

Safety Data Sheet

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

Version: 1.3

Issue date: 02/13/2019 Revision date: 01/19/2024 Supersedes: 01/08/2024

SECTION 1: Identification

Identification

Product form : Mixture

Product name Pamplemousse Fragrance, All Natural

CAS-No. Product code : 99348

1.2. Recommended use and restrictions on use

1.3. **Supplier**

Shay and Company 10639 SE Fuller Rd Milwaukie, OR 97222 503-653-1155

Emergency telephone number

Emergency number : CHEMTREC - USA: 800-424-9300 International: +1 703-527-3887 / 1-800-424-9300

CCN 1015430

SECTION 2: Hazard(s) identification

Classification of the substance or mixture

GHS US classification

Flammable liquids Category 3 Skin corrosion/irritation Category 2 Skin sensitization, Category 1

Reproductive toxicity Category 2 Aspiration hazard Category 1

Flammable liquid and vapor

Causes skin irritation

May cause an allergic skin reaction

Suspected of damaging fertility or the unborn child May be fatal if swallowed and enters airways

GHS Label elements, including precautionary statements

GHS US labeling

Signal word (GHS US)

Hazard pictograms (GHS US)



GHS02

GHS07



· 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

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

Keep container tightly closed.

Ground/Bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapors/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 protection/face protection.

If swallowed: Immediately call a poison center or doctor.

If on skin: Wash with plenty of water.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with

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water/shower.

If exposed or concerned: Get medical advice/attention.

Specific treatment (see supplemental first aid instruction on this label).

Do NOT induce vomiting.

If skin irritation occurs: Get medical advice/attention.
If skin irritation or rash occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.

Wash contaminated clothing 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/container to hazardous or special waste collection point, in accordance

with local, regional, national and/or international regulation.

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 |
|--|---------------------|---------|---|
| D-LIMONENE | (CAS-No.) 5989-27-5 | 25 – 50 | Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 |
| LINALOOL | (CAS-No.) 78-70-6 | 1 – 5 | Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1B, H317 |
| LINALYL ACETATE | (CAS-No.) 115-95-7 | 1 – 5 | Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Skin Sens. 1B, H317 |
| 1-ISOPROPYL-4-METHYLCYCLOHEXA-1,4-DIENE* | (CAS-No.) 99-85-4 | 0.1 – 1 | Flam. Liq. 3, H226 Repr. 2, H361 Asp. Tox. 1, H304 |
| CITRAL | (CAS-No.) 5392-40-5 | 0.1 – 1 | Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 STOT RE 2, H373 |

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.

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/shower. Remove/Take off immediately all contaminated clothing. If skin

irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

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 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.

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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 dust/fume/gas/mist/vapors/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/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 dust/fume/gas/mist/vapors/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/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

OIL, PAMPLEMOUSSE BLOSSOM AN* (N/A)

No additional information available

LINALOOL (78-70-6)

No additional information available

D-LIMONENE (5989-27-5)

No additional information available

LINALYL ACETATE (115-95-7)

No additional information available

1-ISOPROPYL-4-METHYLCYCLOHEXA-1,4-DIENE* (99-85-4)

No additional information available

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| CITRAL (5392-40-5) | | |
|--|---|--|
| USA - ACGIH - Occupational Exposure Limits | | |
| Local name | Citral | |
| ACGIH OEL TWA [ppm] | 5 ppm (IFV - Inhalable fraction and vapor) | |
| Remark (ACGIH) | TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen) | |
| Regulatory reference | ACGIH 2023 | |

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

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:

[In case of inadequate ventilation] wear respiratory protection.



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Color : YELLOW TO ORANGE

Odor : CHARACTERISTIC, MATCHING RETAINER SAMPLE

Odor threshold : No data available pH : No data available Melting point : Not applicable Freezing point : No data available Boiling point : No data available

Flash point : 56 °C

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
Relative density : 0.993 (0.983 – 1.003)

Solubility : Insoluble.

