

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

Revision date 14-Jun-2024

Revision Number 1

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

1.1. Product identifier

Product Code(s) 66853
Safety data sheet number 66853
Product Name MYSOL WEST INDIAN ROSE

Pure substance/mixture Mixture

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

Recommended use Fragrances

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

Serious eye damage/eye irritation	Category 2 - (H319)
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2.2. Label elements

**Signal word**

Warning

Hazard statements

H319 - Causes serious eye irritation

EUH208 - Contains GERANIOL; CITRONELLOL. May produce an allergic reaction.

Precautionary statements

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves and eye/face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

2.3. Other hazards

No information available.

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)
TRIDECETH-9 24938-91-8	1.71%	607-463-3	-	Acute Tox. 4 (H302) Eye Dam. 1 (H318)	-	-	-
CITRONELLOL 106-22-9	0.21%	203-375-0	-	Skin Sens. 1B (H317) Eye Irrit. 2 (H319) Skin Irrit. 2 (H315)	-	-	-
BENZYL BENZOATE 120-51-4	0.15%	204-402-9 (607-085-00-9)	-	Acute Tox. 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)	-	-	-
BETA IONONE 14901-07-6	0.14%	238-969-9	-	Aquatic Chronic 2 (H411)	-	-	-
GERANIOL 106-24-1	0.12%	203-377-1	-	Skin Sens. 1 (H317)	-	-	-
DIETHYL PHTHALATE 84-66-2	0.12%	201-550-6	-	Not classified [B]	-	-	-

(R)-P-MENTHA-1,8-DIENE 5989-27-5	0.05%	227-813-5	-	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Skin Sens. 1B (H317) Aquatic Acute 1 (H400) Aquatic Chronic 3 (H412)	-	1	-
PIN-2(3)-ENE 80-56-8	0.009%	201-291-9	-	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Skin Sens. 1B (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-	-	-
PARA CYMENE 99-87-6	0.005%	202-796-7 (601-094-00-1)	-	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Acute Tox. 3 (H331) Aquatic Chronic 2 (H411)	-	-	-
GAMMA-TERPINE NE 99-85-4	0.003%	202-794-6	-	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304)	-	-	-
CARYOPHYLLENE 87-44-5	0.001%	201-746-1	-	Asp. Tox. 1 (H304) Skin Sens. 1B (H317)	-	-	-
MYRCENE 123-35-3	<0.001%	204-622-5	-	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Eye Irrit. 2 (H319) Skin Irrit. 2 (H315)	-	-	-
3,7-DIMETHYLOCTA-1,3,6-TRIENE 13877-91-3	<0.001%	237-641-2	-	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)	-	-	-
1,3,5-UNDECATRIENE NE 16356-11-9	<0.001%	240-416-1	-	Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-	-	-

[B] - Substance with a Community workplace exposure limit

Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (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.

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. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
Skin contact	Wash hands thoroughly after handling. If skin irritation or rash occurs: Get medical advice/attention.
Ingestion	Rinse mouth thoroughly with water. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

Symptoms	May cause redness and tearing of the eyes.
Eyes	Causes serious eye irritation.

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

Note to doctors	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO ₂). Alcohol resistant foam.
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	Burning produces harmful and toxic fumes. Closed containers can burst violently when heated, due to excess pressure build-up.
Hazardous combustion products	Thermal decomposition may release: Carbon dioxide (CO ₂). Carbon monoxide. Organic products of combustion.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters	Evacuate personnel to safe areas. 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	Evacuate personnel to safe areas. Do not touch or walk through spilled material. Avoid breathing vapours or mists. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with eyes, skin and clothing. Use personal protection recommended in Section 8. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
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Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Avoid release to the environment. Do not allow runoff to sewer, waterway or ground. Local authorities should be advised if significant spillages cannot be contained.

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).

Methods for cleaning up Clean contaminated objects and areas thoroughly observing environmental regulations.

Prevention of secondary hazards Observe good chemical hygiene practices.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ensure adequate ventilation. In case of inadequate ventilation wear respiratory protection. Use personal protection recommended in Section 8.

