

SAFETY DATA SHEET (SDS)

Version 2.0

Revision Date : February 9,2023

Print Date : November 24, 2023

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Lime Essential Oil - Persian/Tahiti
Botanical name : Citrus latifolia
INCI name : Citrus Latifolia Peel Oil
CAS # : 8008-26-2
Country of Originb : Mexico
EINECS # : - / 290-010-3
Product use : Domestic and Industrial

2. HAZARDS IDENTIFICATION

Emergency Overview

GHS Classification

Flammable Liquid - Category 3

Skin Corrosion/Irritation - Category 2

Skin Sensitization - Category 1

Aspiration toxicity - Category 1

Hazardous to aquatic environment, acute hazard - Category 1

Hazardous to aquatic environment, chronic hazard - Category 1

Carcinogenicity - Category 2

GHS Label elements, including precautionary statements



Signal: Danger

Hazard statement(s)

H226	Flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long-lasting effects

Precautionary statement(s)

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fumes/gas/mist/vapours/spray.
P264	Wash ... 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/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required.
P321	Specific treatment (see ... on this label).
P331	Do NOT induce vomiting.
P362	Take off contaminated clothing.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P405	Store locked up.
P501	Dispose of contents/container to ...
P301	IF SWALLOWED:
P302+P352	IF ON SKIN: Wash with plenty of water/
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P308+P313	If exposed: Call a POISON CENTER or doctor/physician.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention.
P370+P378	In case of fire: Use ... to extinguish.
P403+P235	Store in a well ventilated place. Keep cool.

3. COMPOSITION / INFORMATION INGREDIENTS

Product Name	CAS NO	EC NO	Concentration
Lime Oil	8008-26-2	290-010-3	100%

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

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

Do not eat, drink and smoke while using

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Yellowish-green to dark green liquid.
Odor	:	Characteristic fresh, sweet, acidulous, lemon peel-like odor.
Melting Point/Freezing Point	:	<-20°C
Flash point	:	53°C
Relative density	:	0.8580 to 0.8780 @ 20°C
Refractive index	:	1.476 to 1.486 @ 20°C

10. STABILITY AND REACTIVITY

Reactivity

Product may slowly oxidize when in contact with air

Chemical stability

Chemically stable.

Possibility of hazardous reactions

Not determined

Conditions to avoid

Avoid sparks, flame and other heat sources.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

Not determined

11. TOXICOLOGICAL INFORMATION

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

1197

UN proper shipping name

Extracts, liquid

Transport hazard class

3

Packing group

III

US DOT Shipping Description (Land)

1197

Proper shipping name

Extracts, liquid

Class

3

Packaging group

III

IMO-IMDG Shipping Description (Sea)

1197

Proper shipping name

Extracts, liquid

Class

3

Packaging group

III

IATA Shipping Description (Air)

