SAFETY DATA SHEET

Tea Tree Australia

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 01.07.2021
Revision no: 2

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

1.1 Product identifier

Identification of the substance	**Tea Tree Australia**
Registration number (REACH)	01-2120743651-57-0021
EC number	285- 377-1
CAS number	85085-48-9, 68647-73-4
Article number	14157-848-10 (A.721.01)

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

Relevant identified uses	Professional use
Uses advised against	The product is not intended for consumer use.

1.3 Details of the supplier of the safety data sheet

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ul. Franciszka Klimczaka 1
02-797 Warszawa
POLAND

Tel: +48 578 715 000
Email: cs@essentials.com.pl

1.4 Emergency telephone number

+48 578 715 000

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

Section	Hazard class	Hazard class and category	Hazard statement
2.6	flammable liquid	Flam. Liq. 3	H226
3.1O	acute toxicity (oral)	Acute Tox. 4	H302
3.1I	acute toxicity (inhal.)	Acute Tox. 4	H332
3.2	skin corrosion/irritation	Skin Irrit. 2	H315
3.7	reproductive toxicity	Repr. 2	H361
3.10	aspiration hazard	Asp. Tox. 1	H304
4.1C	hazardous to the aquatic environment - chronic hazard	Aquatic Chronic 2	H411

For full text of abbreviations: see SECTION 16.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

- Signal word danger

- Pictograms

GHS02, GHS07, GHS08, GHS09

- Hazard statements

H226	Flammable liquid and vapour.
H302+H332	Harmful if swallowed or if inhaled.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H361	Suspected of damaging fertility or the unborn child.
H411	Toxic to aquatic life with long lasting effects.

- Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
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.
P370+P378	In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.

- Supplemental hazard information

EUH208	Contains alpha-Pinene, Myrcene, l-Limonene, Eukalyptol (1.8-Cineol), Terpinolene. May produce an allergic reaction.

2.3 Other hazards

of no significance

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance	Tea Tree Australia (UVCB)
Identifiers	
REACH Reg. No	01-2120743651-57-0021
CAS No	85085-48-9, 68647-73-4
EC No	285-377-1

Impurities and additives, classification acc. to GHS

Name of substance	Identifier	Wt%
p-menth-1-en-4-ol	CAS No 562-74-3 EC No 209-235-5	25 – < 50
gamma-Terpinene	CAS No 99-85-4 EC No 202-794-6	10 – < 25
alpha-Terpinene	CAS No 99-86-5 EC No 202-795-1	10 – < 25

Impurities and additives, classification acc. to GHS

Name of substance	Identifier	Wt%
p-menth-1-en-8-ol	CAS No 98-55-5 EC No 202-680-6	1 – < 5
Terpinolene	CAS No 586-62-9 EC No 209-578-0	1 – < 5
Eukalyptol (1.8-Cineol)	CAS No 470-82-6 EC No 207-431-5	1 – < 5
alpha-Pinene	CAS No 80-56-8 EC No 201-291-9	1 – < 5
p-Cymenene	CAS No 1195-32-0 EC No 214-795-9	1 – < 5
Myrcene	CAS No 123-35-3 EC No 204-622-5	1 – < 5
alpha-Thujene	CAS No 2867-05-2 EC No 220-686-7	1 – < 5
l-Limonene	CAS No 5989-54-8 EC No 227-815-6	1 – < 5

For full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

- Specific notes/details

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Vapours may form explosive mixtures with air.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

- Flammability hazards

Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

- Ventilation requirements

Keep any substance that emits harmful vapours or gases in a place that allows these to be permanently extracted. Use local and general ventilation. Ground/bond container and receiving equipment.

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Ceiling-C [ppm]	Ceiling-C [mg/m³]	Notation	Source
GB	cycloalkanes (>C7)	80-56-8	WEL		800						EH40/2005

Notation
Ceiling-C ceiling value is a limit value above which exposure should not occur
STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Human health values

Relevant DNELs and other threshold levels

Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
DNEL	0.658 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
DNEL	0.658 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
DNEL	4.356 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
DNEL	4.356 mg/kg bw/day	human, dermal	worker (industry)	acute - systemic effects

Relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
gamma-Terpinene	99-85-4	DNEL	2.939 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
gamma-Terpinene	99-85-4	DNEL	0.833 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Terpinolene	586-62-9	DNEL	3.6 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Terpinolene	586-62-9	DNEL	0.52 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Terpinolene	586-62-9	DNEL	44 µg/cm²	human, dermal	worker (industry)	chronic - local effects
Eukalyptol (1.8-Cineol)	470-82-6	DNEL	7.05 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Eukalyptol (1.8-Cineol)	470-82-6	DNEL	2 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
alpha-Pinene	80-56-8	DNEL	3.8 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects

Relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
alpha-Pinene	80-56-8	DNEL	0.54 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
l-Limonene	5989-54-8	DNEL	33.3 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
l-Limonene	5989-54-8	DNEL	222 µg/cm²	human, dermal	worker (industry)	acute - local effects

Environmental values

Relevant PNECs and other threshold levels

End-point	Threshold level	Organism	Environmental compartment	Exposure time
PNEC	0.008 mg/l	aquatic organisms	freshwater	short-term (single instance)
PNEC	0.001 mg/l	aquatic organisms	marine water	short-term (single instance)
PNEC	2.57 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
PNEC	37.11 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
PNEC	3.711 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
PNEC	7.42 mg/kg	terrestrial organisms	soil	short-term (single instance)

Relevant PNECs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
gamma-Terpinene	99-85-4	PNEC	0.003 mg/l	aquatic organisms	freshwater	short-term (single instance)
gamma-Terpinene	99-85-4	PNEC	0 mg/l	aquatic organisms	marine water	short-term (single instance)
gamma-Terpinene	99-85-4	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
gamma-Terpinene	99-85-4	PNEC	0.49 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
gamma-Terpinene	99-85-4	PNEC	0.049 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
gamma-Terpinene	99-85-4	PNEC	0.423 mg/kg	terrestrial organisms	soil	short-term (single instance)
p-menth-1-en-8-ol	98-55-5	PNEC	68 µg/l	aquatic organisms	freshwater	short-term (single instance)
p-menth-1-en-8-ol	98-55-5	PNEC	6.8 µg/l	aquatic organisms	marine water	short-term (single instance)
p-menth-1-en-8-ol	98-55-5	PNEC	2.6 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)

Relevant PNECs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
p-menth-1-en-8-ol	98-55-5	PNEC	1.85 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
p-menth-1-en-8-ol	98-55-5	PNEC	0.185 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
p-menth-1-en-8-ol	98-55-5	PNEC	0.329 mg/kg	terrestrial organisms	soil	short-term (single instance)
Terpinolene	586-62-9	PNEC	0.634 µg/l	aquatic organisms	freshwater	short-term (single instance)
Terpinolene	586-62-9	PNEC	0.063 µg/l	aquatic organisms	marine water	short-term (single instance)
Terpinolene	586-62-9	PNEC	0.2 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Terpinolene	586-62-9	PNEC	147 µg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Terpinolene	586-62-9	PNEC	14.7 µg/kg	aquatic organisms	marine sediment	short-term (single instance)
Terpinolene	586-62-9	PNEC	29.1 µg/kg	terrestrial organisms	soil	short-term (single instance)
Eukalyptol (1.8-Cineol)	470-82-6	PNEC	57 µg/l	aquatic organisms	freshwater	short-term (single instance)
Eukalyptol (1.8-Cineol)	470-82-6	PNEC	5.7 µg/l	aquatic organisms	marine water	short-term (single instance)
Eukalyptol (1.8-Cineol)	470-82-6	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Eukalyptol (1.8-Cineol)	470-82-6	PNEC	1.425 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Eukalyptol (1.8-Cineol)	470-82-6	PNEC	0.142 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Eukalyptol (1.8-Cineol)	470-82-6	PNEC	0.25 mg/kg	terrestrial organisms	soil	short-term (single instance)
alpha-Pinene	80-56-8	PNEC	0.606 µg/l	aquatic organisms	freshwater	short-term (single instance)
alpha-Pinene	80-56-8	PNEC	0.061 µg/l	aquatic organisms	marine water	short-term (single instance)
alpha-Pinene	80-56-8	PNEC	0.2 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
alpha-Pinene	80-56-8	PNEC	157 µg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
alpha-Pinene	80-56-8	PNEC	15.7 µg/kg	aquatic organisms	marine sediment	short-term (single instance)
alpha-Pinene	80-56-8	PNEC	31.7 µg/kg	terrestrial organisms	soil	short-term (single instance)
l-Limonene	5989-54-8	PNEC	5.4 µg/l	aquatic organisms	freshwater	short-term (single instance)
l-Limonene	5989-54-8	PNEC	0.54 µg/l	aquatic organisms	marine water	short-term (single instance)

