Safety Data Sheet

Organic Rosemary Essential Oil (Rosmarinus officinalis)

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & THE COMPANY/UNDERTAKING

1.1 Product Identifier

| Biological Definition | Rosmarinus Officinalis Leaf Oil is the essential oil obtained from the flowering tops and leaves of the Rosemary, Rosmarinus officinalis L., Lamiaceae |
| Synonyms & Trade Names | Rosmarinus Officinalis Leaf Oil |
| CAS-No | 84604-14-8 / 8000-25-7 |
| EC No | 283-291-9 |
| EINECS No | 283-291-9 |

1.2 Relative identified uses of the substance or mixture and uses advised against

No additional data available.

1.3 Details of the supplier of the safety data sheet

NHR Organic Oils, 24 CHATHAM PLACE, BRIGHTON, BN1 3TN, UK.

1.4 Emergency Tel. No.

0845 310 8066

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

The Full Text for all Hazard Statements are displayed in Section 16.

Classification (EC 1272/2008)

- Flammable liquid, Category 3 (Flam. Liq. 3, H226).
- Skin sensitisation, Category 1 (Skin Sens. 1, H317).
- Specific target organ toxicity (single exposure), Category 2 (STOT SE 2, H371).
- Hazardous to the aquatic environment - Chronic hazard, Category 2 (Aquatic Chronic 2, H411).

2.2 Label Elements

Label in accordance with (EC) No 1272/2008

| GHS08 | GHS09 | GHS07 | GHS02 |

Signal Word Warning

Contains

EC 200-945-0 CAMPHOR L(XN68)=10% X 601-029-00-7 (R)-P-MENTHA-1,8-DIENE

Hazard Statements

H226 Flammable liquid and vapour.
H317 May cause an allergic skin reaction.
<table>
<thead>
<tr>
<th>Precautionary Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.</td>
</tr>
<tr>
<td>P273 Avoid release to the environment.</td>
</tr>
<tr>
<td>P280 Wear protective gloves/protective clothing/eye protection/face protection.</td>
</tr>
<tr>
<td>Supplementary Precautionary Statements</td>
</tr>
<tr>
<td>---------------------------------</td>
</tr>
<tr>
<td>P302 + P352 IF ON SKIN: Wash with plenty of soap and water.</td>
</tr>
<tr>
<td>P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.</td>
</tr>
<tr>
<td>P403 + P235 Store in a well-ventilated place. Keep cool.</td>
</tr>
</tbody>
</table>

### 2.3 Other Hazards

| PBT or vPvB according to Annex XIII | The substance does not satisfy the PBT or vPvP criteria in accordance with annexe XIII of the REACH regulations EC 1907/2006. |
|---------------------------------|
| Adverse physio-chemical properties | No additional data available |
| Adverse effects on human health | No additional data available |

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2 Mixtures

<table>
<thead>
<tr>
<th><strong>50.0% 1,4-CINEOLE</strong> CAS: 470-67-7, EC: 207-428-9</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>20.0% PINENES (ALPHA OR BETA)</strong></td>
</tr>
<tr>
<td>Classification (EC 1272/2008) Dgr Flam. Liq. 3, H226, Asp. Tox. 1, H304, Skin Sens. 1, H317, Aquatic Acute 1, H400, M Acute = 1, Aquatic Chronic 1, H410, M Chronic = 1</td>
</tr>
<tr>
<td><strong>15.0% HYDROCARBONS</strong></td>
</tr>
<tr>
<td>Classification (EC 1272/2008) Danger Asp. Tox. 1, H304</td>
</tr>
<tr>
<td><strong>10.0% CAMPHOR</strong> CAS: 76-22-2, EC: 200-945-0</td>
</tr>
<tr>
<td>Classification (EC 1272/2008) -</td>
</tr>
<tr>
<td><strong>4.0% CAMPHENE</strong> CAS: 79-92-5, EC: 201-234-8</td>
</tr>
<tr>
<td>Classification (EC 1272/2008) Danger, Flam. Sol. 2, H228, Eye Irrit. 2, H319, Aquatic Acute 1, H400, M Acute = 1, Aquatic Chronic 1, H410, M Chronic = 1</td>
</tr>
<tr>
<td><strong>3.0% BORNEOL</strong> CAS: 507-70-0, EC: 208-080-0</td>
</tr>
<tr>
<td><strong>3.0% BETA-CARYOPHYLLENE</strong> CAS: 87-44-5, EC: 201-746-1</td>
</tr>
<tr>
<td>Classification (EC 1272/2008) Danger, Asp. Tox. 1, H304</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

4.1 Description of first aid measures

<table>
<thead>
<tr>
<th>Description</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Remove victim immediately from source of exposure. Get medical attention if any discomfort continues.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Do not give the patient anything orally. In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor. Seek medical attention immediately, showing the label.</td>
</tr>
<tr>
<td>Skin Contact</td>
<td>Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner. Watch out for any remaining product between skin and clothing, watches, shoes, etc. In the event of an allergic reaction, seek medical attention. If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.</td>
</tr>
<tr>
<td>Eye Contact</td>
<td>Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately. Continue to rinse.</td>
</tr>
</tbody>
</table>

4.2 Most important symptoms and effects, both acute and delayed

No additional data available

4.3 Indication of any immediate medical attention and special treatment needed

No additional data available

05. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Keep packages near the fire cool, to prevent pressurised containers from bursting.

