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## SAFETY DATA SHEET EUCALYPTUS GLOBULUS, EXT

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

#### 1.1. Product identifier

**Product name** EUCALYPTUS GLOBULUS (BLUE GUM),  
**Product number** EXT  
**Synonyms; trade names** Eucalyptus Oil Globulus  
**REACH registration number** 01-2119978250-37-XXXX  
**CAS number** 84625-32-1  
**EC number** 283-406-2

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

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

##### Supplier

Tiamo e.U.  
Weideckerstraße 27  
3004 Riederberg  
Tel.: 0664 3941526  
alexander.morgner@tiamo.at

#### 1.4. Emergency telephone number

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (EC 1272/2008)

**Physical hazards** Flam. Liq. 3 - H226  
**Health hazards** Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Asp. Tox. 1 - H304  
**Environmental hazards** Aquatic Chronic 2 - H411

**Human health** The liquid may be irritating to skin. Fatal if swallowed. May cause skin sensitisation or allergic reactions in sensitive individuals.

**Environmental** The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

**Physicochemical** Flammable liquid and vapour

#### 2.2. Label elements

**EC number** 283-406-2

## EUCALYPTUS GLOBULUS, EXT

### Hazard pictograms



### 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.  
 H411 Toxic to aquatic life with long lasting effects.

### Precautionary statements

P273 Avoid release to the environment.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
 P331 Do NOT induce vomiting.  
 P391 Collect spillage.  
 P262 Do not get in eyes, on skin, or on clothing.

### Contains

1, 8 cineole, dipentene, Alpha Pinene, Beta Pinene

### Supplementary precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P233 Keep container tightly closed.  
 P240 Ground and bond container and receiving equipment.  
 P241 Use explosion-proof electrical equipment.  
 P242 Use non-sparking tools.  
 P243 Take action to prevent static discharges.  
 P261 Avoid breathing vapour/ spray.  
 P264 Wash contaminated skin thoroughly after handling.  
 P272 Contaminated work clothing should not be allowed out of the workplace.  
 P302+P352 IF ON SKIN: Wash with plenty of water.  
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.  
 Rinse skin with water or shower.  
 P321 Specific treatment (see medical advice on this label).  
 P332+P313 If skin irritation occurs: Get medical advice/ attention.  
 P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.  
 P362+P364 Take off contaminated clothing and wash it before reuse.  
 P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.  
 P403+P235 Store in a well-ventilated place. Keep cool.  
 P405 Store locked up.  
 P501 Dispose of contents/ container in accordance with national regulations.

### 2.3. Other hazards

#### SECTION 3: Composition/information on ingredients

##### 3.2. Mixtures

###### 1, 8 cineole

>=70 <=95

CAS number: 470-82-6

EC number: 207-431-5

###### Classification

Flam. Liq. 3 - H226

Skin Sens. 1B - H317

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<b>dipentene</b>	>=4 <=12
CAS number: 138-86-3	EC number: 205-341-0
M factor (Acute) = 1	M factor (Chronic) = 1
<b>Classification</b>	
Flam. Liq. 3 - H226	
Skin Irrit. 2 - H315	
Skin Sens. 1 - H317	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	
<b>p-Cymene</b>	>=0.01 <=6
CAS number: 99-87-6	EC number: 202-796-7
<b>Classification</b>	
Flam. Liq. 3 - H226	
Repr. 2 - H361	
Asp. Tox. 1 - H304	
Aquatic Chronic 2 - H411	
<b>Alpha Pinene</b>	>=0.01 <=9
CAS number: 80-56-8	EC number: 201-291-9
M factor (Acute) = 1	M factor (Chronic) = 1
<b>Classification</b>	
Flam. Liq. 3 - H226	
Acute Tox. 4 - H302	
Skin Irrit. 2 - H315	
Skin Sens. 1 - H317	
Asp. Tox. 1 - H304	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	
<b>Alpha Phellandrene</b>	>=0.3 <=3
CAS number: 99-83-2	EC number: 202-792-5
<b>Classification</b>	
Flam. Liq. 3 - H226	
Asp. Tox. 1 - H304	
<b>p-mentha-1,4-diene</b>	>=0.01 <=6
CAS number: 99-85-4	EC number: 202-794-6
<b>Classification</b>	
Flam. Liq. 3 - H226	
Repr. 2 - H361	
Aquatic Chronic 2 - H411	

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<b>7-methyl-3-methylenocta-1,6-diene</b>	<b>&gt;=0.5 &lt;=2</b>
CAS number: 123-35-3	EC number: 204-622-5
M factor (Acute) = 1	
<b>Classification</b>	
Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Asp. Tox. 1 - H304 Aquatic Acute 1 - H400 Aquatic Chronic 2 - H411	

<b>Beta Pinene</b>	<b>&gt;=0.01 &lt;=1.5</b>
CAS number: 127-91-3	EC number: 242-060-2
M factor (Acute) = 1	M factor (Chronic) = 1
<b>Classification</b>	
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>p-menth-1-en-8-ol</b>	<b>&gt;=0.01 &lt;=2</b>
CAS number: 98-55-5	EC number: 202-680-6
<b>Classification</b>	
Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<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

<b>Inhalation</b>	May be fatal if swallowed and enters airways.
<b>Skin contact</b>	May cause an allergic skin reaction.

