

# CINNAMON NUTMEG CLOVE

## Safety Data Sheet

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

Date of issue: 10/04/2017

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Version: 1.2

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : CINNAMON NUTMEG CLOVE  
CAS-No. : N/A

#### 1.2. Recommended use and restrictions on use

No additional information available

#### 1.3. Supplier

#### 1.4. Emergency telephone number

Emergency number : Chemtrec - USA: 800-424-9300

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Flammable liquids Category 4	Combustible liquid
Skin corrosion/irritation Category 2	Causes skin irritation
Serious eye damage/eye irritation Category 2	Causes serious eye irritation
Skin sensitization, Category 1	May cause an allergic skin reaction
Germ cell mutagenicity Category 2	Suspected of causing genetic defects
Carcinogenicity Category 1B	May cause cancer
Aspiration hazard Category 1	May be fatal if swallowed and enters airways

#### 2.2. GHS Label elements, including precautionary statements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

GHS08

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

Combustible liquid  
May be fatal if swallowed and enters airways  
Causes skin irritation  
May cause an allergic skin reaction  
Causes serious eye irritation  
Suspected of causing genetic defects  
May cause cancer

Precautionary statements (GHS-US) :

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
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 swallowed: Immediately call a poison center or doctor  
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.

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Specific treatment (see supplemental first aid instruction on this label)  
Do NOT induce vomiting.  
If skin irritation occurs: Get medical advice/attention.  
If skin irritation or rash occurs: Get medical advice/attention.  
If eye irritation persists: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.  
Wash contaminated clothing before reuse.  
In case of fire: Use media other than water to extinguish.  
Store in a well-ventilated place. Keep cool.  
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

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	GHS-US classification
CINNAMIC ALDEHYDE	(CAS-No.) 104-55-2	5 - 10	Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
CINNAMON LEAF OIL	(CAS-No.) 8015-91-6	5 - 10	Flam. Liq. 4, H227 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Muta. 2, H341 Carc. 1B, H350
ORANGE OIL	(CAS-No.) 8028-48-6	5 - 10	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304
CLOVE LEAF OIL	(CAS-No.) 8000-34-8	1 - 5	Eye Irrit. 2A, H319 Skin Sens. 1B, H317 Asp. Tox. 1, H304
EUGENOL	(CAS-No.) 97-53-0	1 - 5	Eye Irrit. 2, H319 Skin Sens. 1, H317
NUTMEG OIL	(CAS-No.) 8008-45-5	1 - 5	Flam. Liq. 3, H226 Skin Sens. 1, H317 Muta. 2, H341 Carc. 1B, H350 Asp. Tox. 1, H304

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 : Call a physician immediately.  
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 : Do not induce vomiting. Call a physician immediately.

### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.  
Symptoms/effects after eye contact : Eye irritation.  
Symptoms/effects after ingestion : Risk of lung edema.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

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### 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

Fire hazard : Combustible liquid.

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 : No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. 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. Notify authorities if product enters sewers or public waters.

#### 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. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. 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 in a well-ventilated place. Keep cool. Store locked up.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### CLOVE LEAF OIL (8000-34-8)

Not applicable

##### CINNAMIC ALDEHYDE (104-55-2)

Not applicable

##### CINNAMON LEAF OIL (8015-91-6)

Not applicable

##### EUGENOL (97-53-0)

Not applicable

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### NUTMEG OIL (8008-45-5)

Not applicable

### ORANGE OIL (8028-48-6)

Not applicable

## 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:

Wear respiratory protection.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: YELLOW LIQUID
Odor	: CHARACTERISTIC, MATCHING THE RETAINER SAMPLE.
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 87 °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	: 0.94 (0.930 - 0.950)
Solubility	: Insoluble.
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 : 1.472 (1.462 - 1.482)

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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

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

#### 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 : Not classified

<b>CLOVE LEAF OIL (8000-34-8)</b>	
ATE US (oral)	2650 mg/kg body weight
ATE US (dermal)	2500 mg/kg body weight

<b>CINNAMIC ALDEHYDE (104-55-2)</b>	
LD50 oral rat	2220 mg/kg (Rat, Oral)
LD50 dermal rabbit	1260 ml/kg (24 h, Rabbit, Male/female, Experimental value, Dermal)
ATE US (oral)	2220 mg/kg body weight
ATE US (dermal)	1100 mg/kg body weight

