

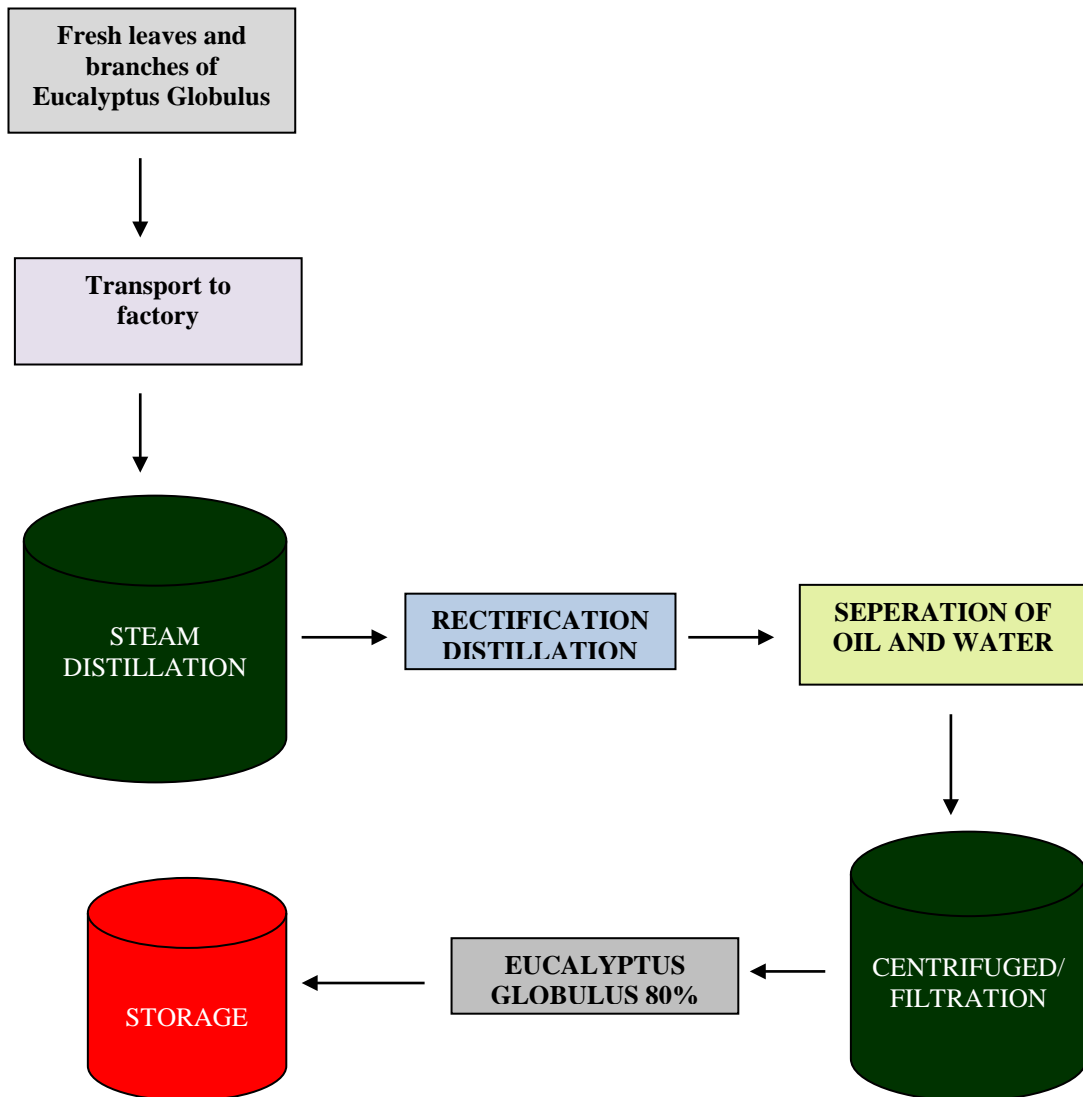


Certificate of Analysis

PRODUCT DETAILS					
Product Name	EUCALYPTUS BLUE GUM				
Product Code	OEEUCABLUEGUM				
Chemical Name:	Eucalyptus Globulus ext				
Batch/Lot Number	4352513				
Expiry Date	March 2022				
Manufacturing Process	Steam distillation of leaves and branches of Myrtaceae.				
Identification	CAS No: 84625-32-1		EINECS No: 283-406-2		
PHYSICAL AND CHEMICAL CHARACTERISTIC					
	SPECIFICATION RANGE			RESULTS	
Appearance	Liquid			Conforms	
Colour	Colourless to pale yellow			Conforms	
Odour	Characteristic			Conforms	
Relative Density @ 20°C	0.905 - 0.925			0.912	
Refractive Index @ 20°C	1.457 - 1.467			1.4635	
Optical Rotation °				+2.17	
MAIN CONSTITUENTS					
CONSTITUENT RANGE	RESULTS	CONSTITUENT RANGE	RESULTS	CONSTITUENTS RANGE	RESULTS
1, 8 Cineole >=70 <=95	80.22	Dipentene >=4 <=12	9.08	Alpha Pinene >=0.01 <=9	1.77
Alpha Phellandrene >=0.3 <=3	1.17	Beta Pinene >=0.01 <=1.5	0.20		
STORAGE AND SHELF LIFE					
Storage	Store in tightly closed container with minimum headspace in a cool, dark and dry place.				

DISCLAIMER: 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 users responsibility to satisfy himself as to the suitability of such information for his own particular use. Where MADAR make a declaration that allergenic material are not present in any product, this statement is made assuming reasonable levels of detection. It is impossible to guarantee the "absolute absence" of any material. It is the ultimate responsibility of the customer to ensure the safety of the intended final product containing this material, by carrying out additional tests if necessary.

EUCALYPTUS BLUE GUM FLOW CHART





**SAFETY DATA SHEET
EUCALYPTUS BLUE GUM**

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

1.1. Product identifier

Product name	EUCALYPTUS BLUE GUM
Product number	OEEUCABLUE
Synonyms; trade names	Eucalyptus Oil Globulus
REACH registration number	01-2119978250-37-0000
CAS number	84625-32-1
Alternative Cas Number	
EC number	283-406-2

FEMA No:

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	MADAR Corporation Limited 19-20 Sandleheath Industrial Estate Fordingbridge Hampshire SP6 1PA
	Tel. +44 1425 655555 (Opening Hours 9am - 5pm)
	e-mail sales@madarcorporation.co.uk

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

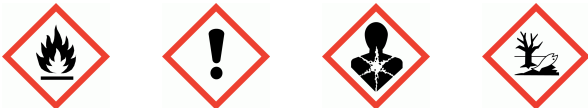
Human health The liquid may be irritating to skin. Fatal if swallowed May cause skin sensitisation or allergic reactions in sensitive individuals.

