

SAFETY DATA SHEET

In accordance with UN GHS latest edition

Product: Citronella Fragrance FIA212731

Version: 1

Section 1. Identification of the substance or the mixture and of the supplier

1.1 Product Identifier

Product identifier: Citronella Fragrance FIA212731

Other identifiers: None

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

Product uses: Fragrances

1.3 Details of the supplier of the safety data sheet

Company name: Fragrance Innovation Australia

Company address: Unit 2, 32 Wodonga Street
Beverley
South Australia 5009
Australia

Contact: Regulatory Affairs

E-Mail address: info@fragranceinnovation.com.au

Company phone: +61 8 8445 6235

1.4 Emergency telephone number

Emergency phone:

Section 2. Hazards identification

2.1 Classification of the substance or mixture

Class and category of danger: Flammable Liquid, Hazard Category 4
Skin Corrosion / Irritation Category 2
Eye Damage / Irritation Category 1
Sensitization - Skin Category 1
Germ Cell Mutagenicity Category 2
Carcinogenicity Category 2
Hazardous to the Aquatic Environment - Acute Hazard Category 2
Hazardous to the Aquatic Environment - Long-term Hazard Category 2
H227, Combustible liquid.
H315, Causes skin irritation.
H317, May cause an allergic skin reaction.
H318, Causes serious eye damage.
H341, Suspected of causing genetic defects (exposure route).
H351, Suspected of causing cancer (exposure route).
H411, Toxic to aquatic life with long lasting effects.

SAFETY DATA SHEET

In accordance with UN GHS latest edition

Product: Citronella Fragrance FIA212731

Version: 1

2.2 Label elements

Signal word: Danger

Hazard statements: H227, Combustible liquid.
 H315, Causes skin irritation.
 H317, May cause an allergic skin reaction.
 H318, Causes serious eye damage.
 H341, Suspected of causing genetic defects (exposure route).
 H351, Suspected of causing cancer (exposure route).
 H411, Toxic to aquatic life with long lasting effects.

Precautionary statements: P202, Do not handle until all safety precautions have been read and understood.
 P210, Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
 P261, Avoid breathing vapour or dust.
 P264, Wash hands and other contacted skin 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/eye protection/face protection.
 P302/352, IF ON SKIN: Wash with plenty of soap and water.
 P305/351/338, IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308/313, IF exposed or concerned: Get medical advice/attention.
 P310, Immediately call a POISON CENTER or doctor/physician.
 P333/313, If skin irritation or rash occurs: Get medical advice/attention.
 P362, Take off contaminated clothing and wash before reuse.
 P370/378, In case of fire: Use carbon dioxide, dry chemical, foam for extinction.
 P391, Collect spillage.
 P403/235, Store in a well-ventilated place. Keep cool.
 P405, Store locked up.
 P501, Dispose of contents/container to approved disposal site, in accordance with local regulations.

Pictograms:



Other hazards: None

SAFETY DATA SHEET

In accordance with UN GHS latest edition

Product: Citronella Fragrance FIA212731

Version: 1

Section 3. Composition / information on ingredients

3.2 Mixtures

Contains:

SAFETY DATA SHEET

In accordance with UN GHS latest edition

Product: Citronella Fragrance FIA212731

Version: 1

Name	CAS	EC	%	GHS Classification
Citral	5392-40-5	226-394-6	20-<50%	Acute Tox. 5-Skin Irrit. 2-Eye Irrit. 2A-Skin Sens. 1B-Aquatic Acute 2;H313-H315-H317-H319-H401
Diethyl phthalate	84-66-2	201-550-6	10-<20%	Skin Irrit. 3-Aquatic Acute 3;H316-H402
Citronellal	106-23-0	203-376-6	10-<20%	Flam. Liq. 4-Acute Tox. 5-Acute Tox. 5-Skin Irrit. 2-Eye Irrit. 2A-Skin Sens. 1B-Aquatic Acute 2;H227-H303-H313-H315-H317-H319-H401
Geraniol	106-24-1	203-377-1	5-<10%	Acute Tox. 5-Skin Irrit. 2-Eye Dam. 1-Skin Sens. 1-Aquatic Acute 3;H303-H315-H317-H318-H402
Citronellol	106-22-9	203-375-0	1-<5%	Acute Tox. 5-Acute Tox. 5-Skin Irrit. 2-Eye Irrit. 2A-Skin Sens. 1B-Aquatic Acute 2;H303-H313-H315-H317-H319-H401
2-Hexyl-(E)-cinnamaldehyde	165184-98-5, 101-86-0	639-566-4	1-<5%	Acute Tox. 5-Skin Irrit. 3-Skin Sens. 1B-Aquatic Acute 1-Aquatic Chronic 2;H303-H316-H317-H400-H411
Estragole	140-67-0	205-427-8	1-<5%	Flam. Liq. 4-Acute Tox. 4-Skin Irrit. 3-Skin Sens. 1B-Muta. 2-Carc. 2;H227-H302-H316-H317-H341-H351
Geranyl acetate	105-87-3	203-341-5	1-<5%	Skin Irrit. 2-Skin Sens. 1B-Aquatic Acute 2-Aquatic Chronic 3;H315-H317-H401-H412
Linalool	78-70-6	201-134-4	1-<5%	Flam. Liq. 4-Acute Tox. 5-Skin Irrit. 2-Eye Irrit. 2A-Skin Sens. 1B-Aquatic Acute 3;H227-H303-H315-H317-H319-H402
l-Limonene	5989-54-8	227-815-6	1-<5%	Flam. Liq. 3-Skin Irrit. 2-Skin Sens. 1B-Asp. Tox 1-Aquatic Acute 1-Aquatic Chronic 1;H226-H304-H315-H317-H410
Butylated hydroxytoluene	128-37-0	204-881-4	1-<5%	Aquatic Acute 1-Aquatic Chronic 1;H410
1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta-gamma-2-benzopyran	1222-05-5	214-946-9	1-<5%	Skin Irrit. 3-Aquatic Acute 1-Aquatic Chronic 1;H316-H410
Citronellyl acetate	150-84-5	205-775-0	0.1-<1%	Skin Irrit. 2-Aquatic Acute 2-Aquatic Chronic 2;H315-H411
4-tert-Butylcyclohexyl acetate	32210-23-4	250-954-9	0.1-<1%	Acute Tox. 5-Skin Sens. 1B-Aquatic Acute 2;H303-H317-H401
Isohexenyl cyclohexenyl carboxaldehyde	37677-14-8	253-617-4	0.1-<1%	Skin Sens. 1B-Aquatic Acute 2-Aquatic Chronic 2;H317-H411
Limonene	5989-27-5	227-813-5	0.1-<1%	Flam. Liq. 3-Skin Irrit. 2-Skin Sens. 1B-Asp. Tox 1-Aquatic Acute 1-Aquatic Chronic 1;H226-H304-H315-H317-H410
Benzyl salicylate	118-58-1	204-262-9	0.1-<1%	Acute Tox. 5-Eye Irrit. 2B-Skin Sens. 1B-Aquatic Acute 2-Aquatic Chronic 3;H303-H317-H320-H401-H412
Dimyrcetol	18479-58-8	242-362-4	0.1-<1%	Flam. Liq. 4-Acute Tox. 5-Skin Irrit. 2-Eye Irrit. 2A-Aquatic Acute 3;H227-H303-H315-H319-H402
Isocitral #3	UNKNOWN		0.1-<1%	Acute Tox. 5-Skin Irrit. 3-Eye Irrit. 2A-Skin Sens. 1B-Aquatic Acute 3-Aquatic Chronic 3;H303-H316-H317-H319-H412
dl-Limonene (racemic)	138-86-3	205-341-0	0.1-<1%	Flam. Liq. 3-Skin Irrit. 2-Skin Sens. 1B-Asp. Tox 1-Aquatic Acute 1-Aquatic Chronic 1;H226-H304-H315-H317-H410
Isocitral #2	72203-98-6		0.1-<1%	Acute Tox. 5-Skin Irrit. 3-Eye Irrit. 2A-Skin Sens. 1B-Aquatic Acute 3-Aquatic Chronic 3;H303-H316-H317-H319-H412
beta-Caryophyllene	87-44-5	201-746-1	0.1-<1%	Skin Irrit. 3-Skin Sens. 1B-Asp. Tox 1;H304-H316-H317
Benzyl benzoate	120-51-4	204-402-9	0.1-<1%	Acute Tox. 4-Acute Tox. 5-Aquatic Acute 1-Aquatic Chronic 2;H302-H313-H400-H411
Camphene	79-92-5	201-234-8	0.1-<1%	Flam. Liq. 3-Flam. Sol. 2-Eye Irrit. 2B-Aquatic Acute 1-Aquatic Chronic 1;H226-H228-H320-H410

SAFETY DATA SHEET

In accordance with UN GHS latest edition

Product: Citronella Fragrance FIA212731

Version: 1

Substances with Community workplace exposure limits, not listed above:

Name	CAS	EC	%
Butylated hydroxytoluene	128-37-0	204-881-4	1.00%
Diethyl phthalate	84-66-2	201-550-6	19.88%

Section 4. First-aid measures

4.1 Description of first aid measures

IF ON SKIN: Wash with plenty of soap and water.

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.

