

**BUSBY OILS**

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

SECTION 1: PRODUCT & COMPANY IDENTIFICATION

Product Name:	EUCALYPTUS OIL DIVES
Shipping Name:	Extracts Liquid
Chemical characterization:	EXTRACTS, LIQUID
Synonyms for Dives:	2- METHYL- 5 (1- METHYLETHYL) -1, 3 CYCLOHEXADIENE, TERPINOLENE
CAS No:	90028-48-1
UN No:	1197
EC-No.	289-839-3
IMCO Class:	Class 3
Uses:	Flavours & Fragrances
Hazards:	Flammable
SUPPLIER:	Busby Oils Natal Greenhill Estate, No 3A, D534, Hilton, KZN, South Africa
Telephone:	00 27 33 343 1767
Emergency contact: Tel:	00 27 33 343 1767 Mobile 00 27 83 462 5691

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture Classification (REGULATION (EC) No 1272/2008) Flammable liquids, Category 3 Skin sensitisation, Category 1 Reproductive toxicity, Category 2 Aspiration hazard, Category 1 Long-term (chronic) aquatic hazard, Category 2	 H226: Flammable liquid and vapour. H317: May cause an allergic skin reaction. H361: Suspected of damaging fertility or the unborn child. H304: May be fatal if swallowed and enters airways. H411: Toxic to aquatic life with long lasting effects.										
2.2 Label elements Labelling (REGULATION (EC) No 1272/2008) Hazard pictograms:	   										
Signal word:	Danger										
Hazard statements:	<table><tr><td>H226</td><td>Flammable liquid and vapour.</td></tr><tr><td>H304</td><td>May be fatal if swallowed and enters airways.</td></tr><tr><td>H317</td><td>May cause an allergic skin reaction.</td></tr><tr><td>H361</td><td>Suspected of damaging fertility or the unborn child.</td></tr><tr><td>H411</td><td>Toxic to aquatic life with long lasting effects.</td></tr></table>	H226	Flammable liquid and vapour.	H304	May be fatal if swallowed and enters airways.	H317	May cause an allergic skin reaction.	H361	Suspected of damaging fertility or the unborn child.	H411	Toxic to aquatic life with long lasting effects.
H226	Flammable liquid and vapour.										
H304	May be fatal if swallowed and enters airways.										
H317	May cause an allergic skin reaction.										
H361	Suspected of damaging fertility or the unborn child.										
H411	Toxic to aquatic life with long lasting effects.										

**BUSBY OILS**

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

Precautionary statements:

Prevention:

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

Response:

- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
- P331 Do NOT induce vomiting.
- P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
- P391 Collect spillage.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Substance name : Eucalyptus dives, ext.

CAS-No. : 90028-48-1, 8000-48-4

EC-No. : 289-839-3



SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice:	Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later. Do not leave the victim unattended.
Protection of first-aiders:	First Aid responders should pay attention to self-protection and use the recommended protective clothing.
If inhaled:	Remove to fresh air immediately. Get medical attention immediately. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration.
In case of skin contact:	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital.
In case of eye contact:	Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed:	If accidentally swallowed obtain immediate medical attention. Rinse mouth with water. Keep respiratory tract clear. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Risks:	First aider needs to protect himself. May be fatal if swallowed and enters airways. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child.
--------	--



SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.
There is no specific antidote available.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media : High volume water jet media

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: No hazardous combustion products are known.

5.3 Advice for firefighters

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.

Further information : In the event of fire and/or explosion do not breathe fumes.
Standard procedure for chemical fires.
Collect contaminated fire extinguishing water separately.
This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Use a water spray to cool fully closed containers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment.
Ensure adequate ventilation.
Remove all sources of ignition.
Evacuate personnel to safe areas.
Beware of vapours accumulating to form explosive concentrations.
Vapours can accumulate in low areas.

BUSBY OILS

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

For disposal considerations see section 13., For personal protection see section 8.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling: Take precautionary measures against static discharges.
Avoid formation of aerosol.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Provide sufficient air exchange and/or exhaust in work rooms.
Open drum carefully as content may be under pressure.
Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion: Do not spray on a naked flame or any incandescent material.
Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).
Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures: When using do not eat or drink. When using do not smoke.
Wash hands before breaks and at the end of workday.

