



OIL, SPICY GER VERBENA III AN*

Safety Data Sheet

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

Date of issue: 01/18/2019

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Version: 1.1

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : OIL, SPICY GER VERBENA III AN*
CAS-No. : N/A
Product code : 90-3033-72

1.2. Recommended use and restrictions on use

No additional information available

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: 703-527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

| | |
|--|--|
| Flammable liquids Category 4 | Combustible liquid |
| 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 |
| Aspiration hazard Category 1 | 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) :

Combustible liquid
May be fatal if swallowed and enters airways
Causes skin irritation
May cause an allergic skin reaction
Causes serious eye irritation

Precautionary statements (GHS-US) :

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
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 in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
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.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
Wash contaminated clothing before reuse.

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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 |
|--------------------|----------------------|---------|---|
| LEMON OIL TERPENES | (CAS-No.) 68917-33-9 | 10 - 25 | Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 |
| PATCHOULI OIL | (CAS-No.) 8014-09-3 | 5 - 10 | Asp. Tox. 1, H304 |
| BERGAMOT OIL | (CAS-No.) 89957-91-5 | 5 - 10 | Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Asp. Tox. 1, H304 |
| LAVANDIN OIL | (CAS-No.) 8022-15-9 | 5 - 10 | Flam. Liq. 4, H227 Eye Irrit. 2A, H319 Skin Sens. 1B, H317 |
| ORANGE TERPENES | (CAS-No.) 68647-72-3 | 1 - 5 | Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 |
| CEDARWOOD OIL | (CAS-No.) 8000-27-9 | 1 - 5 | Asp. Tox. 1, H304 |
| GERANIUM OIL | (CAS-No.) 8000-46-2 | 1 - 5 | Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Asp. Tox. 1, H304 |
| CLOVE OIL | (CAS-No.) 84961-50-2 | 1 - 5 | Eye Irrit. 2A, H319 Skin Sens. 1B, H317 |
| EUGENOL | (CAS-No.) 97-53-0 | 1 - 5 | Eye Irrit. 2, H319 Skin Sens. 1, H317 |
| PETITGRAIN OIL | (CAS-No.) 8014-17-3 | 1 - 5 | Flam. Liq. 4, H227 Skin Irrit. 2, H315 Skin Sens. 1, H317 |
| CARDAMOM OIL | (CAS-No.) 8000-66-6 | 1 - 5 | Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Asp. Tox. 1, H304 |
| ELEMI OIL | (CAS-No.) 8023-89-0 | 1 - 5 | Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 |
| OPOPONAX OIL | (CAS-No.) 8021-36-1 | 0.1 - 1 | Flam. Liq. 4, H227 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 |
| DAVANA OIL | (CAS-No.) 8016-03-3 | 0.1 - 1 | Skin Sens. 1, H317 |
| GALBANUM OIL | (CAS-No.) 8023-91-4 | 0.1 - 1 | Flam. Liq. 4, H227 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 |

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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 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 | : 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 | : Eye irritation. |
| 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 | : Combustible liquid. |
| Reactivity | : The product is non-reactive under normal conditions of use, storage and transport. |

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. 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. |

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7.2. Conditions for safe storage, including any incompatibilities

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| |
|--|
| GALBANUM OIL (8023-91-4) |
| Not applicable |
| BERGAMOT OIL (89957-91-5) |
| Not applicable |
| OPOPONAX OIL (8021-36-1) |
| Not applicable |
| ORANGE TERPENES (68647-72-3) |
| Not applicable |
| LEMON OIL TERPENES (68917-33-9) |
| Not applicable |
| CEDARWOOD OIL (8000-27-9) |
| Not applicable |
| GERANIUM OIL (8000-46-2) |
| Not applicable |
| LAVANDIN OIL (8022-15-9) |
| Not applicable |
| CARDAMOM OIL (8000-66-6) |
| Not applicable |
| CLOVE OIL (84961-50-2) |
| Not applicable |
| DAVANA OIL (8016-03-3) |
| Not applicable |
| EUGENOL (97-53-0) |
| Not applicable |
| ELEMI OIL (8023-89-0) |
| Not applicable |
| PATCHOULI OIL (8014-09-3) |
| Not applicable |
| PETITGRAIN OIL (8014-17-3) |
| Not applicable |

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

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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 | : YELLOW/AMBER TO AMBER/ORANGE TO RED |
| 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 | : 65 °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 | : 0.908 (0.898 - 0.918) |
| Solubility | : Insoluble. |
| 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 |
| Oxidizing properties | : No data available |

9.2. Other information

| | |
|------------------|-------------------------|
| Refractive index | : 1.479 (1.469 - 1.489) |
|------------------|-------------------------|

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

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

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Acute toxicity : Not classified

| ORANGE TERPENES (68647-72-3) | |
|------------------------------|---|
| LD50 oral rat | > 2000 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Read-across, Oral) |
| LD50 dermal rabbit | > 5000 mg/kg body weight (Equivalent or similar to OECD 402, Rabbit, Weight of evidence, Dermal) |

| CLOVE OIL (84961-50-2) | |
|------------------------|------------------------|
| ATE US (oral) | 2650 mg/kg body weight |
| ATE US (dermal) | 2500 mg/kg body weight |

| EUGENOL (97-53-0) | |
|----------------------------|---|
| LD50 oral rat | > 2000 mg/kg body weight (Equivalent or similar to OECD 423, Rat, Male/female, Experimental value, Oral) |
| LC50 inhalation rat (mg/l) | > 2.6 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male/female, Experimental value, Inhalation (aerosol)) |
| ATE US (oral) | 2300 mg/kg body weight |

| ELEMI OIL (8023-89-0) | |
|-----------------------|------------------------|
| ATE US (oral) | 3370 mg/kg body weight |
| ATE US (dermal) | 2500 mg/kg body weight |

