

SAFETY DATA SHEET (SDS)

Version 2.0

Revision Date : April 21,2022

Print Date : March 13, 2023

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	Geranium Essential Oil (Egyptian) - Verified By ECOCERT/Cosmos Approved
Botanical name	:	Pelargonium graveolens L.
Synonyms	:	
INCI name	:	Pelargonium Graveolens Oil
CAS #	:	8000-46-2
Country of Origin	:	Egypt
EINECS #	:	90082-51-2
Product use	:	Domestic and Industrial

2. HAZARDS IDENTIFICATION

Emergency Overview

GHS Classification

Flammable liquids - Category 4

Skin corrosion/irritation - Category 2

Skin sensitization - Category 1

Serious eye damage/eye irritation - Category 1

Hazardous to the aquatic environment - Acute - Category 2

Hazardous to the aquatic environment - Chronic - Category 3

Aspiration Hazard - Category 1

Acute Toxicity Oral - Category 5

GHS Label elements, including precautionary statements



Signal: Danger

Hazard statement(s)

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H303	May be harmful if swallowed
H313	May be harmful in contact with skin
H401	Toxic to aquatic life

Precautionary statement(s)

P262	Do not get in eyes, on skin, or on clothing.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

3. COMPOSITION / INFORMATION INGREDIENTS

Product Name	CAS NO	EC NO	Concentration
Citronellol (Natural)	106-22-9	203-375-0	25 - 37 %
Geraniol (Natural)	106-24-1	203-377-1	10 - 18 %
Linalool (Natural)	78-70-6	201-134-4	4.0 - 8.5 %
Geranyl acetate (Natural)	105-87-3	203-341-5	1.0 - 5.0 %
Menthone (Natural)	10458-14-7	233-944-9	0.0 - 2.1 %
Citral (Geranial & Neral) (Natural)	5392-40-5	226-394-6	0.0 - 2.0 %
alpha-Pinene (Natural)	80-56-8	201-291-9	0.0 - 1.5 %
beta-Pinene (Natural)	127-91-3	204-872-5	0.0 - 1.0 %
Limonene	5989-27-5	227-813-5	0.0 - 0.5 %

4. FIRST AID MEASURES

Eye contact

Immediately flush eyes with plenty of cool water for at least 15 minutes. Get medical attention if irritation occurs.

Skin contact

Remove contaminated clothing. Wash area with soap and water. If irritation occurs, get medical attention.

Inhalation

If inhaled, removed to fresh air. Get medical attention if symptoms appear.

Ingestion

Seek medical attention or contact local poison control center.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media

Foam. Dry Powder. Carbon dioxide.

Unsuitable extinguishing media

Water spray, water jet.

Special protective equipment and precautions for fire-fighters

Wear proper protective equipment. Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers.

Special hazards arising from the substance or its combustible products

Hazardous decomposition products may be formed at extreme heat or if burned.

Resulting gases

Carbon oxides.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures.

Equip clean crew with proper protection. Respiratory protection equipment may be necessary.

Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

Methods and materials for containment and cleaning up

Clean up any spills as soon as possible, using an absorbent material to collect it. Use suitable disposal containers.

7. HANDLING AND STORAGE

Precautions for safe handling

No direct lighting. No smoking. Ensure prompt removal from eyes, skin and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle in accordance with good industrial hygiene and safety procedures.

Conditions for safe storage, including any incompatibilities

Provide local exhaust or general room ventilation to minimize dust and/or vapour concentrations. Keep container closed when not in use.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure controls

Odor is inadequate to warn of overexposure.

Eyes

Use tightly sealed goggles.

Skin

If skin contact or contamination of clothing is likely, protective clothing should be worn. Use protective gloves.

Respiratory

In case of insufficient ventilation, wear suitable respiratory equipment.

