

# Material Safety Data Sheet

According to EU Regulation 1907/2006

## Eucalyptus Globulus Essential Oil

Date Created:

18.04.2017

Date Revised:

19.02.2018

### SECTION 1: Identification of the substance/mixture and of the company/undertaking





| 1.1 Product Identifier |  |        |           |            |           |
|------------------------|--|--------|-----------|------------|-----------|
| Product Name           | Eucalyptus Globulus Essential Oil  |        |           |            |           |
| Biological Definition  | Eucalyptus Globulus Leaf Oil is the volatile oil obtained from the fresh leaves of the Eucalyptus, Eucalyptus Globulus and other species of Eucalyptus, Myrtaceae. |        |           |            |           |
| INCI Name              | Eucalyptus Globulus Leaf Oil   |        |           |            |           |
| Synonyms & Trade Names | - - -  |        |           |            |           |
| Internal Product Code  | R00162   |        |           |            |           |
| REACH Status           | Registered No: 01-21199787250-37-0000  |        |           |            |           |
| CAS-No                 | 800-48-4 /<br>84625-32-1   | EC No. | 283-406-2 | EINECS No. | 283-406-2 |

### 1.2 Details of the supplier of the safety data sheet

|                        |  |
|------------------------|--|
| Company Identification | <b>Cerberus Chemicals Ltd</b><br>Vicarage Barn, Southport Road<br>Scarisbrick, Lancashire<br>L40 8HQ - UK<br><br>Email: info@cerberuschemicals.com |
|------------------------|--|

### 1.3 Details of the supplier of the safety data sheet

|                   |  |
|-------------------|--|
| Emergency Contact | Mr Jordan Boynton - Tel: 01704 840 202 |
|-------------------|--|

| SECTION 2: Hazards identification                     |   |
|---|---|
| <b>2.1 Classification of the substance or mixture</b> |   |
| <b>Classification (67/548/EEC)</b>                    | The Full Text for all Hazard Statements are displayed in Section 16   |
| <b>Classification (EU 1272/2008)</b>                  | <p><b>Physical hazards:</b> Flam. Liq. 3 - H226</p> <p><b>Health hazards:</b> Asp. Tox. 1 - H304, Skin Irrit. 2 - H315, Skin Sens. 1 - H317</p> <p><b>Environmental hazards:</b> Aquatic Chronic 2 - H411</p>   |
| <b>2.2 Label elements</b>                             |   |
| <b>GHS Label:</b>                                     |     <p>GHS07      GHS09      GHS08      GHS02</p>  |
| <b>Signal Word:</b>                                   | Danger  |
| <b>Contains</b>                                       | 1,8 cineole, d-Limonene, Alpha Pinene, Beta Pinene  |
| <b>Hazard Statements</b>                              | <p>H226 Flammable liquid and vapour</p> <p>H304 May be fatal if swallowed and enters airways</p> <p>H315 Causes skin irritation</p> <p>H317 May cause an allergic skin reaction</p> <p>H411 Toxic to aquatic life with long lasting effects</p>   |
| <b>Precautionary Statements</b>                       | <p>P273 Avoid release to the environment</p> <p>P280 Wear protective gloves/protective clothing/eye protection/face protection</p> <p>P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.</p> <p>P331 Do NOT induce vomiting</p> <p>P391 Collect spillage</p> <p>P262 Do not get in eyes, on skin, or on clothing.</p>   |
| <b>Supplementary Precautionary Statements</b>         | <p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P233 Keep container tightly closed.</p> <p>P240 Ground/ bond container and receiving equipment.</p> <p>P241 Use explosion-proof electrical equipment.</p> <p>P242 Use only non-sparking tools.</p> <p>P243 Take precautionary measures against static discharge.</p> <p>P261 Avoid breathing vapour/spray</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P332+P313 If skin irritation occurs: Get medical advice/attention.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/attention</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/container in accordance with national regulations.</p> |

*Risk phrases and Safety phrases in full refer to Section 16 - Other information*

|   |  |
|---|--|
| <b>2.3 Other hazards</b>                  |  |
| <b>Adverse physio-chemical properties</b> | Flammable liquid and vapour.   |
| <b>Adverse effects on human health</b>    | The liquid may be irritating to skin. Fatal if swallowed. May cause skin sensitisation or allergic reactions in sensitive individuals. |

