

# Safety Data Sheet

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

Issue date: 03/29/2023 Revision date: 05/01/2025 Supersedes: 03/29/2023

Version: 1.1

#### **SECTION 1: Identification**

#### 1.1. Identification

Product form : Mixture

Product name : OIL, THE QUEEN OF HEARTS NDV\*

Product code : 94-4012-90

#### 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 2A

Skin sensitization, Category 1 Reproductive toxicity Category 2 Causes serious eye irritation
May cause an allergic skin reaction

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

Causes serious eye irritation

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 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
PHENYLETHYL ALCOHOL	(CAS-No.) 60-12-8	10 – 25	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319
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
2,4-Dimethyl-4,4a,5,9b-tetrahydroindeno[1,2-d]-1,3-dioxin	(CAS-No.) 27606-09-3	1 – 5	Acute Tox. 4 (Oral), H302
VANILLIN	(CAS-No.) 121-33-5	1 – 5	Eye Irrit. 2A, H319
2-Isobutyl-4-methyltetrahydro-2H-pyran-4-ol	(CAS-No.) 63500-71-0	1 – 5	Eye Irrit. 2A, H319
DL-CITRONELLOL	(CAS-No.) 106-22-9	1 – 5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1B, H317
p-tert-Butyldihydrocinnamaldehyde	(CAS-No.) 18127-01-0	0.1 – 1	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Repr. 2, H361 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 : 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 : No data available.

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

Symptoms/effects after eye contact : Eye irritation.

Symptoms/effects after ingestion : No data available.

#### 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 at

: 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.

Methods for cleaning up

#### 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.

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, THE QUEEN OF HEARTS NDV\*

No additional information available

# **VANILLIN (121-33-5)**

No additional information available

## p-tert-Butyldihydrocinnamaldehyde (18127-01-0)

No additional information available

#### DL-CITRONELLOL (106-22-9)

No additional information available

#### 2-Isobutyl-4-methyltetrahydro-2H-pyran-4-ol (63500-71-0)

No additional information available

## 2,4-Dimethyl-4,4a,5,9b-tetrahydroindeno[1,2-d]-1,3-dioxin (27606-09-3)

No additional information available

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## PHENYLETHYL ALCOHOL (60-12-8)

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

## 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 : LIGHT YELLOW/AMBER TO YELLOW/AMBER

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 : 1.0762 (1.0662 – 1.0862)

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

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Explosive properties : No data available
Oxidizing properties : No data available

9.2. Other information

Refractive index : 1.47004 (1.46004 – 1.48004)

# 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

VANILLIN (121-33-5)	
LD50 oral rat	3300 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
ATE US (oral)	3300 mg/kg body weight
ATE US (dermal)	2600 mg/kg body weight

# p-tert-Butyldihydrocinnamaldehyde (18127-01-0)

ATE US (oral) 2500 mg/kg body weight

DL-CITRONELLOL (106-22-9)		
LD50 oral rat	3450 mg/kg (Rat, Inconclusive, insufficient data, Oral)	
LD50 dermal rabbit	2650 mg/kg (Rabbit, Inconclusive, insufficient data, Dermal)	
ATE US (oral)	3450 mg/kg body weight	
ATE US (dermal)	2650 mg/kg body weight	

2,4-Dimethyl-4,4a,5,9b-tetrahydroindeno[1,2-d	]-1,3-dioxin (27606-09-3)

ATE US (oral) 500 mg/kg body weight

PHENYLETHYL ALCOHOL (60-12-8)	
LD50 oral rat	1603 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	2535 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 4.63 mg/l (4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))
ATE US (oral)	500 mg/kg body weight

Skin corrosion/irritation : Not classified

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

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

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

# p-tert-Butyldihydrocinnamaldehyde (18127-01-0)

STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified Viscosity, kinematic No data available Symptoms/effects after inhalation : No data available.

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

Symptoms/effects after eye contact : Eye irritation. Symptoms/effects after ingestion : No data available.

