Canden-Grey Essential Oils

## Rosemary oil (cosmetic grade)

Safety Data Sheet

revision 11/30/2017

| SECTION 1: Identification   |  |   |
|---|--|---|
| Product name  | :Rosemary oil (cosr  | metic grade)  |
|   | substance or mixture and uses a  | •   |
| 1.2. Relevant identified uses of the  | Substance of mixture and uses a  | auviseu ayainsi   |
| Use of the substance/mixture  | : Industrial uses: Uses of s   | substances as such or in preparations* at industrial sites                        |
| 1.3. Details of the supplier of the s   | afety data sheet   |   |
| Camden-Grey Essential Oils, Inc.<br>3401 31st Ave. SW, Naples, FL 34117<br>www.camdengrey.com |  |   |
| 1.4. Emergency telephone number   | r  |   |
| Emergency number  | 1-800-643-1439   |   |
| SECTION 2: Hazard(s) identifica   | ntion  |   |
| 2.1. Classification of the substanc   |  |   |
| GHS-US classification   |  |   |
| Flam. Liq. 3  | H226 -   | Flammable liquid and vapour.  |
| Skin Irrit. 2   | H315 -   | Causes skin irritation.   |
| Skin Sens. 1<br>STOT SE 2   | H317 -<br>H371 -   | May cause an allergic skin reaction.<br>May cause damage to organs.               |
| Asp. Tox. 1   | H304 -   | May be fatal if swallowed and enters airways.                                     |
| Aquatic Acute 2   | H401 -   | Toxic to aquatic life   |
| Aquatic Chronic 2   | H411 -   | Toxic to aquatic life with long lasting effects.                                  |
| Full text of H statements : see section 16  |  |   |
| 2.2. Label elements   |  |   |
| GHS-US labelling  |  |   |
|   | GHS02 GH   | S07 GHS08 GHS09   |
| Signal word (GHS-US)  | : Danger   |   |
| Hazard statements (GHS-US)  | : H226 - Flammable liquid<br>H304 - May be fatal if sw<br>H315 - Causes skin irrita<br>H317 - May cause an all<br>H371 - May cause dama<br>H401 - Toxic to aquatic l | vallowed and enters airways.<br>ation.<br>lergic skin reaction.<br>age to organs. |
| Precautionary statements (GHS-US)   |  | heat, hot surfaces, sparks, open flames and other ignition sources. No            |

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|   | <ul> <li>P303+P361+P353 - If on skin (or hai skin with water/shower</li> <li>P321 - Specific treatment (see suppl</li> <li>P331 - Do NOT induce vomiting.</li> <li>P332+P313 - If skin irritation occurs:</li> <li>P333+P313 - If skin irritation or rash</li> <li>P362+P364 - Take off contaminated</li> <li>P363 - Wash contaminated clothing</li> <li>P370+P378 - In case of fire: Use me</li> <li>P391 - Collect spillage.</li> <li>P403+P235 - Store in a well-ventilate</li> <li>P405 - Store locked up.</li> <li>P501 - Dispose in a safe manner in a</li> </ul> | Get medical advice/at<br>occurs: Get medical a<br>clothing and wash it b<br>before reuse.<br>dia other than water to<br>ad place. Keep cool. | ction on this label)<br>tention.<br>dvice/attention.<br>efore reuse.<br>extinguish.   |
|---|---|--|---|
| .3. Other hazards                         |   |  |   |
| lo additional information available       |   |  |   |
| .4. Unknown acute toxicity (GHS US)       |   |  |   |
| lot applicable                            |   |  |   |
| SECTION 3: Composition/information        | on on ingredients   |  |   |
| .1. Substances                            |   |  |   |
| lot applicable                            |   |  |   |
| .2. Mixtures                              |   |  |   |
| Name                                      | Product identifier  | %  | GHS-US classification   |
| Eucalyptol                                | (CAS-No.) 470-82-6  | 25 - 50  | Flam. Liq. 3, H226<br>Skin Sens. 1B, H317   |
| alpha-Pinene                              | (CAS-No.) 80-56-8   | 10 - 25  | Flam. Liq. 3, H226<br>Skin Irrit. 2, H315<br>Skin Sens. 1B, H317<br>Asp. Tox. 1, H304   |
| 1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one | (CAS-No.) 76-22-2   | 5 - 10   | Flam. Sol. 2, H228<br>Acute Tox. 4 (Oral), H302<br>Acute Tox. 4 (Inhalation:dust,mist),<br>H332<br>STOT SE 2, H371                        |
| Camphene                                  | (CAS-No.) 79-92-5   | 1 - 5  | Flam. Sol. 2, H228<br>Eye Irrit. 2, H319<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410  |
| CARYOPHYLLENE                             | (CAS-No.) 87-44-5   | 1 - 5  | Asp. Tox. 1, H304   |
| d-Limonene                                | (CAS-No.) 5989-27-5   | 1 - 5  | Flam. Liq. 3, H226<br>Skin Irrit. 2, H315<br>Skin Sens. 1B, H317<br>Asp. Tox. 1, H304<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |
| alpha-Terpineol                           | (CAS-No.) 98-55-5   | 1 - 5  | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319   |
| Linalool                                  | (CAS-No.) 78-70-6   | 1 - 5  | Flam. Liq. 4, H227<br>Skin Irrit. 2, H315   |
| Myrcene                                   | (CAS-No.) 123-35-3  | 1 - 5  | Flam. Liq. 3, H226<br>Skin Irrit. 2, H315<br>STOT SE 3, H335<br>Asp. Tox. 1, H304   |
| p-Cymene                                  | (CAS-No.) 99-87-6   | 1 - 5  | Flam. Liq. 3, H226<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411  |