**BUSBY OILS**

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers:	No smoking. Keep container tightly closed in a dry and well- areas and containers ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards.
Advice on common storage:	No special restrictions on storage with other products.
Storage class (TRGS 510):	3, Flammable liquids
Further information on storage stability:	No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s):	Flavor
------------------	--------

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Personal protective equipment

Eye protection:	Eye wash bottle with pure water. Tightly fitting safety goggles
Hand protection	
Remarks:	Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Wear chemicals-resistant gloves, e.g. safety gloves of nitril (thickness 0.4mm) or of butyl rubber (thickness 0.7mm).
Skin and body protection:	Impervious clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Respiratory protection:	In the case of dust or aerosol formation use respirator with filter model AX.

**BUSBY OILS**

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical Form:	Mobile Liquid
Colour:	Colourless to yellow
Odour:	Aromatic with mint note
Taste:	Pungent and camphoraceous followed by sensation of cold
Specific Gravity (20 C):	0.804 to 0.925
Refractive Index (20 C):	1.458 to 1.492
Optical rotation (20 C):	-85 to -45
Solubility in Water:	Insoluble
Solubility in Alcohol:	Soluble (1:3 to 10 v/v in 75% ethanol)
Boiling point:	210°C
Flash Point:	54°C

9.2 Other Information

Explosives:	Due to its structural properties, the product is not classified as explosive.
Oxidizing properties:	The substance or mixture is not classified as oxidizing.
Flammability (liquids):	Flammable liquid and vapour.
Self-ignition:	The substance or mixture is not classified as self heating.
Evaporation rate:	Lower than the evaporation rate of butyl acetate = 1
Molecular weight:	Not determined.

SECTION 10: STABILITY & REACTIVITY

REACTIVITY:	No decomposition if stored and applied as directed.
CHEMICAL STABILITY:	No decomposition if stored and applied as directed.
POSSIBILITY OF HAZARDOUS REACTION:	No decomposition if stored and applied as directed. Vapours may form explosive mixture with air.
CONDITIONS TO AVOID:	Heat, flames & sparks
INCOMPATIBLE MATERIALS:	No data available.
HAZARDOUS COMPOSITION PRODUCTS:	No hazardous decomposition products are known.

BUSBY OILS

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

SECTION 11: TOXICOLOGICAL INFORMATION

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

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity:	LD50 Oral (Rat): 2.840 mg/kg
Acute inhalation toxicity:	Acute toxicity estimate: > 20 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method LD50 Dermal (Rabbit): > 5.000 mg/kg

Components:

p-Cymene:

Acute oral toxicity:	LD50 Oral (Rat, male and female): 4.750 mg/kg GLP: no
Acute inhalation toxicity:	Acute toxicity estimate: 3 mg/l Test atmosphere: vapour
Acute dermal toxicity:	LD50 (Rabbit): > 5.000 mg/kg GLP: no

p-Mentha-1(7),2-diene:

Acute oral toxicity:	Remarks: No data available
Acute inhalation toxicity:	Remarks: No data available
Acute dermal toxicity:	Remarks: No data available

p-Menth-1-en-4-ol:

Acute oral toxicity:	LD50 Oral (Rat): 1.300 mg/kg Method: OECD Test Guideline 401 GLP: no Acute toxicity estimate: 1.300 mg/kg Method: Calculation method
----------------------	--



SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

SECTION 11: Toxicological information

Acute inhalation toxicity:	LC50 (Rat, male and female): 3 mg/l Exposure time: 4 h Test atmosphere: vapour Method: OECD Test Guideline 436 GLP: yes
Acute dermal toxicity:	LD50 Dermal (Rabbit): > 2.500 - < 5.000 mg/kg Method: OECD Test Guideline 402 GLP: No information available.
5-Isopropyl-2-methylbicyclo[3.1.0]hex-2-ene:	
Acute oral toxicity:	LD50 Oral (Rat): > 2.500 mg/kg Method: OECD 423 GLP: yes
linalool; 3,7-dimethyl-1,6-octadien-3-ol; dl-linalool:	
Acute oral toxicity:	LD50 (Rat, male and female): 2.790 mg/kg Method: OECD Test Guideline 401 GLP: no Remarks: Weight of Evidence
Acute dermal toxicity:	LD50 (Rabbit): 5.610 mg/kg Method: OECD Test Guideline 402 GLP: no
p-Mentha-1,4(8)-diene:	
Acute oral toxicity:	LD50 Oral (Rat): > 4.000 mg/kg
Acute dermal toxicity:	LD50 Dermal (Rabbit): > 5.000 mg/kg
p-Mentha-1,4-diene:	
Acute oral toxicity:	LD50 Oral (Rat, female): > 2.000 mg/kg Method: OECD 423 GLP: yes
Acute dermal toxicity:	LD50 Dermal (Rat, male and female): > 2.000 mg/kg Method: OECD Test Guideline 402 GLP: yes

BUSBY OILS

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

p-Mentha-1,3-diene:

Acute oral toxicity:

LD50 (Rat): 1.680 mg/kg

Method: OECD Test Guideline 401

GLP: No information available.

Acute toxicity estimate: 1.680 mg/kg

Method: Calculation method

Acute dermal toxicity:

LD50 Dermal (Rat, female): > 2.000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

7-Methyl-3-methyleneocta-1,6-diene:

Acute oral toxicity:

LD50 (Mouse, male and female): > 3.380 mg/kg

Acute dermal toxicity:

LD50 (Rabbit): > 5.000 mg/kg

Method: OECD Test Guideline 402

(E)-3,7-Dimethylocta-1,3,6-triene:

Acute oral toxicity:

LD50 (Rat): ca. 5.000 mg/kg

Method: OECD Test Guideline 401

GLP: no

Remarks: No data available

Acute dermal toxicity:

LD50 (Rabbit): > 5.000 mg/kg

Method: OECD Test Guideline 402

GLP: no

Pin-2(3)-ene:

Acute oral toxicity:

LD50 Oral: 500 mg/kg

Acute dermal toxicity:

LD50 (Rabbit): > 5.000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Product:

Species:

Humans

Result:

No skin irritation

Concentration:

10 %

**BUSBY OILS**

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

Species: Guinea pig
Exposure time: 6h
Result: Mild skin irritation
GLP: No information available.
Concentration: 100 %

Components:

p-Cymene:

Species: reconstructed human epidermis (RhE)
Method: OECD 439
Result: No skin irritation
GLP: yes
Concentration: 100 %

p-Mentha-1(7),2-diene:

Remarks: No data available

p-Menth-1-en-4-ol:

Species: reconstructed human epidermis (RhE)
Exposure time: 1h
Method: OECD 439
Result: Moderate irritation of skin
GLP: yes
Concentration: 96,8 %

linalool; 3,7-dimethyl-1,6-octadien-3-ol; dl-linalool:

Species: Rabbit
Exposure time: 4h
Method Result: OECD Test Guideline 404 : Skin irritation
GLP: yes
Concentration: 100 %

p-Mentha-1,4(8)-diene:

Species: Rabbit
Exposure time: 4h
Method: Directive 67/548/EEC, Annex V, B.4.
Result: Mild skin irritation
Dose: 0,5 ml
Concentration: 100 %

**BUSBY OILS**

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

Species: Humans
Exposure time: 48h
Method: Closed patch test
Result : No skin irritation
Concentration : 20 %
solvents: Petrolatum

p-Mentha-1,4-diene:

Species: reconstructed human epidermis (RhE)
Exposure time: 1h
Method: OECD Test Guideline 439
Result: No skin irritation
GLP: yes
Concentration: 100 %

7-Methyl-3-methyleneocta-1,6-diene:

Species: Humans
Exposure time: 0,25 h
Result: Skin irritation
GLP: yes
Concentration: 100 %

Pin-2(3)-ene:

Species: reconstructed human epidermis (RhE)
Exposure time: 15 min
Result: Skin irritation
GLP: yes
Concentration: 100 %

Serious eye damage/eye irritation

Not classified based on available information.

