

SAFETY DATA SHEET

NEROLI HONEYDEW FRAGRANCE OIL

1. PRODUCT INFORMATION AND COMPANY IDENTIFICATION

Product Name: Neroli Honeydew Fragrance Oil

Company: Natural Bulk Supplies, 318 Half Day Rd, # 348,
Buffalo Grove, IL 60089 Phone: 847-489-7180

Emergency Contact: Infotrac: 800-535-5053(North America) +1-352-323-3500 (International)

2. HAZARD IDENTIFICATION

Classification of the substance or mixture

GHS US classification

Skin sensitization, Category 1 H317 May cause an allergic skin reaction.

Reproductive toxicity, Category 2 H361 Suspected of damaging fertility or the unborn child.

Full text of H statements : see section 16

GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US) : Warning

Hazard statements (GHS US) :

H317 - May cause an allergic skin reaction

H361 - Suspected of damaging fertility or the unborn child

Precautionary statements (GHS US) :

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P261 - Avoid breathing dust, fume, gas, mist, vapors, spray.

P272 - Contaminated work clothing must not be allowed out of the workplace.

P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing

protection.

P302+P352 - If on skin: Wash with plenty of water.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P321 - Specific treatment (see supplemental first aid instruction on this label).

P333+P313 - If skin irritation or rash occurs: Get medical advice or attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P405 - Store locked up.

P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

Other hazards which do not result in classification

No additional information available

Unknown acute toxicity (GHS US)

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Not applicable

Mixtures

Name	Product identifier	%	GHS US classification
BENZYL BENZOATE	(CAS-No.) 120-51-4	30 – 70	Acute Tox. 4 (Oral), H302
PHENYL ETHYL ALCOHOL	(CAS-No.) 60-12-8	1 – 5	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319
LINALOOL	(CAS-No.) 78-70-6	1 – 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1B, H317
LINALYL ACETATE	(CAS-No.) 115-95-7	1 – 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Skin Sens. 1B, H317
HEXYL CINNAMAL	(CAS-No.) 101-86-0	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
p-Mentha-1,4-diene	(CAS-No.) 99-85-4	< 0.5	Flam. Liq. 3, H226 Repr. 2, H361 Asp. Tox. 1, H304

Full text of hazard classes and H-statements : see section 16

4. FIRST AID MEASURES

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.

Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation :

None under normal conditions.

Symptoms/effects after skin contact :

May cause an allergic skin reaction.

Symptoms/effects after eye contact :

None under normal conditions.

Symptoms/effects after ingestion :

None under normal conditions.

Immediate medical attention and special treatment, if necessary

Treat symptomatically.

5. FIRE FIGHTING MEASURES

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.

Specific hazards arising from the chemical

Fire hazard : No fire hazard.

Explosion hazard : No direct explosion hazard.

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.

6. ACCIDENTAL RELEASE MEASURES

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.

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.

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.

Environmental precautions

Avoid release to the environment.

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.

Reference to other sections

For further information refer to section 13.

7. HANDLING AND STORAGE

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.

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

LINALOOL (78-70-6)

Not applicable

BENZYL BENZOATE (120-51-4)

Not applicable

p-Mentha-1,4-diene (99-85-4)

Not applicable

LIMONENE (5989-27-5)

Not applicable

LINALYL ACETATE (115-95-7)

Not applicable

HEXYL CINNAMAL (101-86-0)

Not applicable

PHENYL ETHYL ALCOHOL (60-12-8)

Not applicable

Appropriate engineering controls

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

Environmental exposure controls : Avoid release to the environment.

Individual protection measures/Personal protective equipment

Personal protective equipment:

Wear recommended 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

Personal protective equipment symbol(s):



9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Color	No data available
Odor	No data available
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	No data available
Solubility	No data available
Partition coefficient n-octanol/water (Log Pow)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
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

Other information

No additional information available

10. STABILITY AND REACTIVITY

Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

Conditions to avoid

None under recommended storage and handling conditions (see section 7).

Incompatible materials

No additional information available

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

LINALOOL (78-70-6)

LD50 oral rat	2790 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	5610 mg/kg body weight (Equivalent or similar to OECD 402, 24 h,

	Rabbit, Experimental value, Dermal, 7 day(s))
ATE US (oral)	2790 mg/kg body weight
ATE US (dermal)	5610 mg/kg body weight

BENZYL BENZOATE (120-51-4)

LD50 oral rat	> 2000 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male/female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2 ml/kg (Modification of Draize 1959 method, 4 h, Rabbit, Experimental value, Dermal)
ATE US (oral)	1160 mg/kg body weight

p-Mentha-1,4-diene (99-85-4)

ATE US (oral)	3650 mg/kg body weight
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LIMONENE (5989-27-5)

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)

HEXYL CINNAMAL (101-86-0)

ATE US (oral)	3100 mg/kg body weight
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PHENYL ETHYL ALCOHOL (60-12-8)

LD50 oral rat	> 1790 mg/kg (Rat, Oral)
LD50 dermal rabbit	> 808 mg/kg (Rabbit, Dermal)
LC50 Inhalation - Rat	> 1.4 mg/l (4 h, Rat, Inhalation)
ATE US (oral)	1610 mg/kg body weight
ATE US (dermal)	2500 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

LIMONENE (5989-27-5)

IARC group 3 - Not classifiable

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

STOT-single exposure : No data available

STOT-repeated exposure : No data available

LINALOOL (78-70-6)

NOAEL (dermal, rat/rabbit, 90 days)

250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

Aspiration hazard : No data available

Viscosity, kinematic : No data available

Symptoms/effects after inhalation : None under normal conditions.

