

This safety data sheet was created pursuant to the requirements of:
UK REACH Regulations (SI 2019/758 as amended)

Revision date 18-Jul-2025

Revision Number 2

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

1.1. Product identifier

Product Code(s) 126118
Safety data sheet number 126118
Product Name TECHNOMELT CLEANER MELT O CLEAN

Pure substance/mixture Mixture

Contains (R)-p-MENTHA-1,8-DIENE; GERANIOL; 2-PINENE; 3,7,7-TRIMETHYLBICYCLO[4.1.0]HEPT-3-ENE; LINALOOL; PIN-2-(10) ENE; 4-ISOPROPENYLCYCLOHEX-1-ENECARBALDEHYDE; p-MENTHA-1,4(8)-DIENE

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

Recommended use Cleaner

1.3. Details of the supplier of the safety data sheet

Supplier

Univar Solutions UK Ltd
Aquarius House
6 Mid Point Business Park
Bradford
GBR

For further information, please contact

E-mail address SDS.EMEA@univarsolutions.com
Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

1.4. Emergency telephone number

Emergency Telephone SGS - +32 (0)3 575 55 55 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Flammable liquids	Category 3 - (H226)
Skin corrosion/irritation	Category 2 - (H315)
Skin sensitisation	Category 1 - (H317)
Aspiration hazard	Category 1 - (H304)
Acute aquatic toxicity	Category 1 - (H400)

Chronic aquatic toxicity

Category 1 - (H410)

2.2. Label elements

Contains (R)-p-MENTHA-1,8-DIENE; GERANIOL; 2-PINENE; 3,7,7-TRIMETHYLBICYCLO[4.1.0]HEPT-3-ENE; LINALOOL; PIN-2-(10) ENE; 4-ISOPROPENYLCYCLOHEX-1-ENECARBALDEHYDE; p-MENTHA-1,4(8)-DIENE

**Signal word**

Danger

Hazard statements

H304 - May be fatal if swallowed and enters airways

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H410 - Very toxic to aquatic life with long lasting effects

H226 - Flammable liquid and vapour

Precautionary statements

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P261 - Avoid breathing vapours

P273 - Avoid release to the environment

P280 - Wear protective gloves

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

P331 - Do NOT induce vomiting

2.3. Other hazards

Solvents contained in the product evaporate during processing and their vapours can form explosive/highly flammable air/vapour mixtures. Vapours are heavier than air and may travel a long distance and accumulate in low lying areas.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable

3.2 Mixtures

Chemical name	Weight-%	EC No (EU Index No)	UK REACH registration number	Classification according to GB CLP (SI 2020/1567 as amended)	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
(R)-p-MENTHA-1,8-DIENE 5989-27-5	80 - <100%	227-813-5 (601-096-00-2)	-	Flam. Liq. 3 (H226) Skin Irrit. 2 (H315) Skin Sens. 1B (H317) Asp. Tox. 1 (H304) Aquatic Acute 1 (H400) Aquatic Chronic 3	-	1	-

				(H412)			
P-MENTHA-1,4-DIENE 99-85-4	0.25- < 2.5 %	202-794-6	-	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Repr. 2 (H361) Aquatic Chronic 2 (H411)	-	-	-
7-METHYL-3-METHYLENEOCTA-1,6-DIENE 123-35-3	0.25- < 2.5 %	204-622-5	-	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)	-	1	-
p-CYMENE 99-87-6	0.1- < 1 %	202-796-7	-	Flam. Liq. 3 (H226) Acute Tox. 3 (H331) Asp. Tox. 1 (H304) Repr. 2 (H361) Aquatic Chronic 2 (H411)	-	-	-
LINALOOL 78-70-6	0.1- < 1 %	201-134-4 (603-235-00-2)	-	Skin Irrit. 2 (H315) Skin Sens. 1B (H317) Eye Irrit. 2 (H319)	-	-	-
GERANIOL 106-24-1	0.1- < 1 %	203-377-1 (603-241-00-5)	-	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317)	-	-	-
PIN-2-(10) ENE 127-91-3	0.1- < 1 %	204-872-5	-	Flam. Liq. 3 (H226) Skin Irrit. 2 (H315) Skin Sens. 1B (H317) Asp. Tox. 1 (H304) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-	1	1
4-ISOPROPENYL CYCLOHEX-1-ENECARBALDEHYDE 2111-75-3	0.1- < 1 %	218-302-8	-	Skin Sens. 1B (H317)	-	-	-
2-PINENE 80-56-8	0.1- < 1 %	201-291-9	-	Flam. Liq. 3 (H226) Acute Tox. 4 (H302) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Aquatic Chronic 1 (H410)	-	1	1
p-MENTHA-1,4(8)-DIENE 586-62-9	0.1- < 1 %	209-578-0	-	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Skin Sens. 1B (H317) Aquatic Chronic 1 (H410)	-	1	1
3,7,7-TRIMETHYLBICYCLO[4.1.0]HEPT-3-ENE	0.1- < 1 %	236-719-3	-	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315)	-	-	-

