

# SAFETY DATA SHEET

## CHAI WOODS FRAGRANCE OIL

### 1. PRODUCT INFORMATION AND COMPANY IDENTIFICATION

Product Name: Chai Woods 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

#### GHS US classification

Skin sensitization,

Category 1

H317 May cause an allergic skin reaction

Full text of H statements : see section 16

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US) : Warning

Hazard statements (GHS US) :

H317 - May cause an allergic skin reaction

Precautionary statements (GHS US) :

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.

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

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

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

P363 - Wash contaminated clothing before reuse.

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

**Other hazards which do not result in classification**

No additional information available

**Unknown acute toxicity (GHS US)**

Not applicable

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Name	Product identifier	%	GHS US classification
BENZYL BENZOATE	(CAS-No.) 120-51-4	30 – 70	Acute Tox. 4 (Oral), H302
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone	(CAS-No.) 54464-57-2	5 – 10	Skin Irrit. 2, H315 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
EUGENOL	(CAS-No.) 97-53-0	1 – 5	Eye Irrit. 2A, H319 Skin Sens. 1B, H317
ETHYL VANILLIN	(CAS-No.) 121-32-4	1 – 5	Eye Irrit. 2B, H320
4-methyl-8-methylenetricyclo[3.3.1.1 <sup>3,7</sup> ]decan-2-ol	(CAS-No.) 122760-84-3	< 0.5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
GERANIOL	(CAS-No.) 106-24-1	< 0.5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317

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 you feel unwell, seek medical advice.

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 :

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 :

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. No open flames, no sparks, and no smoking. 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.

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. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Wear personal protective equipment.

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 :

Keep cool. Protect from sunlight.

Packaging materials :

Store always product in container of same material as original container.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Control parameters**

#### **METHYL-METHYLENE-TRICYCLODECANOL (122760-84-3)**

Not applicable

#### **GERANIOL (106-24-1)**

Not applicable

#### **BENZYL BENZOATE (120-51-4)**

Not applicable

#### **LINALYL ACETATE (115-95-7)**

Not applicable

#### **1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone (54464-57-2)**

Not applicable

**ETHYL VANILLIN (121-32-4)**

Not applicable

**EUGENOL (97-53-0)**

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
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**

#### **Possibility of hazardous reactions**

No additional information available

#### **Conditions to avoid**

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

#### **Incompatible materials**

No additional information available

**Hazardous decomposition products**

No additional information available

**11. TOXICOLOGICAL INFORMATION**

**Information on toxicological effects**

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

**METHYL-METHYLENE-TRICYCLODECANOL (122760-84-3)**

ATE US (oral)	965 mg/kg body weight
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**GERANIOL (106-24-1)**

LD50 oral rat	3600 mg/kg body weight (Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Experimental value, Dermal)
ATE US (oral)	3600 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 rabbit	> 2 ml/kg (Modification of Draize 1959 method, 4 h, Rabbit, Experimental value, Dermal)
ATE US (oral)	1160 mg/kg body weight

**ETHYL VANILLIN (121-32-4)**

LD50 oral rat	> 3160 mg/kg body weight (OECD 401: Acute Oral Toxicity, 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)	3000 mg/kg body weight

**EUGENOL (97-53-0)**



ATE US (oral)	2500 mg/kg body weight
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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

EUGENOL (97-53-0)  
 IARC group 3 - Not classifiable

Reproductive toxicity : Not classified.  
 STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

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 : None under normal conditions.  
 Symptoms/effects after ingestion : None under normal conditions.

## 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.

### GERANIOL (106-24-1)

LC50 - Fish [1]	22 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	10.8 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 algae	13.1 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)

**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)

**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)

**ETHYL VANILLIN (121-32-4)**

LC50 - Fish [1]	87.6 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, Read-across, GLP)
ErC50 algae	120 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Read-across, GLP)

**Persistence and degradability**

**GERANIOL (106-24-1)**

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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**LINALYL ACETATE (115-95-7)**

Persistence and degradability	Readily biodegradable in water.
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**ETHYL VANILLIN (121-32-4)**

Persistence and degradability	Readily biodegradable in water.
ThOD	1.81 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.529 (5 day(s), Literature study)

**Bioaccumulative potential**

**GERANIOL (106-24-1)**

Partition coefficient n-octanol/water (Log Pow)	2.6 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 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).

**LINALYL ACETATE (115-95-7)**

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

**ETHYL VANILLIN (121-32-4)**

Partition coefficient n-octanol/water (Log Pow)	1.58 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

**Mobility in soil**

**GERANIOL (106-24-1)**

Organic Carbon	1.85 (log Koc, PCKOCWIN v1.66, Calculated value)
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Normalized Adsorption Coefficient (Log Koc)	
Ecology - soil	Highly mobile in soil.

**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.

**LINALYL ACETATE (115-95-7)**

Ecology - soil	Adsorbs into the soil.
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**ETHYL VANILLIN (121-32-4)**

Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.092 (log Koc, Equivalent or similar to OECD 106, Experimental value)
Ecology - soil	Low potential for mobility in soil.

**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

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

## 16. OTHER INFORMATION

Full text of H-phrases:

H227 Combustible liquid

H302 Harmful if swallowed

H315 Causes skin irritation

H317 May cause an allergic skin reaction

H318 Causes serious eye damage

H319 Causes serious eye irritation

H320 Causes eye irritation

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