



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

1.1. Product identifier

Mixture identification:

Trade name: LEMON VERBENA & BAMBOO (GH)

Trade code: 2016100692

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

Recommended use: Perfumed composition for industrial use

Uses advised against: Not for ingestion

1.3. Details of the supplier of the safety data sheet

Company:

Cosmo International Fragrances - 2455 East Sunrise Boulevard, Suite 720 - Ft. Lauderdale, Florida 33304 - Phone: (954)566-1516

Cosmo International Fragrances - Pol. Ind. CONGOST Avda. Sant Julia, 260-26608403 Granollers(Barcelona) - Tel:(93)844-3444

Fax:(93)844-3445

Cosmo International Fragrances (Asia) Pte Ltd - 4 Tuas South Drive #07-21 - Singapore 637048 - Phone +65 69118900

e-mail contact: regulatory@cosmo-fragrances.com

1.4. Emergency telephone number

USA: Poison Control Center for South Florida/Miami: 1-800-222-1222

CHEMTREC 1800-424-9300 (USA), 1703-527-3887(OUTSIDE USA)

Singapore: 800-101-2201 or Intl: +6531581349

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Skin Irrit. 2 Causes skin irritation.

Eye Dam. 1 Causes serious eye damage.

Skin Sens. 1B May cause an allergic skin reaction.

Aquatic Chronic 2 Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Pictograms and Signal Words



Danger

Hazard statements

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310	Immediately call a POISON CENTER or doctor/physician.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P391	Collect spillage.
P501	Dispose of contents/container in accordance with applicable regulations.

Contains

HEXYL CINNAMIC ALDEHYDE

GERANIOL

NEROL

CITRAL May produce an allergic reaction.

D-LIMONENE May produce an allergic reaction.

CITRONELLOL May produce an allergic reaction.

CITRONELLAL May produce an allergic reaction.

LINALYL ACETATE May produce an allergic reaction.

EUGENOL May produce an allergic reaction.

1-(1,2,3,4,5,6,7,8-OCTAHYDRO-2,3,8,8-

TETRAMETHYL-2-

NAPHTHALENYL)ETHANONE

HELIONAL ; ALPHA-METHYL-1,3-

BENZODIOXOLE-5-PROPIONALDEHYDE

(REP 2)

LINALOOL May produce an allergic reaction.

GERANYL ACETATE May produce an allergic reaction.

BETA-CARYOPHYLLENE May produce an allergic reaction.

2.3. Other hazards

No PBT Ingredients are present

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Data not available

3.2. Mixtures

Mixture identification: Mixture of aromatic substances

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
10-20 %	CITRAL	CAS:5392-40-5 EC:226-394-6 Index:605-019-00-3	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	01-2119462829-23 / -
5-10 %	HEXYL CINNAMIC ALDEHYDE	CAS:101-86-0, 165184-98-5 EC:202-983-3	Skin Sens. 1B, H317; Aquatic Chronic 2, H411; Aquatic Acute 1, H400	01-2119533092-50 / -
1-5 %	D-LIMONENE	CAS:5989-27-5 EC:227-813-5 Index:601-029-00-7	Flam. Liq. 3, H226; Skin Irrit. 2, H315; Skin Sens. 1B, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Asp. Tox. 1, H304	01-2119529223-47 / -
1-5 %	CITRONELLOL	CAS:106-22-9 EC:203-375-0	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319	01-2119453995-23 / -
1-5 %	GERANIOL	CAS:106-24-1 EC:203-377-1	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Dam. 1, H318	01-2119552430-49 / -
1-5 %	NEROL	CAS:106-25-2 EC:203-378-7	Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1B, H317	01-2119983244-33 / -

1-5 %	ALPHA-TERPINEOL	CAS:98-55-5 EC:202-680-6	Skin Irrit. 2, H315; Eye Irrit. 2, H319	01-2119553062-49/-
0.1-1 %	CITRONELLAL	CAS:106-23-0 EC:203-376-6	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Irrit. 2, H319	01-2119474900-37/-
0.1-1 %	LINALYL ACETATE	CAS:115-95-7 EC:204-116-4	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1B, H317	01-2119454789-19 / -
0.1-1 %	EUGENOL	CAS:97-53-0 EC:202-589-1	Skin Sens. 1B, H317; Eye Irrit. 2, H319	01-2119971802-33 / -
0.1-1 %	1-(1,2,3,4,5,6,7,8-OCTAHYDRO-2,3,8,8-TETRAMETHYL-2-NAPHTHALENYL)ETHANONE	CAS:54464-57-2 EC:259-174-3	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Aquatic Chronic 1, H410	01-2119489989-04/-
0.1-1 %	HELIONAL ; ALPHA-METHYL-1,3-BENZODIOXOLE-5-PROPIONALDEHYDE (REP 2)	CAS:1205-17-0 EC:214-881-6	Skin Sens. 1B, H317; Aquatic Chronic 2, H411; Repr. 2, H361	01-2120740119-58/-
0.1-1 %	MYRCENE	CAS:123-35-3 EC:204-622-5	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 1, H410; Aquatic Acute 1, H400	01-2119514321-56/-
0.1-1 %	LINALOOL	CAS:78-70-6, 126-90-9, 126-91-0 EC:201-134-4 Index:603-235-00-2	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1B, H317	01-2119474016-42/-
0.1-1 %	GERANYL ACETATE	CAS:105-87-3 EC:203-341-5	Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 3, H412	01-2119973480-35 / -
0.1-1 %	BETA-CARYOPHYLLENE	CAS:87-44-5 EC:201-746-1	Asp. Tox. 1, H304; Skin Sens. 1B, H317	01-2120745237-53/-

