



Lemongrass

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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Version: 2.1

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Lemongrass

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Perfume ingredient. Not for use in food or feed.

1.3. Supplier

AAA Candle Supplies, Inc.
10460 Brockwood Rd
Dallas, Texas 75238
T (214) 342-9898
www.AAACandleSupply.com

1.4. Emergency telephone number

No additional information available

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids Category 3	H226	Flammable liquid and vapor.
Skin corrosion/irritation Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 1	H318	Causes serious eye damage
Skin sensitization, Category 1	H317	May cause an allergic skin reaction
Reproductive toxicity Category 2	H361	Suspected of damaging fertility or the unborn child
Aspiration hazard Category 1	H304	May be fatal if swallowed and enters airways

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

Flammable liquid and vapor.
May be fatal if swallowed and enters airways
Causes skin irritation
May cause an allergic skin reaction
Causes serious eye damage
Suspected of damaging fertility or the unborn child

Precautionary statements (GHS US) :

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Ground and bond container and receiving equipment
Use explosion-proof equipment
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing mist, vapors and spray.
Wash hands, forearms and face thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves, protective clothing, eye and face protection
If swallowed: Immediately call a poison center or doctor.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or 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 attention.
Do NOT induce vomiting.
If skin irritation or rash occurs: Get medical attention.
Take off contaminated clothing and wash it before reuse.
In case of fire: Use media other than water to extinguish.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents and container in accordance with applicable regulations.

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2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%*	GHS US classification
Orange terpenes	(CAS-No.) 8028-48-6	< 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Lemongrass Oil, Rectified	(CAS-No.) 8007-02-1	< 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
linalyl acetate	(CAS-No.) 115-95-7	< 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1B, H317 STOT SE 3, H335 Aquatic Acute 3, H402
trans-geranyl acetate	(CAS-No.) 105-87-3	< 5	Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Chronic 2, H411
linalol	(CAS-No.) 78-70-6	< 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1B, H317 STOT SE 3, H336 Aquatic Acute 3, H402
Tetramethyl acetyloctahydronaphthalenes	(CAS-No.) 54464-57-2	< 5	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Acute 2, H401 Aquatic Chronic 1, H410
(+/-)-beta-citronellol	(CAS-No.) 106-22-9	< 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Asp. Tox. 1, H304
alpha-methyl-1,3-benzodioxole-5-propanal	(CAS-No.) 1205-17-0	< 5	Skin Sens. 1B, H317 Repr. 2, H361 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
citral, isomer mixture	(CAS-No.) 5392-40-5	< 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
4-(4-hydroxy-4-methylpentyl)-3-cyclohexene-1-carboxaldehyde	(CAS-No.) 31906-04-4	< 5	Skin Sens. 1A, H317 Aquatic Acute 3, H402
Pelargonium graveolens flower oil	(CAS-No.) 8000-46-2	< 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 3, H402
trans-anethol	(CAS-No.) 4180-23-8	< 5	Skin Sens. 1, H317 Aquatic Acute 2, H401

*Exact concentrations have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.

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- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Rinse skin with water or shower. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
- First-aid measures after ingestion : Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.
- Symptoms/effects after eye contact : Serious damage to eyes.
- Symptoms/effects after ingestion : Risk of lung edema.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

- Fire hazard : Flammable liquid and vapor.
- Reactivity : Flammable liquid and vapor.

5.3. Special protective equipment and precautions for fire-fighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Avoid breathing mist, vapors and spray.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Avoid breathing mist, vapors and spray.
- Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Ground and bond container and receiving equipment.
- Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

citral, isomer mixture (5392-40-5)

ACGIH	ACGIH TWA (ppm)	5 ppm (Citral; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Inhalable fraction and vapor)

8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Environmental exposure controls : Avoid release to the environment.

