

Safety Data Sheet acc. to OSHA HCS

Printing date 01/25/2024

Reviewed on 01/25/2024

1 Identification

- **Product identifier**
- **Trade name:** *Neroli (Citrus aurantium amara)*
- **Article number:** 3088, 308803, 308812, 308869, 36874, 308802
- **CAS Number:** 8016-38-4
- **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.

Aspiration Hazard 1 H304 May be fatal if swallowed and enters airways.



GHS07

Skin Irritation 2 H315 Causes skin irritation.

Eye Irritation 2A H319 Causes serious eye irritation.

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

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

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

Linalool
 beta-Pinene
 Myrcene
 limonene
 geraniol
 geranyl acetate
 Nerol
 alpha-Pinene

· **Hazard statements**

Flammable liquid and vapor.
 Causes skin irritation.
 Causes serious eye irritation.
 May cause an allergic skin reaction.
 Suspected of causing cancer.
 May be fatal if swallowed and enters airways.

· **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.
 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/doctor.
 Specific treatment (see on this label).
 Do NOT induce vomiting.
 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.
 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 advice/attention.

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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.

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

Health = 2

Fire = 2

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 2

Fire = 2

Reactivity = 0

· **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:**

78-70-6	Linalool	>25–≤50%
	⚠ Sensitization - Skin 1B, H317; Flammable Liquids 4, H227	
138-86-3	limonene	>10–≤25%
	⚠ Flammable Liquids 3, H226; ⚠ Skin Irritation 2, H315; Sensitization - Skin 1, H317	
127-91-3	beta-Pinene	>5.5–<10%
	⚠ Flammable Liquids 3, H226; ⚠ Aspiration Hazard 1, H304; ⚠ Skin Irritation 2, H315; Sensitization - Skin 1, H317	
115-95-7	linalyl acetate	>5.5–<10%
	⚠ Skin Irritation 2, H315; Eye Irritation 2A, H319; Flammable Liquids 4, H227	
13877-91-3	trans-beta-Ocimene	>5.5–≤10%
	⚠ Flammable Liquids 3, H226; ⚠ Aspiration Hazard 1, H304	
98-55-5	alpha-Terpineol	>1–≤5.5%
	⚠ Skin Irritation 2, H315; Eye Irritation 2A, H319; Flammable Liquids 4, H227	
40716-66-3	trans-Nerolidol	>1–≤5.5%
	⚠ Eye Irritation 2A, H319	

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106-24-1	geraniol	>1–≤5.5%
	⚠ Sensitization - Skin 1, H317	
105-87-3	geranyl acetate	>1–≤5.5%
	⚠ 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	
106-25-2	Nerol	≤1%
	⚠ Skin Irritation 2, H315; Eye Irritation 2A, H319; Sensitization - Skin 1, H317	
80-56-8	alpha-Pinene	≥0.1–<1%
	⚠ Flammable Liquids 3, H226; ⚠ Aspiration Hazard 1, H304; ⚠ Skin Irritation 2, H315; Sensitization - Skin 1, H317	
· Nonhazardous Components		
3387-41-5	Sabinene	>1–≤5.5%
141-12-8	Neryl acetate	>1–≤5.5%
106-28-5	trans,trans-Farnesol	>1–≤5.5%

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.
- **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.

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- **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:**

None of the ingredients is listed.

· **PAC-2:**

None of the ingredients is listed.

· **PAC-3:**

None of the ingredients is listed.

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 in the dark away from heat.
- **Further information about storage conditions:** Keep receptacle tightly sealed.

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· **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

127-91-3 beta-Pinene

TLV Long-term value: 20 ppm
DSEN, A4

80-56-8 alpha-Pinene

TLV Long-term value: 20 ppm
DSEN, A4· **Additional information:** The lists that were valid during the creation were used as basis.· **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.

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· **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: Amber colored

· **Odor:** Characteristic

· **Odor threshold:** Not determined.

· **pH-value at 20 °C (68 °F):** 3.2

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 177.6 °C (351.7 °F)

· **Flash point:** 56.9 °C (134.4 °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:** Not determined.

· **Explosion limits:**

Lower: 0.7 Vol %

Upper: 6.1 Vol %

· **Vapor pressure at 20 °C (68 °F):** 2.1 hPa (1.6 mm Hg)

· **Density at 20 °C (68 °F):** 0.871 g/cm³ (7.2685 lbs/gal)

· **Relative density** Not determined.

· **Vapor density** Not determined.

· **Evaporation rate** Not determined.

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- | | |
|---|--|
| · 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: | 13.3 % |
| VOC content: | 14.10 % |
| | 122.8 g/l / 1.02 lb/gal |
| · Solids content: | 7.5 % |
| · 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.
- **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	4.55 g/kg (rat)
Dermal	LD50	>5 g/kg (rabbit)

78-70-6 Linalool

Oral	LD50	2,790 mg/kg (rat)
Dermal	LD50	5,610 mg/kg (rabbit)

98-55-5 alpha-Terpineol

Oral	LD50	4,300 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.

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· **Additional toxicological information:**

Neroli: No known hazards or contraindications.

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
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· **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 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

· **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.

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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.

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

None of the ingredients is listed.

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

78-70-6	Linalool	ACTIVE
138-86-3	limonene	ACTIVE
127-91-3	beta-Pinene	ACTIVE
115-95-7	linalyl acetate	ACTIVE
13877-91-3	trans-beta-Ocimene	ACTIVE
98-55-5	alpha-Terpineol	ACTIVE
106-24-1	geraniol	ACTIVE
105-87-3	geranyl acetate	ACTIVE
123-35-3	Myrcene	ACTIVE
141-12-8	Neryl acetate	ACTIVE

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106-28-5	trans,trans-Farnesol	ACTIVE
106-25-2	Nerol	ACTIVE
80-56-8	alpha-Pinene	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)**

127-91-3 beta-Pinene

A4

80-56-8 alpha-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).· **Hazard pictograms**

GHS02



GHS07



GHS08

· **Signal word** Danger· **Hazard-determining components of labeling:**

Linalool
 beta-Pinene
 Myrcene
 limonene
 geraniol
 geranyl acetate
 Nerol
 alpha-Pinene

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· **Hazard statements**

Flammable liquid and vapor.
 Causes skin irritation.
 Causes serious eye irritation.
 May cause an allergic skin reaction.
 Suspected of causing cancer.
 May be fatal if swallowed and enters airways.

· **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.
 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/doctor.
 Specific treatment (see on this label).
 Do NOT induce vomiting.
 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.
 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 advice/attention.
 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.

· **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** 01/25/2024

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

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IATA: International Air Transport Association
 EINECS: 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
 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.**

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