Suitable methods of extinction
Prevent the effluent of fire-fighting measures from entering drains or waterways.

Unsuitable methods of extinction
In the event of a fire, do not use:
### 5.2 Special hazards arising from the product

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.
Do not breathe in smoke.
In the event of a fire, the following may be formed:
- carbon monoxide (CO)
- carbon dioxide (CO2)

### 5.3 Advice for firefighters

Fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

### 6. ACCIDENTAL RELEASE MEASURES

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

Consult the safety measures listed under headings 7 and 8.

For non first aid worker
Avoid any contact with the skin and eyes.

For first aid worker
First aid workers will be equipped with suitable personal protective equipment (See section 8).

#### 6.2 Environmental Precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.
Prevent any material from entering drains or waterways.
If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures
Use drums to dispose of collected waste in compliance with current regulations (see section 13).

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

Clean preferably with a detergent, do not use solvents.

#### 6.4 Reference to other sections

No additional data available

### 7. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

Individuals with a history of skin sensitisation should not, under any circumstance, handle this substance.
Always wash hands after handling.
Remove and wash contaminated clothing before re-using.
Remove contaminated clothing and protective equipment before entering eating areas.

Fire prevention:
Handle in well-ventilated areas.
Prevent the formation of flammable or explosive concentrations in air and avoid vapour concentrations higher than the occupational exposure limits.
Never inhale this substance.
Prevent the accumulation of electrostatic charges with connections to earth.
Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.
Keep packages tightly closed and away from sources of heat, sparks and naked flames.
Do not use tools which may produce sparks. Do not smoke. Prevent access by unauthorised personnel.

**Recommended equipment and procedures:**
For personal protection, see section 8. Observe precautions stated on label and also industrial safety regulations.

**Prohibited equipment and procedures:**
No smoking, eating or drinking in areas where the substance is used. Never open the packages under pressure.

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

**Storage**
- Keep the container tightly closed in a dry, well-ventilated place.
- Keep away from food and drink, including those for animals.
- Keep away from all sources of ignition - do not smoke.
- Keep well away from all sources of ignition, heat and direct sunlight.
- Avoid accumulation of electrostatic charges.

**Packaging**
- Always keep in packaging made of an identical material to the original.

### 7.3 Specific end use(s)
No additional data available.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

- **- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010):**
  - CAS 76-22-2
  - TWA: 2 ppm
  - STEL: 3 ppm
  - Ceiling: -
  - Definition: -
  - Criteria: -

- **- France (INRS - ED984 :2008):**
  - CAS 76-22-2
  - VME-ppm: 2
  - VME-mg/m3: 12
  - VLE-ppm: -
  - VLE-mg/m3: -
  - Notes: -
  - TMP No: -

- **- UK / WEL (Workplace exposure limits, EH40/2005, 2007):**
  - CAS 76-22-2
  - TWA: 2 ppm
  - STEL: 3 ppm
  - Ceiling: -
  - Definition: -
  - Criteria: -

#### 8.2 Exposure controls

**Protective Equipment**

- **Process Conditions**
  - Provide eyewash station.
- **Engineering Measures**
  - Provide adequate ventilation.
- **Respiratory Equipment**
  - For high concentrations use respiratory equipment.
- **Hand Protection**
  - Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.
  - Gloves must be selected according to the application and duration of use at the
workstation. Protective gloves need to be selected according to their suitability for the workstation in question: other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required. Recommended properties:
- Impervious gloves in accordance with standard EN374

Eye Protection
Avoid contact with eyes. Use eye protectors designed to protect against liquid splashes. Before handling, wear safety goggles in accordance with standard EN166.

Other Protection
Use personal protective equipment that is clean and has been properly maintained. Store personal protective equipment in a clean place, away from the work area.

Hygiene Measures
Good personal hygiene practices are always advisable, especially when working with chemicals / oils. Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

Personal Protection
Use personal protection according to Directive 89/686/EEC.

Skin Protection
Avoid skin contact. Wear suitable protective clothing. Suitable type of protective clothing:
- In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.
- In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.
Work clothing worn by personnel shall be laundered regularly. After contact with the product, all parts of the body that have been soiled must be washed.