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8.3. Individual protection measures/Personal protective equipment

Hand protection : Protective gloves
Eye protection : Safety glasses
Skin and body protection : Wear suitable protective clothing
Respiratory protection : Wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Color : Light yellow to yellow
Odor : Characteristic - Lemongrass
Odor threshold : No data available
pH : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : > 115 °F
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : Not applicable.
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available
Specific gravity : No data available
Relative density : No data available
Solubility : Insoluble in water. Soluble in oil. Soluble in organic solvents.
Log Pow : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity, kinematic : < 100 mm²/s
Viscosity, dynamic : < 100 cP
Explosion limits : No data available
Explosive properties : No data available
Oxidizing properties : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

trans-anethol (4180-23-8)

LD50 oral rat	2090 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
ATE US (oral)	2090 mg/kg body weight

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citral, isomer mixture (5392-40-5)	
LD50 oral rat	4960 mg/kg (Rat)
LD50 dermal rat	> 2000 mg/kg (Rat)
LD50 dermal rabbit	2250 mg/kg (Rabbit)
ATE US (oral)	4960 mg/kg body weight
ATE US (dermal)	2250 mg/kg body weight
(+/-)-beta-citronellol (106-22-9)	
LD50 oral rat	3450 mg/kg (Rat; Inconclusive, insufficient data)
LD50 dermal rabbit	2650 mg/kg (Rabbit; Inconclusive, insufficient data)
ATE US (oral)	3450 mg/kg body weight
ATE US (dermal)	2650 mg/kg body weight
trans-geranyl acetate (105-87-3)	
LD50 oral rat	6300 mg/kg (Rat)
ATE US (oral)	6300 mg/kg body weight
alpha-methyl-1,3-benzodioxole-5-propanal (1205-17-0)	
LD50 oral rat	3561 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
ATE US (oral)	3561 mg/kg body weight
linalol (78-70-6)	
LD50 oral rat	2790 mg/kg (Rat)
LD50 dermal rat	5610 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
ATE US (oral)	2790 mg/kg body weight
ATE US (dermal)	5610 mg/kg body weight
linalyl acetate (115-95-7)	
LD50 oral rat	13934 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
ATE US (oral)	13934 mg/kg body weight
4-(4-hydroxy-4-methylpentyl)-3-cyclohexene-1-carboxaldehyde (31906-04-4)	
LD50 oral rat	3218 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
ATE US (oral)	3218 mg/kg body weight
Lemongrass Oil, Rectified (8007-02-1)	
ATE US (dermal)	3103 mg/kg body weight
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
STOT-single exposure	: Not classified
Pelargonium graveolens flower oil (8000-46-2)	
STOT-single exposure	May cause drowsiness or dizziness.
trans-geranyl acetate (105-87-3)	
STOT-single exposure	May cause respiratory irritation.
linalol (78-70-6)	
STOT-single exposure	May cause drowsiness or dizziness.
linalyl acetate (115-95-7)	
STOT-single exposure	May cause respiratory irritation.
Orange terpenes (8028-48-6)	
STOT-single exposure	May cause respiratory irritation.

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Lemongrass Oil, Rectified (8007-02-1)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.
Viscosity, kinematic	: < 100 mm ² /s
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Risk of lung edema.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

citral, isomer mixture (5392-40-5)	
LC50 fish 1	4.6 - 10 mg/l (LC50; 96 h)
EC50 Daphnia 1	7 mg/l (EC50; 48 h)
Threshold limit algae 1	16 mg/l (EC50; 72 h)

(+/-)-beta-citronellol (106-22-9)	
LC50 fish 1	> mg/l >10 <22, LC50; 96 h
EC50 Daphnia 1	17 mg/l (EC50; 48 h)
Threshold limit algae 1	2.4 mg/l (EC50; 72 h)

linalol (78-70-6)	
EC50 Daphnia 1	59 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilization Test; 48 h; Daphnia magna)
EC50 other aquatic organisms 1	>= 100 mg/l (3 h; Activated sludge)
LC50 fish 2	27.8 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Salmo gairdneri)
Threshold limit algae 1	88.3 mg/l (EC50; 96 h)

linalyl acetate (115-95-7)	
LC50 fish 1	11 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Cyprinus carpio)
EC50 Daphnia 1	15 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilization Test; 48 h; Daphnia magna)
Threshold limit algae 1	16 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Scenedesmus subspicatus)