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. Remove contaminated clothing and protective equipment before entering eating areas. Take off contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a cool, well-ventilated place. Ground and bond containers when transferring material. Use explosion-proof electrical, ventilating and lighting equipment. Use non-sparking tools. Take precautionary measures against static discharge. Store away from other materials. Strong acids. Strong bases. Strong oxidising agents.

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

Chemical name	United Kingdom
DIETHYL PHTHALATE 84-66-2	TWA: 5 mg/m ³ STEL: 10 mg/m ³

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
CITRONELLOL 106-22-9		29.5 mg/cm ² [5] [6]	161.6 mg/m ³ [4] [6]
BENZYL BENZOATE 120-51-4		2.6 mg/kg bw/day [4] [6]	5.1 mg/m ³ [4] [6]
BETA IONONE 14901-07-6		6 mg/kg [4] [6]	12.7 mg/m ³ [4] [6]
GERANIOL 106-24-1		12.5 mg/kg bw/day [4] [6] 11800 µg/cm ² [5] [6]	161.6 mg/m ³ [4] [6]
DIETHYL PHTHALATE 84-66-2		7.5 mg/kg bw/day [4] [7]	10.56 mg/m ³ [5] [6]
PIN-2(3)-ENE 80-56-8		0.542 mg/kg bw/day [4] [6]	3.8 mg/m ³ [4] [6]
GAMMA-TERPINENE 99-85-4		0.833 mg/kg bw/day [4] [6]	2.939 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
CITRONELLOL 106-22-9	13.8 mg/kg bw/day [4] [6]	29.5 mg/cm ² [5] [6]	47.8 mg/m ³ [4] [6]
BENZYL BENZOATE 120-51-4	0.4 mg/kg bw/day [4] [6]	1.3 mg/kg bw/day [4] [6]	1.25 mg/m ³ [4] [6]
BETA IONONE 14901-07-6	1.8 mg/kg [6]	3.6 mg/kg [4] [6]	3.1 mg/m ³ [4] [6]
GERANIOL 106-24-1	13.75 mg/kg bw/day [4] [6]	11800 µg/cm ² [5] [6]	47.8 mg/m ³ [4] [6]
DIETHYL PHTHALATE 84-66-2	0.75 mg/kg bw/day [4] [6]		2.6 mg/m ³ [4] [6]
PIN-2(3)-ENE 80-56-8	0.225 mg/kg bw/day [4] [6]	0.225 mg/kg bw/day [4] [6]	0.674 mg/m ³ [4] [6]
GAMMA-TERPINENE 99-85-4	0.417 mg/kg bw/day [4] [6]		0.725 mg/m ³ [4] [6]

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

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
CITRONELLOL 106-22-9	0.0024 mg/l	0.024 mg/L	0.00024 mg/l		
BENZYL BENZOATE 120-51-4	0.017 mg/l		0.002 mg/l		
BETA IONONE 14901-07-6	0.07 mg/l		0.007 mg/l		
GERANIOL 106-24-1	0.0108 mg/L	0.108 mg/L	0.00108 mg/L		
DIETHYL PHTHALATE 84-66-2	0.012 mg/l	120 µg/L	0.0012 mg/l		
(R)-P-MENTHA-1,8-DIENE 5989-27-5	0,014 mg/l		0,0014 mg/l		
PIN-2(3)-ENE 80-56-8	0.606 µg/l	3.03 µg/L	0.061 µg/l	0.303 µg/L	
GAMMA-TERPINENE 99-85-4	0.002792 mg/L		0.0002792 mg/L		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
CITRONELLOL 106-22-9	0.0256 mg/l	0.00256 mg/l	580 mg/L	0.00371 mg/l	580 mg/l
BENZYL BENZOATE 120-51-4	10.66 mg/kg	1.07 mg/kg	100 mg/L	2.12 mg/kg	100 mg/l
BETA IONONE 14901-07-6	0.0616 mg/l	0.00616 mg/kg		0.0156 mg/kg	9 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	
DIETHYL PHTHALATE 84-66-2	0.137 mg/kg	0.0137 mg/kg	2000 µg/L	0.137 mg/kg	2 mg/l
(R)-P-MENTHA-1,8-DIENE 5989-27-5	3.85 mg/kg	0.385 mg/kg	1,8 mg/l	0.763 mg/kg	133 mg/kg
PIN-2(3)-ENE 80-56-8	157 µg/kg	15.7 µg/kg	0.2 mg/L	31.7 µg/kg	0.2 mg/l
GAMMA-TERPINENE 99-85-4	0.490056696 mg/kg sediment dw	0.0490056696 mg/kg sediment dw	10 mg/L	0.422765624 mg/kg soil dw	