Ingestion

Not for ingestion.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Yellow to amber yellow liquid.
Odor	:	Characteristic sweet rose-like aroma, minty, fresh, geranium leaf-like
Flash point	:	>93°C
Relative density	:	0.860 to 0.905 @ 20°C
Solubility (ies)	:	Soluble in alcohol and oils. Insoluble in water.
Refractive index	:	1.455 to 1.475 @ 20°C
Optical rotation	:	-18° to -7° @ 20°C

10. STABILITY AND REACTIVITY

Reactivity

This material presents no significant reactivity hazard.

Chemical stability

Chemically stable.

Possibility of hazardous reactions

Hazardous polymerization will not occur.

Conditions to avoid

Avoid sparks, flame and other heat sources.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

Carbon Oxides.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not available.

Chronic toxicity

May cause allergic reactions on skin.

Inhalation

Inhalation of high concentrations of vapor may result in irritation of eyes, nose and throat, headache, nausea, and dizziness.

Skin contact

Adverse skin effects should be prevented by normal care and personal hygiene.

Eye contact

Possible irritation should be prevented by wearing safety glasses.

Ingestion

Low order toxicity causing irritation of the stomach and intestines which results in nausea and vomiting

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic organisms, may cause long-term adverse effects environment. Avoid any pollution of ground, surface or underground water.

Persistence and degradability

Not available.

Bio - accumulative potential

Not available.

Mobility in soil

Not available.

Other adverse effects

Not available.

13. DISPOSAL CONSIDERATION

Dispose of product in accordance with local, state or provincial and federal regulations. Check with local municipal authority to ensure compliance.

14. TRANSPORT INFORMATION

UN Number

Not regulated.

US DOT Shipping Description (Land)

Not regulated

IMO-IMDG Shipping Description (Sea)

Not regulated

IATA Shipping Description (Air)

Not regulated

15. REGULATORY INFORMATION

California Proposition 65

• This product can expose you to beta-Myrcene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

GHS Hazard Statements

Please refer to section 2.

GHS Precautionary Statements

Please refer to section 2.

16. OTHER INFORMATION

Revision date : April 21,2022

Limitación de Responsabilidad

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CERTIFICATE OF ANALYSIS

Product : **Geranium Essential Oil (Egyptian) - Verified by ECOCERT / Cosmos Approved**
Lot No : 11062A10522
Best Before : May, 2024