Partition coefficient n-octanol/water (Log Pow) : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosion limits : No data available

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Explosive properties : No data available
Oxidizing properties : No data available

9.2. Other information

Refractive index : 1.458 (1.448 – 1.468)

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

| LINALOOL (78-70-6) | |
|------------------------|---|
| ATE US (oral) | 2790 mg/kg body weight |
| D-LIMONENE (5989-27-5) | |
| LD50 oral rat | > 2000 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s)) |
| LD50 dermal rabbit | > 5000 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Read-across, Dermal, 7 day(s)) |

| 1-ISOPROPYL-4-METHYLCYCLOHEXA-1,4-DIENE* (99-85-4) | |
|--|--|
| ATE US (oral) | 3650 mg/kg body weight |
| CITRAL (5392-40-5) | |
| LD50 oral rat | ≈ 6800 mg/kg body weight Animal: rat |
| LD50 dermal rat | > 2000 mg/kg body weight Animal: rat, Remarks on results: other: |

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

| CITRAL (5392-40-5) | |
|--|---|
| NOAEL (chronic,oral,animal/male,2 years) | 60 mg/kg body weight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Remarks on results: other: |

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

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| CITRAL (5392-40-5) | |
|---|---|
| LOAEC (inhalation,rat,gas,90 days) | 68 ppm Animal: rat, Animal sex: female |
| NOAEL (oral,rat,90 days) | 100 mg/kg body weight Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |
| NOAEC (inhalation,rat,gas,90 days) | 34 ppm Animal: rat, Animal sex: female |
| NOAEL (subchronic,oral,animal/male,90 days) | 60 mg/kg body weight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |
| STOT-repeated exposure | May cause damage to organs through prolonged or repeated exposure. |
| Aspiration hazard | : May be fatal if swallowed and enters airways. |
| Viscosity, kinematic | : No data available |

: Irritation. May cause an allergic skin reaction.

Symptoms/effects after ingestion : Risk of lung edema.

SECTION 12: Ecological information

Symptoms/effects after skin contact

12.1. Toxicity

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

| D-LIMONENE (5989-27-5) | |
|------------------------|--|
| LC50 - Fish [1] | 720 μg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value) |
| EC50 - Crustacea [1] | 0.307 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semistatic system, Fresh water, Experimental value, GLP) |
| LC50 - Fish [2] | 702 μg/l Test organisms (species): Pimephales promelas |
| EC50 - Crustacea [2] | 0.51 mg/l Test organisms (species): Daphnia magna |

| CITRAL (5392-40-5) | |
|----------------------|--|
| LC50 - Fish [1] | 6.78 mg/l Test organisms (species): Leuciscus idus |
| EC50 - Crustacea [1] | 6.8 mg/l Test organisms (species): Daphnia magna |

12.2. Persistence and degradability

| D-LIMONENE (5989-27-5) | |
|-------------------------------|------------------------------------|
| Persistence and degradability | Readily biodegradable in water. |
| ThOD | 3.29 g O ₂ /g substance |

12.3. Bioaccumulative potential

| D-LIMONENE (5989-27-5) | |
|---|---|
| BCF - Fish [1] | 864.8 I/kg (BCFBAF v3.01, Pisces, QSAR, Fresh weight) |
| Partition coefficient n-octanol/water (Log Pow) | 4.38 (Experimental value, Equivalent or similar to OECD 117, 37 °C) |
| Bioaccumulative potential | Potential for bioaccumulation (4 ≤ Log Kow ≤ 5). |

12.4. Mobility in soil

| D-LIMONENE (5989-27-5) | |
|---|--|
| Surface tension | No data available in the literature |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 3.049 – 3.801 (log Koc, SRC PCKOCWIN v2.0, Calculated value) |
| Ecology - soil | Low potential for mobility in soil. |

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

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Additional information : Flammable vapors may accumulate in the container.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description (DOT) : UN1266 Perfumery products (Regulated for Bulk only), 3, III

UN-No.(DOT) : UN1266

Proper Shipping Name (DOT) : Perfumery products

(Regulated for Bulk only)

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Packing group (DOT) : III - Minor Danger Hazard labels (DOT) 3 - Flammable liquid



: 203 DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx)

DOT Special Provisions (49 CFR 172.102) : B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a

flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this

subchapter are applicable.

