

SAFETY DATA SHEET

In accordance with REACH Regulation EC No.1907/2006

Product: Rosemary oil FPD-2016A-LM6045

Version: 5

Section 1. Identification of the substance or the mixture and of the supplier

1.1 Product Identifier

Product identifier: Rosemary oil; CAS: 84604-14-8

Other identifiers: Garden rosemary oil

1.2 Relevant identified uses of the substance of mixture and uses advised against

Product uses: Fragrances

1.3 Details of the supplier of the safety data sheet

Company name: Norfolk Essential Oils

Company address: Pates Farm
Wisbech Road
Tipsend
Welney
Wisbech
PE14 9SQ

Contact: Regulatory Affairs

E-Mail address: info@ne oils.com

Company phone: 01354 638065

1.4 Emergency telephone number

Emergency phone: 01354 638065

Section 2. Hazards identification

2.1 Classification of the substance or mixture

Classification under Regulation (EC) No 1272/2008

Class and category of danger: Flammable Liquid, Hazard Category 3
Skin Corrosion / Irritation Category 2
Sensitization - Skin Category 1
Aspiration Hazard Category 1
Hazardous to the Aquatic Environment - Acute Hazard Category 1
Hazardous to the Aquatic Environment - Long-term Hazard Category 1
H226, Flammable liquid and vapour.
H304, May be fatal if swallowed and enters airways.
H315, Causes skin irritation.
H317, May cause an allergic skin reaction.
H410, Very toxic to aquatic life with long lasting effects.

SAFETY DATA SHEET

In accordance with REACH Regulation EC No.1907/2006

Product: Rosemary oil FPD-2016A-LM6045

Version: 5

2.2 Label elements

Classification under Regulation (EC) No 1272/2008

Signal word: Danger

Hazard statements: H226, Flammable liquid and vapour.
H304, May be fatal if swallowed and enters airways.
H315, Causes skin irritation.
H317, May cause an allergic skin reaction.
H410, Very toxic to aquatic life with long lasting effects.

M factor: None

Supplemental Information: None

Precautionary statements: P210, Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
P233, Keep container tightly closed.
P240, Ground/bond container and receiving equipment.
P241, Use explosion-proof electrical, ventilating and lighting equipment.
P242, Use only non-sparking tools.
P243, Take precautionary measures against static discharge.
P261, Avoid breathing vapour or dust.
P264, Wash hands and other contacted skin thoroughly after handling.
P272, Contaminated work clothing should not be allowed out of the workplace.
P273, Avoid release to the environment.
P280, Wear protective gloves/eye protection/face protection.
P301/310, IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303/361/353, IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P331, Do not induce vomiting.
P333/313, If skin irritation or rash occurs: Get medical advice/attention.
P362, Take off contaminated clothing and wash before reuse.
P370/378, In case of fire: Use carbon dioxide, dry chemical, foam for extinction.
P391, Collect spillage.
P403/235, Store in a well-ventilated place. Keep cool.
P405, Store locked up.
P501, Dispose of contents/container to approved disposal site, in accordance with local regulations.

SAFETY DATA SHEET

In accordance with REACH Regulation EC No.1907/2006

Product: Rosemary oil FPD-2016A-LM6045

Version: 5

Pictograms:



2.3 Other hazards

Other hazards: Hydrocarbon Concentration %: 35.0000%

Section 3. Composition / information on ingredients

3.1 Substances

Product identifier: Rosemary oil; CAS: 84604-14-8

Contains:

| Name | CAS | EC | REACH Registration No. | % | Classification for (CLP) 1272/2008 | Specific Conc. Limits, M-factors and ATEs |
|--|-----------|-----------|------------------------|---------|---|---|
| Eucalyptol | 470-82-6 | 207-431-5 | | 20-<50% | Flam. Liq. 3-Skin Sens. 1B;H226-H317,- | oral: ATE = 2480 mg/kg bw |
| alpha-Pinene | 80-56-8 | 201-291-9 | | 10-<20% | Flam. Liq. 3-Skin Irrit. 2-Skin Sens. 1B-Asp. Tox 1-Aquatic Acute 1-Aquatic Chronic 1; H226-H304-H315-H317-H410,- | M = 1-M = 1-oral: ATE = 3500 mg/kg bw |
| 1,7,7-Trimethylbicyclo [2.2.1]heptan-2-one | 76-22-2 | 200-945-0 | | 5-<10% | Flam. Sol. 2-Acute Tox. 4-Acute Tox. 4-STOT SE 2;H228-H302-H332-H371,- | inhalation: ATE = 1.5 mg/l (dusts or mists)-oral: ATE = 1500 mg/kg bw |
| beta-Pinene | 127-91-3 | 204-872-5 | | 5-<10% | Flam. Liq. 3-Skin Irrit. 2-Skin Sens. 1B-Asp. Tox 1-Aquatic Acute 1-Aquatic Chronic 1; H226-H304-H315-H317-H410,- | M = 1-M = 1 |
| Camphene | 79-92-5 | 201-234-8 | | 1-<5% | Flam. Sol. 2-Aquatic Acute 1-Aquatic Chronic 1;H228-H410,- | M = 1-M = 1 |
| beta-Caryophyllene | 87-44-5 | 201-746-1 | | 1-<5% | Skin Sens. 1B-Asp. Tox 1;H304-H317,- | |
| l-Limonene | 5989-54-8 | 227-815-6 | | 1-<5% | Flam. Liq. 3-Skin Irrit. 2-Skin Sens. 1B-Asp. Tox 1-Aquatic Acute 1-Aquatic Chronic 1; H226-H304-H315-H317-H410,- | M = 1 |
| alpha-Terpineol | 98-55-5 | 202-680-6 | | 1-<5% | Skin Irrit. 2-Eye Irrit. 2; H315-H319,- | oral: ATE = 4300 mg/kg bw |
| p-Mentha-1,4-diene | 99-85-4 | 202-794-6 | | 1-<5% | Flam. Liq. 3-Asp. Tox 1;H226-H304,- | oral: ATE = 3850 mg/kg bw |
| Myrcene | 123-35-3 | 204-622-5 | | 1-<5% | Flam. Liq. 3-Skin Irrit. 2-Eye Irrit. 2-Asp. Tox 1;H226-H304-H315-H319,- | |

SAFETY DATA SHEET

In accordance with REACH Regulation EC No.1907/2006

Product: Rosemary oil FPD-2016A-LM6045

Version: 5

| | | | | | | |
|-------------|----------|-----------|--|---------|--|---------------------------------|
| p-Cymene | 99-87-6 | 202-796-7 | | 1-<5% | Flam. Liq. 3-Asp. Tox 1-Aquatic Chronic 2; H226-H304-H411,- | oral: ATE = 4750 mg/kg bw |
| Linalool | 78-70-6 | 201-134-4 | | 1-<5% | Skin Irrit. 2-Eye Irrit. 2-Skin Sens. 1B;H315-H317-H319,- | oral: ATE = 2790 mg/kg bw |
| Terpinolene | 586-62-9 | 209-578-0 | | 0.1-<1% | Skin Sens. 1B-Asp. Tox 1-Aquatic Acute 1-Aquatic Chronic 1; H304-H317-H410,- | M = 1-oral: ATE = 3850 mg/kg bw |

Section 4. First-aid measures

4.1 Description of first aid measures

Inhalation: Remove from exposure site to fresh air, keep at rest, and obtain medical attention.
Eye exposure: Flush immediately with water for at least 15 minutes. Contact physician if symptoms persist.
Skin exposure: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
Ingestion: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

4.2 Most important symptoms and effects, both acute and delayed

May be fatal if swallowed and enters airways.
 Causes skin irritation.
 May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

None expected, see Section 4.1 for further information.

Section 5: Firefighting measures

5.1 Extinguishing media

Suitable media: Carbon dioxide, Dry chemical, Foam.

5.2 Special hazards arising from the substance or mixture

In case of fire, may be liberated: Carbon monoxide, Unidentified organic compounds.

5.3 Advice for fire fighters:

In case of insufficient ventilation, wear suitable respiratory equipment.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Avoid inhalation. Avoid contact with skin and eyes. See protective measures under Section 7 and 8.

SAFETY DATA SHEET

In accordance with REACH Regulation EC No.1907/2006

Product: Rosemary oil FPD-2016A-LM6045

Version: 5

6.2 Environmental precautions:

Keep away from drains, surface and ground water, and soil.

6.3 Methods and material for containment and cleaning up:

Remove ignition sources. Provide adequate ventilation. Avoid excessive inhalation of vapours. Contain spillage immediately by use of sand or inert powder. Dispose of according to local regulations.

6.4 Reference to other sections:

Also refer to sections 8 and 13.

Section 7. Handling and storage

7.1 Precautions for safe handling:

Keep away from heat, sparks, open flames and hot surfaces. - No smoking.

