



OIL, CANDY CANE*

Safety Data Sheet

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

Issue date: 09/06/2022

Revision date: 08/08/2024

Supersedes: 11/09/2023

Version: 1.2

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : OIL, CANDY CANE*
Product code : 92-2000-86

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

Serious eye damage/eye irritation Category 2B
Skin sensitization, Category 1
Carcinogenicity Category 2

Causes eye irritation
May cause an allergic skin reaction
Suspected of causing cancer

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



GHS07

GHS08

Signal word (GHS US) :

Warning

Hazard statements (GHS US) :

May cause an allergic skin reaction
Causes eye irritation
Suspected of causing cancer

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 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.
If exposed or concerned: Get medical advice/attention.
Specific treatment (see supplemental first aid instruction on this label).
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
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.

2.3. Other hazards which do not result in classification

No additional information available

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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 |
|----------------|----------------------|---------|---|
| MENTHOL | (CAS-No.) 89-78-1 | 5 – 10 | Skin Irrit. 2, H315 Eye Irrit. 2B, H320 |
| ETHYL VANILLIN | (CAS-No.) 121-32-4 | 1 – 5 | Eye Irrit. 2B, H320 |
| L-MENTHONE | (CAS-No.) 14073-97-3 | 1 – 5 | Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Skin Sens. 1B, H317 |
| COUMARIN | (CAS-No.) 91-64-5 | 1 – 5 | Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Skin Sens. 1B, H317 |
| ETHYL MALTOL | (CAS-No.) 4940-11-8 | 1 – 5 | Acute Tox. 4 (Oral), H302 |
| PULEGONE | (CAS-No.) 89-82-7 | 0.1 – 1 | Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Carc. 2, H351 |

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 | : IF exposed or concerned: Get medical advice/attention. |
| 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 inhalation | : Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard. |
| Symptoms/effects after skin contact | : May cause an allergic skin reaction. |
| Symptoms/effects after eye contact | : Mild eye irritation. |
| Symptoms/effects after ingestion | : None under normal conditions. |

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. |

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. |

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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 : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. 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, CANDY CANE* |
| No additional information available |
| COUMARIN (91-64-5) |
| No additional information available |
| ETHYL VANILLIN (121-32-4) |
| No additional information available |
| L-MENTHONE (14073-97-3) |
| No additional information available |
| PULEGONE (89-82-7) |
| No additional information available |
| MENTHOL (89-78-1) |
| No additional information available |

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ETHYL MALTOL (4940-11-8)

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 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 | : Not applicable. |
| Vapor pressure | : No data available |
| Relative vapor density at 20°C | : No data available |
| Relative density | : 0.9348 (0.9248 – 0.9448) |
| 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 |
| Oxidizing properties | : No data available |

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9.2. Other information

Refractive index : 1.45575 (1.44575 – 1.46575)

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

| COUMARIN (91-64-5) | |
|----------------------------------|--|
| LD50 oral rat | 293 mg/kg body weight Animal: rat, Guideline: other: |
| LD50 dermal rat | 293 mg/kg body weight Animal: rat, Guideline: other: |
| ATE US (oral) | 290 mg/kg body weight |
| ATE US (dermal) | 293 mg/kg body weight |
| ETHYL VANILLIN (121-32-4) | |
| LD50 oral rat | > 3160 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other: |
| LD50 dermal rat | > 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) |
| ATE US (oral) | 3000 mg/kg body weight |
| L-MENTHONE (14073-97-3) | |
| ATE US (oral) | 500 mg/kg body weight |
| PULEGONE (89-82-7) | |
| ATE US (oral) | 470 mg/kg body weight |
| ATE US (dermal) | 3090 mg/kg body weight |
| MENTHOL (89-78-1) | |
| ATE US (oral) | 2500 mg/kg body weight |
| ATE US (dust, mist) | 5.3 mg/l/4h |
| ETHYL MALTOL (4940-11-8) | |
| LD50 oral rat | 1220 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral) |
| LD50 dermal rabbit | > 5000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: no indication of skin irritation up to the relevant limit dose level |
| ATE US (oral) | 1200 mg/kg body weight |

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes eye irritation.

