



TECHNICAL DATA SHEET

Neroli Essential Oil

PRODUCT DESCRIPTION	PHYSICO-CHEMICAL DATA
Botanical name : Citrus aurantium INCI name : Citrus aurantium flower oil Quality : 100% Pure and Natural	Specific gravity : 0.864-0.895 Refractive index : 1.460-1.492 Optical rotation at 20°C : 2° to 13° Flash point : 116°C Solubility : Soluble in alcohols and fixed oils; Insoluble in water

DESCRIPTION	MANUFACTURING DETAILS
Odour : Floral, sweet and slightly herbaceous Note classification : Top to middle Note Appearance : Clear, Mobile Liquid Colour : Pale yellow to orange	Flower oil parts used : Flowers Extraction Method : Steam Distilled Essential Oil Cultivation : Conventional

LEGISLATION	STABILITY AND STORAGE
CAS-No : 8016-38-4 EINECS : 639-655-8	Keep in tightly closed container in a cool and dry place from 15°C (59°F) to 22°C (71°F). Avoid exposure to light. When stored for more than 24 months, quality should be checked before use.



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1. PRODUCT AND COMPANY IDENTIFICATION

Product identifiers

Product name : Neroli Oil

Brand : Vessel Essential Oils

CAS-No. : **8016-38-4**

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

Identified uses : Laboratory chemicals, Manufacture of substances

Details of the supplier of the safety data sheet

Company : Vessel Essential Oils
Farmakeika Neo Risio

1.6 Telephone : +30 2310 463719
Fax :
E-mail address : info@vessel.gr

Emergency telephone number

Emergency Phone # : +30 2310 463719

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 4), H227

For the full text of the H-Statements mentioned in this Section, see Section 16.

GHS Label elements, including precautionary statements

Pictogram	none
Signal word	Warning
Hazard statement(s) H227	Combustible liquid.
Precautionary statement(s) P210 P280	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wear protective gloves/ protective clothing/ eye protection/ face protection.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P235 P501	Store in a well-ventilated place. Keep cool. Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

CAS-No. : **8016-38-4**

Hazardous components

Component	Classification	Concentration
Oils, neroli	Flam. Liq. 4; H227	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES

Extinguishing media Suitable

extinguishing media

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

Special hazards arising from the substance or mixture

No data available

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up



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Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid inhalation of vapour or mist.
Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.
For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Oils, neroli	8016-38-4	TWA	10.000000 mg/m3	USA. NIOSH Recommended Exposure Limits
		TWA	5.000000 mg/m3	USA. NIOSH Recommended Exposure Limits

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

a) Appearance	Form: clear, liquid
b) Odour	No data available
c) Odour Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	No data available
f) Initial boiling point and boiling range	220 °C (428 °F) - lit.
g) Flash point	116 °C (240.8 °F) - closed cup
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	No data available
l) Vapour density	No data available
m) Relative density	0.966 g/cm ³ at 25 °C (77 °F)
n) Water solubility	No data available
o) Partition coefficient: n- octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available



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Other safety information

No data available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

No data available

Hazardous decomposition products

In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

LD50 Oral - Rat – 1,500 mg/kg

Inhalation: LD50: 3mg/kg

Skin Contact: Can induce irritations

Serious eye damage/eye irritation

Can induce irritations

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available

No data available

Specific target organ toxicity - single exposure

No data available



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Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

Dermatitis, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

UN Number: N/A

UN Proper shipping name: N/A

Transportation hazard classes

Road (U.S. DOT): Not dangerous goods

Air (IATA): Not dangerous goods

Sea (IMDG): Not dangerous goods

Packing group: N/A

Proper shipping name: Not regulated

Poison Inhalation Hazard: No

Class: NONE

15. REGULATORY INFORMATION

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Fire Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

Oils, neroli

CAS-No.
8016-38-4

Revision Date
2020-02-26

New Jersey Right To Know Components

Oils, neroli

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Revision Date
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California Prop. 65 Components



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This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Flam. Liq. H227	Flammable liquids Combustible liquid.
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HMIS Rating

Health hazard:	1
Chronic Health Hazard:	
Flammability:	2
Physical Hazard	0

NFPA Rating

Health hazard:	0
Fire Hazard:	2

Further information

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17/12/2023



DATE: July 2023

PRODUCT DESCRIPTION

Product name :	Neroli Essential oil
Product Type :	Essential oil
Label Name :	Neroli Essential oil from Tunisia
BATCH No :	E1001421
Date of Production :	July 2023
Date of Expiration :	July 2028
Origin :	Tunisia

TECHNICAL INFORMATION

<u>Organoleptic</u>	<u>Result</u>
Aroma :	Conforms to standard
Appearance :	Conforms to standard
Color :	Conforms to standard

PHYSICAL CONSTANTS AT 20° C

<u>Analysis</u>	<u>Method</u>	<u>Result</u>
Refractive Index :	USP <831>	1.489
Specific Gravity :	USP<841>	0.893
Optical Rotation :	USP <781>	+4.4°

ANALYSIS METHOD :

Gas chromatography (GC/FID) area % according to normalization method.



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GC ANALYSIS

<u>Compounds</u>	<u>CAS No</u>	<u>%</u>	<u>Chemical Family</u>
Linalyl Acetate	115-95-7	18.08	Monoterpenic Ester
Linalool	78-70-6	45.29	Monoterpenic Alcohol
Alpha-Terpineol	99-55-5	1.48	Methyl Alcohol
Geranyl Acetate	105-87-3	2.78	Monoterpenic Ester
Myrcene	123-35-3	1.20	Monoterpene
Nerol	106-25-2	1.18	Monoterpenic Alcohol
Neryl Acetate	141-12-8	2.14	Monoterpenic Ester
Limonene	5989-27-5	5.94	Monoterpene
Beta-Pinene	127-91-3	6.10	Monoterpene
Cis-beta Ocimene	13877-91-3	0.53	Monoterpene
Beta-Caryophyllene	87-44-5	0.31	Sesquiterpene
Terpinolene	586-62-9	0.49	Sesquiterpene
Sabinene	3387-41-5	0.24	Monoterpene
Alpha-Pinene	80-56-8	0.12	Monoterpene