# **SECTION 12: Ecological information**

## **Toxicity**

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse

effects in the environment.

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'

DL-CITRONELLOL (106-22-9)	
LC50 - Fish [1]	14.66 mg/l (DIN 38412-15, 96 h, Leuciscus idus, Static system, Fresh water, Experimental value)
EC50 - Crustacea [1]	17.48 mg/l (48 h, Daphnia magna, Static system, Fresh water, Experimental value)

PHENYLETHYL ALCOHOL (60-12-8)	
LC50 - Fish [1]	215 – 464 mg/l (DIN 38412: German standard methods for the examination of water, waste water and sludge, 96 h, Leuciscus idus, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	287.17 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 algae	1300 mg/l (DIN 38412: German standard methods for the examination of water, waste water and sludge, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)

#### Persistence and degradability 12.2.

VANILLIN (121-33-5)	
Persistence and degradability	Readily biodegradable in water.
DL-CITRONELLOL (106-22-9)	
Persistence and degradability	Readily biodegradable in water.
Chemical oxygen demand (COD)	2.05 g O <sub>2</sub> /g substance
ThOD	2.961 g O <sub>2</sub> /g substance

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PHENYLETHYL ALCOHOL (60-12-8)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.45 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.5 g O <sub>2</sub> /g substance
ThOD	2.6 g O <sub>2</sub> /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).

DL-CITRONELLOL (106-22-9)	
BCF - Fish [1]	82.59 l/kg (BCFBAF v3.00, Estimated value)
Partition coefficient n-octanol/water (Log Pow)	3.41 (Practical experience/observation, EU Method A.8: Partition Coefficient, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

PHENYLETHYL ALCOHOL (60-12-8)	
Partition coefficient n-octanol/water (Log Pow)	1.3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °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.

DL-CITRONELLOL (106-22-9)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.85 (log Koc, EPIWIN 2.00, Estimated value)
Ecology - soil	Highly mobile in soil.

PHENYLETHYL ALCOHOL (60-12-8)	
Surface tension	59.7 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.5 (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	Highly mobile 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

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#### Transport by sea

Not regulated

#### Air transport

Not regulated

## **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

#### p-tert-Butyldihydrocinnamaldehyde (18127-01-0)

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

#### 2-Isobutyl-4-methyltetrahydro-2H-pyran-4-ol (63500-71-0)

**EPA TSCA Regulatory Flag** 

PMN - PMN - indicates a commenced PMN substance.

#### 15.2. International regulations

#### **CANADA**

## **VANILLIN (121-33-5)**

Listed on the Canadian DSL (Domestic Substances List)

# p-tert-Butyldihydrocinnamaldehyde (18127-01-0)

Listed on the Canadian DSL (Domestic Substances List)

## DL-CITRONELLOL (106-22-9)

Listed on the Canadian DSL (Domestic Substances List)

# 2-Isobutyl-4-methyltetrahydro-2H-pyran-4-ol (63500-71-0)

Listed on the Canadian DSL (Domestic Substances List)

#### 2,4-Dimethyl-4,4a,5,9b-tetrahydroindeno[1,2-d]-1,3-dioxin (27606-09-3)

Listed on the Canadian DSL (Domestic Substances List)

# PHENYLETHYL ALCOHOL (60-12-8)

Listed on the Canadian DSL (Domestic Substances List)

## 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)

#### **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)

## DL-CITRONELLOL (106-22-9)

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

# 2-Isobutyl-4-methyltetrahydro-2H-pyran-4-ol (63500-71-0)

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-4,4a,5,9b-tetrahydroindeno[1,2-d]-1,3-dioxin (27606-09-3)

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

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#### PHENYLETHYL ALCOHOL (60-12-8)

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

## 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)

# 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.

# **SECTION 16: Other information**

Revision date : 05/01/2025

#### Full text of H-phrases:

H302	Harmful if swallowed
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
H373	May cause damage to organs through prolonged or repeated exposure

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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