

SAFETY DATA SHEET

In accordance with 29 CFR 1910.1200

Product: Ravensara Oil, Madagascar

Version: 1

1. IDENTIFICATION

Product Identifier

Product identifier: Ravensara Oil, Madagascar; CAS: 91770-56-8

Other identifiers: Ravensara Oil, Madagascar RavAro2 Ravensara aromatica

Recommended use of the chemical and restrictions on use

Product uses:

Supplier Details

Company name: Artisan Aromatics

Company address: 1708 Lena Street, #103
Santa Fe, NM 87505

Contact: Stephanie Ariel

E-Mail address: hello@artisanaromatics.com

Company phone: 505-231-9439

Emergency telephone number

Emergency phone: ChemTel: 1-800-255-3924 (Domestic)

2. HAZARD IDENTIFICATION

Classification

This product is classified under 29CFR 1910.1200(d) as follows:

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Class and category of Flammable Liquid, Hazard Category 3
danger: Skin Corrosion / Irritation Category 2

Eye Damage / Irritation Category 2

Sensitization - Skin Category 1

Germ Cell Mutagenicity Category 2

Carcinogenicity Category 2

Aspiration Hazard Category 1

Signal word: Danger

Hazard statements: Flammable liquid and vapour.
May be fatal if swallowed and enters airways.

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

Suspected of causing genetic defects (exposure route).

Suspected of causing cancer (exposure route).

M factor: None



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Pictograms:



Precautionary statements:

Do not handle until all safety precautions have been read and understood.
Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
Keep container tightly closed.
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.
Avoid breathing vapour or dust.
Wash hands and other contacted skin thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves/eye protection/face protection.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
Do not induce vomiting.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.
In case of fire: Use carbon dioxide, dry chemical, foam for extinction.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container to approved disposal site, in accordance with local regulations.

Hazards not otherwise classified (HNOC) None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

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Contains:

Name	CAS	%	GHS Classification
l-Limonene	5989-54-8	10-<20%	Flam. Liq. 3-Skin Irrit. 2-Skin Sens. 1B-Asp. Tox 1;H226-H304-H315-H317
beta-Caryophyllene	87-44-5	10-<20%	Skin Sens. 1B-Asp. Tox 1;H304-H317
Estragole	140-67-0	5-<10%	Flam. Liq. 4-Acute Tox. 4-Skin Sens. 1B-Muta. 2-Carc. 2;H227-H302-H317-H341-H351
Myrcene	123-35-3	5-<10%	Flam. Liq. 3-Skin Irrit. 2-Eye Irrit. 2A-Asp. Tox 1;H226-H304-H315-H319
delta-3-Carene	13466-78-9	5-<10%	Flam. Liq. 3-Skin Irrit. 2-Skin Sens. 1-Asp. Tox 1;H226-H304-H315-H317
alpha-Pinene	80-56-8	1-<5%	Flam. Liq. 3-Acute Tox. 4-Skin Irrit. 2-Skin Sens. 1B-Asp. Tox 1;H226-H302-H304-H315-H317
4-Carvomenthenol	562-74-3	1-<5%	Flam. Liq. 4-Acute Tox. 4-Skin Irrit. 2-Eye Irrit. 2A;H227-H302-H315-H319
p-Mentha-1,3-diene	99-86-5	1-<5%	Flam. Liq. 3-Acute Tox. 4-Asp. Tox 1;H226-H302-H304
Linalool	78-70-6	1-<5%	Flam. Liq. 4-Skin Irrit. 2-Eye Irrit. 2A-Skin Sens. 1B;H227-H315-H317-H319
beta-Pinene	127-91-3	1-<5%	Flam. Liq. 3-Skin Irrit. 2-Skin Sens. 1B-Asp. Tox 1;H226-H304-H315-H317
p-Mentha-1,4-diene	99-85-4	1-<5%	Flam. Liq. 3-Asp. Tox 1;H226-H304
Eucalyptol	470-82-6	1-<5%	Flam. Liq. 3-Skin Sens. 1B;H226-H317
Camphene	79-92-5	1-<5%	Flam. Liq. 3-Flam. Sol. 2-Eye Irrit. 2B;H226-H228-H320
p-Cymene	99-87-6	1-<5%	Flam. Liq. 3-Asp. Tox 1;H226-H304
Terpinolene	586-62-9	0.1-<1%	Flam. Liq. 4-Skin Sens. 1B-Asp. Tox 1;H227-H304-H317

The exact percentage concentrations of components are being withheld as a trade secret.