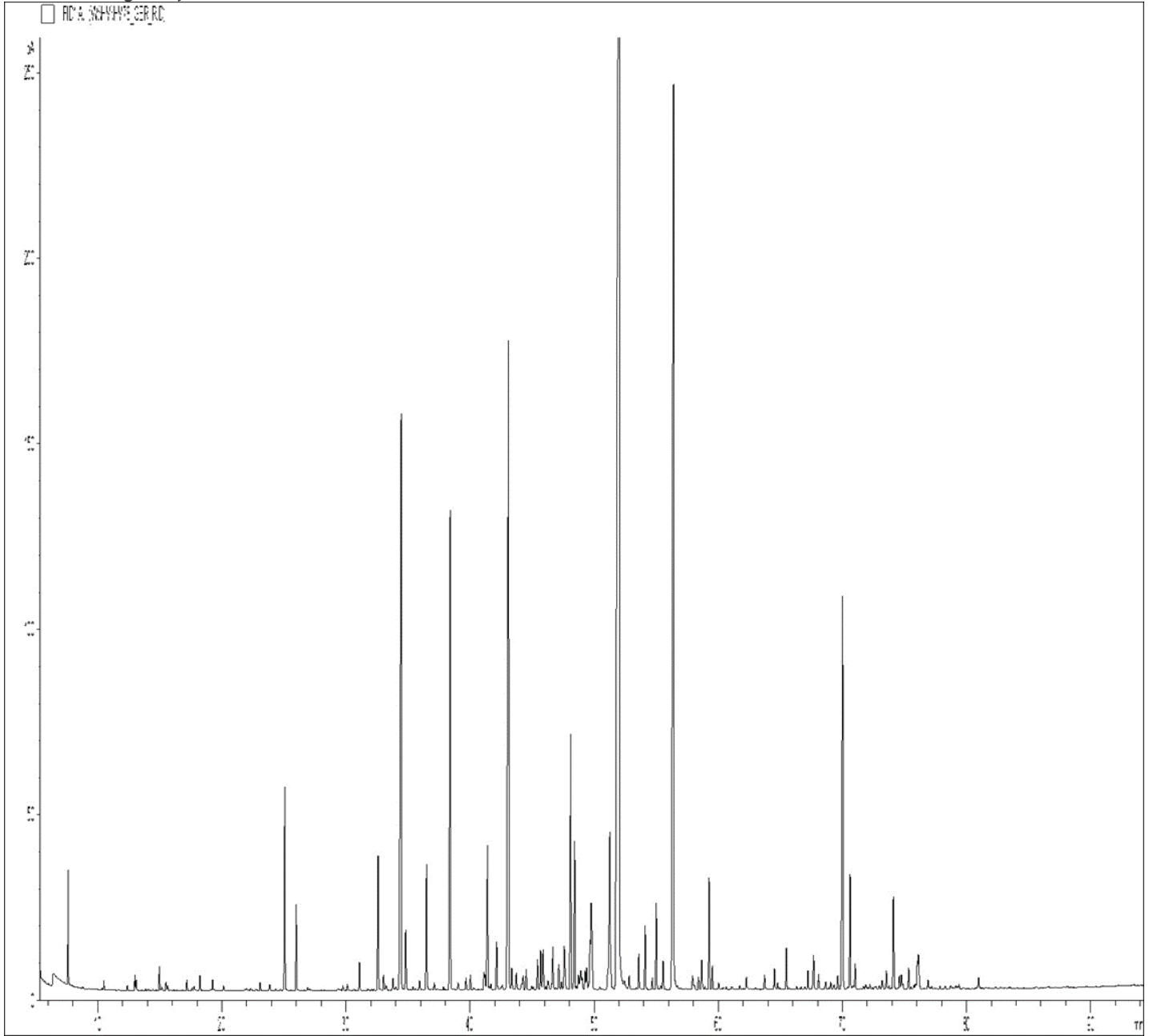
<u>Properties</u>	<u>Specifications</u>	<u>Results</u>
Appearance	: Yellow to yellow-green liquid.	Complies
Odor	: Characteristic floral odor.	Complies
Solubility	: Insoluble in water.	Complies
Specific Gravity	: 0.885 to 0.905 @ 20°C	0.894
Refractive Index	: 1.461 to 1.475 @ 20°C	1.469
Optical Rotation	: -14° to -8° @ 20°C	-11.5°
Citronellol	: 25 - 36 %	34.56

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GCMS ANALYSIS

PRODUCT NAME: GERANIUM ESSENTIAL OIL (EGYPT) Verified By ECOCERT / Cosmos
Approved- 11062
DATE: May 24, 2022



Due to volume turnover, this report is not lot specific, It is representative of the quality of this oil produced by the manufacturer of this product, Specific lots may vary slightly as is the case in natural products,

GCMS ANALYSIS (cont'd.)

PRODUCT NAME: GERANIUM ESSENTIAL OIL (EGYPT) Verified By ECOCERT / Cosmos Approved- 11062

