

Crisp Linen Fragrance, Naturally Derived

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date:
11/03/2022 Revision date: 02/02/2024 Supersedes: 11/03/2022 Version: 1.1

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Crisp Linen Fragrance, Naturally Derived
Product code : 900299

1.2. Recommended use and restrictions on use

1.3. Supplier

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

1.4. 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

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation Category 2	Causes skin irritation
Serious eye damage/eye irritation Category 2	Causes serious eye irritation
Skin sensitization, Category 1	May cause an allergic skin reaction
Specific target organ toxicity (repeated exposure) Category 2	May cause damage to organs through prolonged or repeated exposure

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning

Hazard statements (GHS US) : Causes skin irritation
May cause an allergic skin reaction
Causes serious eye irritation
May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS US) : Do not breathe dust/fume/gas/mist/vapors/spray.
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 on skin: Wash with plenty of water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Get medical advice/attention if you feel unwell.
Specific treatment (see supplemental first aid instruction on this label).
If skin irritation occurs: Get medical advice/attention.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
Wash contaminated clothing before reuse.
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

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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
DIHYDROMYRCENOL	(CAS-No.) 18479-58-8	5 – 10	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
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
METHYL GAMMA-IONONE	(CAS-No.) 127-51-5	1 – 5	Skin Sens. 1B, H317 STOT RE 2, H373
ALPHA HEXYLCINNAMALDEHYDE	(CAS-No.) 101-86-0	1 – 5	Skin Sens. 1B, H317
PTBCHA	(CAS-No.) 32210-23-4	1 – 5	Acute Tox. 4 (Oral), H302 Skin Sens. 1B, H317
3-(5,5,6-Trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol	(CAS-No.) 3407-42-9	1 – 5	Eye Irrit. 2A, H319
TETRAMETHYL ACETYLOCTAHYDRONAPHTHALENES	(CAS-No.) 54464-57-2	1 – 5	Skin Irrit. 2, H315 Skin Sens. 1B, H317
3,7-Dimethyl-1,6-nonadien-3-ol	(CAS-No.) 10339-55-6	1 – 5	Flam. Liq. 4, H227 Eye Irrit. 2A, H319 Skin Sens. 1B, H317
2-Methyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	(CAS-No.) 28219-60-5	1 – 5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
ALLYL CYCLOHEXYLPROPIONATE	(CAS-No.) 2705-87-5	0.1 – 1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Sens. 1, H317
DELTA DAMASCONE	(CAS-No.) 57378-68-4	0.1 – 1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Skin Sens. 1A, H317

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	: Get medical advice/attention if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/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. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.

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	: Eye irritation.

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

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
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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. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

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.
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. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes. Wear personal protective equipment.
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

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OIL, DENIM NDV*

No additional information available

TETRAMETHYL ACETYLOCTAHYDRONAPHTHALENES (54464-57-2)

No additional information available

3-(5,5,6-Trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol (3407-42-9)

No additional information available

LINALYL ACETATE (115-95-7)

No additional information available

PTBCHA (32210-23-4)

No additional information available

ALLYL CYCLOHEXYLPROPIONATE (2705-87-5)

No additional information available

ALPHA HEXYLCINNAMALDEHYDE (101-86-0)

No additional information available

DELTA DAMASCONE (57378-68-4)

No additional information available

DIHYDROMYRCENOL (18479-58-8)

No additional information available

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3,7-Dimethyl-1,6-nonadien-3-ol (10339-55-6)

No additional information available

METHYL GAMMA-IONONE (127-51-5)

No additional information available

2-Methyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol (28219-60-5)

No additional information available

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 insufficient ventilation, wear suitable respiratory equipment



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: COLORLESS TO YELLOW
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	: 100 °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	: 1.0275 (1.0175 – 1.0375)
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
Explosive properties	: No data available

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Oxidizing properties : No data available

9.2. Other information

Refractive index : 1.45707 (1.44707 – 1.46707)

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

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

None under recommended storage and handling conditions (see section 7).

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

3-(5,5,6-Trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol (3407-42-9)

LD50 oral rat	5000 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), Remarks on results: other:
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: other:
ATE US (oral)	5000 mg/kg body weight

PTBCHA (32210-23-4)

LD50 oral rat	300 – 2000 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method), Guideline: EU Method B.1 bis (Acute Oral Toxicity - Fixed Dose Procedure)
ATE US (oral)	300 mg/kg body weight

ALLYL CYCLOHEXYLPROPIONATE (2705-87-5)

LD50 oral rat	585 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 480 - 714
LD50 dermal rabbit	1600 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), 95% CL: 430 - 2770
ATE US (oral)	380 mg/kg body weight
ATE US (dermal)	1600 mg/kg body weight

ALPHA HEXYLCINNAMALDEHYDE (101-86-0)

ATE US (oral)	3100 mg/kg body weight
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DELTA DAMASCONE (57378-68-4)

ATE US (oral)	1400 mg/kg body weight
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DIHYDROMYRCENOL (18479-58-8)

