

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/08/2018

Reviewed on 06/08/2018

1 Identification

- **Product identifier**
- **Trade name:** Rosemary (*Rosmarinus officinalis*)
- **Article number:**
3626, 3627, 5629, 346305, 362702, 362705, 362602, 362603, 3626605, 362608, 362610, 362611, 362617, 362622, 362629, 362676, 3626515, 562905, 562908, 562910, 562911, 562929, 5629531
- **CAS Number:** 8000-25-7
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Young Living
3125 Executive Parkway
Lehi, UT 84043
productsafety@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

Flam. Liq. 3 H226 Flammable liquid and vapor.



GHS08 Health hazard

STOT SE 2 H371 May cause damage to organs.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 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).

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/08/2018

Reviewed on 06/08/2018

Trade name: Rosemary (*Rosmarinus officinalis*)

(Contd. of page 1)

· Hazard pictograms

· Signal word *Danger*

· Hazard-determining components of labeling:

1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one
 eucalyptol
 alpha-Pinene
 beta-Pinene
 Limonene

· Hazard statements

Flammable liquid and vapor.
 Harmful if swallowed.
 Causes skin irritation.
 May cause an allergic skin reaction.
 May cause damage to organs.
 May be fatal if swallowed and enters airways.

· Precautionary statements

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.
 Do not breathe dust/fume/gas/mist/vapors/spray.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 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).
 Rinse mouth.
 Do NOT induce vomiting.
 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 IF exposed or concerned: Call a poison center/doctor.
 Take off contaminated clothing and wash it before reuse.
 If skin irritation or rash occurs: Get medical advice/attention.
 Wash contaminated clothing before reuse.
 In case of fire: Use for extinction: CO₂, powder or water spray.
 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)



(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/08/2018

Reviewed on 06/08/2018

Trade name: Rosemary (*Rosmarinus officinalis*)

(Contd. of page 2)

· **HMIS-ratings (scale 0 - 4)**

HEALTH	1	Health = 1
FIRE	2	Fire = 2
REACTIVITY	0	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:**

470-82-6	eucalyptol	>25–≤50%
	⚠ Flam. Liq. 3, H226; ⚠ Skin Sens. 1, H317	
76-22-2	1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one	>10–≤25%
	⚠ Flam. Sol. 2, H228; ⚠ Acute Tox. 3, H301; ⚠ STOT SE 2, H371; ⚠ Acute Tox. 4, H332	
80-56-8	alpha-Pinene	10%
	⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317	
127-91-3	beta-Pinene	>2.5–<10%
	⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317	
79-92-5	camphene	≥0.1–≤2.5%
	⚠ Flam. Sol. 1, H228; ⚠ Eye Irrit. 2A, H319	
78-70-6	Linalool	≥0.1–≤2.5%
	⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Flam. Liq. 4, H227	
138-86-3	Limonene	≥1–≤2.5%
	⚠ Flam. Liq. 3, H226; ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317	
123-35-3	Myrcene	≥0.1–≤2.5%
	⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319	
98-55-5	alpha-Terpineol	≥0.1–≤2.5%
	⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Flam. Liq. 4, H227	
507-70-0	Borneol	≥0.1–≤2.5%
	⚠ Flam. Sol. 2, H228; ⚠ STOT SE 2, H371	

4 First-aid measures

· **Description of first aid measures**· **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **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 06/08/2018

Reviewed on 06/08/2018

Trade name: Rosemary (*Rosmarinus officinalis*)

(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.
Apply vegetable oil with a sterile cloth around the eye to dilute any excess essential oil.
- **After swallowing:** Immediately call a 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.
- **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 item 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** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/08/2018

Reviewed on 06/08/2018

Trade name: Rosemary (*Rosmarinus officinalis*)

(Contd. of page 4)

Protect against electrostatic charges.

- **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.
- **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 item 7.

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

76-22-2 1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one

PEL	Long-term value: 2 mg/m ³
REL	Long-term value: 2 mg/m ³
TLV	Short-term value: 19 mg/m ³ , 3 ppm
	Long-term value: 12 mg/m ³ , 2 ppm

80-56-8 alpha-Pinene

TLV	Long-term value: 112 mg/m ³ , 20 ppm
	DSEN

127-91-3 beta-Pinene

TLV	Long-term value: 112 mg/m ³ , 20 ppm
	DSEN

138-86-3 Limonene

WEEL	Long-term value: 30 ppm
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- **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.
- Avoid contact with the skin.
- 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

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/08/2018

Reviewed on 06/08/2018

Trade name: Rosemary (*Rosmarinus officinalis*)

(Contd. of page 5)

- **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:	Oily Liquid
Color:	Pale Yellow
Odor:	Characteristic
Odor threshold:	Not determined.