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

EUCALYPTUS BLUE GUM

EC number	283-406-2
Pictogram	
Signal word	Danger
Hazard statements	<p>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.</p>
Precautionary statements	<p>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.</p>
Contains	1, 8 cineole, dipentene, Alpha Pinene, Beta Pinene
Supplementary precautionary statements	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed. P240 Ground/ bond container and receiving equipment. P241 Use explosion-proof electrical equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. 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/ 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.</p>

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	

EUCALYPTUS BLUE GUM

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

EUCALYPTUS BLUE GUM

7-methyl-3-methyleneocta-1,6-diene	>=0.5 <=2
CAS number: 123-35-3	EC number: 204-622-5
Classification	
Flam. Liq. 3 - H226	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Asp. Tox. 1 - H304	
Beta Pinene	>=0.01 <=1.5
CAS number: 127-91-3	EC number: 204-872-5
Classification	
Flam. Liq. 3 - H226	
Skin Irrit. 2 - H315	
Skin Sens. 1 - H317	
Asp. Tox. 1 - H304	
p-menth-1-en-8-ol	>=0.01 <=2
CAS number: 98-55-5	EC number: 202-680-6
Classification	
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

Inhalation	Remove person to fresh air and keep comfortable for breathing. If breathing stops, provide artificial respiration. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention.
Skin contact	Wash skin thoroughly with soap and water. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.
Eye contact	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: Firefighting measures

5.1. Extinguishing media

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

EUCALYPTUS BLUE GUM

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)

EUCALYPTUS BLUE GUM

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 ³
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 ³ General population - Oral; Long term systemic effects: 0.31 mg/kg General population - Inhalation; Long term systemic effects: 1.06 mg/m ³
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 ³ General population - Dermal; Long term systemic effects: 0.42 mg/kg General population - Inhalation; Long term systemic effects: 1.25 mg/m ³
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

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Eye/face protection

Wear face protection.