1197

Proper shipping name

Extracts, liquid

Class

3

Packaging group

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 : February 09 ,2023

CERTIFICATE OF ANALYSIS**Product** : **Lime (Persian / Tahiti) Essential Oil**

Lot No : 11084A10822

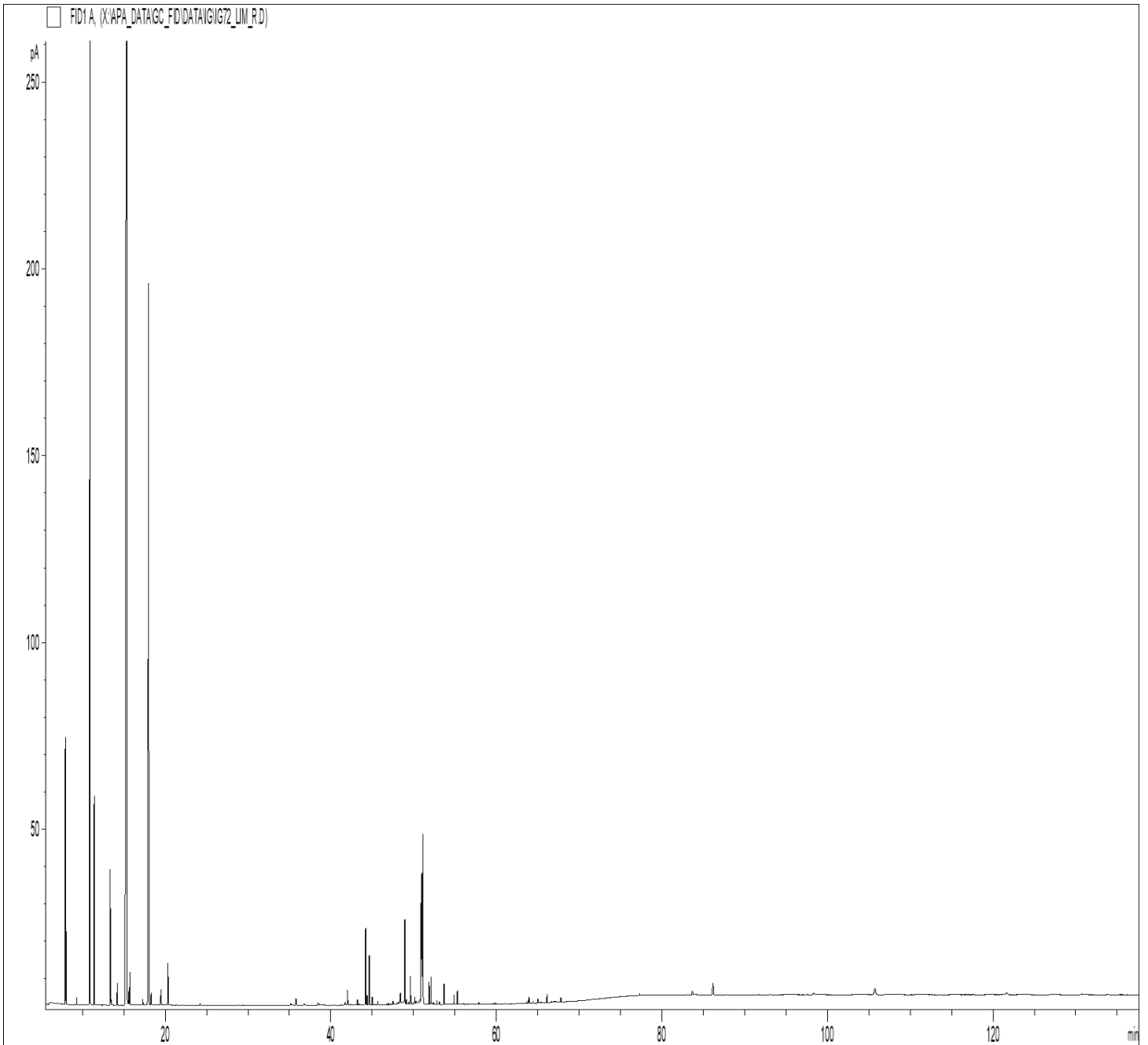
Best Before : August, 2024

<u>Properties</u>	<u>Specifications</u>	<u>Results</u>
Appearance	: Yellowish-green to dark green liquid.	Complies
Odor	: Characteristic fresh, sweet, acidulous, lemon peel-like odor.	Complies
Solubility	: Soluble in alcohols and oils. Insoluble in water.	Complies
Specific Gravity	: 0. 8580 to 0.8780 @ 20°C	0.8710
Refractive Index	: 1.476 to 1.486 @ 20°C	1.4824
Limonene	: -----	54.27
gamma terpinene	: -----	12.17
Myrcene	: -----	1.54

