



OIL, KELP*

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 10/11/2018 Revision date: 01/25/2024 Supersedes: 05/21/2020

Version: 1.3

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : OIL, KELP*
CAS-No. : N/A
Product code : 90-2365-04

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 sensitization, Category 1 : May cause an allergic skin reaction
Reproductive toxicity Category 2 : Suspected of damaging fertility or the unborn child

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
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.
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 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.
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

2.4. Unknown acute toxicity (GHS US)

Not applicable

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SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
2-Methyl-3-(p-isopropylphenyl)propionaldehyde	(CAS-No.) 103-95-7	1 – 5	Skin Irrit. 2, H315 Skin Sens. 1B, H317
DIHYDROMYRCENOL	(CAS-No.) 18479-58-8	1 – 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
COUMARIN	(CAS-No.) 91-64-5	1 – 5	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Skin Sens. 1B, H317
ALPHA TERPINEOL	(CAS-No.) 98-55-5	1 – 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
2,4-Dimethyl-3-cyclohexen-1-carboxaldehyde	(CAS-No.) 68039-49-6	1 – 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1B, H317
Diethylene glycol monomethyl ether	(CAS-No.) 111-77-3	0.1 – 1	Flam. Liq. 4, H227 Repr. 2, H361

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 eyes with water as a precaution.
- 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 : May cause an allergic skin reaction.

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

- 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. 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.

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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. 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

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OIL, KELP* (N/A)
No additional information available
COUMARIN (91-64-5)
No additional information available
ALPHA TERPINEOL (98-55-5)
No additional information available
2-Methyl-3-(p-isopropylphenyl)propionaldehyde (103-95-7)
No additional information available
DIHYDROMYRCENOL (18479-58-8)
No additional information available
2,4-Dimethyl-3-cyclohexen-1-carboxaldehyde (68039-49-6)
No additional information available
Diethylene glycol monomethyl ether (111-77-3)
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 inadequate ventilation] wear respiratory protection.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: COLORLESS TO PALE YELLOW
Odor	: CHARACTERISTIC, MATCHING THE 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	: 98 °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	: 0.932 (0.922 – 0.942)
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

9.2. Other information

Refractive index	: 1.456 (1.446 – 1.466)
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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

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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

ALPHA TERPINEOL (98-55-5)	
LD50 oral rat	4300 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 2900 - 5700
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
ATE US (oral)	4300 mg/kg body weight

2-Methyl-3-(p-isopropylphenyl)propionaldehyde (103-95-7)	
LD50 oral rat	3810 mg/kg (Rat, Male / female, Weight of evidence, Oral, 14 day(s))
LD50 dermal rat	> 5000 mg/kg (Rat, Male, Experimental value, Dermal, 14 day(s))
ATE US (oral)	3810 mg/kg body weight

DIHYDROMYRCENOL (18479-58-8)	
ATE US (oral)	3600 mg/kg body weight

2,4-Dimethyl-3-cyclohexen-1-carboxaldehyde (68039-49-6)	
LD50 oral rat	3900 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 2900 - 5100
LD50 dermal rabbit	> 5000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
ATE US (oral)	3900 mg/kg body weight

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

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

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

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

ALPHA TERPINEOL (98-55-5)	
NOAEL (oral,rat,90 days)	≥ 314 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)

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

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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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'
ALPHA TERPINEOL (98-55-5)	
LC50 - Fish [1]	70 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	73 mg/l Test organisms (species): Daphnia magna
2-Methyl-3-(p-isopropylphenyl)propionaldehyde (103-95-7)	
LC50 - Fish [1]	1.092 mg/l (96 h, Calculated value)
EC50 - Crustacea [1]	1.4 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semi-static system, Fresh water, Experimental value)
LC50 - Fish [2]	2.49 mg/l Test organisms (species):
2,4-Dimethyl-3-cyclohexen-1-carboxaldehyde (68039-49-6)	
LC50 - Fish [1]	15 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oryzias latipes, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	7.74 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semi-static system, Fresh water, Experimental value, GLP)
ErC50 algae	22.8 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)

12.2. Persistence and degradability

2-Methyl-3-(p-isopropylphenyl)propionaldehyde (103-95-7)	
Persistence and degradability	Readily biodegradable in water.
DIHYDROMYRCENOL (18479-58-8)	
Persistence and degradability	Biodegradability in water: no data available.
2,4-Dimethyl-3-cyclohexen-1-carboxaldehyde (68039-49-6)	
Persistence and degradability	Not readily biodegradable in water.

12.3. Bioaccumulative potential

2-Methyl-3-(p-isopropylphenyl)propionaldehyde (103-95-7)	
BCF - Fish [1]	155 l/kg (Calculated value)
Partition coefficient n-octanol/water (Log Pow)	3.4 (Practical experience/observation, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 35 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
DIHYDROMYRCENOL (18479-58-8)	
Partition coefficient n-octanol/water (Log Pow)	3.47 (Estimated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
2,4-Dimethyl-3-cyclohexen-1-carboxaldehyde (68039-49-6)	
BCF - Other aquatic organisms [1]	86.1 l/kg (Calculated value)
Partition coefficient n-octanol/water (Log Pow)	3.1 (Experimental value, Equivalent or similar to OECD 117, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

2-Methyl-3-(p-isopropylphenyl)propionaldehyde (103-95-7)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.05 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
Ecology - soil	Low potential for mobility in soil.
DIHYDROMYRCENOL (18479-58-8)	
Ecology - soil	No (test)data on mobility of the substance available.

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2,4-Dimethyl-3-cyclohexen-1-carboxaldehyde (68039-49-6)

Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.2 (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 adsorption 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.

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

COUMARIN (91-64-5)

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

ALPHA TERPINEOL (98-55-5)

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

Diethylene glycol monomethyl ether (111-77-3)

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

15.2. International regulations

CANADA

COUMARIN (91-64-5)

Listed on the Canadian DSL (Domestic Substances List)

ALPHA TERPINEOL (98-55-5)

Listed on the Canadian DSL (Domestic Substances List)

2-Methyl-3-(p-isopropylphenyl)propionaldehyde (103-95-7)

Listed on the Canadian DSL (Domestic Substances List)

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DIHYDROMYRCENOL (18479-58-8)

Listed on the Canadian DSL (Domestic Substances List)

2,4-Dimethyl-3-cyclohexen-1-carboxaldehyde (68039-49-6)

Listed on the Canadian DSL (Domestic Substances List)

Diethylene glycol monomethyl ether (111-77-3)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

2-Methyl-3-(p-isopropylphenyl)propionaldehyde (103-95-7)

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

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)

2,4-Dimethyl-3-cyclohexen-1-carboxaldehyde (68039-49-6)

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

Component	State or local regulations
Diethylene glycol monomethyl ether(111-77-3)	U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Revision date : 01/25/2024

Full text of H-phrases:

H227	Combustible liquid
H301	Toxic if swallowed
H311	Toxic in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
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.