7.2 Conditions for safe storage, including any incompatibilities:

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

7.3 Specific end use(s):

Fragrances: Use in accordance with good manufacturing and industrial hygiene practices.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limits: Not Applicable

8.2 Exposure Controls

Eye / Skin Protection

Wear protective gloves/eye protection/face protection

Respiratory Protection

Under normal conditions of use and where adequate ventilation is available to prevent build up of excessive vapour, this material should not require special engineering controls. However, in conditions of high or prolonged use, or high temperature or other conditions which increase exposure, the following engineering controls can be used to minimise exposure to personnel: a) Increase ventilation of the area with local exhaust ventilation. b) Personnel can use an approved, appropriately fitted respirator with organic vapour cartridge or canisters and particulate filters. c) Use closed systems for transferring and processing this material.

Also refer to Sections 2 and 7.

SAFETY DATA SHEET

In accordance with REACH Regulation EC No.1907/2006

Product: Rosemary oil FPD-2016A-LM6045

Version: 5

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|--|----------------|
| Physical State/Colour: | Not determined |
| Odour: | Not determined |
| Odour threshold: | Not determined |
| Melting point / freezing point: | Not determined |
| Boiling point or initial boiling point and boiling range: | Not determined |
| Flammability: | Not determined |
| Lower and upper explosion limit: | Not determined |
| Flash point: | 46 °C |
| Auto-ignition temperature: | Not determined |
| Decomposition temperature: | Not relevant |
| pH: | Not determined |
| Kinematic viscosity: | Not determined |
| Solubility: | Not determined |
| Partition coefficient: n-octanol/water (log value): | Not determined |
| Vapour pressure: | Not determined |
| Density and/or relative density: | Not determined |
| Relative vapour density: | Not determined |
| Particle characteristics: | Not determined |

9.2 Other information: None available

Section 10. Stability and reactivity

10.1 Reactivity:

Presents no significant reactivity hazard, by itself or in contact with water.

10.2 Chemical stability:

Good stability under normal storage conditions.

10.3 Possibility of hazardous reactions:

Not expected under normal conditions of use.

10.4 Conditions to avoid:

Avoid extreme heat.

10.5 Incompatible materials:

Avoid contact with strong acids, alkalis or oxidising agents.

SAFETY DATA SHEET

In accordance with REACH Regulation EC No.1907/2006

Product: Rosemary oil FPD-2016A-LM6045

Version: 5

10.6 Hazardous decomposition products:

Not expected.

Section 11. Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

| | |
|---|--|
| Acute Toxicity: | Based on available data the classification criteria are not met. |
| Acute Toxicity Oral | 3465 |
| Acute Toxicity Dermal | Not Applicable |
| Acute Toxicity Inhalation | Not Available |
| Skin corrosion/irritation: | Skin Corrosion / Irritation Category 2 |
| Serious eye damage/irritation: | Based on available data the classification criteria are not met. |
| Respiratory or skin sensitisation: | Sensitization - Skin Category 1 |
| Germ cell mutagenicity: | Based on available data the classification criteria are not met. |
| Carcinogenicity: | Based on available data the classification criteria are not met. |
| Reproductive toxicity: | Based on available data the classification criteria are not met. |
| STOT-single exposure: | Based on available data the classification criteria are not met. |
| STOT-repeated exposure: | Based on available data the classification criteria are not met. |
| Aspiration hazard: | Aspiration Hazard Category 1 |

Information about hazardous ingredients in the mixture

| Ingredient | CAS | EC | LD50/ATE Oral (mg/kg) | LD50/ATE Dermal (mg/kg) | LC50/ATE Inhalation | LC50 Route |
|---|---------|-----------|--------------------------|----------------------------|------------------------|---------------|
| 1,7,7-Trimethylbicyclo [2.2.1]heptan-2-one | 76-22-2 | 200-945-0 | 1500 | Not available | 1.5 | Dust/mist |

Refer to Sections 2 and 3 for additional information.

11.2 Information on other hazards

Not Applicable

Section 12. Ecological information

12.1 Toxicity:

Very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability: Not available

12.3 Bioaccumulative potential: Not available

12.4 Mobility in soil: Not available

12.5 Results of PBT and vPvB assessment:

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6 Endocrine disrupting properties: Not Applicable