Components:**p-Cymene:**

Species: Human EpiOcular Eye Model Test
Method: OECD Test Guideline 492
Result: No eye irritation
GLP: yes
Concentration: 100 %

BUSBY OILS

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

p-Mentha-1(7),2-diene:

Remarks: No data available

p-Menth-1-en-4-ol:

Species: Rabbit
Method: OECD Test Guideline 405
Result: Eye irritation
GLP: yes
Dose: 0,1 ML
Concentration: 100 %

linalool; 3,7-dimethyl-1,6-octadien-3-ol; dl-linalool:

Species: Rabbit
Method: OECD Test Guideline 405
Result: Eye irritation
GLP: no
Concentration: 100 %
Remarks: Weight of Evidence

p-Mentha-1,4(8)-diene:

Species: Rabbit
Method: OECD Test Guideline 405
Result: Mild eye irritation
Concentration: 100 %

p-Mentha-1,4-diene:

Species: Bovine cornea
Method: OECD 437
Result: Mild eye irritation
GLP: yes
Concentration: 100 %

7-Methyl-3-methyleneocta-1,6-diene:

Species: Rabbit
Method: OECD Test Guideline 405
Result: Eye irritation
GLP: yes
Concentration: 100 %

BUSBY OILS

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

(E)-3,7-Dimethylocta-1,3,6-triene:

Species:	Chicken eye
Method:	OECD Test Guideline 438
Result:	No eye irritation
GLP:	yes

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified based on available information.

Product:

Species:	Humans
Result:	No sensitizing effect
Concentration:	10 %

Species:	Guinea pig
Method:	OECD Test Guideline 406
Result:	No sensitizing effect.
GLP:	No information available.
Rate of positive effects:	2/20
Concentration:	10 %
solvents:	Diethylphthalate

Components: p-Cymene:

Test Type:	KeratinoSens assay
Method:	OECD Test Guideline 442D
Result :	No sensitizing effect.
GLP:	yes
Remarks:	Weight of Evidence

p-Mentha-1(7),2-diene:

Remarks:	No data available
----------	-------------------

p-Menth-1-en-4-ol:

Result:	Sensitizing effect.
Remarks:	Weight of Evidence

 **BUSBY OILS**

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

linalool; 3,7-dimethyl-1,6-octadien-3-ol; dl-linalool:

Test Type: Local Lymph Node Assay
Species: Mouse
Method: OECD 429
Result: Sensitizing effect.
GLP : yes
Concentration : 35,5 %
solvents: N,N-Dimethylformamide

p-Mentha-1,4-diene:

Species: Humans
Result: No sensitizing effect.
Concentration: 5 %

p-Mentha-1,3-diene:

Test Type: Local Lymph Node Assay
Species: Mouse
Method: OECD 429
Result: Sensitizing effect.
GLP: No information available.
Concentration: 8,9 %
solvents: Acetone/Olive oil (4:1)

7-Methyl-3-methyleneocta-1,6-diene:

Test Type: Local Lymph Node Assay
Species: Mouse
Method: OECD Test Guideline 429
Result: No sensitizing effect.
GLP: yes
Concentration: 50 %
solvents: Acetone/Olive oil (4:1)

(E)-3,7-Dimethylocta-1,3,6-triene:

Test Type: Local Lymph Node Assay
Species : Mouse
Method: OECD Test Guideline 429
Result: No sensitizing effect.
GLP : yes
solvents: Acetone/Olive oil (4:1)

**BUSBY OILS**

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

Germ cell mutagenicity

Not classified based on available information.

Product:

Genotoxicity in vitro:

Test Type: Ames test

Metabolic activation: with and without metabolic activation

Method: OECD 471

Result: negative

GLP: yes

Components:

p-Cymene:

Genotoxicity in vitro:

Test Type: In vitro Mammalian Cell Gene Mutation Test

Test system: V79 cells

Metabolic activation: with and without metabolic activation

Method: OECD 476

Result: negative

GLP: yes

Test Type: In vitro Mammalian Chromosome Aberration Test

Test system: Human lymphocytes

Metabolic activation: with and without metabolic activation

Method: OECD 473

Result: negative

GLP: yes

Test Type: Ames test

Metabolic activation: with and without metabolic activation

Method: OECD 471

Result: negative

GLP: yes

p-Menth-1-en-4-ol:

Genotoxicity in vitro:

Test Type: Ames test

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

GLP: yes

**BUSBY OILS**

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

linalool; 3,7-dimethyl-1,6-octadien-3-ol; dl-linalool:

Genotoxicity in vitro:

Test Type: Ames test

Metabolic activation: with and without metabolic activation

Method: OECD 471

Result: negative

GLP: yes

Test Type: In vitro Mammalian Chromosome Aberration Test

Test system: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Method: OECD 473

Result: negative

GLP: yes

Test Type: In vitro Mammalian Cell Gene Mutation Test

Test system: mouse lymphoma L5178Y cells

Metabolic activation: with and without metabolic activation

Method: OECD 476

Result: negative

GLP: yes

Genotoxicity in vivo:

Test Type: Mammalian Erythrocyte Micronucleus

Test Species: Mouse (male and female)

Strain: CD1

Cell type: Bone marrow

Application Route: Oral

Method: OECD Test Guideline 474

Result: negative

GLP: yes

p-Mentha-1,4(8)-diene:

Genotoxicity in vitro:

Test Type: Ames test

Method: OECD 471

Result: negative

p-Mentha-1,4-diene:

Genotoxicity in vitro:

Test Type: Ames test

Metabolic activation: with and without metabolic activation

Method: OECD 471

Result: negative

GLP: yes

BUSBY OILS

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

Test Type: In vitro Mammalian Cell Gene Mutation Test
Test system: mouse lymphoma L5178Y cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 490
Result: negative
GLP: yes

Test Type: In Vitro Mammalian Cell Micronucleus Test
Test system: mouse lymphoma L5178Y cells
Metabolic activation: with and without metabolic activation
Method: OECD 487
Result: negative
GLP: yes

p-Mentha-1,3-diene:

Genotoxicity in vitro:

Test Type: Ames test
Metabolic activation: with and without metabolic activation
Method: OECD 471
Result: negative
GLP: No information available.

7-Methyl-3-methyleneocta-1,6-diene:

Genotoxicity in vitro:

Test Type: Ames test
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: yes

Test Type: In vitro Mammalian Chromosome Aberration Test
Test system: Human lymphocytes
Metabolic activation: with and without metabolic activation
Method: OECD 473
Result: negative
GLP: no

Test Type: In vitro Mammalian Cell Gene Mutation Test
Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD 476
Result: negative
GLP: no

**BUSBY OILS**

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

Pin-2(3)-ene:

Genotoxicity in vitro:

Test Type: Ames test

Result: negative

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Suspected of damaging fertility or the unborn child.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Components:**p-Cymene:**

Assessment:

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity**Components:****p-Cymene:**

Species:

Rat, male

NOAEL:

50 mg/kg bw/day

Application Route:

Oral

Method:

OECD 422

GLP:

yes

Target Organs:

Reproductive organs

Species:

Rat, female

NOAEL:

100 mg/kg bw/day

Application Route:

Oral

Method:

OECD 422

GLP:

yes

Target Organs:

Reproductive organs

 **BUSBY OILS**

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

linalool; 3,7-dimethyl-1,6-octadien-3-ol; dl-linalool:

Species: Rat, male
NOAEL: $\geq 497,9$ mg/kg
Application Route: Oral
Exposure time: 96d
Method: OECD Test Guideline 408
GLP: yes

Species: Rat, male and female
NOAEL: 250 mg/kg
Application Route: Dermal
Exposure time: 91d
Number of exposures: daily
Method: OECD Test Guideline 411
GLP: yes

Aspiration toxicity

May be fatal if swallowed and enters airways.

11.2 Information on other hazards**Endocrine disrupting properties****Product:**

Assessment: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Further information**Product:**

Remarks: Solvents may degrease the skin.

 **BUSBY OILS**

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Components:

p-Cymene:

Toxicity to fish:

LC50 (Cyprinodon variegatus (sheepshead minnow)): 48 mg/l

Exposure time: 96 h

Test Type: static test

Method: OPPTS 850.1075

GLP: No information available.