Full text of 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  | : Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. |
| First-aid measures after eye contact   | : Rinse eyes with water as a precaution.   |
| First-aid measures after ingestion     | : Do not induce vomiting. Call a physician immediately.  |

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| 4.2. Most important symptoms and effects                             | , both acute and delayed  |
|--|---|
|  | : May cause an allergic skin reaction.  |
| , 1  | : Irritation. May cause an allergic skin reaction.  |
| Symptoms/effects after ingestion                                     | : Risk of lung oedema.  |
| 4.3. Indication of any immediate medical a<br>Treat symptomatically. | ttention and special treatment needed   |
| SECTION 5: Firefighting measures                                     |   |
| 5.1. Extinguishing media   |   |
|  | : Water spray. Dry powder. Foam. Carbon dioxide.  |
| 5.2. Special hazards arising from the subs                           |   |
|  | : Flammable liquid and vapour.  |
| Reactivity   | : On combustion, forms: carbon oxides (CO and CO2). Flammable liquid and vapour.  |
| 5.3. Advice for firefighters   |   |
|  | : Do not attempt to take action without suitable protective equipment. Self-contained breathing   |
|  | apparatus. Complete protective clothing.  |
| SECTION 6: Accidental release measu                                  | Ires  |
| 6.1. Personal precautions, protective equi                           | pment and emergency procedures  |
| General measures   | : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.   |
| 6.1.1. For non-emergency personnel                                   |   |
| Protective equipment   | : Gloves. Face shield. Protective clothing.   |
| Emergency procedures   | : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.   |
| 6.1.2. For emergency responders                                      |   |
| Protective equipment   | : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".  |
| Emergency procedures   | : Ventilate area.   |
| 6.2. Environmental precautions                                       |   |
| Avoid release to the environment. Prevent entry to                   | sewers and public waters. Notify authorities if liquid enters sewers or public waters.  |
| 6.3. Methods and material for containment                            | t and cleaning up   |
|  | Collect spillage.   |
| 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                                     |   |
| See Heading 8. Exposure controls and personal pr                     | otection. For further information refer to section 13.  |
| SECTION 7: Handling and storage                                      |   |
| 7.1. Precautions for safe handling                                   |   |
|  | : Handle empty containers with care because residual vapours are flammable.   |
| 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. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. |
| Hygiene measures   | : Wash hands thoroughly after handling. Wash contaminated clothing before reuse.<br>Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or<br>smoke when using this product. Always wash hands after handling the product.   |
| 7.2. Conditions for safe storage, including                          | any incompatibilities   |
| Technical measures   | : Proper grounding procedures to avoid static electricity should be followed. Explosion-free electrical equipment and lighting with earth. Ground/bond container and receiving equipment.   |

