

Safety Data Sheet acc. to OSHA HCS

Printing date 11/22/2023

Reviewed on 11/22/2023

1 Identification

- **Product identifier**
- **Trade name:** Orange (Citrus sinensis)
- **Article number:**
3602, 360202, 360203, 360205, 360208, 360210, 360211, 360215, 360217, 360229, 360276, 3602515, 3602531, 3603, 360302, 360305, 360308, 360310, 360311, 360317, 360322, 360376, 3603515, 360222, 5627, 562702, 562705, 562708, 562710, 562729, 5627531, 27706, 360269, 360238, 562711, 360327, 562769, 360227, 360212, 360312, 3603531, 360338, 562712, 360260, 360360, 32042, 562760, 32236, 33534, 33647, 360278, 360378, 34507, 360288, 562788, 40013-BS, 360300-BS, 43555, 38528S, 38529S, 110720S, 110720
- **CAS Number:** 8008-57-9
- **Application of the substance / the mixture** Cosmetic Active Agent
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Young Living
1538 Sandalwood Drive
Lehi, Utah 84043
sds@youngliving.com
- **Information department:** Health Sciences and Product Safety
- **Emergency telephone number:**
Chemtrec (US): 1 (800) 424-9300
Chemtrec (Outside US): +1 (703) 527-3887 (Collect calls accepted.)

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids 3 H226 Flammable liquid and vapor.



GHS08 Health hazard

Carcinogenicity 2 H351 Suspected of causing cancer.



GHS07

Skin Irritation 2 H315 Causes skin irritation.

Sensitization - Skin 1 H317 May cause an allergic skin reaction.

Eye Irritation 2B H320 Causes eye irritation.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/22/2023

Reviewed on 11/22/2023

Trade name: Orange (*Citrus sinensis*)

(Contd. of page 1)

· **Hazard pictograms**· **Signal word** *Warning*· **Hazard-determining components of labeling:**

limonene
Myrcene
alpha-Pinene
beta-Pinene

· **Hazard statements**

Flammable liquid and vapor.
Causes skin and eye irritation.
May cause an allergic skin reaction.
Suspected of causing cancer.

· **Precautionary statements**

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/fume/gas/mist/vapors/spray
Wash thoroughly after handling. Do not touch eyes.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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 on this label).
Take off contaminated clothing and wash it before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical help.
Wash contaminated clothing before reuse.
In case of fire: Use CO₂, powder or water spray to extinguish.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/22/2023

Reviewed on 11/22/2023

Trade name: Orange (*Citrus sinensis*)

(Contd. of page 2)

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

138-86-3	limonene	>50–≤100%
	⚠ Flammable Liquids 3, H226; ⚠ Skin Irritation 2, H315; Sensitization - Skin 1, H317	
123-35-3	Myrcene	>1–≤5.5%
	⚠ Flammable Liquids 3, H226; ⚠ Carcinogenicity 2, H351; Aspiration Hazard 1, H304; ⚠ Skin Irritation 2, H315; Eye Irritation 2A, H319	
78-70-6	Linalool	≥0.1–<1%
	⚠ Sensitization - Skin 1B, H317; Flammable Liquids 4, H227	
80-56-8	alpha-Pinene	≥0.1–<1%
	⚠ Flammable Liquids 3, H226; ⚠ Aspiration Hazard 1, H304; ⚠ Skin Irritation 2, H315; Sensitization - Skin 1, H317	
127-91-3	beta-Pinene	≥0.1–<1%
	⚠ Flammable Liquids 3, H226; ⚠ Aspiration Hazard 1, H304; ⚠ Skin Irritation 2, H315; Sensitization - Skin 1, H317	

4 First-aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/22/2023

Reviewed on 11/22/2023

Trade name: Orange (*Citrus sinensis*)

(Contd. of page 3)

- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
Dilute and rinse the skin with vegetable oil to dilute the essential oil
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
Apply vegetable oil with a sterile cloth around the eye to dilute any excess essential oil.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· PAC-1:

112-31-2	decanal	1.8 ppm
124-13-0	octanal	17 mg/m ³

· PAC-2:

112-31-2	decanal	19 ppm
124-13-0	octanal	190 mg/m ³

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/22/2023

Reviewed on 11/22/2023

Trade name: Orange (*Citrus sinensis*)

(Contd. of page 4)

· **PAC-3:**

112-31-2	decanal	120 ppm
124-13-0	octanal	1,100 mg/m ³

7 Handling and storage

· **Handling:**· **Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

· **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

· **Conditions for safe storage, including any incompatibilities**· **Storage:**· **Requirements to be met by storerooms and receptacles:** Store in a cool location.· **Information about storage in one common storage facility:**

Store away from flammable substances.

Store in the dark away from heat.

· **Further information about storage conditions:** Keep receptacle tightly sealed.· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see section 7.· **Control parameters**· **Components with limit values that require monitoring at the workplace:**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

138-86-3 limonene

WEEL Long-term value: 30 ppm

80-56-8 alpha-PineneTLV Long-term value: 20 ppm
DSEN, A4**127-91-3 beta-Pinene**TLV Long-term value: 20 ppm
DSEN, A4· **Additional information:** The lists that were valid during the creation were used as basis.