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

|   |                                    |                |           |                |           |
|---|------------------------------------|----------------|-----------|----------------|-----------|
| <b>&gt;80%</b>  | 1,8 Cineol                         | <b>CAS No:</b> | 470-82-6  | <b>EC No.:</b> | 207-431-5 |
| Classification (EC 1272/2008) Flam. Liq. 3 - H226, Skin Sens. 1B - H317   |                                    |                |           |                |           |
| <b>≤ 10%</b>  | d-Limonene                         | <b>CAS No:</b> | 5989-27-5 | <b>EC No.:</b> | 227-813-5 |
| Classification (EC1272/2008) Flam. Liq. 3 - H226, Asp. Tox. 1 H304, Skin Irrit. 2 - H315, Skin Sens. 1 - H317, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410     |                                    |                |           |                |           |
| <b>≤ 6%</b>   | para-Cymene                        | <b>CAS No:</b> | 99-87-6   | <b>EC No.:</b> | 202-796-7 |
| Classification (EC 1272/2008); Flam. Liq. 3 - H226, Asp. Tox. 1 - H304, Eye Irrit. 2 - H319   |                                    |                |           |                |           |
| <b>≤ 9%</b>   | alpha-Pinene                       | <b>CAS No:</b> | 80-56-8   | <b>EC No.:</b> | 201-291-9 |
| Classification (EC 1272/2008); Flam. Liq. 3 - H226, Skin Irrit. 2 - H315, Skin Sens. 1 - H317, Asp. Tox. 1 - H304, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410 |                                    |                |           |                |           |
| <b>≤ 3%</b>   | alpha-Phellandrene                 | <b>CAS No:</b> | 99-83-2   | <b>EC No.:</b> | 202-792-5 |
| Classification (EC 1272/2008); Flam. Liq. 3 - H226, Asp. Tox. 1 - H304  |                                    |                |           |                |           |
| <b>≤ 6%</b>   | p-mentha-1,4-diene                 | <b>CAS No:</b> | 99-85-4   | <b>EC No.:</b> | 202-794-6 |
| Classification (EC 1272/2008); Flam. Liq. 3 - H226, Asp. Tox. 1 - H304  |                                    |                |           |                |           |
| <b>≤ 2%</b>   | 7-methyl-3-methyleneocta-1,6-diene | <b>CAS No:</b> | 123-35-3  | <b>EC No.:</b> | 204-622-5 |
| Classification (EC 1272/2008); Flam. Liq. 3 - H226, Skin Irrit. 2 - H315, Eye Irrit. 2 - H319, Asp. Tox. 1 - H304, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410 |                                    |                |           |                |           |
| <b>≤ 2%</b>   | p-menth-1-en-8-ol                  | <b>CAS No:</b> | 99-55-5   | <b>EC No.:</b> | 202-680-6 |
| Classification (EC 1272/2008); Skin Irrit. 2 - H315, Eye Irrit. 2 - H319  |                                    |                |           |                |           |
| <b>≤ 1.5%</b>   | beta-Pinene                        | <b>CAS No:</b> | 127-91-3  | <b>EC No.:</b> | 204-872-5 |
| Classification (EC 1272/2008); Flam. Liq. 3 - H226, Skin Irrit. 2 - H315, Skin Sens. 1 - H317, Asp. Tox. 1 - H304, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410 |                                    |                |           |                |           |

|                     |         |
|---------------------|---------|
| <b>3.2 Mixtures</b> |         |
| <b>EU INCI</b>      | US INCI |
| N/A                 | N/A     |

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

|                            |   |
|----------------------------|---|
| <b>General Information</b> | See categories below.   |
| <b>Inhalation</b>          | Remove person to fresh air and keep comfortable for breathing. If breathing stops, provide artificial respiration. Get medical attention if any discomfort continues.           |
| <b>Ingestion</b>           | Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention.   |
| <b>Skin Contact</b>        | Wash skin thoroughly with soap and water. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.                                |
| <b>Eye Contact</b>         | Remove any contact lenses and open eyelids wide apart. Rinse with water. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. |

#### 4.2 Most important symptoms and effects, both acute and delayed

|              |  |
|--------------|--|
| Inhalation   | May be fatal if swallowed and enters airways |
| Skin Contact | May cause an allergic skin reaction          |

#### 4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor - Treat symptomatically.

### SECTION 5: Fire Fighting Measures

#### 5.1 Extinguishing Media

Suitable Extinguishing Media: Carbon Dioxide (CO<sub>2</sub>), dry chemical, Foam, Water Spray.