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| Storage conditions        | : Keep only in the original container in a cool, well ventilated place away from : Store in a well-<br>ventilated place. Keep cool. Keep container tightly closed. Store locked up. |
|---------------------------|---|
| Incompatible products     | : Strong bases. Strong acids.   |
| Incompatible materials    | : Sources of ignition. Direct sunlight. Heat sources.   |
| Heat and ignition sources | : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  |

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

0.0

| 1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one (76-22-2) |                        |                        |
|---|------------------------|------------------------|
| ACGIH   | ACGIH TWA (ppm)        | 2 ppm                  |
| ACGIH   | ACGIH STEL (ppm)       | 3 ppm                  |
| ACGIH   | Remark (ACGIH)         | Eye & URT irr; anosmia |
| OSHA  | OSHA PEL (TWA) (mg/m³) | 2 mg/m <sup>3</sup>    |

| 8.2. Exposure controls              |   |
|-------------------------------------|---|
| Appropriate engineering controls    | : Ensure good ventilation of the work station.  |
| Personal protective equipment       | : Avoid all unnecessary exposure.   |
|                                     |   |
| Hand protection                     | : Gloves.   |
| Eye protection                      | : Chemical goggles or safety glasses. Protective goggles.   |
| Skin and body protection            | : Wear suitable protective clothing.  |
| Respiratory protection              | : In case of insufficient ventilation, wear suitable respiratory equipment.                             |
| Environmental exposure controls     | : Avoid release to the environment.   |
| Other information                   | : Do not eat, drink or smoke during use.  |
| <b>SECTION 9: Physical and chen</b> | nical properties  |
| 9.1. Information on basic physica   | I and chemical properties   |
| Physical state                      | : Liquid  |
| Appearance                          | : Liquid.   |
| Colour                              | : colourless to yellow  |
| Odour                               | : There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure. |

Mixture contains one or more component(s) which have the following odour(s):

|  | camphor odour Lemon odour Mild odour Irritating/pungent odour Camphor odour Pleasant odour |
|--|--|
| Odour threshold                            | : No data available  |
| рН   | : No data available  |
| Melting point                              | : Not applicable   |
| Freezing point                             | : No data available  |
| Boiling point                              | : No data available  |
| Flash point                                | : 104 °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  |
| Oxidising properties                       | : No data available  |
| Vapour pressure                            | : 1 mm Hg 20°C   |
| Relative density                           | : 0.904 (0.89 - 0.91)  |
| Relative vapour density at 20 °C           | : No data available  |

