADN) : 5 L

Excepted quantities (ADN) : E1

Equipment required (ADN) : PP, EX, A

Ventilation (ADN) : VE01

Number of blue cones/lights (ADN) : 0

### Rail transport

Classification code (RID) : F1

Special provisions (RID) : 601

Excepted quantities (RID) : E1

Packing instructions (RID) : P001, IBC03, LP01, R001

Mixed packing provisions (RID) : MP19

Portable tank and bulk container instructions (RID) : T2

Portable tank and bulk container special provisions (RID) : TP1

Tank codes for RID tanks (RID) : LGBF

Transport category (RID) : 3

Special provisions for carriage – Packages (RID) : W12

Colis express (express parcels) (RID) : CE4

Hazard identification number (RID) : 30

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### SECTION 15: Regulatory information

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

##### 15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

Reference code	Applicable on
3.	NIAOULI ESSENTIAL OIL 100% pure and natural MADAGASCAR
3(a)	NIAOULI ESSENTIAL OIL 100% pure and natural MADAGASCAR
3(b)	NIAOULI ESSENTIAL OIL 100% pure and natural MADAGASCAR
3(c)	NIAOULI ESSENTIAL OIL 100% pure and natural MADAGASCAR
40.	NIAOULI ESSENTIAL OIL 100% pure and natural MADAGASCAR

NIAOULI ESSENTIAL OIL 100% pure and natural MADAGASCAR is not on the REACH Candidate List

NIAOULI ESSENTIAL OIL 100% pure and natural MADAGASCAR is not on the REACH Annex XIV List

NIAOULI ESSENTIAL OIL 100% pure and natural MADAGASCAR is not subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

NIAOULI ESSENTIAL OIL 100% pure and natural MADAGASCAR is not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC

##### 15.1.2. National regulations

No additional information available

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### SECTION 16: Other information

Full text of H- and EUH-statements:	
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1B	Skin sensitisation, category 1B
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.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*



# Certificate of analysis

NIA OULI ESSENTIAL OIL 100% pure and natural MADAGASCAR

N° Reach 01-2120121078-65-XXXX

Certificate of analysis N° 032797

LOT N° 0027998

Odour : Conform

Appearance : Conform

Colour : Conform

## **Physico-chemical properties**

Specific gravity at 20°C = 0,915

Refractive index at 20°C = 1,467

Optical rotation at 20°C = -2,0°

## **Analysis method :**

Gas chromatography (GC/FID) area % according to normalization method (ISO 7609 and 11024)

## **Gas Chromatographic analyse**

Components	%
cineol-1.8 (= eucalyptol)	55.61
alpha-pinene	8.99
limonene	7.69
alpha-terpineol	6.24
viridiflorol	4.52
beta-pinene	2.32
beta-caryophyllene	1.70
gamma-terpinene	1.59
alpha-terpinyl acetate	1.35
myrcene	1.07
para-cymene	0.83
trans-nerolidol	0.55
benzaldehyde	0.24