Toxicity to daphnia and other
aquatic invertebrates:

EC50 (Daphnia magna (Water flea)): 3,7 mg/l

End point: Immobilization

Exposure time: 48 h

Test Type: semi-static test

Analytical monitoring: yes

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae/aquatic plants:

EC50 (Scenedesmus capricornutum (fresh water algae)): 4,03 mg/l

End point: Growth rate

Exposure time: 72 h

Test Type: static test

Analytical monitoring: yes

Method: OECD Test Guideline 201

GLP: yes

NOEC (Scenedesmus capricornutum (fresh water algae)): 1,4 mg/l

End point: Growth rate

Exposure time: 72 h

Test Type: static test

Analytical monitoring: yes

Method: OECD Test Guideline 201

GLP: yes

Toxicity to microorganisms:

NOEC (Activated sludge): 100 mg/l

End point: Respiration inhibition

Exposure time: 28 d

Test Type: static test

Analytical monitoring: no

Method: OECD 301F

GLP: yes

BUSBY OILS

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

p-Menth-1-en-4-ol:

Toxicity to daphnia and other aquatic invertebrates:

EC50 (Daphnia magna): 6,3 mg/l
End point: Immobilization
Exposure time: 48 h
Test Type: static test
Analytical monitoring: yes
Method: OECD 202 / ISO 6341
GLP: yes

Toxicity to algae/aquatic plants:

EC50 (Pseudokirchneriella subcapitata (green algae)): 20,6 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 201
GLP: yes

EC10 (Pseudokirchneriella subcapitata (green algae)): 9,4 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 201
GLP: yes

linalool; 3,7-dimethyl-1,6-octadien-3-ol; dl-linalool:

Toxicity to fish:

LC50 (Oncorhynchus mykiss (rainbow trout)): 27,8 mg/l
End point: mortality
Exposure time: 96 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 203
GLP: yes

Toxicity to daphnia and other aquatic invertebrates:

EC50 (Daphnia magna (Water flea)): 59 mg/l
End point: Immobilization
Exposure time: 48 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 202
GLP: yes

BUSBY OILS

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

Toxicity to algae/aquatic plants:

EC50 (Desmodesmus subspicatus (green algae)): 156,7 mg/l

End point: Growth rate

Exposure time: 96 h

Test Type: static test

Analytical monitoring: no

Method: DIN 38412 (part 9)

GLP: no

EC10 (Desmodesmus subspicatus (green algae)): 54,3 mg/l

End point: Growth rate

Exposure time: 96 h

Test Type: static test

Analytical monitoring: no

Method: DIN 38412 (part 9)

GLP: no

Toxicity to microorganisms:

EC50 (Activated sludge): > 100 mg/l

End point: Respiration inhibition

Exposure time: 3 h

Test Type: static test

Analytical monitoring: yes

Method: OECD 209

GLP: yes

p-Mentha-1,4-diene:

Toxicity to fish:

EC50 (Danio rerio (zebra fish)): 2,792 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other aquatic invertebrates:

EC50 (Daphnia magna (Water flea)): 10,189 mg/l

Exposure time: 48 h

Test Type: static test

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae/aquatic plants:

EC50 (Scenedesmus capricornutum (fresh water algae)): > 10,82 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

GLP: yes

BUSBY OILS

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

Toxicity to microorganisms:

EC50 (Activated sludge): > 1.000 mg/l

Exposure time: 3 h

Analytical monitoring: yes

Method: OECD 209

GLP: yes

p-Mentha-1,3-diene:**Toxicity to fish:**

LC50 (Pimephales promelas (fathead minnow)): 3,15 mg/l

End point: mortality

Exposure time: 96 h

Test Type: flow-through test

Analytical monitoring: yes

Method: OECD Test Guideline 203

GLP: No information available.