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| Solubility   | : Poorly soluble in water.   |
|--|--|
| 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   |  |
| No additional information available  |  |
| SECTION 10: Stability and reactive   | itv  |
| 10.1. Reactivity   |  |
| On combustion, forms: carbon oxides (CO ar   | nd CO2). Flammable liquid and vapour.  |
| 10.2. Chemical stability   |  |
| Stable under normal conditions.  |  |
| 10.3. Possibility of hazardous reaction  | c  |
| Not established.   |  |
|  |  |
| 10.4. Conditions to avoid<br>Direct sublight. Extremely high or low temper   | atures. Open flame. Overheating. Sparks. Avoid contact with hot surfaces. Heat. No flames, no sparks.  |
| Eliminate all sources of ignition.   | aures. Open name. Overnealing. Sparks. Avoid contact with hot surfaces. Heat. No hames, no sparks.   |
| 10.5. Incompatible materials   |  |
| Strong acids. Strong bases.  |  |
| 10.6. Hazardous decomposition produ  | icts   |
| fume. Carbon monoxide. Carbon dioxide. Ma  | y release flammable gases.   |
| SECTION 11: Toxicological inform   | nation   |
| 11.1. Information on toxicological effe  | cts  |
|  |  |
| Acute toxicity   | : Not classified   |
|  |  |
| ROSEMARY OIL SPANISH WHC LOT# 10   | 06710 (8000-25-7)  |
| ROSEMARY OIL SPANISH WHC LOT# 10<br>LD50 oral rat  |  |
|  | 06710 (8000-25-7)         5000 mg/kg (Rat)         > 10000 mg/kg (Rabbit)  |
| LD50 oral rat  | 5000 mg/kg (Rat)   |
| LD50 oral rat<br>LD50 dermal rabbit<br>ATE US (oral)   | 5000 mg/kg (Rat)           > 10000 mg/kg (Rabbit)           5000 mg/kg bodyweight  |
| LD50 oral rat<br>LD50 dermal rabbit<br>ATE US (oral)<br>1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one  | 5000 mg/kg (Rat)           > 10000 mg/kg (Rabbit)           5000 mg/kg bodyweight  |
| LD50 oral rat<br>LD50 dermal rabbit<br>ATE US (oral)<br>1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one<br>ATE US (oral)   | 5000 mg/kg (Rat)           > 10000 mg/kg (Rabbit)           5000 mg/kg bodyweight   (76-22-2)           500 mg/kg bodyweight   |
| LD50 oral rat<br>LD50 dermal rabbit<br>ATE US (oral)<br>1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one<br>ATE US (oral)<br>ATE US (dust,mist)   | 5000 mg/kg (Rat)           > 10000 mg/kg (Rabbit)           5000 mg/kg bodyweight  |
| LD50 oral rat<br>LD50 dermal rabbit<br>ATE US (oral)<br><b>1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one</b><br>ATE US (oral)<br>ATE US (dust,mist)<br><b>Camphene (79-92-5)</b>   | 5000 mg/kg (Rat)         > 10000 mg/kg (Rabbit)         5000 mg/kg bodyweight         (76-22-2)         500 mg/kg bodyweight         1.5 mg/l/4h   |
| LD50 oral rat<br>LD50 dermal rabbit<br>ATE US (oral)<br>1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one<br>ATE US (oral)<br>ATE US (dust,mist)   | 5000 mg/kg (Rat)         > 10000 mg/kg (Rabbit)         5000 mg/kg bodyweight         (76-22-2)         500 mg/kg bodyweight         1.5 mg/l/4h         > 5000 mg/kg (Rat)  |
| LD50 oral rat<br>LD50 dermal rabbit<br>ATE US (oral)<br><b>1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one</b><br>ATE US (oral)<br>ATE US (dust,mist)<br><b>Camphene (79-92-5)</b><br>LD50 oral rat<br>LD50 dermal rabbit  | 5000 mg/kg (Rat)         > 10000 mg/kg (Rabbit)         5000 mg/kg bodyweight         (76-22-2)         500 mg/kg bodyweight         1.5 mg/l/4h   |
| LD50 oral rat<br>LD50 dermal rabbit<br>ATE US (oral)<br><b>1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one</b><br>ATE US (oral)<br>ATE US (dust,mist)<br><b>Camphene (79-92-5)</b><br>LD50 oral rat<br>LD50 dermal rabbit<br><b>d-Limonene (5989-27-5)</b>   | 5000 mg/kg (Rat)         > 10000 mg/kg (Rabbit)         5000 mg/kg bodyweight         (76-22-2)         500 mg/kg bodyweight         1.5 mg/l/4h         > 5000 mg/kg (Rat)         > 5000 mg/kg (Rat)         > 2500 mg/kg (Rat)  |
| LD50 oral rat<br>LD50 dermal rabbit<br>ATE US (oral)<br><b>1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one</b><br>ATE US (oral)<br>ATE US (dust,mist)<br><b>Camphene (79-92-5)</b><br>LD50 oral rat<br>LD50 dermal rabbit<br><b>d-Limonene (5989-27-5)</b><br>LD50 oral rat  | 5000 mg/kg (Rat)         > 10000 mg/kg (Rabbit)         5000 mg/kg bodyweight         (76-22-2)         500 mg/kg bodyweight         1.5 mg/l/4h         > 5000 mg/kg (Rat)         > 5000 mg/kg (Rat)         > 2500 mg/kg (Rat)         4400 mg/kg bodyweight  |
| LD50 oral ratLD50 dermal rabbitATE US (oral) <b>1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one</b> ATE US (oral)ATE US (dust,mist) <b>Camphene (79-92-5)</b> LD50 oral ratLD50 dermal rabbit <b>d-Limonene (5989-27-5)</b> LD50 oral ratLD50 oral ratLD50 oral ratLD50 oral ratLD50 oral rat  | 5000 mg/kg (Rat)         > 10000 mg/kg (Rabbit)         5000 mg/kg bodyweight         (76-22-2)         500 mg/kg bodyweight         1.5 mg/l/4h         -         > 5000 mg/kg (Rat)         > 5000 mg/kg (Rat)         > 2500 mg/kg (Rat)         > 2500 mg/kg (Rabbit)         -         4400 mg/kg bodyweight         > 5000 mg/kg bodyweight         > 5000 mg/kg bodyweight  |