13466-78-9				Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)			
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Full text of H- and EUH-phrases: see section 16

Additional information

Declaration of ingredients according to Detergent Regulation 648/2004/EC: Contains Perfumes. Allergenic fragrance ingredients >=100 ppm: Limonene, Geraniol, Linalool

This product does not contain candidate substances of very high concern at a concentration >= 0.1% (UK REACH Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Skin contact	IF ON SKIN: Wash with plenty of soap and water. Get medical attention if symptoms occur.
Ingestion	Rinse mouth thoroughly with water. Drink 1 or 2 glasses of water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit does not enter the lungs.
Self-protection of the first aider	Remove all sources of ignition. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing.

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

Dermal	Causes skin irritation. May cause an allergic skin reaction. Rashes. Hives. Itching. Redness.
Ingestion	May be fatal if swallowed and enters airways May result in aspiration into the lungs, causing chemical pneumonia. Risk of lung oedema. Coughing and/or wheezing Difficulty in breathing Nausea

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

Note to doctors	Treat symptomatically. Delayed pulmonary edema may occur.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Carbon dioxide (CO2). Alcohol resistant foam. Dry chemical.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	Risk of ignition. Keep product and empty container away from heat and sources of ignition. May emit toxic fumes under fire conditions. Exposure to combustion products may be a hazard to health.
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5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Cool containers with flooding quantities of water until well after fire is out. Collect contaminated fire extinguishing water separately. Do not allow it to enter drains or surface water.
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SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions	Use personal protection recommended in Section 8. Avoid contact with skin and eyes. Keep unnecessary and unprotected personnel from entering. Stop leak if you can do it without risk. In case of spills, beware of slippery floors and surfaces. Eliminate all ignition sources if safe to do so. Pay attention to flashback. Take precautionary measures against static discharge.
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Other information	Ventilate the area. Refer to protective measures listed in Sections 7 and 8.
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For emergency responders	Use personal protection recommended in Section 8.
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6.2. Environmental precautions

Environmental precautions	Keep out of drains, sewers, ditches and waterways. Local authorities should be advised if significant spillages cannot be contained.
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6.3. Methods and material for containment and cleaning up

Methods for containment	Contain and collect spillage 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).
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Methods for cleaning up	Clean contaminated objects and areas thoroughly observing environmental regulations.
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Prevention of secondary hazards	Observe good chemical hygiene practices.
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6.4. Reference to other sections

Reference to other sections	See section 8 for more information. See section 13 for more information.
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SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Advice on safe handling	Keep away from open flames, hot surfaces and sources of ignition. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use non-sparking tools. Take precautionary measures against static discharge.
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General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using the product. Wash hands before breaks and after work. Take off contaminated clothing and wash it before reuse.
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7.2. Conditions for safe storage, including any incompatibilities**Storage Conditions**

Store in accordance with local regulations. Keep container tightly closed in a dry and well-ventilated place. Keep away from heat, sparks and open flame. Keep in properly labelled containers. Store away from incompatible materials. Oxidising agents. Do not store near combustible materials.