Relevant PNECs of components of the mixture

Name of sub-stance	CAS No	End-point	Threshold level	Organism	Environment-al compart-ment	Exposure time
l-Limonene	5989-54-8	PNEC	0.2 $^{mg}/_{l}$	aquatic organisms	sewage treat-ment plant (STP)	short-term (single instance)
l-Limonene	5989-54-8	PNEC	1.322 $^{mg}/_{kg}$	aquatic organisms	freshwater sedi-ment	short-term (single instance)
l-Limonene	5989-54-8	PNEC	0.132 $^{mg}/_{kg}$	aquatic organisms	marine sediment	short-term (single instance)
l-Limonene	5989-54-8	PNEC	0.262 $^{mg}/_{kg}$	terrestrial organ-isms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Type of material

NBR: acrylonitrile-butadiene rubber

- Material thickness

> 0.7 mm

- Breakthrough times of the glove material

>10 minutes (permeation: level 1)

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.
Filtering half mask (EN 149). Type: A (against organic gases and vapours with a boiling point of > 65 °C , colour code: Brown).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid (Clear, liquid)
Colour	light yellow
Odour	characteristic

Other safety parameters

pH (value)	not determined
Melting point/freezing point	-22 °C
Initial boiling point and boiling range	not determined
Flash point	53 °C
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)
Explosive limits	not determined
Vapour pressure	2,100 Pa at 25 °C
Density	0.8955 $^{g}/_{cm^3}$
Vapour density	this information is not available

Solubility(ies)

- Water solubility	1,420 $^{mg}/_{l}$ at 20 °C

Partition coefficient

- n-octanol/water (log KOW)	≥3.4 – ≤5.5 (30 °C)(ECHA)
Auto-ignition temperature	252 °C at 1,022 mbar (ECHA)
Viscosity	not determined
Explosive properties	none
Oxidising properties	none

9.2 Other information

Surface tension	51 $^{mN}/_{m}$ (20 °C) (ECHA)
Temperature class (EU, acc. to ATEX)	T3 (maximum permissible surface temperature on the equipment: 200°C)

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". It's a reactive substance. The mixture contains reactive substance(s). Risk of ignition.

If heated:

Risk of ignition

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints to prevent fire or explosion

Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

10.5 Incompatible materials

Oxidisers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Harmful if swallowed. Harmful if inhaled.

GHS of the United Nations, annex 4: May be harmful in contact with skin.

- Acute toxicity estimate (ATE)

Oral 1,900 $^{mg}/_{kg}$
Inhalation: dust/mist 4.78 $^{mg}/_{l}/4h$

Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
p-menth-1-en-4-ol	562-74-3	oral	500 $^{mg}/_{kg}$
alpha-Terpinene	99-86-5	oral	500 $^{mg}/_{kg}$
alpha-Pinene	80-56-8	oral	500 $^{mg}/_{kg}$

Skin corrosion/irritation
Causes skin irritation.

Serious eye damage/eye irritation
The classification criteria for this hazard class are not met.

Respiratory or skin sensitisation
The classification criteria for these hazard classes are not met.

Germ cell mutagenicity
The classification criteria for this hazard class are not met.

Carcinogenicity
The classification criteria for this hazard class are not met.

Reproductive toxicity
Suspected of damaging the unborn child. Suspected of damaging fertility.

Specific target organ toxicity - single exposure
The classification criteria for this hazard class are not met.

Specific target organ toxicity - repeated exposure
The classification criteria for this hazard class are not met.