**Toxicity to daphnia and other
aquatic invertebrates:**

EC50 (Daphnia magna): 1,7 mg/l

End point: Immobilization

Exposure time: 48 h

Test Type: semi-static test

Analytical monitoring: yes

Method: OECD Test Guideline 202

GLP: yes

Toxicity to microorganisms:

EC50 (Activated sludge): > 1.000 mg/l

End point: Respiration inhibition

Exposure time: 3 h

Test Type: static test

Analytical monitoring: no

Method: OECD 209

GLP: yes

EC10 (Activated sludge): 452 mg/l

End point: Respiration inhibition

Exposure time: 3 h

Test Type: static test

Analytical monitoring: no

Method: OECD 209

GLP: yes

 **BUSBY OILS**

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

7-Methyl-3-methyleneocta-1,6-diene:

Toxicity to daphnia and other aquatic invertebrates:

EC50 (Daphnia magna (Water flea)): 1,47 mg/l
End point: Immobilization
Exposure time: 48 h
Test Type: semi-static test
Analytical monitoring: yes
Method: OECD Test Guideline 202
GLP: yes

Toxicity to algae/aquatic plants:

EC50 (Pseudokirchneriella subcapitata (green algae)): 0,342 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 201
GLP: yes

EC10 (Pseudokirchneriella subcapitata (green algae)): 0,274 mg/l
Exposure time: 72 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 201
GLP: yes

M-Factor (Acute aquatic toxicity): 1

M-Factor (Chronic aquatic toxicity): 1

Pin-2(3)-ene:

M-Factor (Acute aquatic toxicity): 1

M-Factor (Chronic aquatic toxicity): 1

12.2 Persistence and degradability

Components:

p-Mentha-1,5-diene:

Biodegradability:

Test Type: Manometric respiration test
Result: Inherently biodegradable.
Biodegradation: 72 %
Exposure time: 60 d
Method: OECD 301F
GLP: yes

BUSBY OILS

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

p-Cymene:

Biodegradability:

Test Type: MITI Test I

Result: Readily biodegradable.

Biodegradation: 88 %

Exposure time: 14 d

Method: OECD 301C

p-Mentha-1(7),2-diene:

Biodegradability:

Result: Inherently biodegradable.

Remarks: Information given is based on data obtained from similar substances.

p-Menth-1-en-4-ol:

Biodegradability:

Test Type: Closed Bottle test

Result: Readily biodegradable.

Biodegradation: 69 %

Exposure time: 28 d

Method: OECD 301D

GLP: yes

linalool; 3,7-dimethyl-1,6-octadien-3-ol; dl-linalool:

Biodegradability:

Test Type: Closed Bottle test

Result: Readily biodegradable.

Biodegradation: 64,2 %

Exposure time: 28 d

Method: OECD 301D

GLP: yes

p-Mentha-1,4(8)-diene:

Biodegradability:

Test Type: Manometric Respirometry Test

Result: Readily biodegradable.

Biodegradation: 78 %

Exposure time: 28 d

Method: OECD 301F

GLP: yes

p-Mentha-1,4-diene:

Biodegradability:

Test Type: MITI test, (BOD/COD):

Result: Readily biodegradable.

Biodegradation: 94 %

Exposure time: 28 d

Method: OECD 301C

**BUSBY OILS**

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

p-Mentha-1,3-diene:

Biodegradability:

Test Type: Manometric Respirometry Test

Inoculum: activated sludge, non-adapted

Result: Inherently biodegradable.

Biodegradation: 66 %

Exposure time: 70 d

Method: OECD 301F

GLP: yes

7-Methyl-3-methyleneocta-1,6-diene:

Biodegradability:

Test Type: Closed Bottle test

Inoculum: activated sludge, non-adapted

Result: Readily biodegradable.

Biodegradation: 76 %

Exposure time: 28 d

Method: OECD 301D

GLP: yes

(E)-3,7-Dimethylocta-1,3,6-triene:

Biodegradability:

Result: Readily biodegradable.

Remarks: Information given is based on data obtained from similar substances.

Pin-2(3)-ene:

Biodegradability:

Test Type: Closed Bottle test

Result: Readily biodegradable.