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

See section 1 for more information.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure Limits**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
(R)-p-MENTHA-1,8-DIENE 5989-27-5		9.5 mg/kg [5] [7]	66.7 mg/m ³ [4] [6]
P-MENTHA-1,4-DIENE 99-85-4		0.833 mg/kg/day [4] [6]	2.939 mg/m ³ [4] [6]
LINALOOL 78-70-6		15 mg/cm ² [5] [6]	2.8 mg/m ³ [4] [6]
GERANIOL 106-24-1		12.5 mg/kg [4] [6]	161.6 mg/l [4] [6]
2-PINENE 80-56-8		0.542 mg/kg bw/day [4] [6]	3.8 mg/m ³ [4] [6]
p-MENTHA-1,4(8)-DIENE 586-62-9		1.45 mg/kg/day [4] [6]	5.12 mg/m ³ [4] [6]

[4] Systemic health effects.
 [5] Local health effects.
 [6] Long term.
 [7] Short term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
(R)-p-MENTHA-1,8-DIENE 5989-27-5	4.8 mg/kg bw/day [4] [6]	4.8 mg/kg [5] [7]	16.6 mg/m ³ [4] [6]
P-MENTHA-1,4-DIENE 99-85-4	0.417 mg/kg/day [4] [6]	0.417 mg/kg/day [4] [6]	0.725 mg/m ³ [4] [6]

Chemical name	Oral	Dermal	Inhalation
LINALOOL 78-70-6	0.2 mg/kg/day [4] [6]	15 mg/cm ² [5] [6]	0.7 mg/m ³ [4] [6]
GERANIOL 106-24-1	13.75 mg/kg [4] [6]	7.5 mg/kg [4] [6]	47.8 mg/m ³ [4] [6]
2-PINENE 80-56-8	0.225 mg/kg bw/day [4] [6]		0.674 mg/m ³ [4] [6]
p-MENTHA-1,4(8)-DIENE 586-62-9	0.73 mg/kg/day [4] [6]	0.73 mg/kg/day [4] [6]	1.26 mg/m ³ [4] [6]

[4]	Systemic health effects.
[5]	Local health effects.
[6]	Long term.
[7]	Short term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
(R)-p-MENTHA-1,8-DIENE 5989-27-5	0.014 mg/l		0.0014 mg/l		
P-MENTHA-1,4-DIENE 99-85-4	0.002792 mg/L		0.0002792 mg/L		
LINALOOL 78-70-6	0.2 mg/l	2 mg/L	0.02 mg/l		
GERANIOL 106-24-1	0.0108 mg/L	0.108 mg/L	0.00108 mg/L		
2-PINENE 80-56-8	0.606 µg/L	3.03 µg/L	0.0606 µg/L	0.303 µg/L	
p-MENTHA-1,4(8)-DIENE 586-62-9	5.2 µg/l		0.52 µg/l		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
(R)-p-MENTHA-1,8-DIENE 5989-27-5		0.385 mg/kg dry weight (d.w.)	1.8 mg/l	0.763 mg/kg dry weight (d.w.)	133 mg/kg food
P-MENTHA-1,4-DIENE 99-85-4	0.490056696 mg/kg sediment dw	0.0490056696 mg/kg sediment dw	10 mg/L	0.422765624 mg/kg soil dw	
LINALOOL 78-70-6	2.22 mg/kg	0.222 mg/kg	10 mg/L	0.327 mg/kg	> 10 mg/l
GERANIOL 106-24-1	0.115 mg/kg sediment dw	0.0115 mg/kg sediment dw	0.7 mg/L	0.0167 mg/kg soil dw	
2-PINENE 80-56-8	157 µg/kg sediment dw	15.7 µg/kg sediment dw	0.2 mg/L	31.7 µg/kg soil dw	8.76 mg/kg food
p-MENTHA-1,4(8)-DIENE 586-62-9	0.581 mg/kg	58.1 mg/kg		113 µg/l	3 mg/l

8.2. Exposure controls

Engineering controls

Ensure adequate ventilation. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection

Use eye protection according to EN 166. Tight sealing safety goggles.

