

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 11/03/2020 Revision date: 06/26/2023 Supersedes: 11/18/2022

SECTION 1: Identification Identification 1.1. Product form : Mixture Product name : OIL, COCONUT SWEET II* CAS-No. N/A Product code : 90-3044-51 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 Specific target organ toxicity (repeated exposure) May cause damage to organs through prolonged or repeated exposure Category 2 GHS Label elements, including precautionary statements 2.2. **GHS US labeling** Hazard pictograms (GHS US) GHS07 GHS08 Signal word (GHS US) : Warning Hazard statements (GHS US) May cause an allergic skin reaction 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. 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. Get medical advice/attention if you feel unwell. 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. 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
COUMARIN	(CAS-No.) 91-64-5	5 – 10	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Skin Sens. 1B, H317
PIPERONAL	(CAS-No.) 120-57-0	1 – 5	Skin Sens. 1B, H317
LIMONENE	(CAS-No.) 5989-27-5	1 – 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304
VANILLIN	(CAS-No.) 121-33-5	1 – 5	Eye Irrit. 2A, H319
ANISIC ALDEHYDE	(CAS-No.) 123-11-5	1 – 5	STOT RE 2, H373

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 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 effe	ects (acute and delayed)
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
4.3. Immediate medical attention and s	pecial treatment, if necessary
Treat symptomatically.	
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguis	
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Specific hazards arising from the c	hemical
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 mea	asures
6.1. Personal precautions, protective e	quipment 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 containm	nent 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.	

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: 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.
: 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.
ding any incompatibilities
: Store in a well-ventilated place. Keep cool.
sonal protection

VANILLIN (121-33-5)
No additional information available
ANISIC ALDEHYDE (123-11-5)
No additional information available
LIMONENE (5989-27-5)
No additional information available
PIPERONAL (120-57-0)
No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls Environmental exposure controls : Ensure good ventilation of the work station.: 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	

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Odor threshold	: No data available
рН	: 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	: 0.966 (0.956 – 0.976)
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

ATE US (dermal)

LD50 dermal rat

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VANILLIN (121-33-5) LD50 oral rat : 1.464 (1.454 – 1.474)

293 mg/kg body weight

value, Oral, 14 day(s))

Experimental value, Dermal, 14 day(s))

SECTION 10: Stability and reactivity			
10.1. Reactivity	0.1. 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 conc	litions of use.		
10.4. Conditions to avoid			
None under recommended storage and handling conditions (see section 7).			
10.5. Incompatible materials	10.5. Incompatible materials		
No additional information available			
10.6. Hazardous decomposition products	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		

3300 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental

> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female,

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VANILLIN (121-33-5)	
ATE US (oral)	3300 mg/kg body weight
ATE US (dermal)	2600 mg/kg body weight
ANISIC ALDEHYDE (123-11-5)	
LD50 oral rat	3210 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Experimental value, Dermal, 14 day(s))
ATE US (oral)	3210 mg/kg body weight
LIMONENE (5989-27-5)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 5000 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Read-across, Dermal, 7 day(s))
PIPERONAL (120-57-0)	
LD50 oral rat	2700 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other:, 95% CL: 2350 - 3100
LD50 dermal rat	> 5000 mg/kg body weight Animal: rat, Guideline: other:, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: other:
ATE US (oral)	2700 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 STOT-single exposure	: Not classified
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
COUMARIN (91-64-5)	
NOAEL (subchronic,oral,animal/female,90	> 138.3 mg/kg body weight Animal: mouse, Animal sex: female
days)	Frous mighty body weight Animal: model, Animal sex. Terrate
ANISIC ALDEHYDE (123-11-5)	
NOAEL (oral,rat,90 days)	100 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
PIPERONAL (120-57-0)	
NOAEL (oral,rat,90 days)	300 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
SECTION 12: Ecological information	n and a second se
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):