ATE US (oral)	3600 mg/kg body weight
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3,7-Dimethyl-1,6-nonadien-3-ol (10339-55-6)

LD50 dermal rabbit	> 5000 mg/kg body weight Animal: rabbit, Guideline: other:
LC50 Inhalation - Rat	> 1 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Remarks on results: other:
ATE US (oral)	5000 mg/kg body weight

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METHYL GAMMA-IONONE (127-51-5)	
LD50 oral rat	> 2000 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), Remarks on results: other:
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: other:

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

3-(5,5,6-Trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol (3407-42-9)	
NOAEL (oral,rat,90 days)	1125 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)

3,7-Dimethyl-1,6-nonadien-3-ol (10339-55-6)	
NOAEL (dermal,rat/rabbit,90 days)	250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

METHYL GAMMA-IONONE (127-51-5)	
NOAEL (oral,rat,90 days)	30 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (dermal,rat/rabbit,90 days)	50 mg/kg body weight Animal: rat, Guideline: other:, Remarks on results: other:
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.

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.

3-(5,5,6-Trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol (3407-42-9)	
LC50 - Fish [1]	17.6 mg/l Test organisms (species): other:
EC50 - Crustacea [1]	2.59 mg/l Test organisms (species): Daphnia magna
LC50 - Fish [2]	18.9 mg/l Test organisms (species): other:

PTBCHA (32210-23-4)	
LC50 - Fish [1]	8.6 mg/l Test organisms (species): Cyprinus carpio
EC50 - Crustacea [1]	5.3 mg/l Test organisms (species): Daphnia magna

ALLYL CYCLOHEXYLPROPIONATE (2705-87-5)	
LC50 - Fish [1]	0.13 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	3.8 mg/l Test organisms (species): Daphnia magna

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3,7-Dimethyl-1,6-nonadien-3-ol (10339-55-6)	
LC50 - Fish [1]	24 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	23 mg/l Test organisms (species): Daphnia magna
METHYL GAMMA-IONONE (127-51-5)	
LC50 - Fish [1]	10.9 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	9 mg/l Test organisms (species): Daphnia magna

12.2. Persistence and degradability

DIHYDROMYRCENOL (18479-58-8)	
Persistence and degradability	Biodegradability in water: no data available.

12.3. Bioaccumulative potential

DIHYDROMYRCENOL (18479-58-8)	
Partition coefficient n-octanol/water (Log Pow)	3.47 (Estimated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

DIHYDROMYRCENOL (18479-58-8)	
Ecology - soil	No (test)data on mobility of the substance available.

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.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Transportation of Dangerous Goods

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

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3-(5,5,6-Trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol (3407-42-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
PTBCHA (32210-23-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
ALPHA HEXYLCINNAMALDEHYDE (101-86-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
2-Methyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol (28219-60-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

TETRAMETHYL ACETYLOCTAHYDRONAPHTHALENES (54464-57-2)
Listed on the Canadian DSL (Domestic Substances List)
3-(5,5,6-Trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol (3407-42-9)
Listed on the Canadian DSL (Domestic Substances List)
LINALYL ACETATE (115-95-7)
Listed on the Canadian DSL (Domestic Substances List)
PTBCHA (32210-23-4)
Listed on the Canadian DSL (Domestic Substances List)
ALLYL CYCLOHEXYLPROPIONATE (2705-87-5)
Listed on the Canadian DSL (Domestic Substances List)
ALPHA HEXYLCINNAMALDEHYDE (101-86-0)
Listed on the Canadian DSL (Domestic Substances List)
DELTA DAMASCONE (57378-68-4)
Listed on the Canadian DSL (Domestic Substances List)
DIHYDROMYRCENOL (18479-58-8)
Listed on the Canadian DSL (Domestic Substances List)
3,7-Dimethyl-1,6-nonadien-3-ol (10339-55-6)
Listed on the Canadian DSL (Domestic Substances List)
METHYL GAMMA-IONONE (127-51-5)
Listed on the Canadian DSL (Domestic Substances List)
2-Methyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol (28219-60-5)
Listed on the Canadian NDSL (Non-Domestic Substances List)

EU-Regulations

No additional information available

National regulations

TETRAMETHYL ACETYLOCTAHYDRONAPHTHALENES (54464-57-2)
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)
ALLYL CYCLOHEXYLPROPIONATE (2705-87-5)
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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DELTA DAMASCONE (57378-68-4)

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

DIHYDROMYRCENOL (18479-58-8)

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

3,7-Dimethyl-1,6-nonadien-3-ol (10339-55-6)

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

METHYL GAMMA-IONONE (127-51-5)

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

15.3. US State regulations

 **WARNING:** California Proposition 65 for products falling below safe harbor levels.
This formula does contain 100% natural citrus essential oils all which contain beta-myrcene. 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. .

SECTION 16: Other information

Revision date : 02/02/2024

Full text of H-phrases:

H227	Combustible liquid
H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H320	Causes eye irritation
H373	May cause damage to organs through prolonged or repeated exposure

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.