

# ORGANIC ORANGE OIL

## Safety Data Sheet

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

### 1.1. Identification

Name : ORGANIC ORANGE OIL

CAS No : 8008-57-9

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Industrial uses: Uses of substances as such or in preparations\* at industrial sites

### 1.3. Details of the supplier of the safety data sheet

Plant Therapy, Inc

510 2<sup>nd</sup> Ave S.

Twin Falls, ID 83301

[cs@planttherapy.com](mailto:cs@planttherapy.com)

[www.planttherapy.com](http://www.planttherapy.com)

### 1.4. Emergency telephone number

Emergency number : 1-800-917-6577

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

#### GHS-US classification

Flam. Liq. 3	H226 -	Flammable liquid and vapor
Skin Irrit. 2	H315 -	Causes skin irritation
Skin Sens. 1	H317 -	May cause an allergic skin reaction
Asp. Tox. 1	H304 -	May be fatal if swallowed and enters airways
Aquatic Acute 1	H400 -	Very toxic to aquatic life
Aquatic Chronic 1	H410 -	Very toxic to aquatic life with long lasting effects

Full text of H-statements: see section 16

### 2.2. Label elements

# ORGANIC ORANGE OIL

## Safety Data Sheet

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

### GHS-US labelling



Hazard pictograms (GHS-US) :

Signal word (GHS-US) :

Hazard statements (GHS-US) :

Danger

H226 - Flammable liquid and vapor

H304 - May be fatal if swallowed and enters airways

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H400 - Very toxic to aquatic life

Precautionary statements (GHS-US) :

H410 - Very toxic to aquatic life with long lasting effects

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P233 - Keep container tightly closed

P240 - Ground/bond container and receiving equipment

P241 - Explosion-free electrical equipment and lighting with earth

P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash hands thoroughly after handling

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

P273 - Avoid release to the environment

P280 - Wear protective gloves/protective clothing/eye protection

P301+P310 - IF SWALLOWED: immediately call a POISON CENTER or doctor/physician

P302+P352 - IF ON SKIN: Wash with plenty of soap and water

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

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

P331 - Do NOT induce vomiting

P332+P313 - If skin irritation occurs: Get medical advice/attention

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

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

P363 - Wash contaminated clothing before reuse

P370+P378 - In case of fire: Use media other than water to extinguish

P391 - Collect spillage

P403+P235 - Store in a well-ventilated place. Keep cool

P405 - Store locked up

P501 - Dispose in a safe manner in accordance with local/national regulations

### 2.3. Other hazards

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
d-Limonene	(CAS No) 5989-27-5	>= 80	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Myrcene	(CAS No) 123-35-3	5 - 10	Flam. Liq. 3, H226 Skin Irrit. 2, H315 STOT SE 3, H335 Asp. Tox. 1, H304
alpha-Pinene	(CAS No) 80-56-8	1 - 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304

# ORGANIC ORANGE OIL

## Safety Data Sheet

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

Linalool	(CAS No) 78-70-6	1 - 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315
delta-3-Carene	(CAS No) 13466-78-9	1 - 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304

Full text of H-statements: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : Check the vital functions. Victim conscious with labored breathing: half-seated. Unconscious: maintain adequate airway and respiration. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Cardiac arrest: perform resuscitation. Respiratory arrest: artificial respiration or oxygen. Prevent cooling by covering the victim (no warming up). Keep the victim calm, avoid physical strain. Keep watching the victim. Depending on the victim's condition: doctor/hospital. Give psychological aid.
- 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.
- First-aid measures after eye contact : Do not apply (chemical) neutralizing agents. Rinse immediately with plenty of water. Consult an eye specialist.
- First-aid measures after ingestion : Ingestion of large quantities: immediately to hospital. Rinse mouth with water, do not induce vomiting, call a doctor. Immediately call a POISON CENTER or doctor/physician.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after skin contact : Slight irritation.
- Symptoms/injuries after eye contact : Irritation of the eye tissue.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Carbon dioxide. Polyvalent foam. BC-powder.
- Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Flammable. This product is flammable. Fire hazard. Gas/vapor flammable with air within explosion limits.
- Explosion hazard : Explosion risk in case of fire. Sparks can induce fire of vapors. Gas/vapor explosive with air within explosion limits.
- Reactivity : Upon combustion: CO and CO<sub>2</sub> are formed.

#### 5.3. Advice for firefighters

- Precautionary measures fire : Exposure to heat: have neighborhood close doors and windows. Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation.
- Firefighting instructions : No data available.
- Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

- Protective equipment : See "Material-Handling" to select protective clothing.
- Emergency procedures : Wash contaminated clothes. Stop engines and no smoking. No open flames, no sparks, and no smoking. Mark the danger area.