12.2. Persistence and degradability

trans-anethol (4180-23-8)	
Persistence and degradability	Ozonation in the air. Photodegradation in the air.

citral, isomer mixture (5392-40-5)	
Persistence and degradability	Readily biodegradable in water. Forming sediments in water. Ozonation in the air. Photodegradation in the air.
Biochemical oxygen demand (BOD)	0.556 g O ₂ /g substance
Chemical oxygen demand (COD)	1.99 g O ₂ /g substance
ThOD	2.84 g O ₂ /g substance

(+/-)-beta-citronellol (106-22-9)	
Persistence and degradability	Readily biodegradable in water.
Chemical oxygen demand (COD)	2.05 g O ₂ /g substance
ThOD	2.961 g O ₂ /g substance

trans-geranyl acetate (105-87-3)	
Persistence and degradability	Biodegradability in water: no data available. Forming sediments in water.
ThOD	2.6 g O ₂ /g substance

alpha-methyl-1,3-benzodioxole-5-propanal (1205-17-0)	
Persistence and degradability	Biodegradability in water: no data available.

linalol (78-70-6)	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.531 g O ₂ /g substance
Chemical oxygen demand (COD)	2.808 g O ₂ /g substance

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linalyl acetate (115-95-7)	
Persistence and degradability	Readily biodegradable in water. Forming sediments in water. Adsorbs into the soil. Ozonation in the air. Photodegradation in the air.

4-(4-hydroxy-4-methylpentyl)-3-cyclohexene-1-carboxaldehyde (31906-04-4)	
Persistence and degradability	Readily biodegradable in water.

Orange terpenes (8028-48-6)	
Persistence and degradability	Biodegradability in water: no data available.

12.3. Bioaccumulative potential

citral, isomer mixture (5392-40-5)	
BCF other aquatic organisms 1	250 (BCF)
Log Pow	2.76 - 3.45 (Estimated value)
Bioaccumulative potential	Bioaccumable.

(+/-)-beta-citronellol (106-22-9)	
Log Pow	3.41 - 3.91

trans-geranyl acetate (105-87-3)	
BCF other aquatic organisms 1	1500 (BCF)
Log Pow	4.04 (Experimental value)

alpha-methyl-1,3-benzodioxole-5-propanal (1205-17-0)	
Log Pow	2.4 (OECD 117: Partition Coefficient (n-octanol/water), HPLC method)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

linalol (78-70-6)	
Log Pow	2.84 - 3.145
Bioaccumulative potential	Bioaccumable.

linalyl acetate (115-95-7)	
Log Pow	3.93 (Experimental value)

4-(4-hydroxy-4-methylpentyl)-3-cyclohexene-1-carboxaldehyde (31906-04-4)	
Bioaccumulative potential	No bioaccumulation data available.

Orange terpenes (8028-48-6)	
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

- Waste treatment methods : Dispose of contents and container in accordance with licensed collector's sorting instructions.
- Additional information : Flammable vapors may accumulate in the container.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

- Transport document description : ID8000 Consumer commodity, 9
- UN-No.(DOT) : ID8000
- Proper Shipping Name (DOT) : Consumer commodity
- Class (DOT) : 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140
- Hazard labels (DOT) : 9 - Class 9 (Miscellaneous dangerous materials)



- Other information : No supplementary information available.

Transport by sea

Not regulated

Air transport

- Transport document description (IATA) : UN 8000 Consumer commodity, 9

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UN-No. (IATA) : 8000
Proper Shipping Name (IATA) : Consumer commodity
Class (IATA) : 9 - Miscellaneous Dangerous Goods

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Revision date : 07/21/2020

Full text of H-phrases:

H226	Flammable liquid and vapor.
H227	Combustible liquid
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
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H361	Suspected of damaging fertility or the unborn child
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

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.