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

Germ cell mutagenicity : Not classified

Carcinogenicity : Suspected of causing cancer.

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| COUMARIN (91-64-5) | |
|--------------------|----------------------|
| IARC group | 3 - Not classifiable |

| PULEGONE (89-82-7) | |
|--------------------|--------------------------------------|
| IARC group | 2B - Possibly carcinogenic to humans |

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

| COUMARIN (91-64-5) | |
|---|---|
| NOAEL (subchronic,oral,animal/female,90 days) | > 138.3 mg/kg body weight Animal: mouse, Animal sex: female |

| ETHYL MALTOL (4940-11-8) | |
|----------------------------|--|
| NOAEL (oral, rat, 90 days) | ≥ 200 mg/kg body weight Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

Symptoms/effects after inhalation : Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.

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

Symptoms/effects after eye contact : Mild eye irritation.

Symptoms/effects after ingestion : None under normal conditions.

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.

| COUMARIN (91-64-5) | |
|----------------------|---|
| LC50 - Fish [1] | 2.94 mg/l Test organisms (species): |
| EC50 - Crustacea [1] | 8012 mg/l Test organisms (species): Daphnia sp. |
| LC50 - Fish [2] | 1324 mg/l Test organisms (species): |
| NOEC (chronic) | 0.5 mg/l Test organisms (species): Duration: '21 d' |
| NOEC chronic fish | 0.191 mg/l Test organisms (species): Duration: '30 d' |

| ETHYL VANILLIN (121-32-4) | |
|---------------------------|---|
| LC50 - Fish [1] | 87.6 mg/l Test organisms (species): Pimephales promelas |
| EC50 - Crustacea [1] | 26.2 mg/l Test organisms (species): Daphnia magna |
| LOEC (chronic) | 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |
| NOEC (chronic) | 5.9 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |

| ETHYL MALTOL (4940-11-8) | |
|--------------------------|---|
| LC50 - Fish [1] | > 85 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value) |
| EC50 - Crustacea [1] | 27 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value) |
| ErC50 algae | 7.2 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP) |

12.2. Persistence and degradability

| ETHYL MALTOL (4940-11-8) | |
|-------------------------------|---------------------------------|
| Persistence and degradability | Readily biodegradable in water. |

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12.3. Bioaccumulative potential

ETHYL MALTOL (4940-11-8)

| | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 2.9 (Practical experience/observation, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C) |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). |

12.4. Mobility in soil

ETHYL MALTOL (4940-11-8)

| | |
|----------------|---|
| 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

| | |
|--|---|
| 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

SECTION 15: Regulatory information

15.1. US Federal regulations

COUMARIN (91-64-5)

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

ETHYL VANILLIN (121-32-4)

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

15.2. International regulations

CANADA

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COUMARIN (91-64-5)

Listed on the Canadian DSL (Domestic Substances List)

ETHYL VANILLIN (121-32-4)

Listed on the Canadian DSL (Domestic Substances List)

L-MENTHONE (14073-97-3)

Listed on the Canadian DSL (Domestic Substances List)

PULEGONE (89-82-7)

Listed on the Canadian DSL (Domestic Substances List)

MENTHOL (89-78-1)

Listed on the Canadian DSL (Domestic Substances List)

ETHYL MALTOL (4940-11-8)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

L-MENTHONE (14073-97-3)

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

PULEGONE (89-82-7)

Listed on IARC (International Agency for Research on Cancer)

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

MENTHOL (89-78-1)

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

Listed on INSQ (Mexican National Inventory of Chemical Substances)

ETHYL MALTOL (4940-11-8)

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:

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

SECTION 16: Other information

Revision date : 08/08/2024

Full text of H-phrases:

| | |
|------|-------------------------------------|
| H227 | Combustible liquid |
| H301 | Toxic if swallowed |
| H302 | Harmful if swallowed |
| H311 | Toxic in contact with skin |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H320 | Causes eye irritation |
| H351 | Suspected of causing cancer |

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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.