| LD50 oral rat<br>LD50 dermal rabbit<br>ATE US (oral)<br><b>1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one</b><br>ATE US (oral)<br>ATE US (dust,mist)<br><b>Camphene (79-92-5)</b><br>LD50 oral rat<br>LD50 dermal rabbit<br><b>d-Limonene (5989-27-5)</b><br>LD50 oral rat  | 5000 mg/kg (Rat)         > 10000 mg/kg (Rabbit)         5000 mg/kg bodyweight         (76-22-2)         500 mg/kg bodyweight         1.5 mg/l/4h         > 5000 mg/kg (Rat)         > 5000 mg/kg (Rat)         > 2500 mg/kg (Rat)         4400 mg/kg bodyweight  |
| LD50 oral ratLD50 dermal rabbitATE US (oral) <b>1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one</b> ATE US (oral)ATE US (dust,mist) <b>Camphene (79-92-5)</b> LD50 oral ratLD50 dermal rabbit <b>d-Limonene (5989-27-5)</b> LD50 oral ratLD50 oral ratLD50 oral ratLD50 oral ratLD50 oral rat  | 5000 mg/kg (Rat)         > 10000 mg/kg (Rabbit)         5000 mg/kg bodyweight         (76-22-2)         500 mg/kg bodyweight         1.5 mg/l/4h         -         > 5000 mg/kg (Rat)         > 5000 mg/kg (Rat)         > 2500 mg/kg (Rat)         > 2500 mg/kg (Rabbit)         -         4400 mg/kg bodyweight         > 5000 mg/kg bodyweight         > 5000 mg/kg bodyweight  |
| LD50 oral ratLD50 dermal rabbitATE US (oral) <b>1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one</b> ATE US (oral)ATE US (dust,mist) <b>Camphene (79-92-5)</b> LD50 oral ratLD50 dermal rabbit <b>d-Limonene (5989-27-5)</b> LD50 oral ratLD50 dermal rabbit | 5000 mg/kg (Rat)         > 10000 mg/kg (Rabbit)         5000 mg/kg bodyweight         (76-22-2)         500 mg/kg bodyweight         1.5 mg/l/4h         -         > 5000 mg/kg (Rat)         > 25000 mg/kg bodyweight         44000 mg/kg bodyweight         44000 mg/kg bodyweight         44000 mg/kg bodyweight  |
| LD50 oral ratLD50 dermal rabbitATE US (oral) <b>1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one</b> ATE US (oral)ATE US (oral)ATE US (dust,mist) <b>Camphene (79-92-5)</b> LD50 oral ratLD50 dermal rabbit <b>d-Limonene (5989-27-5)</b> LD50 dermal rabbitATE US (oral)Skin corrosion/irritationSerious eye damage/irritation                         | 5000 mg/kg (Rat)         > 10000 mg/kg (Rabbit)         5000 mg/kg bodyweight         (76-22-2)         500 mg/kg bodyweight         1.5 mg/l/4h         > 5000 mg/kg (Rat)         > 2500 mg/kg (Rat)         > 2500 mg/kg (Rat)         > 2500 mg/kg (Rat)         > 2500 mg/kg (Rat)            4400 mg/kg bodyweight         4400 mg/kg bodyweight         > 5000 mg/kg bodyweight         S000 mg/kg bodyweight         Not classified  |
| LD50 oral ratLD50 dermal rabbitATE US (oral) <b>1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one</b> ATE US (oral)ATE US (dust,mist) <b>Camphene (79-92-5)</b> LD50 oral ratLD50 dermal rabbit <b>d-Limonene (5989-27-5)</b> LD50 dermal rabbitATE US (oral)Skin corrosion/irritationSerious eye damage/irritationRespiratory or skin sensitisation     | 5000 mg/kg (Rat)         > 10000 mg/kg (Rabbit)         5000 mg/kg bodyweight         (76-22-2)         5000 mg/kg bodyweight         1.5 mg/l/4h         >         > 5000 mg/kg (Rat)         > 2500 mg/kg bodyweight         4400 mg/kg bodyweight         > 5000 mg/kg bodyweight         4400 mg/kg bodyweight         > 5000 mg/kg bodyweight         Expension         Causes skin irritation.   |
| LD50 oral ratLD50 dermal rabbitATE US (oral) <b>1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one</b> ATE US (oral)ATE US (oral)ATE US (dust,mist) <b>Camphene (79-92-5)</b> LD50 oral ratLD50 dermal rabbit <b>d-Limonene (5989-27-5)</b> LD50 dermal rabbitATE US (oral)Skin corrosion/irritationSerious eye damage/irritation                         | 5000 mg/kg (Rat)         > 10000 mg/kg (Rabbit)         5000 mg/kg bodyweight         (76-22-2)         500 mg/kg bodyweight         1.5 mg/l/4h         > 5000 mg/kg (Rat)         > 2500 mg/kg (Rat)         > 2500 mg/kg (Rat)         > 2500 mg/kg (Rat)         > 2500 mg/kg (Rat)               4400 mg/kg bodyweight         4400 mg/kg bodyweight <td< td=""></td<>  |
| LD50 oral ratLD50 dermal rabbitATE US (oral) <b>1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one</b> ATE US (oral)ATE US (dust,mist) <b>Camphene (79-92-5)</b> LD50 oral ratLD50 dermal rabbit <b>d-Limonene (5989-27-5)</b> LD50 dermal rabbitATE US (oral)Skin corrosion/irritationSerious eye damage/irritationRespiratory or skin sensitisation     | 5000 mg/kg (Rat)         > 10000 mg/kg (Rabbit)         5000 mg/kg bodyweight         (76-22-2)         500 mg/kg bodyweight         1.5 mg/l/4h         > 5000 mg/kg (Rat)         > 2500 mg/kg (Rat)         > 2500 mg/kg (Rabbit)         4400 mg/kg bodyweight         > 5000 mg/kg bodyweight         4400 mg/kg bodyweight         > 5000 mg/kg bodyweight         Stopp and the |