Peak	RT (min)	Compound name	%
1	5,38	ACETONE	0,02
2	7,61	alpha-PINENE	0,53
3	10,49	DEHYDROXYLINALOOL OXIDE A	0,06
4	12,38	gamma-PYRONENE	0,03
5	13,00	beta-MYRCENE	0,10
6	13,09	alpha-PHELLANDRENE	0,07
7	13,86	alpha-TERPINENE	0,02
8	14,96	LIMONENE	0,18
9	15,16	1,8-CINEOLE	0,03
10	15,50	beta-PHELLANDRENE	0,07
11	15,63	cis-ARBUSCULON	0,04
12	17,19	cis-beta-OCIMENE	0,08
13	17,61	trans-ARBUSCULON	0,03
14	17,77	gamma-TERPINENE	0,04
15	18,25	trans-beta-OCIMENE	0,11
16	19,27	p-CYMENE	0,09
17	20,15	TERPINOLENE	0,04
18	23,10	1-PENTANOL, 3-METHYL-	0,07
19	23,87	5-HEPTEN-2-ONE, 6-METHYL-	0,05
20	25,09	ROSE cis-OXIDE	1,64
21	26,01	ROSE trans-OXIDE	0,66
22	26,92	3-HEXEN-1-OL	0,05
23	29,76	cis-p-MENTHANE-8-OL	0,04
24	30,12	trans-p-MENTHANE-8-OL	0,04
25	31,10	LINALOOL cis-OXIDE	0,22
26	32,50	alpha-CUBEBENE	0,20
27	32,59	MENTHONE	0,90
28	33,04	LINALOOL trans-OXIDE	0,12
29	33,25	NERYL OXIDE	0,06
30	33,79	CITRONELLAL	0,12

GCMS ANALYSIS (cont'd.)

PRODUCT NAME: GERANIUM ESSENTIAL OIL (EGYPT) Verified By ECOCERT / Cosmos Approved- 11062

Peak	RT (min)	Compound name	%
31	34,04	YLANGENE	0,05
32	34,46	ISOMENTHONE	6,74
33	34,83	alpha-COPAENE	0,52
34	35,42	EXO-ISOCITRAL	0,04
35	35,94	alpha-BOURBONENE	0,09
36	36,50	beta-BOURBONENE	1,13
37	37,12	alpha-GURJUNENE	0,07
38	37,86	beta1-CUBEBENE	0,03
39	38,41	LINALOOL	4,18
40	39,04	NEOISOPULEGOL	0,08
41	39,68	ISOPULEGOL	0,11
42	40,04	epsilon-CADINENE	0,14
43	41,13	beta-CUBEBENE	0,16
44	41,21	3,5-HEPTADIENE-2-ONE, 6-METHYL-	0,14
45	41,42	beta-CARYOPHYLLENE	1,33
46	41,54	ALIPHATIC ESTER	0,04
47	41,69	TERPINENE-4-OL	0,07
48	42,15	6,9-GUAIADIENE	0,49
49	42,61	KETONIC COMPOUND Mw=152	0,10
50	43,11	CITRONELLYL FORMATE	7,64
51	43,37	NEOISOMENTHOL	0,22
52	43,74	CADINA-3,5-DIENE	0,20
53	44,17	SESQUITERPENE	0,09
54	44,29	GERMACRENE A	0,13
55	44,53	ALLO-AROMADENDRENE	0,20
56	44,98	SESQUITERPENE Mw=202	0,05
57	45,13	ALIPHATIC ALCOHOL	0,03
58	45,43	ZONARENE	0,28
59	45,69	alpha-HUMULENE	0,33
60	45,89	CITRONELLYL ACETATE	0,41

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: GERANIUM ESSENTIAL OIL (EGYPT) Verified By ECOCERT / Cosmos Approved- 11062