EUCALYPTUS BLUE GUM

Hand protection	Chemical resistant gloves (PVC)
Other skin and body protection	Wear apron or protective clothing in case of contact.
Hygiene measures	Good personal hygiene procedures should be implemented.
Respiratory protection	Generally unnecessary in a well ventilated area. If ventilation is insufficient, respiratory protection must be worn.
Thermal hazards	Wear suitable protective clothing to prevent heat.
Environmental exposure controls	Avoid discharging into drains.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Colourless to pale yellow.
Melting point	+5 to -20°C
Initial boiling point and range	153 - 184°C
Flash point	45.5 - 46.5°C PMCC (Pensky-Martens closed cup).
Upper/lower flammability or explosive limits	Technically not feasible.
Vapour pressure	ca 262 Pa @ 25°C
Relative density	0.905 - 0.925 @ 20°C
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
Auto-ignition temperature	270°C
Viscosity	2.456 mPa s @ 20°C 1.627 mPa s @ 40°C
Explosive properties	Scientifically unjustified.
Optical rotation	

9.2. Other information

Refractive index	1.457 - 1.467
-------------------------	---------------

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The substance is stable under normal storage and handling conditions.
-------------------	---

10.2. Chemical stability

Stability	Stable at normal ambient temperatures.
------------------	--

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	None known.
---	-------------

EUCALYPTUS BLUE GUM

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Strong reducing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon dioxide (CO₂). Carbon monoxide (CO).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) 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

Notes (dermal LD₅₀) 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).

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 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

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

EUCALYPTUS BLUE GUM

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

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

EUCALYPTUS BLUE GUM

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

SECTION 16: Other information

Revision date 18/11/2016

Revision 5

Supersedes date 01/11/2016

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.



Product Specification

PRODUCT DETAILS	
Product Name	EUCALYPTUS BLUE GUM
Product Code	OEEUCABLUE
Chemical Name:	Eucalyptus Globulus ext
Country of Origin	China
Tariff Number	33012941
Natural Status	We hereby declare, to the best of our knowledge and from information received from our supplier, that this product is in accordance to the requirements of Articles 3 (2) (d) of Regulation (EC) 1334/2008 and therefore can be designated as natural.
Food Grade Status	We confirm, from information received from our supplier, that this product conforms with EU Regulations and can be used in food.
Kosher Certified	Yes
Halal Certified	We hereby declare, from information received from our supplier, that this product does not contain any ingredient derived from animal origin, extracted from hair or feathers, animal fats, animal extracts, blood of any origin, blood plasma, pork and/or other meat products. This product does not contain alcohol (ethanol or grain alcohol) and has not been used in the manufacturing process.
GMO Declaration	To the best of our knowledge and from information received from our supplier, this product does not derive from genetically modified starting raw material, or additives that are derived from genetically modified organisms.
Manufacturing Process	Steam distillation of leaves and branches of Myrtaceae.
Identification	CAS No: 84625-32-1 EINECS No: 283-406-2
PHYSICAL AND CHEMICAL CHARACTERISTIC	
Appearance	Liquid
Colour	Colourless to pale yellow
Odour	Characteristic
Relative Density @ 20°C	0.905 - 0.925
Refractive Index @ 20°C	1.457 - 1.467
Melting Point	+5 to -20c
Boiling Range	153 - 184°C
Flash Point	45.5 to 46.5°C PMCC (Pensky-Martens closed cup)
Vapour Pressure	ca 262 Pa @ 25°C
Viscosity	2.456 mPas @ 20°C / 1.627 mPas @ 40°C
Hydrocarbon content	18%
FRAGRANCE ALLERGENS	
Limonene/Dipentene (5989-27-5) >=4 to <=12%	Linalool (78-70-6) <0.5%
FOOD ALLERGENS	
NONE PRESENT	
IFRA	
STORAGE AND SHELF LIFE	
Storage	Store in tightly closed container with minimum headspace in a cool, dark and dry place.
Shelf Life	24 months unopened and stored as above.

DISCLAIMER: 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 users responsibility to satisfy himself as to the suitability of such information for his own particular use. Where MADAR Corporation make a declaration that allergenic material are not present in any product, this statement is made assuming reasonable levels of detection. It is impossible to guarantee the "absolute absence" of any material. It is the ultimate responsibility of the customer to ensure the safety of the intended final product containing this material, by carrying out additional tests if necessary.



Vegan Statement

IDENTIFICATION	
Product:	Eucalyptus Blue Gum
Cas No:	84625-32-1
EINECS No:	283-406-2
STATEMENT	
<p>We, MADAR Corporation Limited, from information received from our supplier, hereby declare that the material listed above is compliant with a vegan diet.</p> <p>It does not contain any animal ingredients or animal by products. No animal ingredients or by products are used in the manufacturing process.</p> <p>10th January 2019</p> <p>This document represents to the best of our knowledge and from information received from our supplier. It does not release the buyer from the obligation to carry out an examination of the goods received. All uses made by the buyer are done under their own responsibility.</p>	