Hand protection

Chemical resistant gloves required for prolonged or repeated contact. Gloves must conform to standard EN 374. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Examples of acceptable glove barrier materials include: Isobutylene-isoprene rubber (IIR). Gloves should be removed and replaced if there are any signs of degradation or breakthrough.

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
Short term Protection index 2	Isobutylene-isoprene rubber (IIR)	>= 0.7 mm	> 30 minutes
Long term (repeated) Protection index 6	Isobutylene-isoprene rubber (IIR)	>= 0.7 mm	> 480 minutes

Skin and body protection

Wear suitable protective clothing. Long sleeved clothing. Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Respiratory protection

Recommended filter type:

Not required; except in case of aerosol formation.
Respirator with ABEK filter. EN 14387.

General advice

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using the product. Wash hands before breaks and after work. Take off contaminated clothing and wash it before reuse.

Environmental exposure controls

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid
Colour	Colourless
Odour	Characteristic.
Odour threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	< -50 °C	
Initial boiling point and boiling range	173 °C	
Flammability		flammable liquid.
Flammability Limit in Air		
Upper flammability or explosive limits	6.1% (V)	
Lower flammability or explosive limits	0.8% (V)	
Flash point	40 - 50 °C	CC (closed cup). DIN 51755.
Autoignition temperature	> 300 °C	
Decomposition temperature		Not applicable. Substance/mixture is not self-reactive, no organic peroxide and does not decompose under foreseen conditions of use.
pH		Not applicable. Substance/mixture is non-polar/aprotic.

pH (as aqueous solution)		Not applicable.
Kinematic viscosity	< 20.5 mm ² /s	@ 40 °C.
Dynamic viscosity		No information available.
Water solubility	Immiscible in water	
Solubility(ies)		No information available.
Partition coefficient		Not applicable. Mixture.
Vapour pressure	< 200 mbar	@ 20 °C.
Relative density		No information available.
Bulk density		No information available
Liquid Density	0.846 g/cm ³	@ 20 °C
Relative vapour density	> 1	@ 20 °C.
Particle characteristics		Not applicable. liquid.
Particle Size	.	
Particle Size Distribution	.	
Explosive properties	No information available	
Oxidising properties	No information available	
9.2. Other information		
VOC content	96.3%	

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Stable under recommended storage conditions. Reacts with:. Oxidising agents.

10.2. Chemical stability

Stability Stable under recommended storage conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions See Section 10.1.

10.4. Conditions to avoid

Conditions to avoid Keep away from open flames, hot surfaces and sources of ignition. Excessive heat.

10.5. Incompatible materials

Incompatible materials Oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products None under normal use conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information An allergic reaction cannot be excluded after repeated skin contact

Inhalation May cause irritation.

Eye contact	May cause irritation.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Ingestion	May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Itching. Rashes. Hives. Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Redness. May cause redness and tearing of the eyes.
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Acute toxicity**Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
(R)-p-MENTHA-1,8-DIENE	> 2000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 3.41 mg/l (Mouse) 4h
P-MENTHA-1,4-DIENE	= 3650 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
7-METHYL-3-METHYLENEOCTA-1,6-DIENE	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
p-CYMENE	=4750 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	3 mg/l (ATE)
LINALOOL	= 2790 mg/kg (Rat)	= 5610 mg/kg (Rabbit)	-
GERANIOL	= 3600 mg/kg (Rat)	> 5 g/kg (Rabbit)	-
PIN-2-(10) ENE	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
4-ISOPROPENYLCYCLOHEX-1-ENECARBALDEHYDE	=2500 mg/kg (ATE)	-	-
2-PINENE	> 500 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
p-MENTHA-1,4(8)-DIENE	= 4390 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
3,7,7-TRIMETHYLBICYCLO[4.1.0]HEPT-3-ENE	=4800 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Causes skin irritation.
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(R)-p-MENTHA-1,8-DIENE (5989-27-5)

Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rabbit	Dermal			Irritant Brief contact may cause moderate skin irritation with local redness.