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

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**Notes for the doctor** Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

**Suitable extinguishing media** Water spray. Carbon dioxide (CO2). Dry chemicals. Foam.

**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 produces irritating, toxic and obnoxious fumes.

#### 5.3. Advice for firefighters

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

### SECTION 6: Accidental release measures

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

**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

**Environmental precautions** Do not discharge into drains or watercourses or onto the ground.

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

**Methods for 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. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see Section 13.

### 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

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

#### 7.3. Specific end use(s)

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### **SECTION 8: Exposure controls/Personal protection**

#### **8.1. Control parameters**

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

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 7.05 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 2 bw/day, mg/kg General population - Inhalation; Long term systemic effects: 1.74 mg/m <sup>3</sup> General population - Dermal; Long term systemic effects: 1 bw/day, mg/kg General population - Oral; Long term systemic effects: 600 mg/kg, bw/day
<b>PNEC</b>	<ul style="list-style-type: none"> <li>- Fresh water; Short term 5.7 mg/l</li> <li>- Intermittent release, Fresh water; 0.57 mg/l</li> <li>- marine water; Short term 5.7 mg/l</li> <li>- STP; Short term 10 mg/l</li> <li>- Sediment (Freshwater); Short term 1.425 mg/kg</li> <li>- Sediment (Marinewater); Short term 0.142 mg/kg</li> <li>- Soil; Short term 0.25 mg/kg</li> </ul>

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

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 3.8 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 0.54 bw/day, mg/kg General population - Inhalation; Long term systemic effects: 0.67 mg/m <sup>3</sup> General population - Dermal; Long term systemic effects: 0.19 mg/kg, bw/day General population - Oral; Long term systemic effects: 0.19 mg/kg, bw/day
<b>PNEC</b>	<ul style="list-style-type: none"> <li>- Fresh water; Short term 0.606 mg/l</li> <li>- Fresh water, Intermittent release; 3.03 mg/l</li> <li>- marine water; Short term 0.061 mg/l</li> <li>- Intermittent release, marine water; 0.303 mg/l</li> <li>- STP; Short term 0.2 mg/l</li> <li>- Sediment (Freshwater); Short term 157 mg/kg</li> <li>- Sediment (Marinewater); Short term 15.7 mg/kg</li> <li>- Soil; Short term 31.7 mg/kg</li> </ul>

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

<b>DNEL</b>	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>
<b>PNEC</b>	<ul style="list-style-type: none"> <li>- STP; 0.2 mg/l</li> <li>- Soil; 1.015 mg/kg</li> <li>- Fresh water; 0.00028 mg/l</li> <li>- marine water; 0.0008 mg/l</li> <li>- Sediment (Freshwater); 5.022 mg/kg</li> <li>- Sediment (Marinewater); 0.502 mg/kg</li> </ul>

##### **Beta Pinene (CAS: 127-91-3)**

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<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 5.69 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 0.8 bw/day, mg/kg General population - Inhalation; Long term systemic effects: 1 mg/m <sup>3</sup> General population - Dermal; Long term systemic effects: 0.3 mg/kg, bw/day General population - Oral; Long term systemic effects: 0.3 bw/day, mg/kg
<b>PNEC</b>	<ul style="list-style-type: none"> <li>- Fresh water; Short term 1.004 mg/l</li> <li>- Intermittent release, Fresh water; 5.02 mg/l</li> <li>- marine water; Short term 0.1 mg/l</li> <li>- STP; Short term 3.26 mg/l</li> <li>- Sediment (Freshwater); Short term 0.337 mg/kg</li> <li>- Sediment (Marinewater); Short term 0.034 mg/kg</li> <li>- Soil; Short term 0.067 mg/kg</li> </ul>

### p-menth-1-en-8-ol (CAS: 98-55-5)

<b>PNEC</b>	<ul style="list-style-type: none"> <li>- Fresh water; Short term 68 mg/l</li> <li>- marine water; Short term 6.8 mg/l</li> <li>- STP; Short term 2.6 mg/l</li> <li>- Sediment (Freshwater); Short term 1.85 mg/kg</li> <li>- Sediment (Marinewater); Short term 0.185 mg/kg</li> <li>- Soil; Short term 0.329 mg/kg</li> </ul>
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### 8.2. Exposure controls

#### Protective equipment



<b>Appropriate engineering controls</b>	Provide adequate ventilation. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
<b>Eye/face protection</b>	Wear face protection.
<b>Hand protection</b>	Chemical resistant gloves (PVC)
<b>Other skin and body protection</b>	Wear apron or protective clothing in case of contact.
<b>Hygiene measures</b>	Good personal hygiene procedures should be implemented.
<b>Respiratory protection</b>	Generally unnecessary in a well ventilated area. If ventilation is insufficient, respiratory protection must be worn.
<b>Thermal hazards</b>	Wear suitable protective clothing to prevent heat.
<b>Environmental exposure controls</b>	Avoid discharging into drains.

### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Liquid.
<b>Colour</b>	Colourless to pale yellow.
<b>Melting point</b>	+5 to -20°C
<b>Initial boiling point and range</b>	153 - 184°C

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<b>Flash point</b>	45.5 - 46.5°C Pensky-Martens closed cup.
<b>Upper/lower flammability or explosive limits</b>	Technically not feasible.
<b>Vapour pressure</b>	ca 262 Pa @ 25°C
<b>Relative density</b>	0.905 - 0.925 @ 20°C
<b>Partition coefficient</b>	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 Algorythm For Environmental Risk Assessment toolbox, multilinear V.1.1. The range of the LogP varies as below. log Pow: 2.84 to 4.42
<b>Auto-ignition temperature</b>	270°C
<b>Viscosity</b>	2.456 mPa s @ 20°C 1.627 mPa s @ 40°C
<b>Explosive properties</b>	Scientifically unjustified.
<b><u>9.2. Other information</u></b>	
<b>Refractive index</b>	1.457 - 1.467
<b>Hydrocarbon Content</b>	

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

<b>Reactivity</b>	The substance is stable under normal storage and handling conditions.
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#### 10.2. Chemical stability

<b>Stability</b>	Stable at normal ambient temperatures.
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#### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	None known.
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#### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Avoid heat, flames and other sources of ignition.
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#### 10.5. Incompatible materials

<b>Materials to avoid</b>	Strong oxidising agents. Strong reducing agents.
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#### 10.6. Hazardous decomposition products

<b>Hazardous decomposition products</b>	Carbon dioxide (CO <sub>2</sub> ). Carbon monoxide (CO).
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### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Acute toxicity - oral

<b>Notes (oral LD<sub>50</sub>)</b>	REACH dossier information. The oral LD <sub>50</sub> 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).
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##### Acute toxicity - dermal

<b>Notes (dermal LD<sub>50</sub>)</b>	REACH dossier information. The dermal LD <sub>50</sub> 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).
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## EUCALYPTUS GLOBULUS, EXT

### Skin corrosion/irritation

**Skin corrosion/irritation** REACH dossier information. Irritating to skin.

### **SECTION 12: Ecological information**

#### 12.1. Toxicity

#### 12.2. Persistence and degradability

**Biodegradation** The substance is readily biodegradable.

#### 12.3. Bioaccumulative 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 Algorythm 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

#### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

#### 12.6. Other adverse effects

### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

**Disposal 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**

#### 14.1. UN number

**UN No. (ADR/RID)** 1169

**UN No. (IMDG)** 1169

**UN No. (ICAO)** 1169

**UN No. (ADN)** 1169

#### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** EXTRACTS, AROMATIC, LIQUID

**Proper shipping name (IMDG)** EXTRACTS, AROMATIC, LIQUID

**Proper shipping name (ICAO)** EXTRACTS, AROMATIC, LIQUID

**Proper shipping name (ADN)** EXTRACTS, AROMATIC, LIQUID

#### 14.3. Transport hazard class(es)

**ADR/RID class** 3

**ADR/RID classification code** F1

**ADR/RID label** 3

**IMDG class** 3

**ICAO class/division** 3

**ADN class** 3

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### Transport labels



#### 14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

#### 14.5. Environmental hazards

##### Environmentally hazardous substance/marine pollutant



#### 14.6. Special precautions for user

EmS	F-E, S-D
ADR transport category	3
Emergency Action Code	3Y
Hazard Identification Number (ADR/RID)	30
Tunnel restriction code	(D/E)

#### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

### SECTION 15: Regulatory information

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

EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Guidance	CHIP for everyone HSG228.

#### 15.2. Chemical safety assessment

##### Inventories

##### EU - EINECS/ELINCS

Complies

##### Canada - DSL/NDSL

Complies

##### US - TSCA

Complies

##### US - TSCA 12(b) Export Notification

Not listed.

## EUCALYPTUS GLOBULUS, EXT

**Australia - AICS**

Complies

**Japan - ENCS**

Complies

**Korea - KECI**

Complies

**China - IECSC**

Complies

**Philippines – PICCS**

Complies

**New Zealand - NZIOC**

Complies

**Taiwan - TCSI**

Complies

**SECTION 16: Other information****Revision date** 18/08/2021**Revision** 7**Supersedes date** 26/09/2019**SDS number** 4666**Hazard statements in full** 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.

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.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's Responsibility to satisfy himself as to the suitability of such information for his own particular use.