- **pH-value at 20 °C (68 °F):** 3.6

- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	156.2 °C (313.2 °F)

- **Flash point:** 47.8 °C (118 °F)
Does not sustain combustion.

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** 255 °C (491 °F)

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

- **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

- **Vapor pressure at 20 °C (68 °F):** 0.3 hPa (0.2 mm Hg)

- **Density at 20 °C (68 °F):** 0.91 g/cm³ (7.59395 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.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/08/2018

Reviewed on 06/08/2018

Trade name: Rosemary (*Rosmarinus officinalis*)

(Contd. of page 6)

· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	1.5 %
VOC content:	1.50 %
	13.7 g/l / 0.11 lb/gl
Solids content:	35.4 %
· 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	~5 g/kg (rat)
Dermal	LD50	>10 g/kg (rabbit)

79-92-5 camphene

Oral	LD50	5,000 mg/kg (rat)
Dermal	LD50	2,500 mg/kg (rab)

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:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**

Rosemary: May be neurotoxic based off of camphor content. (1,8-cineole CT): Do not apply to or near the face of infants or children. Maximum use levels: Camphor CT 16.5% (dermal maximum) and 513 mg (daily oral maximum). Alpha-pinene 22% (dermal maximum) and 676 mg (daily adult oral maximum). Verbenone CT 6.5% (dermal maximum) and 192 mg (daily adult oral maximum). 10% on 25 volunteers it was neither irritating or sensitizing to skin. Oral LD50 in rats ~5 mL/kg. Dermal LD50 in rabbits >10 mL/kg.

The product shows the following dangers according to internally approved calculation methods for preparations:

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/08/2018

Reviewed on 06/08/2018

Trade name: Rosemary (*Rosmarinus officinalis*)

(Contd. of page 7)

Harmful
Irritant

· **Carcinogenic categories**

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

None of the ingredients is listed.

· **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.

14 Transport information

· **UN-Number**

· **DOT, ADN, IMDG, IATA** not regulated

· **UN proper shipping name**

· **DOT, ADN, IMDG, IATA** not regulated

· **Transport hazard class(es)**

· **DOT, ADN, IMDG, IATA**

· **Class** not regulated

(Contd. on page 9)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/08/2018

Reviewed on 06/08/2018

Trade name: Rosemary (*Rosmarinus officinalis*)

(Contd. of page 8)

- | | |
|---|-----------------|
| · 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
- 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):

All ingredients are 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 established by ACGIH)

76-22-2 1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one

A4

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 10)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/08/2018

Reviewed on 06/08/2018

Trade name: Rosemary (*Rosmarinus officinalis*)

(Contd. of page 9)

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

1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one
 eucalyptol
 alpha-Pinene
 beta-Pinene
 Limonene

· **Hazard statements**

Flammable liquid and vapor.
 Harmful if swallowed.
 Causes skin irritation.
 May cause an allergic skin reaction.
 May cause damage to organs.
 May be fatal if swallowed and enters airways.

· **Precautionary statements**

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.
 Do not breathe dust/fume/gas/mist/vapors/spray.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 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).
 Rinse mouth.
 Do NOT induce vomiting.
 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 IF exposed or concerned: Call a poison center/doctor.
 Take off contaminated clothing and wash it before reuse.
 If skin irritation or rash occurs: Get medical advice/attention.
 Wash contaminated clothing before reuse.
 In case of fire: Use for extinction: CO₂, powder or water spray.
 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

(Contd. on page 11)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/08/2018

Reviewed on 06/08/2018

Trade name: Rosemary (Rosmarinus officinalis)

(Contd. of page 10)

- **Contact:** Patricia Atkinson
- **Date of preparation / last revision** 06/08/2018 / -
- **Abbreviations and acronyms:**
 - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 - IMDG: International Maritime Code for Dangerous Goods
 - DOT: US Department of Transportation
 - IATA: International Air Transport Association
 - ACGIH: American Conference of Governmental Industrial Hygienists
 - 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
 - Flam. Liq. 3: Flammable liquids – Category 3
 - Flam. Liq. 4: Flammable liquids – Category 4
 - Flam. Sol. 1: Flammable solids – Category 1
 - Flam. Sol. 2: Flammable solids – Category 2
 - Acute Tox. 3: Acute toxicity – Category 3
 - Acute Tox. 4: Acute toxicity – Category 4
 - Skin Irrit. 2: Skin corrosion/irritation – Category 2
 - Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
 - Skin Sens. 1: Skin sensitisation – Category 1
 - STOT SE 2: Specific target organ toxicity (single exposure) – Category 2
 - Asp. Tox. 1: Aspiration hazard – Category 1
- *** Data compared to the previous version altered.**

US