7-METHYL-3-METHYLENEOCTA-1,6-DIENE (123-35-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
	in vitro	Dermal			Irritant

LINALOOL (78-70-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 404: Acute Dermal Irritation/Corrosion	Rabbit	Dermal		4 hours	Causes skin irritation

GERANIOL (106-24-1)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 404: Acute Dermal Irritation/Corrosion	Rabbit	Dermal		4 hours	Moderate skin irritation

2-PINENE (80-56-8)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 431: In vitro skin corrosion: reconstructed human epidermis (RHE) test method	Human evidence	Dermal			Irritant

3,7,7-TRIMETHYLBICYCLO[4.1.0]HEPT-3-ENE (13466-78-9)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 431: In vitro skin corrosion: reconstructed human epidermis (RHE) test method	Human evidence	Dermal		15 minutes	Irritant

Serious eye damage/eye irritation Based on available data the classification criteria are not met.

(R)-p-MENTHA-1,8-DIENE (5989-27-5)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 405: Acute Eye Irritation/Corrosion	Rabbit				non-irritant

7-METHYL-3-METHYLENEOCTA-1,6-DIENE (123-35-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rabbit	eye			Causes serious eye irritation

LINALOOL (78-70-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 405: Acute Eye Irritation/Corrosion	Rabbit	eye			Causes serious eye irritation

GERANIOL (106-24-1)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 405: Acute Eye Irritation/Corrosion	Rabbit	eye			Corneal Opacity Irreversible damage

Respiratory or skin sensitisation May cause an allergic skin reaction.

(R)-p-MENTHA-1,8-DIENE (5989-27-5)

Method	Species	Exposure route	Results
OECD Test No. 429: Skin Sensitization	Mouse	Dermal	Sensitising

7-METHYL-3-METHYLENEOCTA-1,6-DIENE (123-35-3)

Method	Species	Exposure route	Results
	Mouse	Dermal	Not a skin sensitiser

LINALOOL (78-70-6)

Method	Species	Exposure route	Results
OECD Test No. 429: Skin Sensitization	Mouse	Dermal	Sensitising

GERANIOL (106-24-1)

Method	Species	Exposure route	Results
OECD Test No. 429: Skin Sensitization	Mouse	Dermal	Sensitising

3,7,7-TRIMETHYLBICYCLO[4.1.0]HEPT-3-ENE (13466-78-9)

Method	Species	Exposure route	Results
Patch test	Guinea pig	Dermal	Sensitising

Germ cell mutagenicity

Based on available data the classification criteria are not met.

Component Information

(R)-p-MENTHA-1,8-DIENE (5989-27-5)

Method	Species	Results
	in vitro	Negative
	in vivo	Negative
OECD Test No. 471: Bacterial Reverse Mutation Test	Ames Test	Negative
	in vitro	Negative

7-METHYL-3-METHYLENEOCTA-1,6-DIENE (123-35-3)

Method	Species	Results
	in vitro	Not mutagenic
	in vivo	Not mutagenic

Carcinogenicity

Based on available data the classification criteria are not met.

Component Information

(R)-p-MENTHA-1,8-DIENE (5989-27-5)

Method	Species	Results
	Mouse	Negative

7-METHYL-3-METHYLENEOCTA-1,6-DIENE (123-35-3)

Method	Species	Results
		Some positive data exist, but the data are not sufficient for classification

Reproductive toxicity

Based on available data the classification criteria are not met.

(R)-p-MENTHA-1,8-DIENE (5989-27-5)

Method	Species	Results
Test type: Embryo-foetal development	Rat	Negative

7-METHYL-3-METHYLENEOCTA-1,6-DIENE (123-35-3)

Method	Species	Results
	Rat	Negative NOAEL 500 mg/kg/day
	Rat	Negative NOAEL 300 mg/kg/day
	Rat	Negative NOAEL 300 mg/kg/day

STOT - single exposure

Based on available data the classification criteria are not met.

7-METHYL-3-METHYLENEOCTA-1,6-DIENE (123-35-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rat	Oral	500 mg/kg	14 weeks	Some positive data exist, but the data are not sufficient for classification
	Rat	Oral	250 mg/kg	14 weeks	Some positive data exist, but the data are not sufficient for classification
	Rat	Oral	1000 mg/kg	14 weeks	Some positive data exist, but the data are not sufficient for classification
	Rat	Oral	2000 mg/kg	14 weeks	Not classified

STOT - repeated exposure

Based on available data the classification criteria are not met.