Aspiration hazard
May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1 Toxicity
Toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute)

Endpoint	Value	Species	Exposure time
LL50	>10 $^{mg}/_{l}$	fish	24 h
EL50	16.6 $^{mg}/_{l}$	aquatic invertebrates	24 h
ErC50	>80 $^{mg}/_{l}$	algae	72 h
EC50	>80 $^{mg}/_{l}$	algae	72 h

Aquatic toxicity (chronic)

Endpoint	Value	Species	Exposure time
EC50	257 $^{mg}/_{l}$	microorganisms	30 min

12.2 Persistence and degradability

Process of degradability

Process	Degradation rate	Time
carbon dioxide generation	43.8 %	5 d
oxygen depletion	4 %	5 d

Degradability of components of the mixture						
Name of substance	**CAS No**	**Process**	**Degradation rate**	**Time**	**Method**	**Source**
gamma-Terpinene	99-85-4	oxygen depletion	27 %	28 d		ECHA
Myrcene	123-35-3	oxygen depletion	76 %	28 d		ECHA

12.3 Bioaccumulative potential

The substance fulfils the very bioaccumulative criterion.

n-octanol/water (log KOW)	≥3.4 – ≤5.5 (30 °C)(ECHA)

Bioaccumulative potential of components of the mixture				
Name of substance	**CAS No**	**BCF**	**Log KOW**	**BOD5/COD**
gamma-Terpinene	99-85-4		5.4 (25 °C)	
p-menth-1-en-8-ol	98-55-5		2.6 (30 °C)	
Eukalyptol (1.8-Cineol)	470-82-6		3.4	
Myrcene	123-35-3		4.82 (pH value: ~6.5, 30 °C)	
l-Limonene	5989-54-8	864.8	4.38 (pH value: 7.2, 37 °C)	

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Endocrine disrupting potential

Not listed.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment-relevant information

Solvent reclamation/regeneration.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Relevant provisions relating to waste

Decision 2000/532/EC on the list of waste

Product, Product residues: 07 06 99 wastes not otherwise specified
Packagings: 15 01 10* Packaging containing residues of or contaminated by dangerous substances.
Completely emptied packages can be recycled.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1	**UN number**	1169
14.2	**UN proper shipping name**	EXTRACTS, AROMATIC, LIQUID
14.3	**Transport hazard class(es)**	
	Class	3 (flammable liquids) (environmentally hazardous)
14.4	**Packing group**	III (substance presenting low danger)
14.5	**Environmental hazards**	hazardous to the aquatic environment

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

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

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

UN number	1169
Proper shipping name	EXTRACTS, AROMATIC, LIQUID
Particulars in the transport document	UN1169, EXTRACTS, AROMATIC, LIQUID, 3, III, (D/E), environmentally hazardous
Class	3
Classification code	F1
Packing group	III
Danger label(s)	3, fish and tree

Environmental hazards	yes (hazardous to the aquatic environment)
Special provisions (SP)	601
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
Transport category (TC)	3
Tunnel restriction code (TRC)	D/E
Hazard identification No	30
Emergency Action Code	3Y

International Maritime Dangerous Goods Code (IMDG)

UN number	1169
Proper shipping name	EXTRACTS, AROMATIC, LIQUID
Particulars in the shipper's declaration	UN1169, EXTRACTS, AROMATIC, LIQUID, (gamma-Terpinene), 3, III, 53°C c.c., MARINE POLLUTANT
Class	3
Marine pollutant	yes (hazardous to the aquatic environment)
Packing group	III
Danger label(s)	3, fish and tree

Special provisions (SP)	223, 955
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-E, S-D
Stowage category	A

International Civil Aviation Organization (ICAO-IATA/DGR)

UN number	1169
Proper shipping name	Extracts, aromatic, liquid
Particulars in the shipper's declaration	UN1169, Extracts, aromatic, liquid, 3, III
Class	3
Environmental hazards	yes (hazardous to the aquatic environment)
Packing group	III
Danger label(s)	3

Special provisions (SP)	A3
Excepted quantities (EQ)	E1
Limited quantities (LQ)	10 L

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

not listed

Seveso Directive

2012/18/EU (Seveso III)

No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements		Notes
E2	environmental hazards (hazardous to the aquatic environment, cat. 2)	200	500	57)

Notation
57) hazardous to the Aquatic Environment in category Chronic 2

National inventories

Country	Inventory	Status
AU	AICS	substance is listed
CA	DSL	substance is listed
CN	IECSC	substance is listed
EU	REACH Reg.	substance is listed
KR	KECI	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	substance is listed
TW	TCSI	substance is listed
US	TSCA	substance is listed
EU	ECSI	substance is listed