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| d-Limonene (5989-27-5)                              |   |
|---|---|
| IARC group  | 3 - Not classifiable  |
|   |   |
| Reproductive toxicity                               | : Not classified  |
|   | Based on available data, the classification criteria are not met    |
| Specific target organ toxicity (single exposure)    | : May cause damage to organs.                                       |
|   |   |
| Specific target organ toxicity (repeated exposure)  | : Not classified  |
| exposure)   |   |
| Aspiration hazard                                   | : May be fatal if swallowed and enters airways.                     |
| •   |   |
| Potential adverse human health effects and symptoms | : Based on available data, the classification criteria are not met. |
|   |   |
| Symptoms/effects after inhalation                   | : May cause an allergic skin reaction.                              |
| Symptoms/effects after skin contact                 | : Irritation. May cause an allergic skin reaction.                  |
| Symptoms/effects after ingestion                    | : Risk of lung oedema.  |
| SECTION 12: Ecological information                  |   |
| SECTION 12: Ecological information                  |   |
| 12.1. Toxicity<br>Ecology - general                 | : Toxic to aquatic life with long lasting effects.                  |
|   |   |
| Eucalyptol (470-82-6)                               |   |
| LC50 fish 1   | 102 mg/l (96 h; Pimephales promelas)                                |
| Threshold limit other aquatic organisms 1           | 40.071 mg/l (720 h; Pimephales promelas; QSAR)                      |
| Camphene (79-92-5)                                  |   |
| LC50 fish 1   | 0.72 mg/l (96 h; Brachydanio rerio; Technical product)              |
| EC50 Daphnia 1                                      | 46 mg/l (24 h; Daphnia magna; Technical product)                    |
| EC50 other aquatic organisms 1                      | > 1000 mg/l (3 h; Activated sludge)                                 |
| LC50 fish 2   | 1.7 ppm (96 h; Cyprinodon variegatus; Static system)                |
| EC50 Daphnia 2                                      | 22 mg/l (48 h; Daphnia magna; Technical product)                    |
| Threshold limit algae 2                             | 580 mg/l (72 h; Scenedesmus subspicatus; Technical product)         |
| 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)                           |
| alpha-Terpineol (98-55-5)                           |   |
| LC50 fish 1   | 10 - 100 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)           |
| 12.2. Persistence and degradability                 |   |
| Eucalyptol (470-82-6)                               |   |
| Persistence and degradability                       | Water : Not biodegradable.  |
| · ·····   |   |