12.7 Other adverse effects: Not available

SAFETY DATA SHEET

In accordance with REACH Regulation EC No.1907/2006

Product: Rosemary oil FPD-2016A-LM6045

Version: 5

Section 13. Disposal considerations

13.1 Waste treatment methods:

Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14. Transport information

| | 14.1 UN number: | 14.2 UN Proper Shipping Name: | 14.3 Transport hazard class (es): | Sub Risk: | 14.4 Packing Group: |
|-----------------------------|-----------------|--|-----------------------------------|-----------|---------------------|
| UN Model Regulations | UN1993 | FLAMMABLE LIQUID, N.O.S. (Eucalyptol, alpha-Pinene) | 3 | - | III |
| IMDG | UN1993 | FLAMMABLE LIQUID, N.O.S. (Eucalyptol, alpha-Pinene, beta-Pinene) MARINE POLLUTANT | 3 | - | III |
| ADR,RID,ADN | UN1993 | FLAMMABLE LIQUID, N.O.S. (Eucalyptol, alpha-Pinene) | 3 | - | III |
| ICAO TI | UN1993 | FLAMMABLE LIQUID, N.O.S. (Eucalyptol, alpha-Pinene) | 3 | - | III |

14.5 Environmental hazards: This is classified as an environmentally hazardous substance under the UN Model Regulations. This is classified as a Marine Pollutant under the IMDG Code.

14.6 Special precautions for user: None additional

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

Not applicable

Section 15. Regulatory information

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

Water Hazard Class (WGK): 3

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

Section 16. Other information

Concentration % Limits: SCI 2=39.37% SS 1=2.15% AH 1=28.57% EH A1=96.90% EH C1=96.90% EH C2=9.65% EH C3=0.96450617% EH C4=92.59%

Total Fractional Values: SCI 2=2.54 SS 1=46.50 AH 1=3.50 EH A1=1.03 EH C1=1.03 EH C2=10.37 EH C3=103.68 EH C4=1.08

Key to revisions:

14.1. UN number

14.2. UN proper shipping name

SECTION 3: Composition/information on ingredients

SAFETY DATA SHEET

In accordance with REACH Regulation EC No.1907/2006

Product: Rosemary oil FPD-2016A-LM6045

Version: 5

Key to abbreviations:

| Abbreviation | Meaning |
|-------------------|--|
| Acute Tox. 4 | Acute Toxicity - Oral Category 4 |
| Acute Tox. 4 | Acute Toxicity - Inhalation Category 4 |
| Aquatic Acute 1 | Hazardous to the Aquatic Environment - Acute Hazard Category 1 |
| Aquatic Chronic 1 | Hazardous to the Aquatic Environment - Long-term Hazard Category 1 |
| Aquatic Chronic 2 | Hazardous to the Aquatic Environment - Long-term Hazard Category 2 |
| Asp. Tox 1 | Aspiration Hazard Category 1 |
| Eye Irrit. 2 | Eye Damage / Irritation Category 2 |
| Flam. Liq. 3 | Flammable Liquid, Hazard Category 3 |
| Flam. Sol. 2 | Flammable Solid, Hazard Category 2 |
| H226 | Flammable liquid and vapour. |
| 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. |
| H371 | May cause damage to organs (organs, exposure route). |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |
| P210 | Keep away from heat, sparks, open flames and hot surfaces. - No smoking. |
| P233 | Keep container tightly closed. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical, ventilating and lighting equipment. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P260 | Do not breathe vapour or dust. |
| P261 | Avoid breathing vapour or dust. |
| P264 | Wash hands and other contacted skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/eye protection/face protection. |
| P301/310 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. |
| P301/312 | IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell. |
| P302/352 | IF ON SKIN: Wash with plenty of soap and water. |
| P303/361/353 | IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P304/340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |

SAFETY DATA SHEET

In accordance with REACH Regulation EC No.1907/2006

Product: Rosemary oil FPD-2016A-LM6045

Version: 5

| | |
|---------------|--|
| P305/351/338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P309/311 | IF exposed or if you feel unwell: Call a POISON CENTRE or doctor/physician. |
| P312 | Call a POISON CENTRE or doctor/physician if you feel unwell. |
| P330 | Rinse mouth. |
| P331 | Do not induce vomiting. |
| P332/313 | If skin irritation occurs: Get medical advice/attention. |
| P333/313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P337/313 | If eye irritation persists: Get medical advice/attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P363 | Wash contaminated clothing before reuse. |
| P370/378 | In case of fire: Use carbon dioxide, dry chemical, foam for extinction. |
| P391 | Collect spillage. |
| P403/235 | Store in a well-ventilated place. Keep cool. |
| P405 | Store locked up. |
| P501 | Dispose of contents/container to approved disposal site, in accordance with local regulations. |
| STOT SE 2 | Specific Target Organ Toxicity (Single Exposure) Category 2 |
| Skin Irrit. 2 | Skin Corrosion / Irritation Category 2 |
| Skin Sens. 1B | Sensitization - Skin Category 1B |

The information in this safety data sheet is to the best of our knowledge true and accurate but all data, instructions, recommendations and/or suggestions are made without guarantee.

Norfolk
Essential Oils