##### 6.1.2. For emergency responders

No additional information available

#### 6.2. Environmental precautions

Prevent spreading in sewers. Avoid release to the environment.

# ORGANIC ORANGE OIL

## Safety Data Sheet

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

### 6.3. Methods and material for containment and cleaning up

- For containment : Dam up the liquid spill. Dilute/disperse combustible gas/vapor with water curtain. Do not use compressed air for pumping over spills. Plug the leak, cut off the supply. Contain leaking substance, pump over in suitable containers.
- Methods for cleaning up : On land, sweep or shovel into suitable containers. This material and its container must be disposed of in a safe way, and as per local legislation. Take up liquid spill into absorbent material. Collect spillage.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Do not discharge the waste into the drain. Do not use compressed air for pumping over spills. Keep away from sources of ignition - No smoking. Measure the concentration in the atmosphere. Keep container tight closed. No open flames. No smoking. Comply with local regulations for disposal. Carry out operations in the open/under local exhaust/ventilation or with respiratory protection.

### 7.2. Conditions for safe storage, including any incompatibilities

- Heat and ignition sources : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Storage area : Store in a dark area. Provide for a tub to collect spills. Meet the legal requirements.
- Special rules on packaging : correctly labelled. Secure fragile packaging's in solid containers. Meet the legal requirements. opaque. Special rules on packaging. closing.
- Packaging materials : No data available. MATERIAL TO AVOID: Store in a corrosion resistant container with a resistant inner liner.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### delta-3-Carene (13466-78-9)

ACGIH	ACGIH TWA (ppm)	20 ppm
ACGIH	ACGIH STEL (ppm)	20 ppm

### 8.2. Exposure controls

- Materials for protective clothing : GIVE EXCELLENT RESISTANCE: No data available. GIVE GOOD RESISTANCE: No data available. GIVE LESS RESISTANCE: GIVE POOR RESISTANCE: No data available.
- Hand protection : Gloves.
- Eye protection : Safety glasses.
- Skin and body protection : 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
- Appearance : Liquid.
- Colour : Yellow to yellow-brown
- Odor : Fruity
- Odor threshold : No data available

# ORGANIC ORANGE OIL

## Safety Data Sheet

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

pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 115 (21 - 55) °F
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: 0.844 (0.84 - 0.85)
Relative vapor density at 20 °C	: No data available
Density	: 842 - 846 kg/m <sup>3</sup>
Solubility	: Soluble in ethanol. Soluble in carbon disulfide. Poorly soluble in water. Water: Solubility in water of component(s) of the mixture: • d-Limonene: insoluble • Myrcene: insoluble • delta-3-Carene: 0.00029 g/100ml (25°C)
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

### 9.2. Other information

Other properties : Slightly volatile.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Upon combustion: CO and CO<sub>2</sub> are formed.

### 10.2. Chemical stability

No data available.

### 10.3. Possibility of hazardous reactions

# ORGANIC ORANGE OIL

## Safety Data Sheet

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

---

No additional information available

### 10.4. Conditions to avoid

No additional information available

### 10.5. Incompatible materials

No additional information available

# ORGANIC ORANGE OIL

## Safety Data Sheet

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

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

ORGANIC ORANGE OIL (8008-57-9)	
LD50 oral rat	> 5000 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
d-Limonene (5989-27-5)	
LD50 oral rat	4400 mg/kg bodyweight
LD50 dermal rabbit	> 5000 mg/kg bodyweight
ATE US (oral)	4400.000 mg/kg bodyweight
delta-3-Carene (13466-78-9)	
LD50 oral rat	4800 mg/kg (Rat)
ATE US (oral)	4800.000 mg/kg bodyweight

Skin corrosion/irritation : Causes skin irritation.  
Serious eye damage/irritation : Not classified  
Respiratory or skin sensitization : May cause an allergic skin reaction.  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified

d-Limonene (5989-27-5)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified exposure)

Aspiration hazard : May be fatal if swallowed and enters airways.

Symptoms/injuries after skin contact : Slight irritation.