| Eucaryptol (470-62-6)                               |                                  |  |
|---|----------------------------------|--|
| Persistence and degradability                       | Water : Not biodegradable.       |  |
| alpha-Pinene (80-56-8)                              |                                  |  |
| Persistence and degradability                       | Not established.                 |  |
| 1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one (76-22-2) |                                  |  |
| Persistence and degradability                       | Not established.                 |  |
| Camphene (79-92-5)                                  |                                  |  |
| Persistence and degradability                       | not readily degradable in water. |  |
| CARYOPHYLLENE (87-44-5)                             |                                  |  |
| Persistence and degradability                       | Not established.                 |  |

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| d-Limonene (5989-27-5)                          |   |
|---|---|
| Persistence and degradability                   | May cause long-term adverse effects in the environment. Readily biodegradable in water.<br>Adsorbs into the soil. |
| ThOD  | 3.29 g O <sub>2</sub> /g substance  |
| alpha-Terpineol (98-55-5)                       |   |
| Persistence and degradability                   | Readily biodegradable in water. easily degradable in the soil.  |
| ThOD  | 2.9 g O <sub>2</sub> /g substance   |
| Linalool (78-70-6)                              |   |
| Persistence and degradability                   | Not established.  |
| Myrcene (123-35-3)                              |   |
| Persistence and degradability                   | No data available.  |
| p-Cymene (99-87-6)                              |   |
| Persistence and degradability                   | May cause long-term adverse effects in the environment.   |
| 12.3. Bioaccumulative potential                 |   |
| Eucalyptol (470-82-6)                           |   |
| Log Pow   | 1.84 (Calculated)   |
| Bioaccumulative potential                       | Low bioaccumulation potential.  |
| alpha-Pinene (80-56-8)                          |   |
| Bioaccumulative potential                       | Not established.  |
| 1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one (76-2 | 22-2)   |
| Bioaccumulative potential                       | Not established.  |
| Camphene (79-92-5)                              |   |
| BCF fish 1                                      | 432 - 1290 (Cyprinus carpio; Test duration: 8 weeks)  |
| Log Pow   | 4.02  |
| CARYOPHYLLENE (87-44-5)                         |   |
| Bioaccumulative potential                       | Not established.  |
| 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.   |
| alpha-Terpineol (98-55-5)                       |   |
| Log Pow   | 2.57 (Estimated value)  |
| Bioaccumulative potential                       | Low bioaccumulation potential.  |
| Linalool (78-70-6)                              |   |
| Bioaccumulative potential                       | Not established.  |
| Myrcene (123-35-3)                              |   |
| Bioaccumulative potential                       | No data available.  |
| p-Cymene (99-87-6)                              |   |
| Bioaccumulative potential                       | Not established.  |
| 12.4 Mobility in soil                           |   |

### 12.4. Mobility in soil

No additional information available

| 12.5. Other adverse effects  |                                       |
|------------------------------|---------------------------------------|
|                              |                                       |
| Effect on the global warming | : No known effects from this product. |
|                              |                                       |
| Other information            | : Avoid release to the environment.   |
|                              |                                       |