<b>CINNAMON LEAF OIL (8015-91-6)</b>	
ATE US (oral)	2650 mg/kg body weight

<b>EUGENOL (97-53-0)</b>	
LD50 oral rat	> 2000 mg/kg body weight (Equivalent or similar to OECD 423, Rat, Male/female, Experimental value, Oral)
LC50 inhalation rat (mg/l)	> 2.6 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male/female, Experimental value, Inhalation (aerosol))
ATE US (oral)	2300 mg/kg body weight

<b>NUTMEG OIL (8008-45-5)</b>	
ATE US (oral)	2620 mg/kg body weight

<b>ORANGE OIL (8028-48-6)</b>	
LD50 oral rat	> 5000 mg/kg body weight (Rat; Equivalent or similar to OECD 401; Experimental value)
LD50 dermal rabbit	> 5000 mg/kg body weight (Rabbit; Experimental value; Equivalent or similar to OECD 402)

Skin corrosion/irritation : Causes skin irritation.  
Serious eye damage/irritation : Causes serious eye irritation.  
Respiratory or skin sensitization : May cause an allergic skin reaction.  
Germ cell mutagenicity : Suspected of causing genetic defects.  
Carcinogenicity : May cause cancer.

<b>EUGENOL (97-53-0)</b>	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified  
Specific target organ toxicity – single exposure : Not classified

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Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: Risk of lung edema.

### 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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CINNAMIC ALDEHYDE (104-55-2)	
LC50 fish 1	105.76 mg/l (96 h, Pimephales promelas, Flow-through system, Fresh water, QSAR, Estimated value)
EC50 Daphnia 1	119.56 mg/l (48 h, Daphnia magna, Static system, Fresh water, QSAR, Estimated value)
EUGENOL (97-53-0)	
LC50 fish 1	13 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP)
EC50 Daphnia 1	1.13 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 (algae)	24 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
ORANGE OIL (8028-48-6)	
LC50 fish 1	702 µg/l (LC50; Equivalent or similar to OECD 203; 96 h; Pimephales promelas; Flow-through system; Fresh water; Read-across)
EC50 Daphnia 1	0.67 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)

#### 12.2. Persistence and degradability

CINNAMIC ALDEHYDE (104-55-2)	
Persistence and degradability	Readily biodegradable in water.
EUGENOL (97-53-0)	
Persistence and degradability	Readily biodegradable in water.

#### 12.3. Bioaccumulative potential

CINNAMIC ALDEHYDE (104-55-2)	
Log Pow	1.84 (Calculated)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
EUGENOL (97-53-0)	
Log Pow	1.83 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 30 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
ORANGE OIL (8028-48-6)	
BCF other aquatic organisms 1	32 - 395 (BCF; BCFWIN)
Log Pow	2.78 - 4.88 (QSAR; KOWWIN)

#### 12.4. Mobility in soil

CINNAMIC ALDEHYDE (104-55-2)	
Surface tension	45.3 mN/m (20 °C, Experimental value)
Log Koc	1.57 (log Koc, Other, Calculated value)
Ecology - soil	Highly mobile in soil.

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### EUGENOL (97-53-0)

Ecology - soil	No (test) data on mobility of the substance available.
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### 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

#### CLOVE LEAF OIL (8000-34-8)

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

#### CINNAMIC ALDEHYDE (104-55-2)

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

#### CINNAMON LEAF OIL (8015-91-6)

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

#### EUGENOL (97-53-0)

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

#### NUTMEG OIL (8008-45-5)

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

#### ORANGE OIL (8028-48-6)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

#### CANADA

#### CLOVE LEAF OIL (8000-34-8)

Listed on the Canadian DSL (Domestic Substances List)

#### CINNAMIC ALDEHYDE (104-55-2)

Listed on the Canadian DSL (Domestic Substances List)

#### CINNAMON LEAF OIL (8015-91-6)

Listed on the Canadian DSL (Domestic Substances List)

#### EUGENOL (97-53-0)

Listed on the Canadian DSL (Domestic Substances List)

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### NUTMEG OIL (8008-45-5)

Listed on the Canadian DSL (Domestic Substances List)

### ORANGE OIL (8028-48-6)

Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations


No additional information available

#### National regulations

No additional information available

#### 15.3. US State regulations

This product can expose you to eugenyl methyl ether, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

 **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](http://www.P65Warnings.ca.gov).

This product can expose you to safrole, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## SECTION 16: Other information

Revision date : 10/04/2017

Full text of H-phrases:

H226	Flammable liquid and vapour
H227	Combustible liquid
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H341	Suspected of causing genetic defects
H350	May cause cancer

SDS US (GHS HazCom 2012)

*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*