Symptoms/injuries after eye contact : Irritation of the eye tissue.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - water : No data available on ecotoxicity.

d-Limonene (5989-27-5)	
LC50 fish 1	720 µg/l (96 h; Pimephales promelas; Lethal)
EC50 Daphnia 1	0.36 mg/l (48 h; Daphnia magna; GLP)
LC50 fish 2	702 µg/l (96 h; Pimephales promelas)
Threshold limit algae 1	150 mg/l (72 h; Desmodesmus subspicatus; GLP)
Threshold limit algae 2	2.62 mg/l (72 h; Desmodesmus subspicatus)

### 12.2. Persistence and degradability

ORGANIC ORANGE OIL (8008-57-9)	
Persistence and degradability	Biodegradability in water: no data available.
d-Limonene (5989-27-5)	

# ORGANIC ORANGE OIL

## Safety Data Sheet

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

Persistence and degradability	May cause long-term adverse effects in the environment. Readily biodegradable in water. Adsorbs into the soil.
ThOD	3.29 g O <sub>2</sub> /g substance

### Myrcene (123-35-3)

Persistence and degradability	No data available.
-------------------------------	--------------------

### alpha-Pinene (80-56-8)

Persistence and degradability	Not established.
-------------------------------	------------------

### Linalool (78-70-6)

Persistence and degradability	Not established.
-------------------------------	------------------

### delta-3-Carene (13466-78-9)

Persistence and degradability	Biodegradability in water: no data available.
-------------------------------	---

### 12.3. Bioaccumulative potential

#### ORGANIC ORANGE OIL (8008-57-9)

Bioaccumulative potential	No bioaccumulation data available.
---------------------------	------------------------------------

#### d-Limonene (5989-27-5)

BCF fish 1	864.8 - 1022 (Pisces; Fresh weight)
------------	-------------------------------------

Log Pow	4.38 (Experimental value; OECD 117: Partition Coefficient (n-octanol/water), HPLC method; 37 °C)
---------	--

Bioaccumulative potential	Not established. Bioaccumulative potential.
---------------------------	---

#### Myrcene (123-35-3)

Bioaccumulative potential	No data available.
---------------------------	--------------------

#### alpha-Pinene (80-56-8)

Bioaccumulative potential	Not established.
---------------------------	------------------

#### Linalool (78-70-6)

Bioaccumulative potential	Not established.
---------------------------	------------------

#### delta-3-Carene (13466-78-9)

Log Pow	4.38 (Experimental value)
---------	---------------------------

Bioaccumulative potential	No bioaccumulation.
---------------------------	---------------------

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : Remove waste in accordance with local and/or national regulations. Dispose in a safe manner in accordance with local/national regulations. Remove to an authorized waste treatment plant.

Additional information : Hazardous waste according to Directive 2008/98/EC.



# ORGANIC ORANGE OIL

## Safety Data Sheet

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

### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport

#### TDG

No additional information available

#### Transport by sea

UN-No. (IMDG)	: 1169
Proper Shipping Name (IMDG)	: EXTRACTS, AROMATIC, LIQUID
Class (IMDG)	: 3 - Flammable liquids
Packing group (IMDG)	: III - substances presenting low danger
EmS-No. (1)	: F-E
MFAG-No	: 127;128
EmS-No. (2)	: S-D

#### Air transport UN-

No. (IATA)	: 1169
Proper Shipping Name (IATA)	: Extracts, aromatic, liquid
Class (IATA)	: 3 - Flammable Liquids
Packing group (IATA)	: III - Minor Danger
Civil Aeronautics Law	: Flammable liquids

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### d-Limonene (5989-27-5)

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

##### Myrcene (123-35-3)

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

##### alpha-Pinene (80-56-8)

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

##### Linalool (78-70-6)

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

##### delta-3-Carene (13466-78-9)

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

#### 15.2. International regulations

##### CANADA

No additional information available

##### EU-Regulations

No additional information available

##### National regulations

No additional information available

#### 15.3. US State regulations

##### Myrcene (123-35-3)

# ORGANIC ORANGE OIL

## Safety Data Sheet

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

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
Yes	No	No	No	

### alpha-Pinene (80-56-8)

U.S. - New Jersey - Right to Know Hazardous Substance List

## SECTION 16: Other information

Full text of H-	Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
	Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
	Asp. Tox. 1	Aspiration hazard, Category 1
	Flam. Liq. 3	Flammable liquids, Category 3
	Flam. Liq. 4	Flammable liquids, Category 4
	Skin Irrit. 2	Skin corrosion/irritation, Category 2
	Skin Sens. 1	Sensitization — Skin, Category 1
	Skin Sens. 1B	Sensitization — Skin, category 1B
	STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
	H226	Flammable liquid and vapor
	H227	Combustible liquid
	H304	May be fatal if swallowed and enters airways
	H315	Causes skin irritation
	H317	May cause an allergic skin reaction
	H335	May cause respiratory irritation
	H400	Very toxic to aquatic life
	H410	Very toxic to aquatic life with long lasting effects

statements:

SDS US (Plant Therapy) 5.2

*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*