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| SECTION 13: Disposal consideration<br>3.1. Waste treatment methods   |   |
|--|---|
| Waste treatment methods  | : Dispose of contents/container in accordance with licensed collector's sorting instructions. |
| Additional information   | : Flammable vapours may accumulate in the container.  |
| Ecology - waste materials  | : Avoid release to the environment. Hazardous waste due to toxicity.                          |
| SECTION 14: Transport information  |   |
| Department of Transportation (DOT)   |   |
| In accordance with DOT   |   |
| Not regulated for transport  |   |
| Transportation of Dangerous Goods  |   |
| Passenger Carrying Road Vehicle or Passenger   | : 111   |
| Carrying Railway Vehicle Index   |   |
| Transport by sea   |   |
| UN-No. (IMDG)  | : 1197  |
| Proper Shipping Name (IMDG)  | : EXTRACTS, FLAVOURING, LIQUID  |
| Class (IMDG)   | : 3 - Flammable liquids   |
| Packing group (IMDG)   | : III - substances presenting low danger  |
| MFAG-No  | : 127;128   |
| Air transport  |   |
| UN-No. (IATA)  | : 1197  |
| Proper Shipping Name (IATA)  | : Extracts, flavouring, liquid  |
| Class (IATA)   | : 3 - Flammable Liquids   |
| Packing group (IATA)   | : III - Minor Danger  |
| Civil Aeronautics Law  | : Flammable liquids   |
| 15.1. US Federal regulations<br>ROSEMARY OIL SPANISH WHC LOT# 106710<br>Listed on the United States TSCA (Toxic Substa |   |
| Eucalyptol (470-82-6)  |   |
| Listed on the United States TSCA (Toxic Substa   | ances Control Act) inventory  |
| alpha-Pinene (80-56-8)   |   |
| Listed on the United States TSCA (Toxic Substa   | ances Control Act) inventory  |
| 1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one (76  |   |
| Listed on the United States TSCA (Toxic Substa   | •   |
| Camphene (79-92-5)   |   |
| Listed on the United States TSCA (Toxic Substa   | ances Control Act) inventory  |
| CARYOPHYLLENE (87-44-5)  |   |
| Listed on the United States TSCA (Toxic Substa   | ances Control Act) inventory  |
| d-Limonene (5989-27-5)   |   |
|  | ances Control Act) inventory  |
| Listed on the United States TSCA (Toxic Substa   |   |
| Listed on the United States TSCA (Toxic Substa<br>Borneol (507-70-0)   |   |
|  |   |

alpha-Terpineol (98-55-5)

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 Myrcene (123-35-3)

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

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#### p-Cymene (99-87-6)

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

#### 15.2. International regulations

#### CANADA

Eucalyptol (470-82-6)

Listed on the Canadian DSL (Domestic Substances List)

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

Listed on the Canadian DSL (Domestic Substances List)

#### Camphene (79-92-5)

Listed on the Canadian DSL (Domestic Substances List)

#### CARYOPHYLLENE (87-44-5)

Listed on the Canadian DSL (Domestic Substances List)

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

Listed on the Canadian DSL (Domestic Substances List)

#### p-Cymene (99-87-6)

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

| Myrcene (123-35-3)                                       |  |   |   |                                     |
|--|--|---|---|-------------------------------------|
| U.S California -<br>Proposition 65 -<br>Carcinogens List | U.S California -<br>Proposition 65 -<br>Developmental Toxicity | U.S California -<br>Proposition 65 -<br>Reproductive Toxicity -<br>Female | U.S California -<br>Proposition 65 -<br>Reproductive Toxicity -<br>Male | No significant risk<br>level (NSRL) |
| Yes  | No   | No  | No  |                                     |

| alpha-Pinene (80-56-8)   |  |
|--|--|
| U.S New Jersey - Right to Know Hazardous Substance List<br>U.S Pennsylvania - RTK (Right to Know) List |  |
| 1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one (76-22-2)  |  |
| U.S New Jersey - Right to Know Hazardous Substance List  |  |
|  |  |
| Borneol (507-70-0)   |  |
|  |  |

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

#### p-Cymene (99-87-6)

U.S. - Pennsylvania - RTK (Right to Know) List

| SECTION 16: Other information |  |
|-------------------------------|--|
| Data sources                  | : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE<br>COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and<br>mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending<br>Regulation (EC) No 1907/2006. |

Other information

: None.

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| H226 | Flammable liquid and vapour.                          |
|------|---|
| H227 | Combustible liquid                                    |
| H228 | Flammable solid.                                      |
| H302 | Harmful if swallowed.                                 |
| H304 | May be fatal if swallowed and enters airways.         |
| H315 | Causes skin irritation.                               |
| H317 | May cause an allergic skin reaction.                  |
| H319 | Causes serious eye irritation.                        |
| H332 | Harmful if inhaled.                                   |
| H335 | May cause respiratory irritation.                     |
| H371 | May cause damage to organs.                           |
| H400 | Very toxic to aquatic life.                           |
| H401 | Toxic to aquatic life                                 |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects.      |

| : 0 Minimal Hazard - No significant risk to health   |
|--|
| : 2 Moderate Hazard - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F but below 200 F. (Classes II & IIIA) |
| : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.  |
| : B<br>B - Safety glasses, Gloves  |
|  |

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