Component Information

(R)-p-MENTHA-1,8-DIENE (5989-27-5)

Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rat	Ingestion	5 mg/kg	13 weeks	NOAEL
	Rat	Ingestion	30 mg/kg	13 weeks	LOAEL

7-METHYL-3-METHYLENEOCTA-1,6-DIENE (123-35-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
	similar health hazards	Inhalation			Some positive data exist, but the data are not sufficient for classification

LINALOOL (78-70-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 408: Repeated Dose 90-Day Oral Toxicity Study in Rodents	Rat	Oral		96 days	NOAEL : $\geq$ 497.9 mg/kg
OECD Test No. 411: Sub-chronic Dermal Toxicity: 90-day Study	Rat	Dermal	7 days/week	91 days	NOAEL : 250 mg/kg

Aspiration hazard

May be fatal if swallowed and enters airways.

Other adverse effects

No information available.

SECTION 12: Ecological information**12.1. Toxicity****Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

(R)-p-MENTHA-1,8-DIENE (5989-27-5)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test	Pimephales promelas	LC50	0.702 mg/L	96 hours	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	EC50	0.577 mg/L	48 hours	
Chronic toxicity	Daphnia magna	EC10	0.153 mg/L	21 days	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Pseudokirchneriella subcapitata	ErC50	0.25 mg/L	72 hours	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Pseudokirchneriella subcapitata	EC10	0.14 mg/L	72 hours	
OECD Test No. 209: Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation)	Toxicity to microorganisms	EC50	>100 mg/L	3 hours	
	Pimephales promelas	EC10	0.32 mg/L	8 days	

P-MENTHA-1,4-DIENE (99-85-4)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test	Danio rerio	LC50	2.792 mg/L	96 hours	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	EC50	10,189 mg/L	48 hours	

7-METHYL-3-METHYLENEOCTA-1,6-DIENE (123-35-3)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
	Green Algae	ErC50	0.342 mg/L	72 hours	
	Medaka	LC50	0.92 mg/L	96 hours	
	Water flea	EC50	0.45 mg/L	48 hours	
	Green Algae	NOEC	0.23 mg/L	72 hours	
	Water flea	NOEC	0.12 mg/L	21 days	

p-CYMENE (99-87-6)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test	Cyprinodon variegatus	LC50	48 mg/L	96 hours	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	EC50	6.5 mg/L	48 hours	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Pseudokirchneriella subcapitata	EC50	4.03 mg/L	72 hours	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Pseudokirchneriella subcapitata	NOEC	1.4 mg/L	72 hours	

GERANIOL (106-24-1)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 201:	Algae	EC50	13.1 mg/L	72 hours	

Freshwater Algae and Cyanobacteria, Growth Inhibition Test					
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	EC50	10.8 mg/L	48 hours	
Acute toxicity	Fish	LC50	14 mg/L	96 hours	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Desmodesmus subspicatus	EC50	13.1 mg/L	72 hours	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Desmodesmus subspicatus	EC10	3.77 mg/L	72 hours	

PIN-2-(10) ENE (127-91-3)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test	Pimephales promelas	LC50	0.5 mg/L	96 hours	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	EC50	1.25 mg/L	48 hours	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Pseudokirchneriella subcapitata	EC50	1.44 mg/L	48 hours	

2-PINENE (80-56-8)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test	Danio rerio	LC50	0.303 mg/L	96 hours	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	EC50	0.475 mg/L	48 hours	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Pseudokirchneriella subcapitata		0.131 mg/L	48 hours	

p-MENTHA-1,4(8)-DIENE (586-62-9)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test	Pimephales promelas	LC50	0.688 mg/L	96 hours	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	EC50	0.634 mg/L	48 hours	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Pseudokirchneriella subcapitata	EC10	0.273 mg/L	72 hours	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Pseudokirchneriella subcapitata	EC50	0.692 mg/L	72 hours	