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

Symptoms/effects after eye contact : None under normal conditions.

Symptoms/effects after ingestion : None under normal conditions.

12. ECOLOGICAL INFORMATION

Toxicity

The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

LINALOOL (78-70-6)

LC50 - Fish [1]	27.8 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	59 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 algae	156.7 mg/l (DIN 38412-9, 96 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)

BENZYL BENZOATE (120-51-4)

LC50 - Fish [1]	2.32 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	3.09 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)

LIMONENE (5989-27-5)

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 - Crustacea [1]	0.36 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)

LINALYL ACETATE (115-95-7)

LC50 - Fish [1]	11 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Cyprinus carpio)
EC50 - Crustacea [1]	15 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna)

PHENYL ETHYL ALCOHOL (60-12-8)

LC50 - Fish [1]	220 – 260 mg/l (96 h, Leuciscus idus)
EC50 - Crustacea [1]	287.17 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna)

Persistence and degradability

LINALOOL (78-70-6)

Persistence and degradability	Readily biodegradable in water.
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BENZYL BENZOATE (120-51-4)

Persistence and degradability	Readily biodegradable in water.
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LIMONENE (5989-27-5)

Persistence and degradability	Readily biodegradable in water.
ThOD	3.29 g O ₂ /g substance

LINALYL ACETATE (115-95-7)

Persistence and degradability	Readily biodegradable in water.
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PHENYL ETHYL ALCOHOL (60-12-8)

Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.45 g O ₂ /g substance
Chemical oxygen demand (COD)	2.5 g O ₂ /g substance
ThOD	2.6 g O ₂ /g substance
BOD (% of ThOD)	0.558

Bioaccumulative potential

LINALOOL (78-70-6)

Partition coefficient n-octanol/water (Log Pow)	2.84 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

BENZYL BENZOATE (120-51-4)

BCF - Fish [1]	2.286 (BCFBAF v3.00, Pisces, QSAR)
Partition coefficient n-octanol/water (Log Pow)	3.97 (Experimental value, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

LIMONENE (5989-27-5)

BCF - Fish [1]	864.8 – 1022 (Pisces, QSAR, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	4.38 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 37 °C)
Bioaccumulative potential	Potential for bioaccumulation ($4 \geq \text{Log Kow} \leq 5$).

LINALYL ACETATE (115-95-7)

Partition coefficient n-octanol/water (Log Pow)	3.93 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation ($\text{Log Kow} < 4$).

PHENYL ETHYL ALCOHOL (60-12-8)

Partition coefficient n-octanol/water (Log Pow)	1.38 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation ($\text{Log Kow} < 4$).

Mobility in soil

LINALOOL (78-70-6)

Surface tension	8.3 mN/m (20 °C, ISO 9101: Surface active agents - Determination of interfacial tension)
Ecology - soil	No (test)data on mobility of the substance available.

BENZYL BENZOATE (120-51-4)

Surface tension	0.027 N/m (210 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.8 (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.

LIMONENE (5989-27-5)

Ecology - soil	Adsorbs into the soil.
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LINALYL ACETATE (115-95-7)

Ecology - soil	Adsorbs into the soil.
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Other adverse effects

No additional information available

13. DISPOSAL CONSIDERATIONS

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.

14. TRANSPORT INFORMATION

Department of Transportation (DOT)

In accordance with DOT

Transport document description (DOT) : UN3082 Environmentally hazardous substances, liquid, n.o.s. (BENZYL BENZOATE), 9, III

UN-No.(DOT) : UN3082

Proper Shipping Name (DOT) : Environmentally hazardous substances, liquid, n.o.s. BENZYL BENZOATE

Class (DOT) : 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140

Packing group (DOT) : III - Minor Danger

Hazard labels (DOT) : 9 - Class 9 (Miscellaneous dangerous materials)



DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 241
DOT Symbols : G - Identifies PSN requiring a technical name

DOT Special Provisions (49 CFR 172.102)

8 - A hazardous substance that is not a hazardous waste may be shipped under the shipping description "Other regulated substances, liquid or solid, n.o.s.", as appropriate. In addition, for solid materials, special provision B54 applies.

146 - This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in 171.8 of this subchapter, or any hazard class as defined in Part 173 of this subchapter, if it is designated as environmentally hazardous by the Competent Authority of the country of origin, transit or destination.

173 - An appropriate generic entry may be used for this material.

335 - Mixtures of solids that are not subject to this subchapter and environmentally hazardous liquids or solids may be classified as "Environmentally hazardous substances, solid, n.o.s," UN3077 and may be transported under this entry, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each transport unit must be leak-proof when used as bulk packaging.

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).

T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx) : 155

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : No Limit

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : No Limit

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

Emergency Response Guide (ERG) Number : 171

Other information : No supplementary information available.

15. REGULATORY INFORMATION

US Federal regulations

No additional information available

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta-gamma-2-benzopyran	CAS-No. 1222-05-5	1 – 5%
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16. OTHER INFORMATION

Full text of hazard classes and H-statements:

H226 Flammable liquid and vapor

H227 Combustible liquid

H302 Harmful if swallowed

H304 May be fatal if swallowed and enters airways

H315 Causes skin irritation

H317 May cause an allergic skin reaction

H319 Causes serious eye irritation

H320 Causes eye irritation

H361 Suspected of damaging fertility or the unborn child

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