8.2. Exposure controls

Engineering controls

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

Personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles). Use eye protection according to EN 166.

Hand protection

Chemical resistant gloves required for prolonged or repeated contact. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Gloves must conform to standard EN 374.

Skin and body protection

Wear appropriate clothing to prevent reasonably probable skin contact.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Chemical respirator with

organic vapour cartridge.

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. Remove contaminated clothing and protective equipment before entering eating areas. Take off contaminated clothing and wash it before reuse.
Environmental exposure controls	Avoid release to the environment. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Colour	No information available
Odour	Fragrant.
Odour threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point		No information available.
Initial boiling point and boiling range		No information available.
Flammability		No information available.
Flammability Limit in Air		No information available.
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point	> 80 °C	No information available.
Autoignition temperature		No information available.
Decomposition temperature		No information available.
pH		No information available.
pH (as aqueous solution)		No information available.
Kinematic viscosity		No information available.
Dynamic viscosity		No information available.
Water solubility	No data available	No information available.
Solubility(ies)		No information available.
Partition coefficient		No information available.
Vapour pressure		No information available.
Relative density		No information available.
Bulk density		No information available.
Liquid Density	No information available	No information available.
Relative vapour density		No information available.
Particle characteristics		Not applicable.
Particle Size	No information available	
Particle Size Distribution	No information available	
Explosive properties	No information available	
Oxidising properties	No information available	

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No reactive hazards known/expected.
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10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Excessive heat.

10.5. Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Organic products of combustion.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Information on likely routes of exposure****Product Information**

Inhalation Not an expected route of exposure.

Eye contact Causes serious eye irritation.

Skin contact The product contains a sensitising substance which may provoke an allergic reaction among sensitive individuals.

Ingestion Not an expected route of exposure.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause redness and tearing of the eyes.

Acute toxicity**Numerical measures of toxicity**

Based on available data, the classification criteria are not met

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

ATEmix (oral) 29,239.80 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
CITRONELLOL	= 3450 mg/kg (Rat)	= 2650 mg/kg (Rabbit)	-
BENZYL BENZOATE	= 500 mg/kg (Rat)	= 4000 mg/kg (Rabbit)	-

GERANIOL	= 3600 mg/kg (Rat)	> 5 g/kg (Rabbit)	-
DIETHYL PHTHALATE	= 8600 mg/kg (Rat)	> 11200 mg/kg (Rat)	> 4.64 mg/L (Rat) 6 h
(R)-P-MENTHA-1,8-DIENE	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
PIN-2(3)-ENE	= 3700 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
PARA CYMENE	= 4750 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 9.7 mg/L (Rat) 5 h
GAMMA-TERPINENE	= 3650 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
MYRCENE	> 5 g/kg (Rat)	> 5 g/kg (Rabbit)	-

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

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

CITRONELLOL (106-22-9)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Causes skin irritation

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

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

Serious eye damage/eye irritation

Causes serious eye irritation.

CITRONELLOL (106-22-9)

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

(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	eye			non-irritant

Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

CITRONELLOL (106-22-9)

Method	Species	Exposure route	Results
			respiratory sensitiser: Negative

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

Method	Species	Exposure route	Results
OECD Test No. 429: Skin Sensitization	Mouse	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
OECD Test No. 471: Bacterial Reverse Mutation Test	Ames Test	Negative
OECD Test No. 473: In vitro Mammalian Chromosome Aberration Test	in vitro	Negative
OECD Test No. 476: In Vitro Mammalian Cell Gene Mutation Tests using the Hprt and xprt genes		Negative
OECD 479		Negative
	Rat	Negative

Carcinogenicity

Based on available data the classification criteria are not met.