4. FIRST-AID MEASURES

Description of first aid measures

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

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

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.

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.

Causes serious eye irritation.

Suspected of causing genetic defects (exposure route).

Suspected of causing cancer (exposure route).



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Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable media: Carbon dioxide, Dry chemical, Foam.

Specific hazards arising from the chemical

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

Protective Equipment and Precautions for Firefighters

In case of insufficient ventilation, wear suitable respiratory equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

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

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.

7. HANDLING AND STORAGE

Precautions for safe handling:

Keep away from heat, sparks, open flames and hot surfaces. - No smoking.

Conditions for safe storage, including any incompatibilities:

Ground/bond container and receiving equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Other exposure guidelines

No information available



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Exposure controls

Engineering measures

Showers, eyewash stations, ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face and Skin Protection

Wear protective gloves/eye protection/face protection, and suitable protective clothing

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. A NIOSH-approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where air-purifying respirators may not provide adequate protection.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Appearance:	Not determined
Odor:	Not determined
Odor threshold:	Not determined
pH:	Not determined
Melting point / freezing point:	Not determined
Initial boiling point / range:	Not determined
Flash point:	117 °F / 47 °C
Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined
Upper/lower flammability or explosive limits:	Product does not present an explosion hazard
Vapor pressure:	Not determined
Vapor density:	Not determined
Relative density:	Not determined
Solubility(ies):	Not determined
Partition coefficient: n-octanol/water:	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	Not determined



Artisan
AROMATICS

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Other information: None available

10. STABILITY AND REACTIVITY

Reactivity:

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

Chemical stability:

Good stability under normal storage conditions.

Possibility of hazardous reactions:

Not expected under normal conditions of use.

Conditions to avoid:

Avoid extreme heat.

Incompatible materials:

Avoid contact with strong acids, alkalis or oxidising agents.

Hazardous decomposition products:

Not expected.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute Toxicity:	Based on available data the classification criteria are not met.
Acute Toxicity Oral	4361
Acute Toxicity Dermal	>5000
Acute Toxicity Inhalation	Not Available
Skin corrosion/irritation:	Skin Corrosion / Irritation Category 2
Serious eye damage/irritation:	Eye Damage / Irritation Category 2
Respiratory or skin sensitisation:	Sensitization - Skin Category 1
Germ cell mutagenicity:	Germ Cell Mutagenicity Category 2
Carcinogenicity:	Carcinogenicity Category 2
Reproductive toxicity:	Based on available data the classification criteria are not met.
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:	
<u>Additional Information</u>	None available



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12. ECOLOGICAL INFORMATION

Ecotoxicity:

Very toxic to aquatic life with long lasting effects.

Persistence and degradability: Not available

Bioaccumulative potential: Not available

Mobility in soil: Not available

Other adverse effects: Not available

13. DISPOSAL CONSIDERATIONS

Waste treatment

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.

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	UN1993	FLAMMABLE LIQUID, N.O.S. (l-Limonene, Myrcene)	3	-	III
US DOT	None	-			-
US DOT (Bulk)	NA1993	COMBUSTIBLE LIQUID, N.O.S. (l-Limonene, Myrcene)			III
IMDG	UN1993	FLAMMABLE LIQUID, N.O.S. (l-Limonene, Myrcene, delta-3-Carene) MARINE POLLUTANT	3	-	III
ADR,RID,ADN	UN1993	FLAMMABLE LIQUID, N.O.S. (l-Limonene, Myrcene)	3	-	III
ICAO TI	UN1993	FLAMMABLE LIQUID, N.O.S. (l-Limonene, Myrcene)	3	-	III

US DOT refers to domestic transport by road/rail within the 48 ground states

US DOT (Bulk) refers to domestic bulk transport by road/rail within the 48 ground states.