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table

2 for UN2672).

T2 - 1.5 178.274(d)(2) Normal..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx) DOT Quantity Limitations Passenger aircraft/rail : 60 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a **DOT Vessel Stowage Location**

passenger vessel.

Emergency Response Guide (ERG) Number

Other information : No supplementary information available.

Transportation of Dangerous Goods

Transport document description (TDG) : UN1266 PERFUMERY PRODUCTS (Regulated for Bulk only), 3, III

UN-No. (TDG)

Proper Shipping Name (TDG) : PERFUMERY PRODUCTS TDG Primary Hazard Classes : 3 - Class 3 - Flammable Liquids

Packing group (TDG) : III - Minor Danger

TDG Special Provisions : 59 - Substances that are listed by name in Schedule 1 must not be transported under this shipping name. Substances transported under this shipping name may contain not more than

20% nitrocellulose if the nitrocellulose contains not more than 12.6% nitrogen (by dry mass).

Explosive Limit and Limited Quantity Index Passenger Carrying Road Vehicle or Passenger : 60 L

Carrying Railway Vehicle Index

Transport by sea

Transport document description (IMDG) : UN 1266 PERFUMERY PRODUCTS, 3, III

UN-No. (IMDG) : 1266

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Proper Shipping Name (IMDG) : PERFUMERY PRODUCTS
Class (IMDG) : 3 - Flammable liquids

Packing group (IMDG) : III - substances presenting low danger

Limited quantities (IMDG) : 5 L

Air transport

Transport document description (IATA) : UN 1266 Perfumery products, 3, III

UN-No. (IATA) : 1266

Proper Shipping Name (IATA) : Perfumery products
Class (IATA) : 3 - Flammable Liquids
Packing group (IATA) : III - Low danger

SECTION 15: Regulatory information

15.1. US Federal regulations

No additional information available

15.2. International regulations

CANADA

LINALOOL (78-70-6)

Listed on the Canadian DSL (Domestic Substances List)

LINALYL ACETATE (115-95-7)

Listed on the Canadian DSL (Domestic Substances List)

1-ISOPROPYL-4-METHYLCYCLOHEXA-1,4-DIENE* (99-85-4)

Listed on the Canadian DSL (Domestic Substances List)

CITRAL (5392-40-5)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

LINALOOL (78-70-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Listed on INSQ (Mexican National Inventory of Chemical Substances)

LINALYL ACETATE (115-95-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Listed on INSQ (Mexican National Inventory of Chemical Substances)

1-ISOPROPYL-4-METHYLCYCLOHEXA-1,4-DIENE* (99-85-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Listed on INSQ (Mexican National Inventory of Chemical Substances)

CITRAL (5392-40-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Listed on INSQ (Mexican National Inventory of Chemical Substances)

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15.3. US State regulations

California Proposition 65 for products falling below safe harbor levels.

This formula does contain various 100% natural citrus derived essential oils, which may contain Myrcene, methyl eugenol, and furcoumarines all of which are on the Prop 65 list. We believe the volume in the end product falls below the safe harbor levels designated by Prop 65 and therefore this product does not have a Prop 65 warning. Please see our letter on Prop 65 warnings.



SECTION 16: Other information

Revision date : 01/19/2024

Full textofH-phrases:

| Flammable liquid and vapor | |
|---|--|
| Combustible liquid | |
| May be fatal if swallowed and enters airways | |
| · | |
| Causes skin irritation | |
| May cause an allergic skin reaction | |
| Causes serious eye irritation | |
| Causes eye irritation | |
| Suspected of damaging fertility or the unborn child | |
| May cause damage to organs through prolonged or repeated exposure | |
| | Combustible liquid May be fatal if swallowed and enters airways Causes skin irritation May cause an allergic skin reaction Causes serious eye irritation Causes eye irritation Suspected of damaging fertility or the unborn child |

SDS US (GHS HazCom 2012)

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.

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