Reproductive toxicity

Based on available data the classification criteria are not met.

STOT - single exposure

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 407	Rat	Oral	825 mg/kg	16 days	NOAEL

STOT - repeated exposure

Based on available data the classification criteria are not met.

Aspiration hazard

Based on available data the classification criteria are not met.

Other adverse effects

No information available.

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

Based on available data, the classification criteria are not met.

CITRONELLOL (106-22-9)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	EC50	17 mg/L	48 hours	Harmful to aquatic life

(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. 212: Fish, Short-term Toxicity Test on Embryo and Sac-Fry Stages	Pimephales promelas	LC10	0.32 mg/L	8 days	

OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	EC50	0.577 mg/L	48 hours	
OECD Test No. 211: Daphnia magna Reproduction Test	Daphnia magna	EC10	0.153 mg/L	21 days	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Pseudokirchneriella subcapitata	EC50	0.32 mg/L	72 hours	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Pseudokirchneriella subcapitata	EC10	0.174 mg/L	72 hours	
OECD Test No. 209: Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation)	activated sludge	EC10	18 mg/L	3 hours	

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
CITRONELLOL	-	-	-	EC50: =17mg/L (48h, Daphnia magna)
BENZYL BENZOATE	-	LC50: =2.32mg/L (96h, Danio rerio)	-	-
GERANIOL	-	LC50: =22mg/L (96h, Danio rerio)	-	-
DIETHYL PHTHALATE	EC50: =23mg/L (72h, Desmodesmus subspicatus) EC50: =21mg/L (96h, Desmodesmus subspicatus) EC50: 42 - 255mg/L (72h, Pseudokirchneriella subcapitata) EC50: 2.11 - 4.29mg/L (96h, Pseudokirchneriella subcapitata)	LC50: =17mg/L (96h, Pimephales promelas) LC50: =16.8mg/L (96h, Pimephales promelas) LC50: =22mg/L (96h, Lepomis macrochirus) LC50: =16.7mg/L (96h, Lepomis macrochirus) LC50: =12mg/L (96h, Oncorhynchus mykiss)	-	EC50: 36 - 74mg/L (48h, Daphnia magna) EC50: =86mg/L (48h, Daphnia magna)
PIN-2(3)-ENE	-	LC50: =0.28mg/L (96h, Pimephales promelas)	-	LC50: =41mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

Persistence and degradability There is no data for this product.

(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)	28 days	71.4%	Readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
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CITRONELLOL	3.41
BENZYL BENZOATE	3.97
GERANIOL	2.6
DIETHYL PHTHALATE	2.2
(R)-P-MENTHA-1,8-DIENE	4.57
PIN-2(3)-ENE	4.1
PARA CYMENE	4.8
GAMMA-TERPINENE	5.4
CARYOPHYLLENE	6.23
MYRCENE	4.82

12.4. Mobility in soil

Mobility in soil No information available.

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
CITRONELLOL	The substance is not PBT / vPvB
BENZYL BENZOATE	The substance is not PBT / vPvB
GERANIOL	The substance is not PBT / vPvB
DIETHYL PHTHALATE	The substance is not PBT / vPvB
(R)-P-MENTHA-1,8-DIENE	The substance is not PBT / vPvB
PIN-2(3)-ENE	The substance is not PBT / vPvB
PARA CYMENE	The substance is not PBT / vPvB
GAMMA-TERPINENE	The substance is not PBT / vPvB
CARYOPHYLLENE	PBT assessment does not apply
MYRCENE	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	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

IMDG

14.1 UN number or ID number	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

ADR

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

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).

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

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/NDL - 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**

No Chemical Safety Assessment has been carried out for this substance/mixture

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**

H302 - Harmful if swallowed
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H400 - Very toxic to aquatic life
H411 - Toxic 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 **Not applicable**

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

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**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