Biodegradation: 68 %

Exposure time: 28 d

Method: OECD 301D

GLP: yes

12.3 Bioaccumulative potential**Components:****p-Mentha-1,5-diene:**

Partition coefficient: noctanol/ water:

log Pow: 4,62

Remarks: calculated

p-Cymene:

Partition coefficient: noctanol/ water:

log Pow: 4,8 (20 °C)

Method: OECD Test Guideline 117

GLP: yes


 **BUSBY OILS**

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

p-Mentha-1(7),2-diene:

Partition coefficient: noctanol/ water: log Pow: 4,7
Remarks: calculated

p-Menth-1-en-4-ol:

Partition coefficient: noctanol/ water: log Pow: 2,97 (22,7 °C)
Method: OECD 117
GLP: yes

linalool; 3,7-dimethyl-1,6-octadien-3-ol; dl-linalool:

Partition coefficient: noctanol/ water: log Pow: 2,84 (25 °C)
Method: OECD Test Guideline 107
GLP: no

p-Mentha-1,4(8)-diene:

Partition coefficient: noctanol/ water: log Pow: 4,88
Remarks: calculated

p-Mentha-1,4-diene:

Partition coefficient: noctanol/ water: log Pow: 5,4 (25 °C)
Method: OECD Test Guideline 117
GLP: no

p-Mentha-1,3-diene:

Partition coefficient: noctanol/ water: log Pow: 5,3 (35 °C)
Method: OECD 117
GLP: yes

7-Methyl-3-methyleneocta-1,6-diene:

Partition coefficient: noctanol/ water: log Pow: 4,82 (30 °C)
pH: 6,5
Method: OECD Test Guideline 117
GLP: no

Pin-2(3)-ene:

Partition coefficient: noctanol/ water: log Pow: 5,7 (35 °C)

12.4 Mobility in soil

No data available

**BUSBY OILS**

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

12.5 Results of PBT and vPvB assessment

Product:

Assessment:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Product:

Additional ecological information:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product :

The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Contaminated packaging :

Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: TRANSPORT INFORMATION

PROPER SHIPPING NAME:**EXTRACTS LIQUID**

14.1 UN number or ID number

ADR :

UN 1197

RID :

UN 1197

IMDG :

UN 1197

IATA :

UN 1197

**BUSBY OILS**

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

14.2 UN proper shipping name

ADR:	EXTRACTS, LIQUID
RID:	EXTRACTS, LIQUID
IMDG:	EXTRACTS, LIQUID
	(2-METHYL-5-(1-METHYLETHYL)-1,3-CYCLOHEXADIENE, TERPINOLENE)
IATA:	Extracts, liquid

14.3 Transport hazard class(es)

ADR:	3
RID:	3
IMDG:	3
IATA:	3

14.4 Packing group

ADR

Packing group:	III
Classification Code:	F1
Hazard Identification Number:	30
Labels:	3
Tunnel restriction code:	(D/E)

RID

Packing group:	III
Classification Code:	F1
Hazard Identification Number:	30
Labels:	3

IMDG

Packing group:	III
Labels:	3
EmS Code:	F-E, S-D

IATA (Cargo)

Packing instruction (cargo aircraft):	366
Packing instruction (LQ):	Y344
Packing group:	III
Labels:	Flammable Liquid

**BUSBY OILS**

SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

IATA (Passenger)

Packing instruction (passenger aircraft): 355
Packing instruction (LQ): Y344
Packing group: III
Labels: Flammable Liquid

14.5 Environmental hazards**ADR**

Environmentally hazardous: yes

RID

Environmentally hazardous: yes

IMDG

Marine pollutant: yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: REGULATORY INFORMATION

WORDS OF WARNING:**PARTICULAR RISKS:****DANGER:**

H226 Flammable liquid and vapour.
H303 May be harmful if swallowed
H304 May be fatal if swallowed and enters airways.
H315 Can causes skin irritation.
H317 May cause an allergic skin reaction.
H401 Toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects

PRECAUTIONARY**STATEMENT****PREVENTION:**

P210 Keep away from heat, sparks, open flames or hot surfaces. – No smoking.
P273 Avoid release to the environment.
P280 Wear protective gloves, protective clothing, eye protection, face protection.

PRECAUTIONARY**STATEMENT****RESPONSE:**

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.



SAFETY DATA SHEET

Date: 20 February 2024 | Version: 3 | Revision: 1 February 2029

EUCALYPTUS OIL DIVES

SECTION 16: OTHER INFORMATION

The information provided herein is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and it is not to be considered a warranty or quality specification.

It is the user's responsibility to apply the information contained herein and to determine safe working conditions. The User assumes full responsibility for any loss, injury, damage or cost resulting from improper use of this product, or use of this product in combination with other products.