Legend

AICS	Australian Inventory of Chemical Substances
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
KECI	Korea Existing Chemicals Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances
REACH Reg.	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
1.1	CAS number: 68647-73-4, 85085-48-9	CAS number: 85085-48-9, 68647-73-4	yes
2.1		Classification according to Regulation (EC) No 1272/2008 (CLP): change in the listing (table)	yes

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relev-ant
2.2		- Hazard statements: change in the listing (table)	yes
2.2		- Supplemental hazard information: change in the listing (table)	yes
3.1	CAS No: 68647-73-4, 85085-48-9	CAS No: 85085-48-9, 68647-73-4	yes
3.1		Impurities and additives, classification acc. to GHS: change in the listing (table)	yes
5.2	Hazardous combustion products: Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)	Hazardous combustion products: Carbon monoxide (CO), Carbon dioxide (CO2)	yes
8.1		Occupational exposure limit values (Workplace Exposure Limits): change in the listing (table)	yes
8.1		Relevant DNELs of components of the mixture: change in the listing (table)	yes
8.1		Relevant PNECs of components of the mixture: change in the listing (table)	yes
9.1	Physical state: liquid	Physical state: liquid (Clear, liquid)	yes
9.1	Flash point: 53 °C at 1,022 mbar	Flash point: 53 °C	yes
9.1	Density: 0.895 $^{g}/_{cm^3}$	Density: 0.8955 $^{g}/_{cm^3}$	yes
9.2		Temperature class (EU, acc. to ATEX): T3 (maximum permissible surface temperature on the equipment: 200°C)	yes
11.1	Acute toxicity: Harmful if swallowed. Harmful if inhaled.	Acute toxicity: Harmful if swallowed. Harmful if inhaled.GHS of the United Nations, annex 4: May be harmful in contact with skin.	yes
11.1	Respiratory or skin sensitisation: May cause an allergic skin reaction.	Respiratory or skin sensitisation: The classification criteria for these hazard classes are not met.	yes
11.1	Reproductive toxicity: The classification criteria for this hazard class are not met.	Reproductive toxicity: Suspected of damaging the unborn child. Suspected of damaging fertility.	yes
12.1		Aquatic toxicity (acute): change in the listing (table)	yes
12.2		Degradability of components of the mixture: change in the listing (table)	yes
12.3	Bioaccumulative potential: Data are not available.	Bioaccumulative potential: The substance fulfils the very bioaccumulative criterion.	yes
12.3		Bioaccumulative potential of components of the mixture: change in the listing (table)	yes

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
13.1	Decision 2000/532/EC on the list of waste: Product, Product residues: 07 06 99 wastes not otherwise specified Packagings: 15 01 10x Packaging containing residues of or contaminated by dangerous substances. Completely emptied packages can be recycled.	Decision 2000/532/EC on the list of waste: Product, Product residues: 07 06 99 wastes not otherwise specified Packagings: 15 01 10* Packaging containing residues of or contaminated by dangerous substances. Completely emptied packages can be recycled.	yes
14.3	Class: 3 (flammable liquids)	Class: 3 (flammable liquids) (environmentally hazardous)	yes
14.7	Emergency Action Code: 3YE	Emergency Action Code: 3Y	yes
14.7	Particulars in the shipper's declaration: UN1169, EXTRACTS, AROMATIC, LIQUID, 3, III, 53°C c.c., MARINE POLLUTANT	Particulars in the shipper's declaration: UN1169, EXTRACTS, AROMATIC, LIQUID, (gamma-Terpinene), 3, III, 53°C c.c., MARINE POLLUTANT	yes
15.1		National inventories: change in the listing (table)	yes
16		Abbreviations and acronyms: change in the listing (table)	yes
16		List of relevant phrases (code and full text as stated in chapter 2 and 3): change in the listing (table)	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)
EINECS	European Inventory of Existing Commercial Chemical Substances

Abbr.	Descriptions of used abbreviations
EL50	Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
LL50	Lethal Loading 50 %: the LL50 corresponds to the loading rate causing 50 % lethality
log KOW	n-Octanol/water
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL	Short-term exposure limit
SVHC	Substance of Very High Concern
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H332	Harmful if inhaled.

Code	Text
H361	Suspected of damaging fertility or the unborn child.
H411	Toxic to aquatic life with long lasting effects.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.