Unsuitable Extinguishing Media: Do not use water jet as an extinguisher, as this will spread the fire.

#### 5.2 Special hazards arising from the substance or mixture

Specific Hazards

Burning can produce irritating, toxic and obnoxious fumes.

#### 5.3 Advice for fire-fighters

Special Protective equipment for fire-fighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

### SECTION 6: Accidental Release Measures

#### 6.1 Personal precautions

##### Personal Precautions

Provide adequate ventilation. Avoid contact with skin and eyes. Avoid inhalation of vapours. Wear protective clothing and gloves.

##### For emergency responders

Wear an appropriate NIOSH / MSHA approved respirator if mist or vapour is generated.

#### 6.2 Environmental precautions

Do not discharge into drains or watercourses or onto the ground.

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

Absorb with liquid binding material (e.g. sand, diatomaceous earth, acid or universal binding agents). Collect in closed and suitable containers for disposal.

#### 6.4 References to other sections.

Please refer to *Section 8 - Exposure Controls/Personal Protection* for further information on personal precautions.

Please refer to *Section 13 - Disposal Considerations* for further information on waste treatment.

### SECTION 7: Handling and Storage

#### 7.1: Precautions for safe handling

##### Usage precautions:

Apply good manufacturing practice and industrial hygiene practices. Keep containers sealed when not in use.

Provide adequate ventilation. Keep away from heat, sparks and open flame.

##### Advice on general occupational hygiene

Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas.

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

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

#### 7.3 Specific end use(s)

No additional data available

## SECTION 8: Exposure Controls/Personal Protection

### 8.1 Control Parameters

#### 1, 8 cineole (CAS: 470-82-6)

##### DNEL

Workers - Dermal; Long term systemic effects: 2 mg/kg

General population - Oral; Long term systemic effects: 600 mg/kg

General population - Dermal; Long term systemic effects: 1 mg/kg

**General population - Inhalation; Long term systemic effects: 1.74 mg/m<sup>3</sup>**

##### PNEC

- STP; 10 mg/l

- Soil; 0.2 mg/kg

- Intermittent release; 0.57 mg/l

- Fresh water; 0.057 mg/l

- Marine water; 0.0057 mg/l

- Sediment (Freshwater); 0.06732 mg/kg

- Sediment (Marinewater); 0.00673 mg/kg

#### Alpha Pinene (CAS: 80-56-8)

##### DNEL

Workers - Inhalation; Long term systemic effects: 5.98 mg/m<sup>3</sup>

General population - Oral; Long term systemic effects: 0.31 mg/kg

General population - Inhalation; Long term systemic effects: 1.06 mg/m<sup>3</sup>

##### PNEC

- STP; 3.26 mg/l

- Soil; 0.539 mg/kg

- Fresh water; 0.004 mg/l

- Marine water; 0.0004 mg/l

- Sediment (Freshwater); 1.033 mg/kg

- Sediment (Marinewater); 0.103 mg/kg

#### 7-methyl-3-methyleneocta-1,6-diene (CAS: 123-35-3)

##### DNEL

Workers - Dermal; Long term systemic effects: 0.83 mg/kg

Workers - Inhalation; Long term systemic effects: 5.83 mg/m<sup>3</sup>

General population - Dermal; Long term systemic effects: 0.42 mg/kg

General population - Inhalation; Long term systemic effects: 1.25 mg/m<sup>3</sup>

##### PNEC

- STP; 0.2 mg/l




- Soil; 1.015 mg/kg

- Fresh water; 0.00028 mg/l

- Marine water; 0.0008 mg/l

- Sediment (Freshwater); 5.022 mg/kg

- Sediment (Marinewater); 0.502 mg/kg

| 8.2 Exposure Controls   |  |
|---|--|
| <b>Eye protection</b>    | Use safety glasses.  |
| <b>Hand protection</b>   | Chemical resistant gloves required.  |
| <b>Other protection</b>  | Wear suitable protective clothing to prevent heat. Wear apron or protective clothing in case of contact.                                     |
| <b>Respiratory equipment</b>  | Generally unnecessary in a well ventilated area. If ventilation is insufficient, respiratory protection must be worn.                        |
| <b>Hygiene measures</b>   | No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.      |
| <b>Engineering measures</b>   | Provide adequate ventilation. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. |