3,7,7-TRIMETHYLBICYCLO[4.1.0]HEPT-3-ENE (13466-78-9)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 202:	Daphnia magna	EC50	0.8 mg/L	48 hours	

Daphnia sp., Acute Immobilisation Test					
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Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
LINALOOL	EC50: =88.3mg/L (96h, <i>Desmodesmus subspicatus</i>)	LC50: =27.8mg/L (96h, <i>Oncorhynchus mykiss</i>)	-	EC50: =20mg/L (48h, <i>Daphnia magna</i>)
GERANIOL	-	LC50: =22mg/L (96h, <i>Danio rerio</i>)	-	-
2-PINENE	-	LC50: =0.28mg/L (96h, <i>Pimephales promelas</i>)	-	LC50: =41mg/L (48h, <i>Daphnia magna</i>)
p-MENTHA-1,4(8)-DIENE	-	LC50: =0.805mg/L (96h, <i>Danio rerio</i>)	-	-

12.2. Persistence and degradability

Persistence and degradability The product contains substances which are biodegradable.

(R)-p-MENTHA-1,8-DIENE (5989-27-5)

Method	Exposure time	Value	Results
OECD Test No. 301B: Ready Biodegradability: CO2 Evolution Test (TG 301 B) or Equivalent.	14 days	Biodegradation 71.4 %	Readily biodegradable

P-MENTHA-1,4-DIENE (99-85-4)

Method	Exposure time	Value	Results
OECD Test No. 301C: Ready Biodegradability: Modified MITI Test (I) (TG 301 C)	28 days	94% Biodegradation	Readily biodegradable

7-METHYL-3-METHYLENEOCTA-1,6-DIENE (123-35-3)

Method	Exposure time	Value	Results
OECD Test No. 301D: Ready Biodegradability: Closed Bottle Test (TG 301 D)	28 days	76% Biodegradation	Readily biodegradable

p-CYMENE (99-87-6)

Method	Exposure time	Value	Results
OECD Test No. 301C: Ready Biodegradability: Modified MITI Test (I) (TG 301 C)	14 days	88% Biodegradation	Readily biodegradable

LINALOOL (78-70-6)

Method	Exposure time	Value	Results
OECD Test No. 301D: Ready Biodegradability: Closed Bottle Test (TG 301 D)	28 days	64.2% Biodegradation	Readily biodegradable

GERANIOL (106-24-1)

Method	Exposure time	Value	Results
OECD Test No. 301D: Ready Biodegradability: Closed Bottle Test (TG 301 D)	28 days	82% Biodegradation	Readily biodegradable

PIN-2-(10) ENE (127-91-3)

Method	Exposure time	Value	Results
OECD Test No. 301D: Ready	28 days	76% Biodegradation	Readily biodegradable

Biodegradability: Closed Bottle Test (TG 301 D)			
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2-PINENE (80-56-8)

Method	Exposure time	Value	Results
OECD Test No. 301D: Ready Biodegradability: Closed Bottle Test (TG 301 D)	28 days	76% Biodegradation	Readily biodegradable

p-MENTHA-1,4(8)-DIENE (586-62-9)

Method	Exposure time	Value	Results
OECD Test No. 301D: Ready Biodegradability: Closed Bottle Test (TG 301 D)	28 days	81% Biodegradation	Readily biodegradable

3,7,7-TRIMETHYLBICYCLO[4.1.0]HEPT-3-ENE (13466-78-9)

Method	Exposure time	Value	Results
OECD Test No. 301D: Ready Biodegradability: Closed Bottle Test (TG 301 D)	28 days	76% Biodegradation	Readily biodegradable

12.3. Bioaccumulative potential**Bioaccumulation**

There is no data for this product.

Component Information

Chemical name	Partition coefficient
(R)-p-MENTHA-1,8-DIENE	4.38
P-MENTHA-1,4-DIENE	5.4
7-METHYL-3-METHYLENEOCTA-1,6-DIENE	4.82
p-CYMENE	4.1
LINALOOL	2.9
GERANIOL	2.6
PIN-2-(10) ENE	4.425
4-ISOPROPENYLCYCLOHEX-1-ENECARBALDEHYDE	3.34
2-PINENE	4.1
p-MENTHA-1,4(8)-DIENE	5.3
3,7,7-TRIMETHYLBICYCLO[4.1.0]HEPT-3-ENE	4.38

12.4. Mobility in soil**Mobility in soil**

Immiscible in water.