Environmental hazards: This is an environmentally hazardous substance.

Special precautions for user: None additional

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

Not applicable



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15. REGULATORY INFORMATION

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

None additional

Additional information

None additional

16. OTHER INFORMATION

Key to revisions:

Not applicable

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.

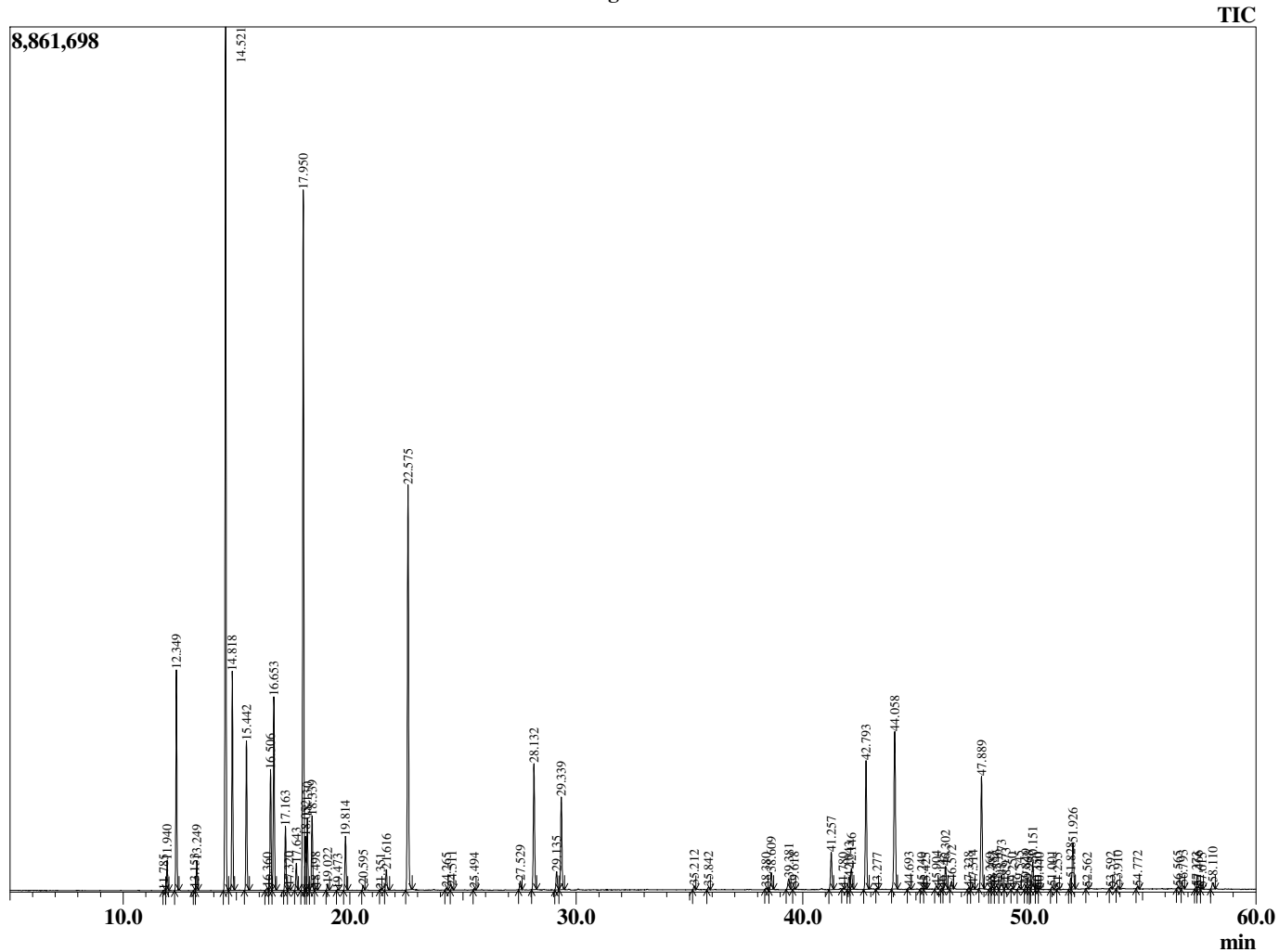
Sample Information

Analyzed by : A. Mattingly
 Analyzed : 2/22/2021 10:56:09 AM
 Sample Type : Essential Oil
 Sample Name : RavAro2
 Injection Volume : 0.10
 Lot Number : H0E0219G
 Instrument ID : GC-4