| SECTION 9: Physical and Chemical Properties               |   |
|---|---|
| 9.1 Information on basic physical and chemical properties |   |
| <b>Appearance</b>   | Clear liquid                            |
| <b>Colour</b>   | Colourless to pale yellow               |
| <b>Odour</b>  | Characteristic                          |
| <b>Relative Density</b>                                   | 0.906 to 0.927                          |
| <b>Flash Point (°C)</b>                                   | 45.5 - 46.5 (Pensky-Martens Closed Cup) |
| <b>Refractive Index</b>                                   | 1.456 - 1.47                            |
| <b>Melting Point (°C)</b>                                 | +5 to -20                               |
| <b>Boiling Point (°C)</b>                                 | 153 - 184                               |
| <b>Vapour Pressure</b>                                    | Ca 262 Pa                               |
| <b>Solubility in Water @20°C</b>                          | No data                                 |
| <b>Auto-Ignition Temp. (°C)</b>                           | 270                                     |

## 9.2 Other information

### Partition Coefficient

Eucalyptus is a natural complex substance. It is a mixture of several components, but three of them represent 90% of that mixture. LogP of each of these three components were calculated with the In Silico Algorithm For Environmental Risk Assessment toolbox, multilinear V.1.1.

The range of the LogP varies as below. log Pow: 2.84 to 4.42

## SECTION 10: Stability and Reactivity

### 10.1 Reactivity

The substance is stable under normal storage and handling conditions.

### 10.2 Chemical stability

Stable under normal temperature conditions.

### 10.3 Possibility of hazardous reactions

None known.

### 10.4 Conditions to avoid

Avoid heat, sparks and other sources of ignition.

### 10.5 Incompatible materials

#### Materials to avoid

Strong oxidising agents. Strong reducing agents.

### 10.6 Hazardous decomposition products

#### Combustion produces:

- Carbon Monoxide (CO)
- Carbon Dioxide (CO<sub>2</sub>)
- Smoke

## SECTION 11: Toxicological Information

### 11.1 Information on toxicological effects.

|  |   |
|--|---|
| <b>Acute toxicity:</b>                   | Not classified.   |
|  | Acute toxicity - oral<br>Notes (oral LD <sub>50</sub> )<br>REACH dossier information. The oral LD50 for Eucalyptus oil is higher than 2000 mg.kg bw in mice therefore it is not classified according to the Annex VI to the Directive 67/548/EEC and the CLP Regulation (EC) No (1272-2008).          |
|  | Acute toxicity - dermal<br>Notes (dermal LD <sub>50</sub> )<br>REACH dossier information. The dermal LD50 for Eucalyptus oil is higher than 5000 mg/kg bw in rabbits therefore it is not classified according to the Annex VI to the Directive 67/548/EEC and the CLP Regulation (EC) No (1272-2008). |
| <b>LD50 (Oral):</b>                      | No data available   |
| <b>LD50 (Dermal):</b>                    | No data available   |
| <b>Skin corrosion / irritation:</b>      | Causes skin irritation  |
| <b>Serious eye damage / irritation:</b>  | Not classified.   |
| <b>Respiratory / skin sensitisation:</b> | May cause an allergic skin reaction.  |
| <b>Germ cell mutagenicity:</b>           | Not classified.   |
| <b>Carcinogenicity:</b>                  | Not classified.   |
| <b>Reproductive toxicity:</b>            | Not classified.   |
| <b>STOT-single exposure:</b>             | Not classified.   |
| <b>STOT-repeated exposure:</b>           | Not classified.   |
| <b>Aspiration hazard:</b>                | May be fatal if swallowed and enters airways.   |
| <b>Other information:</b>                | N/A   |

## SECTION 12: Ecological Information

### 12.1 Toxicity

Toxic to aquatic life with long lasting effects

## 12.2 Persistence and degradability

The substance is readily biodegradable

## 12.3 Bio-accumulative potential

### Partition Coefficient

Eucalyptus is a natural complex substance. It is a mixture of several components, but three of them represent 90% of that mixture. LogP of each of these three components were calculated with the In Silico Algorithm For Environmental Risk Assessment toolbox, multilinear V.1.1. The range of the LogP varies as below. log Pow: 2.84 to 4.42

## 12.4 Mobility in soil

No additional data available.