Immediately call a POISON CENTER or doctor/physician.

4.2 Most important symptoms and effects, both acute and delayed

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye damage.

Suspected of causing genetic defects (exposure route).

Suspected of causing cancer (exposure route).

4.3 Indication of any immediate medical attention and special treatment needed

None expected, see Section 4.1 for further information.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable media: Carbon dioxide, Dry chemical, Foam.

5.2 Special hazards arising from the substance or mixture

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

5.3 Advice for fire fighters:

In case of insufficient ventilation, wear suitable respiratory equipment.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

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

SAFETY DATA SHEET

In accordance with UN GHS latest edition

Product: Citronella Fragrance FIA212731

Version: 1

6.2 Environmental precautions:

Keep away from drains, surface and ground water, and soil.

6.3 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.

6.4 Reference to other sections:

Also refer to sections 8 and 13.

Section 7. Handling and storage

7.1 Precautions for safe handling:

Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use personal protective equipment as required. Use in accordance with good manufacturing and industrial hygiene practices. Use in areas with adequate ventilation. Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities:

Store in a well-ventilated place. Keep container tightly closed. Keep cool. 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.

7.3 Specific end use(s):

Fragrances: Use in accordance with good manufacturing and industrial hygiene practices.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limits:

Ingredient	CAS	EC	Description	ppm	mg/m ³	Reference
Butylated hydroxytoluene	128-37-0	204-881-4	Long-term exposure limit (8-hour TWA reference period)	-	-	-
			Short-term exposure limit (15-minute reference period)	-	-	-
Diethyl phthalate	84-66-2	201-550-6	Long-term exposure limit (8-hour TWA reference period)	-	-	-
			Short-term exposure limit (15-minute reference period)	-	-	-

8.2 Exposure Controls

Eye / Skin Protection

Wear protective gloves/eye protection/face protection

SAFETY DATA SHEET

In accordance with UN GHS latest edition

Product: Citronella Fragrance FIA212731

Version: 1

Respiratory Protection

Ensure adequate and ongoing ventilation is maintained in order to prevent build up of excessive vapour and to ensure occupational exposure limits are adhered to. If appropriate, and depending on your patterns and volumes of use, the following engineering controls may be required as additional protective measures: a) Isolate mixing rooms and other areas where this material is used or openly handled. Maintain these areas under negative air pressure relative to the rest of the plant. b) Employ the use of Personal protective equipment - an approved, properly fitted respirator with organic vapour cartridges or canisters and particulate filters. c) Use local exhaust ventilation around open tanks and other open sources of potential exposures in order to avoid excessive inhalation, including places where this material is openly weighed or measured. In addition, use general dilution ventilation of the work area to eliminate or reduce possible worker exposures. d) Use closed systems for transferring and processing this material.

Also refer to Sections 2 and 7.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Faint Yellow - Pale Straw
Odour:	Citrus, Citronella, Basil
pH:	Not determined
Initial boiling point / range:	Not determined
Flash point:	> 90 °C
Vapour pressure:	Not determined
Relative density:	0.9350 - 0.9490
Solubility(ies):	Not determined

9.2 Other information: None available

Section 10. Stability and reactivity

10.1 Reactivity:

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

10.2 Chemical stability:

Good stability under normal storage conditions.

10.3 Possibility of hazardous reactions:

Not expected under normal conditions of use.

10.4 Conditions to avoid:

Avoid extreme heat.

10.5 Incompatible materials:

Avoid contact with strong acids, alkalis or oxidising agents.

10.6 Hazardous decomposition products:

Not expected.

SAFETY DATA SHEET

In accordance with UN GHS latest edition

Product: Citronella Fragrance FIA212731

Version: 1

Section 11. Toxicological information

11.1 Information on toxicological effects

This mixture has not been tested as a whole for health effects. The health effects have been calculated using the methods outlined in UN GHS.

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye damage.

Suspected of causing genetic defects (exposure route).

Suspected of causing cancer (exposure route).

Assumed Toxicity Value (LD50 or ATE) for Acute Oral Toxicity: >5000

Assumed Toxicity Value (LD50 or ATE) for Acute Dermal Toxicity: >5000

Assumed Toxicity Value (LC50 or ATE) for Acute Inhalation Toxicity: Not Available

Inhalation Route: Not Available

Information about hazardous ingredients in the mixture

Ingredient	CAS	EC	LD50/ATE Oral	LD50/ATE Dermal	LC50/ATE Inhalation	LC50 Route
Estragole	140-67-0	205-427-8	1230	Not available	Not available	Not available

Refer to Sections 2 and 3 for additional information.