Peak Report TIC

R.Time	Name	Area%
11.785	Tricyclene	0.01
11.940	alpha-Thujene	0.58
12.349	alpha-Pinene	4.34
13.153	alpha-Fenchene	0.03
13.249	Camphene	0.61
14.521	Sabinene	17.82
14.818	beta-Pinene	4.60
15.442	Myrcene	3.23
16.360	Pseudolimonene	0.07
16.506	alpha-Phellandrene	2.66
16.653	delta-3-Carene	4.28
17.163	alpha-Terpinene	1.41
17.320	meta-Cymene	0.07
17.643	para-Cymene	0.63
17.950	Limonene	15.94
18.052	beta-Phellandrene	1.13
18.130	1,8-Cineole	1.61
18.339	(Z)-beta-Ocimene	1.70
18.498	Unidentified	0.06
19.022	(E)-beta-Ocimene	0.16
19.473	Unidentified	0.03
19.814	gamma-Terpinene	1.29
20.595	trans-Sabinene hydrate	0.12
21.351	Isoterpinolene	0.02
21.616	Terpinolene	0.52
22.575	Linalool	9.92
24.265	cis-para-Menth-2-en-1-ol	0.05
24.511	allo-Ocimene	0.08
25.494	trans-para-Menth-2-en-1-ol	0.03
27.529	Borneol	0.22
28.132	Terpinen-4-ol	3.26
29.135	alpha-Terpineol	0.50
29.339	Estragole	2.48
35.212	Bornyl acetate	0.10
35.842	Dihydroedulan I	0.07
38.380	Elemene isomer	0.04
38.609	delta-Elemene	0.49
39.381	alpha-Cubebene	0.36
39.618	Eugenol	0.04
41.257	alpha-Copaene	1.06
41.780	beta-Bourbonene	0.02
42.043	beta-Cubebene	0.36
42.146	beta-Elemene	0.62
42.793	Methyleugenol	3.40
43.277	alpha-Gurjunene	0.02
44.058	trans-beta-Caryophyllene	4.81
44.693	beta-Copaene	0.07
45.240	Aromadendrene	0.04
45.425	6,9-Guaiaadiene	0.02
45.904	trans-Muurola-3,5-diene	0.09
46.145	(E)-beta-Farnesene	0.03
46.302	alpha-Humulene	0.69
46.572	Alloaromadendrene	0.23
47.328	10-beta-H-Cadina-1(6),4-diene	0.05
47.514	trans-Cadina-1(6),4-diene	0.12
47.889	Germacrene D	3.19
48.269	Unidentified	0.03
48.383	beta-Selinene	0.08
48.546	trans-Muurola-4(14),5-diene	0.14
48.773	Bicyclogermacrene	0.50
48.973	alpha-Muurolene	0.17
49.250	Unidentified	0.02

Chromatogram RavAro2



R.Time	Name	Area%
49.545	beta-Bisabolene	0.09
49.849	gamma-Cadinene	0.12
49.968	Cubebol	0.08
50.151	delta-Cadinene	0.78
50.350	trans-Calamenene	0.04
50.440	Zonarene	0.02
51.001	trans-Cadina-1,4-diene	0.08
51.255	alpha-Cadinene	0.01
51.828	Elemicin	0.27
51.926	alpha-Elemol	1.39
52.562	Unidentified	0.03
53.592	Unidentified	0.04
53.910	Caryophyllene oxide	0.08
54.772	Guaiol	0.07
56.565	1-epi-Cubenol	0.05
56.793	gamma-Eudesmol	0.09
57.373	tau-Cadinol	0.05
57.466	epi-alpha-Cadinol	0.08
57.615	delta-Cadinol	0.03
58.110	alpha-Cadinol	0.25
		100.00