## 12.5 Results of PBT and VPVB assessment

This product does not contain any substances classified as PBT or vPvB.

## 12.6 Other adverse effects



No additional data available.

## SECTION 13: Disposal Considerations

### 13.1 Waste Treatment Methods

Recycling is preferred to disposal or burning. Disposal must be made according to official regulations. Must not be disposed together with household waste.

## SECTION 14. Transport Information

|                      |   |
|----------------------|---|
| Warning Icon         |   |
| Proper Shipping Name | EXTRACTS AROMATIC LIQUID  |
| UN No. Road          | UN 1169   |
| ADR Class            | Class 3   |
| Hazard No. (ADR)     | 30  |
| Hazchem Code         | 3Y  |
| UN No. SEA           | UN 1169   |
| IMDG Class           | Class 3   |
| IMDG Pack Gr.        | Pk Gp III   |
| EMS                  | F-E, S-D  |
| UN No. AIR           | UN 1169   |
| Air Class            | Class 3   |
| Air Pack Gr.         | Pk Gp III   |

## SECTION 15: Regulatory Information

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

|                           |   |
|---------------------------|---|
| EU Directives             | Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18th Dec 2006 Concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 199/45/EC and repealing Council Regulation (EEC) No793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769 /EEC and Commission Directives 91/155/EEC, 93/67/EEC, and 93/105/EEC and 2000/21/EC including amendments. |
| Statutory Instruments     | The chemicals (Hazard Information and Packaging for Supply Regulations 2009 (S.I. 2009 No 716)  |
| Approved Code of Practice | Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations.   |
| Guidance Notes            | Workplace Exposure Limits EH40. CHIP for everyone HSG 108.  |



## 15.2 Chemical safety assessment

An assessment has not been executed as this is not a hazardous material according to article 31 of REACH 1907/2006.

## SECTION 16: Other Information

**Training Instructions:** Refer to possible hazard before use of this product.

### Abbreviations and acronyms:

|                                   |   |
|-----------------------------------|---|
| <b>MSDS</b>                       | Material Safety Data Sheet  |
| <b>INCI</b>                       | International Nomenclature of Cosmetic Ingredients  |
| <b>CAS</b>                        | Chemical Abstract Service   |
| <b>IMDG</b>                       | International Maritime Code for Dangerous Goods   |
| <b>ADR</b>                        | Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)   |
| <b>RID</b>                        | International Carriage of Dangerous Goods by Rail   |
| <b>ICAO</b>                       | International Civil Aviation Organization   |
| <b>AND</b>                        | International Carriage of Dangerous Goods by Inland Waterways   |
| <b>GHS</b>                        | Globally Harmonized System of Classification and Labelling of Chemicals   |
| <b>Trem Card</b>                  | Transport Emergency Card  |
| <b>STOT</b>                       | Specific Target Organ Toxicity  |
| <b>N/A</b>                        | Not Available   |
| <b>Hazard Statements in Full:</b> | H226 Flammable liquid and vapour.<br>H304 May be fatal if swallowed or enters airways.<br>H315 Causes skin irritation.<br>H317 May cause an allergic skin reaction.<br>H319 Causes serious eye irritation.<br>H400 Very toxic to aquatic life.<br>H410 Very toxic to aquatic life with long lasting effects.<br>H411 Toxic to aquatic life with long lasting effects. |

Complies with REACH guidance for SDS as circulated by ECHA 2011.

|                   |   |
|-------------------|---|
| <b>Disclaimer</b> | This information contained herein is believed to be true and correct at the time of our response. Any views or opinions presented in this document are solely those of the author and do not necessarily represent those of Cerberus Chemicals Ltd. Neither can we guarantee the accuracy of any of the information of data contained within. It is not, and should not be construed as, a guarantee or warranty, or a part of our contractual or other legal obligations. Disclosure, reproduction or transmission, in whole or in part, without prior written consent of Cerberus Chemicals Ltd is not permitted. |
|-------------------|---|

### Revisions in this document

| Date (DD-MM-YYYY) | Change    | Revision Number |
|-------------------|-----------|-----------------|
| 18/04/2017        | New Issue | 0               |
| 19/02/2018        | Full MSDS | 1               |
|                   |           |                 |
|                   |           |                 |
|                   |           |                 |