Peak	RT (min)	Compound name	%
61	46,11	SELINENE ISOMER	0,04
62	46,28	NERYL FORMATE	0,08
63	46,32	cis-4,5-MUUROLADIENE	0,05
64	46,58	SESQUITERPENE	0,05
65	46,68	NERAL	0,37
66	47,16	gamma-SELINENE	0,27
67	47,38	gamma-MUUROLENE	0,08
68	47,60	alpha-TERPINEOL	0,33
69	47,63	LEDENE	0,20
70	48,11	GERANYL FORMATE	2,14
71	48,44	GERMACRENE D	1,43
72	48,58	EREMOPHILENE	0,04
73	48,74	MUUROLADIENE ISOMER	0,15
74	48,92	beta-SELINENE	0,25
75	49,03	PIPERITONE	0,12
76	49,27	alpha-SELINENE	0,19
77	49,42	alpha-MUUROLENE	0,21
78	49,68	CITRONELLYL PROPIONATE	0,42
79	49,75	BICYCLOGERMACRENE	0,73
80	49,80	GERANIAL	0,46
81	50,47	E,E-alpha-FARNESENE	0,06
82	51,12	gamma-CADINENE	0,14
83	51,26	delta-CADINENE	1,66
84	51,32	GERANYL ACETATE	0,26
85	52,05	CITRONELLOL	34,56
86	52,44	beta-SESQUIPHELLANDRENE	0,15
87	52,82	CADINA-1,4-DIENE	0,14
88	53,60	NEROL	0,27
89	54,12	CITRONELLYL BUTYRATE	0,51
90	54,69	NERYL ISOBUTYRATE	0,09

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: GERANIUM ESSENTIAL OIL (EGYPT) Verified By ECOCERT / Cosmos Approved- 11062

Peak	RT (min)	Compound name	%
91	55,02	GERANYL PROPIONATE	0,70
92	55,36	GERMACRENE B	0,04
93	55,56	trans-CALAMENENE	0,27
94	56,40	GERANIOL	10,98
95	56,72	GERANYL ISOBUTYRATE	0,05
96	57,93	2-PHENYLETHYL ISOBUTYRATE	0,13
97	58,02	2-PHENYLETHYL BUTYRATE	0,07
98	58,41	ISOGERANIOL ISOMER	0,11
99	58,67	alpha-AGAROFURAN	0,28
100	59,27	GERANYL BUTYRATE	0,92
101	59,53	NERYL 2-METHYLBUTYRATE	0,18
102	60,03	alpha-CALACORENE	0,06
103	61,73	CUBEBOL	0,03
104	62,27	CITRONELLYL METHYLVALERATE	0,11
105	63,74	CARYOPHYLLENE OXIDE	0,15
106	64,52	NERYL METHYLVALERATE	0,18
107	64,78	CITRONELLYL CAPROATE	0,06
108	65,49	CITRONELLYL TIGLATE	0,35
109	66,32	LEDOL	0,04
110	67,23	NERYL CAPROATE	0,15
111	67,68	Epi-CUBENOL	0,36
112	68,09	CUBENOL	0,14
113	68,66	GLOBULOL	0,10
114	69,06	VIRIDIFLOROL	0,07
115	69,33	FUOPELARGON	0,05
116	69,63	GERANYL CAPROATE	0,12
117	70,02	10-epi-gamma-EUDESOL	4,23
118	70,63	GERANYL TIGLATE	0,99
119	71,03	SPATHULENOL	0,22
120	71,89	PENTADECANONE, TRIMETHYL-	0,06

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GCMS ANALYSIS (cont'd.)

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Peak	RT (min)	Compound name	%
121	72,22	AROMATIC COMPOUND	0,04
122	72,98	T-CADINOL	0,04
123	73,20	gamma-EUDESOL	0,10
124	73,55	AGAROSPIROL	0,16
125	74,12	2-PHENYLETHYL TIGLATE	0,83
126	74,59	SESQUITERPENOL	0,12
127	74,77	NERYL CAPRYLATE	0,14
128	74,87	CITRONELLIC ESTER	0,04
129	75,34	VALERIANOL	0,19
130	75,78	CITRONELLIC ESTER	0,03
131	75,90	alpha-EUDESOL	0,04
132	76,04	4-HYDROXY-DIHYDRO-alpha-AGAROFURAN	0,23
133	76,12	beta-EUDESOL	0,40
134	76,90	CITRONELLIC ACID	0,08
135	77,87	ALIPHATIC ESTER	0,04
136	79,40	CITRONELLIC ESTER	0,04
137	80,96	GERANIC ACID	0,11
		TOTAL	100,00

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