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<u> </u>		
COUMARIN (91-64-5)		
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'	
VANILLIN (121-33-5)		
LC50 - Fish [1]	57 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)	
EC50 - Crustacea [1]	36.79 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)	
LC50 - Fish [2]	123 mg/l Test organisms (species): Pimephales promelas	
ErC50 algae	120 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)	
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'	
ANISIC ALDEHYDE (123-11-5)		
LC50 - Fish [1]	148.32 mg/l (DIN 38412-15, 96 h, Leuciscus idus, Static system, Fresh water, Experimental value, Lethal)	
EC50 - Crustacea [1]	82.8 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Lethal)	
ErC50 algae	61 mg/l (DIN 38412-9, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Growth rate)	
LOEC (chronic)	1.53 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC (chronic)	0.71 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
LIMONENE (5989-27-5)		
LC50 - Fish [1]	720 μg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)	
EC50 - Crustacea [1]	0.307 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semi- static system, Fresh water, Experimental value, GLP)	
LC50 - Fish [2]	702 μg/l Test organisms (species): Pimephales promelas	
EC50 - Crustacea [2]	0.51 mg/l Test organisms (species): Daphnia magna	
PIPERONAL (120-57-0)		
LC50 - Fish [1]	2.5 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Cyprinus carpio, Static system, Fresh water, Experimental value, GLP)	
EC50 - Crustacea [1]	52 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)	
ErC50 algae	31 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)	

12.2. Persistence and degradability

VANILLIN (121-33-5)		
Persistence and degradability	Readily biodegradable in water.	
ANISIC ALDEHYDE (123-11-5)		
Persistence and degradability	Readily biodegradable in water.	
LIMONENE (5989-27-5)		
Persistence and degradability	Readily biodegradable in water.	
ThOD	3.29 g O ₂ /g substance	
PIPERONAL (120-57-0)		
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.	
ThOD	1.71 g O ₂ /g substance	

12.3. Bioaccumulative potential

VANILLIN (121-33-5)	
Partition coefficient n-octanol/water (Log Pow)	1.17 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

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ANISIC ALDEHYDE (123-11-5)		
Partition coefficient n-octanol/water (Log Pow)	1.56 (Practical experience/observation, Equivalent or similar to OECD 107, 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
LIMONENE (5989-27-5)		
BCF - Fish [1]	864.8 l/kg (BCFBAF v3.01, Pisces, QSAR, Fresh weight)	
Partition coefficient n-octanol/water (Log Pow)	4.38 (Experimental value, Equivalent or similar to OECD 117, 37 °C)	
Bioaccumulative potential	Potential for bioaccumulation ($4 \le Log \text{ Kow} \le 5$).	
PIPERONAL (120-57-0)		
Partition coefficient n-octanol/water (Log Pow)	1.2 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 35 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
12.4. Mobility in soil		

VANILLIN (121-33-5)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.438 (log Koc, Experimental value)	
Ecology - soil	Low potential for mobility in soil.	
ANISIC ALDEHYDE (123-11-5)		
Surface tension	No data available in the literature	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1 (log Koc, SRC PCKOCWIN v2.0, Experimental value)	
Ecology - soil	Highly mobile in soil.	
LIMONENE (5989-27-5)		
Surface tension	No data available in the literature	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.049 – 3.801 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	
Ecology - soil	Low potential for mobility in soil.	
PIPERONAL (120-57-0)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.1 (log Koc, Calculated value)	
Ecology - soil	Highly mobile 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 inforr	nation
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

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SECTION 15: Regulatory information

15.1. US Federal regulations

COUMARIN (91-64-5)

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

ANISIC ALDEHYDE (123-11-5)

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)

VANILLIN (121-33-5)

Listed on the Canadian DSL (Domestic Substances List)

ANISIC ALDEHYDE (123-11-5)

Listed on the Canadian DSL (Domestic Substances List)

PIPERONAL (120-57-0)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

VANILLIN (121-33-5)

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

PIPERONAL (120-57-0)

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.

SECTION 16: Other information Revision date : 06/26/2023 Full text of H-phrases: H226 Flammable liquid and vapor H301 Toxic if swallowed H304 May be fatal if swallowed and enters airways H311 Toxic in contact with skin H315 Causes skin irritation H317 May cause an allergic skin reaction H319 Causes serious eye irritation H373 May cause damage to organs through prolonged or repeated exposure

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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.