

Safety Data Sheet

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

Version: 1.2

Issue date: 04/24/2019 Revision date: 01/23/2025 Supersedes: 04/24/2019

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : OIL, PATCHOULI*

CAS-No. : N/A

Product code : 91-1022-44

1.2. Recommended use and restrictions on use

1.3. Supplier

The Lebermuth Company 4004 Technology Drive South Bend, IN 46628 - United States T 574-259-7000 - F 574-258-7450 info@lebermuth.com - www.lebermuth.com

1.4. Emergency telephone number

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

CCN 13010

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation Category 2 Skin sensitization, Category 1 Reproductive toxicity Category 2

Aspiration hazard Category 1

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

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)





GHS07 GHS08

Signal word (GHS US) : Danger

Hazard statements (GHS US) : 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.

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 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.

Store locked up.

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
Cedryl acetate	(CAS-No.) 77-54-3	10 – 25	Skin Sens. 1B, H317
ACETYL CEDRENE	(CAS-No.) 32388-55-9	5 – 10	Skin Sens. 1B, H317
ALPHA-CEDRENE	(CAS-No.) 469-61-4	5 – 10	Skin Irrit. 2, H315 Asp. Tox. 1, H304
GUAIYL ACETATE	(CAS-No.) 134-28-1	1 – 5	Skin Irrit. 2, H315 Skin Sens. 1B, H317
ALPHA-GUAIENE	(CAS-No.) 3691-12-1	1 – 5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Asp. Tox. 1, H304
1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone	(CAS-No.) 54464-57-2	1 – 5	Skin Irrit. 2, H315 Skin Sens. 1B, H317
CEDR-8(15)-ENE*	(CAS-No.) 546-28-1	1 – 5	Asp. Tox. 1, H304
β-Caryophyllene	(CAS-No.) 87-44-5	1 – 5	Skin Sens. 1B, H317 Asp. Tox. 1, H304
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
GERANIOL	(CAS-No.) 106-24-1	0.1 – 1	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317
GAMMA-TERPINENE	(CAS-No.) 99-85-4	0.1 – 1	Flam. Liq. 3, H226 Repr. 2, H361 Asp. Tox. 1, H304

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 : 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 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 inhalation : No data available.

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : None under normal conditions.

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.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.

Explosion hazard : No direct explosion hazard.

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

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper

protective equipment, including respiratory protection.

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

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb

spillage to prevent material-damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. 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".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to

prevent migration and entry into sewers or streams. Stop leak, if possible without risk.

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

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

Precautions for safe handling

Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. 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 : Keep in a cool, well-ventilated place away from heat.

Storage conditions : Store locked up

Packaging materials : Store always product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OIL, PATCHOULI* (N/A)

No additional information available

$1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl) ethanone\ (54464-57-2)$

No additional information available

β-Caryophyllene (87-44-5)

No additional information available

Cedryl acetate (77-54-3)

No additional information available

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GAMMA-TERPINENE (99-85-4)

No additional information available

GERANIOL (106-24-1)

No additional information available

ALPHA-GUAIENE (3691-12-1)

No additional information available

GUAIYL ACETATE (134-28-1)

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

ACETYL CEDRENE (32388-55-9)

No additional information available

ALPHA-CEDRENE (469-61-4)

No additional information available

CEDR-8(15)-ENE* (546-28-1)

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

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:

Protective gloves

Eye protection:

Chemical goggles or 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 : AMBER TO DARK AMBER LIQUID

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 : No data available

Flash point : 114 °C

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Relative evaporation rate (butyl acetate=1) : No data available Flammability : Not applicable.

Vapor pressure : No data available Relative vapor density at 20°C : No data available Relative density : 1.008 (0.998 – 1.018)

Solubility : Insoluble.