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

The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
(R)-p-MENTHA-1,8-DIENE	The substance is not PBT / vPvB
P-MENTHA-1,4-DIENE	The substance is not PBT / vPvB
7-METHYL-3-METHYLENEOCTA-1,6-DIENE	The substance is not PBT / vPvB
p-CYMENE	The substance is not PBT / vPvB
LINALOOL	The substance is not PBT / vPvB
GERANIOL	The substance is not PBT / vPvB
PIN-2-(10) ENE	The substance is not PBT / vPvB
2-PINENE	The substance is not PBT / vPvB
p-MENTHA-1,4(8)-DIENE	The substance is not PBT / vPvB

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Waste from residues/unused products**

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

Contaminated packaging

Do not reuse empty containers. Empty remaining contents. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information**IATA**

14.1 UN number or ID number	UN2052
14.2 UN proper shipping name	DIPENTENE
14.3 Transport hazard class(es)	3
14.4 Packing group	III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	None
ERG Code	3L

IMDG

14.1 UN number or ID number	UN2052
14.2 UN proper shipping name	DIPENTENE
14.3 Transport hazard class(es)	3
14.4 Packing group	III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	None
EmS-No	F-E, S-E
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	UN2052
14.2 UN proper shipping name	DIPENTENE
14.3 Transport hazard class(es)	3
14.4 Packing group	III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	None
Classification code	F1

ADR

14.1 UN number or ID number	UN2052
14.2 UN proper shipping name	DIPENTENE
14.3 Transport hazard class(es)	3
14.4 Packing group	III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	None
Classification code	F1

Tunnel restriction code (D/E)

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Authorisations and/or restrictions on use:**

This product contains one or more substances subject to restriction (UK REACH - Annex XVII).

This product does not contain substances subject to authorisation (UK REACH - Annex XIV).

Product restricted per REACH Annex XVII: 3

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
(R)-p-MENTHA-1,8-DIENE - 5989-27-5	75	-
LINALOOL - 78-70-6	75	-
GERANIOL - 106-24-1	75	-

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

Dangerous substance category per COMAH Regulations 2015 (as amended)

E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

P5c - FLAMMABLE LIQUIDS

Named dangerous substances per COMAH Regulations 2015 (as amended)

Not applicable

The Ozone-Depleting Substances Regulations 2015

Not applicable

The Biocidal Products Regulations 2001 (as amended)

Chemical name	The Biocidal Products Regulations 2001 (as amended)
GERANIOL - 106-24-1	Product-type 18: Insecticides, acaricides and products to control other arthropods Product-type 19: Repellents and attractants

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)

Not applicable

Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)

Not applicable

International Inventories**TSCA**

Contact supplier for inventory compliance status

DSL/NDL

Contact supplier for inventory compliance status

EINECS/ELINCS

Contact supplier for inventory compliance status

ENCS

Contact supplier for inventory compliance status

IECSC

Contact supplier for inventory compliance status

KECI

Contact supplier for inventory compliance status

PICCS

Contact supplier for inventory compliance status

AIIC

Contact supplier for inventory compliance status

NZIoC

Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AIIC - Australian Inventory of Industrial Chemicals
NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment**Chemical Safety Report**

A Chemical Safety Assessment has been carried out for this substance

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H226 - Flammable liquid and vapour
H302 - Harmful if swallowed
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H319 - Causes serious eye irritation
H331 - Toxic if inhaled
H361 - Suspected of damaging fertility or the unborn child
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
H412 - Harmful to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorisation:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitisers		

Revision Note **SDS sections updated 2 3 4 5 6 7 8 9 10 11 12 13 15 16****Classification procedure**

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method

STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGl(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Prepared By J Forth

Revision date 18-Jul-2025

**This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

End of Safety Data Sheet