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/22/2023

Reviewed on 11/22/2023

Trade name: Orange (*Citrus sinensis*)

(Contd. of page 5)

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

- **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:

Liquid

Color:

Light orange

- **Odor:**

Characteristic

- **Odor threshold:**

Not determined.

- **pH-value at 20 °C (68 °F):**

3.4

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/22/2023

Reviewed on 11/22/2023

Trade name: Orange (*Citrus sinensis*)

(Contd. of page 6)

· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
· Flash point:	52.5 °C (126.5 °F) Does not sustain combustion.
· Flammability (solid, gaseous):	Flammable.
· Auto igniting:	255 °C (491 °F)
· Decomposition temperature:	Not determined.
· Ignition temperature:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	0.7 Vol %
Upper:	6.1 Vol %
· Vapor pressure:	Not determined.
· Density at 20 °C (68 °F):	0.845 g/cm ³ (7.05153 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	95.0 %
VOC content:	95.49 %
	806.9 g/l / 6.73 lb/gal
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/22/2023

Reviewed on 11/22/2023

Trade name: Orange (Citrus sinensis)

(Contd. of page 7)

- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

Oral	LD50	>5 g/kg (rat)
Dermal	LD50	>5 g/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
Orange: Skin sensitization if oxidized. Phototoxic. If applied to skin at over maximum use level, skin must not be exposed to sunlight for 12 hours. Old or oxidized oils should be avoided. Maximum dermal use is 1.25%. Non Toxic.
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

- **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

123-35-3	Myrcene	2B
----------	---------	----

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/22/2023

Reviewed on 11/22/2023

Trade name: Orange (*Citrus sinensis*)

(Contd. of page 8)

- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|---|-----------------|
| · UN-Number | |
| · DOT, IMDG, IATA | not regulated |
| · UN proper shipping name | |
| · DOT, IMDG, IATA | not regulated |
| · Transport hazard class(es) | |
| · DOT, ADN, IMDG, IATA | |
| · Class | not regulated |
| · Packing group | |
| · DOT, IMDG, IATA | not regulated |
| · Environmental hazards: | Not applicable. |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not applicable. |
| · UN "Model Regulation": | not regulated |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **Sara**
- **Section 355 (extremely hazardous substances):**
None of the ingredients is listed.

(Contd. on page 10)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/22/2023

Reviewed on 11/22/2023

Trade name: Orange (*Citrus sinensis*)

(Contd. of page 9)

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

138-86-3	limonene	ACTIVE
123-35-3	Myrcene	ACTIVE
78-70-6	Linalool	ACTIVE
80-56-8	alpha-Pinene	ACTIVE
4630-07-3	Valencene	ACTIVE
112-31-2	decanal	ACTIVE
124-13-0	octanal	ACTIVE
127-91-3	beta-Pinene	ACTIVE
141-27-5	Geranial	ACTIVE
106-26-3	Neral	ACTIVE

· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **Proposition 65**· **Chemicals known to cause cancer:**

123-35-3	Myrcene
----------	---------

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value)**

80-56-8	alpha-Pinene	A4
127-91-3	beta-Pinene	A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 11)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/22/2023

Reviewed on 11/22/2023

Trade name: Orange (*Citrus sinensis*)

(Contd. of page 10)

· **Hazard pictograms**· **Signal word** *Warning*· **Hazard-determining components of labeling:**

limonene
Myrcene
alpha-Pinene
beta-Pinene

· **Hazard statements**

Flammable liquid and vapor.
Causes skin and eye irritation.
May cause an allergic skin reaction.
Suspected of causing cancer.

· **Precautionary statements**

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/fume/gas/mist/vapors/spray
Wash thoroughly after handling. Do not touch eyes.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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 on this label).
Take off contaminated clothing and wash it before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical help.
Wash contaminated clothing before reuse.
In case of fire: Use CO₂, powder or water spray to extinguish.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 12)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/22/2023

Reviewed on 11/22/2023

Trade name: Orange (Citrus sinensis)

(Contd. of page 11)

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Health Sciences and Product Safety
- **Contact:** Clell Fowles, RPh
- **Date of preparation / last revision** 11/22/2023
- **Abbreviations and acronyms:**
 - IMDG: International Maritime Code for Dangerous Goods
 - DOT: US Department of Transportation
 - IATA: International Air Transport Association
 - ELINECS: European Inventory of Existing Commercial Chemical Substances
 - ELINCS: European List of Notified Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - NFPA: National Fire Protection Association (USA)
 - HMIS: Hazardous Materials Identification System (USA)
 - VOC: Volatile Organic Compounds (USA, EU)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - NIOSH: National Institute for Occupational Safety
 - OSHA: Occupational Safety & Health
 - TLV: Threshold Limit Value
 - PEL: Permissible Exposure Limit
 - REL: Recommended Exposure Limit
 - Flammable Liquids 3: Flammable liquids – Category 3
 - Flammable Liquids 4: Flammable liquids – Category 4
 - Skin Irritation 2: Skin corrosion/irritation – Category 2
 - Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A
 - Eye Irritation 2B: Serious eye damage/eye irritation – Category 2B
 - Sensitization - Skin 1: Skin sensitisation – Category 1
 - Sensitization - Skin 1B: Skin sensitisation – Category 1B
 - Carcinogenicity 2: Carcinogenicity – Category 2
 - Aspiration Hazard 1: Aspiration hazard – Category 1
- *** Data compared to the previous version altered.**

US