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

9.2. Other information

Refractive index : 1.502 (1.492 – 1.512)

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

Cedryl acetate (77-54-3)		
LD50 oral rat	44750 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 33650 - 59520	
ATE US (oral)	44750 mg/kg body weight	
GAMMA-TERPINENE (99-85-4)		
ATE US (oral)	3650 mg/kg body weight	
GERANIOL (106-24-1)		
ATE US (oral)	3600 mg/kg body weight	

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

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EC50 - Crustacea [1]

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ACETYL CEDRENE (32388-55-9)	
LD50 dermal rabbit	> 5000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: other:
ATE US (oral)	4500 mg/kg body weight
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
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
3-(5,5,6-Trimethylbicyclo[2.2.1]hept-2-y	l)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-Da Oral Toxicity Study in Rodents)
Aspiration hazard	: May be fatal if swallowed and enters airways.
Viscosity, kinematic	: No data available
Symptoms/effects after inhalation	: No data available.
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: Risk of lung edema.
SECTION 12: Ecological informa	tion
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
β-Caryophyllene (87-44-5)	
EC50 - Crustacea [1]	> 0.17 mg/l Test organisms (species): Daphnia magna

β-Caryophyllene (87-44-5) EC50 - Crustacea [1] > 0.17 mg/l Test organisms (species): Daphnia magna Cedryl acetate (77-54-3) LC50 - Fish [1] ≈ 15.61 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)

0.33 mg/l Test organisms (species): Daphnia magna

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:	
ACETYL CEDRENE (32388-55-9)		
LC50 - Fish [1]	3 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Pimephales promelas, Static system, Experimental value, GLP)	
EC50 - Crustacea [1]	0.86 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Experimental value, GLP)	
LC50 - Fish [2]	3 mg/l Test organisms (species): Pimephales promelas	
ErC50 algae	> 4.3 mg/l (OECD 201: Alga, Growth Inhibition Test, 96 h, Pseudokirchneriella subcapitata, Static system, Experimental value, GLP)	

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ACETYL CEDRENE (32388-55-9)	
LOEC (chronic)	0.23 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.087 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

ACETYL CEDRENE (32388-55-9)	
Persistence and degradability	Not readily biodegradable in water.

12.3. Bioaccumulative potential

ACETYL CEDRENE (32388-55-9)	
BCF - Fish [1]	867 – 3920 (OECD 305: Bioconcentration: Flow-Through Fish Test, 28 day(s), Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value, GLP)
Partition coefficient n-octanol/water (Log Pow)	5.6 – 5.9 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method)
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).

12.4. Mobility in soil

ACETYL CEDRENE (32388-55-9)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.5 – 5.1 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
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

Regional waste regulation : Disposal must be done according to official regulations.

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

Sewage disposal recommendations : Disposal must be done according to official regulations. Product/Packaging disposal recommendations : Disposal must be done according to official regulations.

Additional information : Do not re-use empty containers.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Transportation of Dangerous Goods

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

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SECTION 15: Regulatory information

15.1. US Federal regulations

Cedryl acetate (77-54-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

ALPHA-GUAIENE (3691-12-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

GUAIYL ACETATE (134-28-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

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

ACETYL CEDRENE (32388-55-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

ALPHA-CEDRENE (469-61-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

CEDR-8(15)-ENE* (546-28-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone (54464-57-2)

Listed on the Canadian DSL (Domestic Substances List)

β-Caryophyllene (87-44-5)

Listed on the Canadian DSL (Domestic Substances List)

Cedryl acetate (77-54-3)

Listed on the Canadian DSL (Domestic Substances List)

GAMMA-TERPINENE (99-85-4)

Listed on the Canadian DSL (Domestic Substances List)

ALPHA-GUAIENE (3691-12-1)

Listed on the Canadian DSL (Domestic Substances List)

GUAIYL ACETATE (134-28-1)

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)

ACETYL CEDRENE (32388-55-9)

Listed on the Canadian DSL (Domestic Substances List)

ALPHA-CEDRENE (469-61-4)

Listed on the Canadian DSL (Domestic Substances List)

CEDR-8(15)-ENE* (546-28-1)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

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1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone (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)

β-Caryophyllene (87-44-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

GAMMA-TERPINENE (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)

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 : 01/23/2025

Full text of H-phrases:

text of 11 princess.	
H226	Flammable liquid and vapor
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

SDS US (GHS HazCom 2012) - Lebermuth

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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