Environmental Exposure Controls
Avoid discharging into drainage water. Only eliminate by authorised companies.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Fluid liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless to Pale yellow</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic, cineol, more or less camphor</td>
</tr>
<tr>
<td>Relative Density</td>
<td>0.900 - 0.920 @ 20°C</td>
</tr>
<tr>
<td>Flash Point (°C)</td>
<td>23°C &lt;= PE &lt;= 55°C</td>
</tr>
<tr>
<td>Refractive Index</td>
<td>1.460 - 1.475 @ 20°C</td>
</tr>
<tr>
<td>Melting Point (°C)</td>
<td>No additional data available.</td>
</tr>
<tr>
<td>Boiling Point (°C)</td>
<td>No additional data available.</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>No additional data available.</td>
</tr>
<tr>
<td>Solubility in Water @20°C</td>
<td>Insoluble in water.</td>
</tr>
<tr>
<td>Auto-ignition temperature (°C)</td>
<td>No additional data available.</td>
</tr>
</tbody>
</table>

9.2 Other information

No additional data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No additional data available
10.2 Chemical stability
This substance is stable under the recommended handling and storage conditions in section 7.

10.3 Possible hazardous reactions
No additional data available

10.4 Conditions to Avoid
Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.
Avoid:
- accumulation of electrostatic charges.
- heating
- heat
- flames and hot surfaces

10.5 Incompatible materials
Keep away from:
- water

10.6 Hazardous Decomposition Products
The thermal decomposition may release/form:
- carbon monoxide (CO)
- carbon dioxide (CO2)

11. TOXOLOGICAL INFORMATION

11.1 Information on toxicological effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity</td>
<td>No toxicological data available for the substances.</td>
</tr>
<tr>
<td>Skin corrosion / irritation</td>
<td>May cause an allergic reaction by skin contact.</td>
</tr>
<tr>
<td>Serious eye damage / irritation</td>
<td>May cause damage to organs.</td>
</tr>
<tr>
<td>Respiratory or skin sensitisation</td>
<td>No additional data available</td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td>No additional data available</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>No additional data available</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>No additional data available</td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>No additional data available</td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>No additional data available</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>No additional data available</td>
</tr>
<tr>
<td>Photo-toxicity</td>
<td>No additional data available</td>
</tr>
<tr>
<td>Other Information</td>
<td>Monograph(s) from the IARC (International Agency for Research on Cancer) : CAS 5989-27-5 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

12.1 Toxicity
Toxic to aquatic life with long lasting effects.
The product must not be allowed to run into drains or waterways.

12.2 Persistence & degradability
No additional data available.

12.3 Bioaccumulation Potential
No additional data available.
### 12.4 Mobility in soil

No additional data available.

### 12.5 Results of PBT and vPvB Assessment

No additional data available

### 12.6 Other adverse effects

No additional data available

### 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

Do not pour into drains or waterways.

Waste:
Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.
Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company. Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:
Empty container completely. Keep label(s) on container.
Give to a certified disposal contractor

### 14. TRANSPORT INFORMATION

#### 14.1 UN number

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UN No. Road</td>
<td>1169</td>
</tr>
<tr>
<td>UN No. SEA</td>
<td>1169</td>
</tr>
<tr>
<td>UN No. AIR</td>
<td>1169</td>
</tr>
</tbody>
</table>

#### 14.2 UN proper shipping name

UN1169=EXTRACTS, AROMATIC, LIQUID

#### 14.3 Transport hazard class(es)

- ADR/RID/ADN Class 3
- ADR/RID/ADN Class 3
- IMDG Class 3
- ICAO Class/Division 3

Transport Labels

![Flammable]

#### 14.4 Packing group

- ADR/RID/ADN Packing group III
- IMDG Packing group III
- ICAO Packing group III

#### 14.5 Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
14.6 Special precautions for user

EMS F-E,S-D
Emergency Action Code F1
Hazard No. (ADR) 90 Environmentally hazardous substance
Tunnel Restriction Code (D/E)

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code

No additional data available

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Statutory Instruments

Guidance Notes
Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

EU Legislation

15.2 Chemical safety assessment

No additional information available.

16. OTHER INFORMATION

| Hazard and/or Precautionary Statements in Full | H226 Flammable liquid and vapour. |
| H228 Flammable solid. |
| 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. |
| H400 Very toxic to aquatic life. |
| H410 Very toxic to aquatic life with long lasting effects. |
| H411 Toxic to aquatic life with long lasting effects. |
| H412 Harmful to aquatic life with long lasting effects. |

Other Information
None

Revision Date
02/07/15

Reason for revision
New SDS

Rev No/Repl, SDS Generated
01
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