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and/or label.

In case of Inhalation:

Remove person to fresh air and keep warm and at rest.

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

Eye irritation

Eye damages

Skin Irritation

Erythema

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

General Information:

As in all potential poisoning, Obtain medical advice immediately

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing media separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

For containment : Any absorbent used for cleaning up spillage should be disposed promptly accordingly to local regulation.

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Wear adequate protective gloves protection and eye/face protection.

No smoking. Avoid any source of ignition.

Avoid exposing to high temperature during processing.

Do not ingest or apply to the skin as such. Good personal washing routines should be followed.

Maintain adequate local and general ventilation where product is handled.

Contaminated clothing should be changed before entering eating areas.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Store in a tightly closed container in a cool, dry, well-ventilated area, Away from heat sources.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour	Notes
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8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Where ventilation is inadequate to prevent any inhalation of substances, use adequate respiratory apparatus.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance and colour: Light Yellow

Odour: Conform

Odour threshold: Data not available

pH: Data not available

Melting point / freezing point: Data not available

Initial boiling point and boiling range: Data not available

Flash point: 89 °C (192.2 °F)

Evaporation rate: Data not available

Upper/lower flammability or explosive limits: Data not available

Vapour density: Data not available

Relative density: 0.917 g/ml

Solubility in water: Data not available

Solubility in oil: Data not available

Partition coefficient (n-octanol/water): Data not available

Auto-ignition temperature: Data not available

Decomposition temperature: Data not available

Viscosity: Data not available

Explosive properties: Data not available

Oxidizing properties: Data not available

Solid/gas flammability: Data not available

Specific Gravity @20°C = 0.919

Vapor Pressure (mm Hg @20°C): Data not available

Refractive Index @20°C = 1.482

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Data not Available.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological Information of the Preparation

a) acute toxicity not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation The product is classified: Skin Irrit. 2(H315)

c) serious eye damage/irritation	The product is classified: Eye Dam. 1(H318)
d) respiratory or skin sensitisation	The product is classified: Skin Sens. 1B(H317)
e) germ cell mutagenicity	not classified
	Based on available data, the classification criteria are not met
f) carcinogenicity	not classified
	Based on available data, the classification criteria are not met
g) reproductive toxicity	not classified
	Based on available data, the classification criteria are not met
h) STOT-single exposure	not classified
	Based on available data, the classification criteria are not met
i) STOT-repeated exposure	not classified
	Based on available data, the classification criteria are not met
j) aspiration hazard	not classified
	Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

CITRAL	LD50 Oral Rat = 4950 mg/kg LD50 Skin Rabbit = 2250 mg/kg LD50 Skin Rat > 2000 mg/kg
HEXYL CINNAMIC ALDEHYDE	LD50 Oral Rat = 2450 mg/kg LD50 Skin Rabbit > 3000 mg/kg
D-LIMONENE	LD50 Oral Rat = 4400 mg/kg LD50 Skin Rabbit > 2000 mg/kg
CITRONELLOL	LD50 Oral Rat = 3450 mg/kg LD50 Skin Rabbit = 2650 mg/kg
GERANIOL	LD50 Oral Rat = 3600 mg/kg LD50 Skin Rabbit > 5000 mg/kg
NEROL	LD50 Oral Rat = 4500 mg/kg LD50 Skin Rabbit > 5000 mg/kg
ALPHA-TERPINEOL	LD50 Oral Mouse = 2830 mg/kg LD50 Oral Rat = 5170 mg/kg
CITRONELLAL	LD50 Oral Rat = 2420 mg/kg LD50 Skin Rabbit > 2500 mg/kg
LINALYL ACETATE	LD50 Oral Rat = 13934 mg/kg
EUGENOL	LD50 Oral Rat = 1930 mg/kg
MYRCENE	LD50 Oral Rat > 5 g/kg LD50 Skin Rabbit > 5 g/kg
LINALOOL	LC50 Inhalation Mouse = 3.2 mg/l 1h LD50 Oral Rat = 2790 mg/kg