Section 12. Ecological information

12.1 Toxicity:

Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability: Not available

12.3 Bioaccumulative potential: Not available

12.4 Mobility in soil: Not available

12.5 Results of PBT and vPvB assessment:

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6 Other adverse effects: Not available

SAFETY DATA SHEET

In accordance with UN GHS latest edition

Product: Citronella Fragrance FIA212731

Version: 1

Section 13. Disposal considerations

13.1 Waste treatment methods:

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.

Section 14. Transport information

14.1 UN number: UN3082

14.2 UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (l-Limonene, 1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopentagamma-2-benzopyran)

14.3 Transport hazard class(es): 9

Sub Risk: -

14.4. Packing Group: III

14.5 Environmental hazards: This is an environmentally hazardous substance.

14.6 Special precautions for user: None additional

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:
Not applicable

Section 15. Regulatory information

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

Water Hazard Class (WGK): 3

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

Section 16. Other information

Concentration % Limits: EH A2=19.08% EH A3=1.87% EH C2=48.61% EH C3=4.84% SCI 2=17.41% SCI 3=1.60% EDI 1=37.76% EDI 2A=8.01% SS 1=3.84% MUT 2=33.61% CAR 2=33.61%

Total Fractional Values: EH A2=5.24 EH A3=53.61 EH C2=2.06 EH C3=20.67 SCI 2=5.74 SCI 3=62.57 EDI 1=2.65 EDI 2A=12.49 SS 1=26.04 MUT 2=2.98 CAR 2=2.98

Key to revisions:

Not applicable

Key to abbreviations:

Abbreviation	Meaning
Acute Tox. 4	Acute Toxicity - Oral Category 4
Acute Tox. 5	Acute Toxicity - Dermal Category 5
Acute Tox. 5	Acute Toxicity - Oral Category 5
Aquatic Acute 1	Hazardous to the Aquatic Environment - Acute Hazard Category 1

SAFETY DATA SHEET

In accordance with UN GHS latest edition

Product: Citronella Fragrance FIA212731

Version: 1

Aquatic Acute 2	Hazardous to the Aquatic Environment - Acute Hazard Category 2
Aquatic Acute 3	Hazardous to the Aquatic Environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the Aquatic Environment - Long-term Hazard Category 1
Aquatic Chronic 2	Hazardous to the Aquatic Environment - Long-term Hazard Category 2
Aquatic Chronic 3	Hazardous to the Aquatic Environment - Long-term Hazard Category 3
Asp. Tox 1	Aspiration Hazard Category 1
Carc. 2	Carcinogenicity Category 2
Eye Dam. 1	Eye Damage / Irritation Category 1
Eye Irrit. 2A	Eye Damage / Irritation Category 2A
Eye Irrit. 2B	Eye Damage / Irritation Category 2B
Flam. Liq. 3	Flammable Liquid, Hazard Category 3
Flam. Liq. 4	Flammable Liquid, Hazard Category 4
Flam. Sol. 2	Flammable Solid, Hazard Category 2
H226	Flammable liquid and vapour.
H227	Combustible liquid.
H228	Flammable solid.
H302	Harmful if swallowed.
H303	May be harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H313	May be harmful in contact with skin.
H315	Causes skin irritation.
H316	Causes mild skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H320	Causes eye irritation.
H341	Suspected of causing genetic defects (exposure route).
H351	Suspected of causing cancer (exposure route).
H400	Very toxic to aquatic life.
H401	Toxic to aquatic life.
H402	Harmful 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.
Muta. 2	Germ Cell Mutagenicity Category 2
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical, ventilating and lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.

SAFETY DATA SHEET

In accordance with UN GHS latest edition

Product: Citronella Fragrance FIA212731

Version: 1

P261	Avoid breathing vapour or dust.
P264	Wash hands and other contacted skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection/face protection.
P301/310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301/312	IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell.
P302/352	IF ON SKIN: Wash with plenty of soap and water.
P303/361/353	IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P305/351/338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308/313	IF exposed or concerned: Get medical advice/attention.
P310	Immediately call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTRE or doctor/physician if you feel unwell.
P330	Rinse mouth.
P331	Do not induce vomiting.
P332/313	If skin irritation occurs: Get medical advice/attention.
P333/313	If skin irritation or rash occurs: Get medical advice/attention.
P337/313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P363	Wash contaminated clothing before reuse.
P370/378	In case of fire: Use carbon dioxide, dry chemical, foam for extinction.
P391	Collect spillage.
P403/235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to approved disposal site, in accordance with local regulations.
Skin Irrit. 2	Skin Corrosion / Irritation Category 2
Skin Irrit. 3	Skin Corrosion / Irritation Category 3
Skin Sens. 1	Sensitization - Skin Category 1
Skin Sens. 1B	Sensitization - Skin Category 1B

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.