GCMS ANALYSIS

PRODUCT NAME: LIME (PERSIAN) ESSENTIAL OIL

DATE: September 14, 2023



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,

PRODUCT NAME: LIME (PERSIAN) ESSENTIAL OIL

PEAK	RT (MIN)	COMPOUND NAME	%
1	7.93	α-PINENE	2.22
2	8.02	α -THUYENE	0.58
3	9.31	CAMPHENE	0.07
4	10.91	β-PINENE	11.93
5	11.41	SABINENE	2.14
6	13.36	β-MYRCENE	1.54
7	13.46	α -PHELLANDRENE	0.06
8	14.20	α -TERPINENE	0.27
9	15.39	LIMONENE	54.27
10	15.60	1,8-CINEOLE	0.16
11	15.73	β -PHELLANDRENE	0.37
12	17.27	cis- β -OCIMENE	0.08
13	18.00	γ-TERPINENE	12.17
14	18.31	trans- β -OCIMENE	0.16
15	19.48	p-CYMENE	0.21
16	20.33	TERPINOLENE	0.59
17	24.22	5-HEPTEN-2-ONE, 6-METHYL-	0.03
18	35.16	trans-THUYANOL	0.04
19	35.36	ELEMENE ISOMER	0.01
20	35.80	δ -ELEMENE	0.13
21	36.78	CITRONELLAL	0.04
22	38.46	DECANAL	0.05
23	38.65	PENTADECANE	0.02
24	41.74	cis-THUYANOL	0.05
25	42.03	LINALOOL	0.21
26	43.22	α -cis-BERGAMOTENE	0.08
27	43.41	α -SANTALENE	0.02
28	43.76	SESQUITERPENE	0.01
29	44.22	α-trans-BERGAMOTENE	1.07
30	44.40	β -ELEMENE	0.13

GCMS ANALYSIS (cont'd.)

PRODUCT NAME: LIME (PERSIAN) ESSENTIAL OIL

PEAK	RT (MIN)	COMPOUND NAME	%
31	44.66	β-CARYOPHYLLENE	0.70
32	45.02	TERPINENE-4-OL	0.11
33	45.28	ALIPHATIC COMPOUND	0.01
34	45.68	SESQUITERPENE	0.05
35	46.97	GERMACRENE A	0.02
36	47.27	SESQUITERPENE	0.01
37	47.52	β-SANTALENE	0.05
38	48.14	CITRONELLYL ACETATE	0.02
39	48.38	α-HUMULENE	0.06
40	48.42	E-β-FARNESENE	0.11
41	48.94	NERAL	1.38
42	49.14	Z-β-FARNESENE	0.08
43	49.37	SESQUITERPENE	0.02
44	49.45	γ-CURCUMENE	0.03
45	49.63	α-TERPINEOL	0.34
46	49.81	BORNEOL	0.02
47	50.15	GERMACRENE D	0.08
48	50.30	β-SELINENE	0.03
49	50.58	ALIPHATIC COMPOUND	0.02
50	50.81	α-SELINENE	0.04
51	50.93	NERYL ACETATE	1.29
52	51.01	β-BISABOLENE	1.59
53	51.14	GERANIAL	2.60
54	51.70	TERPENIC COMPOUND	0.01
55	51.88	E,E-α-FARNESENE	0.25
56	52.12	GERANYL ACETATE	0.29
57	52.21	1-DECANOL	0.01
58	52.42	CITRONELLOL	0.03
59	52.85	trans-α-BISABOLENE	0.04
60	53.14	PERILLALDEHYDE	0.04

PRODUCT NAME: LIME (PERSIAN/ ESSENTIAL OIL

PEAK	RT (MIN)	COMPOUND NAME	%
61	53.68	NEROL	0.24
62	54.89	GERMACRENE B	0.11
63	55.30	GERANIOL	0.15
64	56.06	ALIPHATIC ESTER	0.01
65	57.88	TETRADECANAL	0.02
66	59.91	SESQUITERPENOL	0.02
67	63.66	SESQUITERPENOL	0.02
68	63.86	SESQUITERPENOL	0.03
69	63.95	PENTADECANAL	0.08
70	64.44	SESQUITERPENOL	0.02
71	65.01	CAMPHERENOL	0.04
72	65.04	AROMATIC COMPOUND	0.04
73	65.22	SESQUITERPENOL	0.01
74	65.40	ALIPHATIC ESTER	0.01
75	66.13	α -BISABOLOL	0.10
76	67.00	COMPOUND Mw=122	0.03
77	67.13	β -NOOTKATOL	0.01
78	67.19	FARNESAL	0.01
79	67.81	DIMETHYL METHYLPENTENYL NORBORNANOL	0.05
80	77.32	PHYTOL	0.02
81	83.66	PALMITIC ACID	0.09
82	86.18	HERNIARIN	0.28
83	98.34	ALKEN COMPOUND	0.07
84	105.75	LIMETTIN	0.28
85	108.56	AROMATIC COMPOUND	0.02
86	121.66	BERGAPTENE	0.12
87	124.25	AROMATIC COMPOUND	0.02
88	130.79	ISOPIMPINELLINE	0.05
		TOTAL	99.94