LD50 Skin Rat = 5610 mg/kg

GERANYL ACETATE

LD50 Oral Rat = 6330 mg/kg

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 2(H411)

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
CITRAL	CAS: 5392-40-5 - EINECS: 226-394-6 - INDEX: 605-019-00-3	EC50 Daphnia Daphnia magna = 7 mg/L 48 Hr
		EC50 Algae Desmodesmus subspicatus = 16 mg/L 72H
		LC50 Fish Leuciscus idus = 4.6 mg/L 96 Hr - static 4.6-10
D-LIMONENE	CAS: 5989-27-5 - EINECS: 227-813-5 - INDEX: 601-029-00-7	LC50 Fish Pimephales promelas = 0.619 mg/L 96 Hr - flow-through 0.619-0.796
		LC50 Fish Oncorhynchus mykiss = 35 mg/L 96 Hr
LINALOOL	CAS: 78-70-6, 126-90-9, 126-91-0 - EINECS: 201-134-4 - INDEX: 603-235-00-2	EC50 Daphnia Daphnia magna = 20 mg/L 48 Hr
		EC50 Algae Desmodesmus subspicatus = 88.3 mg/L 96 Hr
		LC50 Fish Leuciscus idus = 22 mg/L 96 Hr - static 22-46

12.2. Persistence and degradability

Data not available

12.3. Bioaccumulative potential

Data not available

12.4. Mobility in soil

Data not available

12.5. Results of PBT and vPvB assessment

No PBT Ingredients are present

12.6. Other adverse effects

Data not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number

3082

14.2. UN proper shipping name

ADR-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(D-LIMONENE - HEXYL CINNAMIC ALDEHYDE)

IATA-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(D-LIMONENE - HEXYL CINNAMIC ALDEHYDE)

IMDG Technical Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(D-LIMONENE - HEXYL CINNAMIC ALDEHYDE)

14.3. Transport hazard class(es)

ADR-Class: 9

IATA-Class: 9

IMDG-Class: 9

14.4. Packing group

Road and Rail (ADR-RID):

ADR exempt: No

ADR-Label: 9

ADR-Packing Group: III

ADR - Hazard identification number: 90

Air (IATA):

IATA-Passenger Aircraft: 964

IATA-Cargo Aircraft: 964

IATA-Label: 9

IATA-Packing group: III

IATA-Subrisk: -

IATA-Erg: 9L

IATA-Special Provisions: A97 A158 A197

Sea (IMDG):

IMDG-Packing group: III

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -

IMDG-Subrisk: -

IMDG-Special Provisions: 274 335 969

IMDG-Page: N/A

IMDG-Label: N/A

IMDG-EMS: F-A, S-F

IMDG-MFAG: N/A

14.5. Environmental hazards

Most important toxic component: HEXYL CINNAMIC ALDEHYDE

Toxic ingredients quantity: 11,04

Very toxic ingredients quantity: 15,36

Marine pollutant: Yes

Data not available

14.6. Special precautions for user

*Note: In containers of 119 gallons or less, this product is not regulated by D.O.T. - Ground Transportation

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

Data not available

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.

Regulation (EU) n. 286/2011 (ATP 2 CLP)
 Regulation (EU) n. 618/2012 (ATP 3 CLP)
 Regulation (EU) n. 487/2013 (ATP 4 CLP)
 Regulation (EU) n. 944/2013 (ATP 5 CLP)
 Regulation (EU) n. 605/2014 (ATP 6 CLP)
 Regulation (EU) n. 2016/918 (ATP 8 CLP)
 Regulation (EU) n. 2016/1179 (ATP 9 CLP)
 Regulation (EU) n. 2015/1221 (ATP 7 CLP)
 Regulation (EU) 2015/830

Dispositions about directives 82/501/CE, 96/82/CE(Seveso bis), 2003/15/CE(Seveso ter):

Seveso III category according to Annex 1, part 1

Product belongs to category: E2 200 500

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code	Description
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.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H361	Suspected of damaging fertility or the unborn child .
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
2.6/3	Flam. Liq. 3	Flammable liquid, Category 3
3.10/1	Asp. Tox. 1	Aspiration hazard, Category 1
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.4.2/1B	Skin Sens. 1B	Skin Sensitisation, Category 1B
3.7/2	Repr. 2	Reproductive toxicity, Category 2
4.1/A1	Aquatic Acute 1	Acute aquatic hazard, category 1
4.1/C1	Aquatic Chronic 1	Chronic (long term) aquatic hazard, category 1
4.1/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
3.2/2	Calculation method
3.3/1	Calculation method
3.4.2/1B	Calculation method
4.1/C2	Calculation method

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