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

| ORANGE TERPENES (68647-72-3) | |
|------------------------------|----------------------|
| IARC group | 3 - Not classifiable |

| EUGENOL (97-53-0) | |
|-------------------|----------------------|
| IARC group | 3 - Not classifiable |

Reproductive toxicity : Not classified
Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated exposure : Not classified

Aspiration hazard : May be fatal if swallowed and enters airways.
Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact : Eye irritation.
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.

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| ORANGE TERPENES (68647-72-3) | |
|------------------------------|---|
| LC50 fish 1 | 720 µg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal) |
| EC50 Daphnia 1 | 0.36 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) |

| EUGENOL (97-53-0) | |
|-------------------|---|
| LC50 fish 1 | 13 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) |
| EC50 Daphnia 1 | 1.13 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) |
| ErC50 (algae) | 24 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP) |

12.2. Persistence and degradability

| ORANGE TERPENES (68647-72-3) | |
|-------------------------------|------------------------------------|
| Persistence and degradability | Readily biodegradable in water. |
| ThOD | 3.29 g O ₂ /g substance |

| EUGENOL (97-53-0) | |
|-------------------------------|---------------------------------|
| Persistence and degradability | Readily biodegradable in water. |

12.3. Bioaccumulative potential

| ORANGE TERPENES (68647-72-3) | |
|------------------------------|--|
| BCF fish 1 | 864.8 - 1022 (Pisces, QSAR, Fresh weight) |
| Log Pow | 4.38 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 37 °C) |
| Bioaccumulative potential | Potential for bioaccumulation (4 ≥ Log Kow ≤ 5). |

| EUGENOL (97-53-0) | |
|---------------------------|--|
| Log Pow | 1.83 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 30 °C) |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). |

12.4. Mobility in soil

| ORANGE TERPENES (68647-72-3) | |
|------------------------------|------------------------|
| Ecology - soil | Adsorbs into the soil. |

| EUGENOL (97-53-0) | |
|-------------------|---|
| 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.

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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

GALBANUM OIL (8023-91-4)

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

BERGAMOT OIL (89957-91-5)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

OPOPONAX OIL (8021-36-1)

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

ORANGE TERPENES (68647-72-3)

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

LEMON OIL TERPENES (68917-33-9)

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

CEDARWOOD OIL (8000-27-9)

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

GERANIUM OIL (8000-46-2)

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

LAVANDIN OIL (8022-15-9)

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

CARDAMOM OIL (8000-66-6)

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

CLOVE OIL (84961-50-2)

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

DAVANA OIL (8016-03-3)

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

EUGENOL (97-53-0)

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

ELEMI OIL (8023-89-0)

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

PATCHOULI OIL (8014-09-3)

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

PETITGRAIN OIL (8014-17-3)

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

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15.2. International regulations

CANADA

| |
|---|
| GALBANUM OIL (8023-91-4) |
| Listed on the Canadian DSL (Domestic Substances List) |
| BERGAMOT OIL (89957-91-5) |
| Listed on the Canadian DSL (Domestic Substances List) |
| OPOPONAX OIL (8021-36-1) |
| Listed on the Canadian DSL (Domestic Substances List) |
| ORANGE TERPENES (68647-72-3) |
| Listed on the Canadian DSL (Domestic Substances List) |
| LEMON OIL TERPENES (68917-33-9) |
| Listed on the Canadian DSL (Domestic Substances List) |
| CEDARWOOD OIL (8000-27-9) |
| Listed on the Canadian DSL (Domestic Substances List) |
| GERANIUM OIL (8000-46-2) |
| Listed on the Canadian DSL (Domestic Substances List) |
| LAVANDIN OIL (8022-15-9) |
| Listed on the Canadian DSL (Domestic Substances List) |
| CARDAMOM OIL (8000-66-6) |
| Listed on the Canadian DSL (Domestic Substances List) |
| CLOVE OIL (84961-50-2) |
| Listed on the Canadian DSL (Domestic Substances List) |
| DAVANA OIL (8016-03-3) |
| Listed on the Canadian DSL (Domestic Substances List) |
| EUGENOL (97-53-0) |
| Listed on the Canadian DSL (Domestic Substances List) |
| ELEMI OIL (8023-89-0) |
| Listed on the Canadian DSL (Domestic Substances List) |
| PATCHOULI OIL (8014-09-3) |
| Listed on the Canadian DSL (Domestic Substances List) |
| PETITGRAIN OIL (8014-17-3) |
| Listed on the Canadian DSL (Domestic Substances List) |

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations



WARNING:

This product can expose you to eugenyl methyl ether, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

This product can expose you to myrcene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

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Full text of H-phrases:

| | |
|------|--|
| H226 | Flammable liquid and vapour |
| 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 |

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