SAFETY DATA SHEET

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

Supercedes date 22-Aug-2018 **Revision date** 20-Feb-2024 **Revision Number** 2

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

1.1. Product identifier

Product Code(s) 55519

Safety data sheet number 55519

Product Name ORGANIC SPEARMINT OIL

EC No (EU Index No) 283-656-2

CAS No 8008-79-5

Pure substance/mixture Substance

Contains D-P-MENTHA-1(6),8-DIEN-2-ONE; LIMONENE; 2-PINENE; EUCALYPTOL TRT; PIN-2-(10) ENE; MENTHONE

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

Recommended use Cosmetics

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

Skin corrosion/irritation	Category 2 - (H315)
Skin sensitisation	Category 1B - (H317)

Chronic aquatic toxicity	Category 2 - (H411)

2.2. Label elements

Contains D-P-MENTHA-1(6),8-DIEN-2-ONE; LIMONENE; 2-PINENE; EUCALYPTOL TRT; PIN-2-(10) ENE; MENTHONE

Signal word
Warning

Hazard statements
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H411 - Toxic to aquatic life with long lasting effects

Precautionary statements
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
P264 - Wash face, hands and any exposed skin thoroughly after handling
P273 - Avoid release to the environment
P391 - Collect spillage

2.3. Other hazards

Toxic to aquatic life.

SECTION 3: Composition/information on ingredients

3.1 Substances

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)
D-P-MENTHA-1(6), 8-DIEN-2-ONE 99-49-0	50 - 60%	202-759-5	-	Skin Sens. 1 (H317)	-	-	-
LIMONENE 138-86-3	10 - 20%	205-341-0	-	Flam. Liq. 3 (H226) Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-	-	-
2-METHYL-5-(1-METHYLVINYL)CYCLOHEXAN-1-ONE 7764-50-3	0 - 10%	231-857-0	-	-	-	-	-
CYCLOBUTA[1,2:3,	0 - 10%	610-778-9	-	-	-	-	-

4]DICYCLOPENTENE, DECAHYDRO-3A-METHYL-6-METHYLENE-1-(1-METHYLETHYL)-, (1S,3AS,3BR,6AS,6BR)- 5208-59-3							
MYRCENE 123-35-3	0 - 10%	204-622-5	-	Asp. Tox. 1 (H304) Flam. Liq. 3 (H226) Eye Irrit. 2 (H319) Skin Irrit. 2 (H315)	-	-	-
EUCALYPTOL TRT 470-82-6	0 - 10%	207-431-5	-	Flam. Liq. 3 (H226) Skin Sens. 1B (H317)	-	-	-
OCTAN-3-OL 589-98-0	0 - 10%	209-667-4	-	Eye Irrit. 2 (H319) Skin Irrit. 2 (H315)	-	-	-
(1A,2A,5A)-2-METHYL-5-(1-METHYLETHYL)BICYCLO[3.1.0]HEXAN-2-OL 17699-16-0	0 - 10%	241-703-4	-	-	-	-	-
PIN-2-(10) ENE 127-91-3	0 - 10%	204-872-5	-	Skin Irrit. 2 (H315) Skin Sens. 1B (H317) Asp. Tox. 1 (H304) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Flam. Liq. 3 (H226)	-	-	-
P-MENTH-1-EN-4-OL 562-74-3	0 - 10%	209-235-5	-	Eye Irrit. 2 (H319) Acute Tox. 4 (H302) Skin Irrit. 2 (H315)	-	-	-
2-PINENE 80-56-8	0 - 10%	201-291-9	-	Asp. Tox. 1 (H304) Flam. Liq. 3 (H226) Skin Sens. 1 (H317) Aquatic Chronic 1 (H410) Acute Tox. 4 (H302) Skin Irrit. 2 (H315)	-	-	-
CIS-2-METHYL-5-(1-METHYLVINYL)CYCLOHEX-2-EN-1-YL ACETATE 1205-42-1	0 - 10%	214-883-7	-	-	-	-	-
(1A,2B,5A)-2-METHYL-5-(1-METHYLVINYL)CYCLOHEXYL ACETATE 20777-49-5	0 - 10%	207-774-9	-	-	-	-	-
(1E,6E)-1-METHYL-5-METHYLIDENE-8-PROPAN-2-YLCYCLODECA-1,6-DIENE 23986-74-5	0 - 10%	-	-	Asp. Tox. 1 (H304) Acute Tox. 4 (H302)	-	-	-
THUJ-4-(10)-ENE 3387-41-5	0 - 10%	222-212-4	-	Flam. Liq. 3 (H226)	-	-	-
(1R,5S)-2-METHYL-5-PROP-1-EN-2-YLCYCLOHEX-2-EN-1	0 - 10%	-	-	-	-	-	-

-OL 1197-07-5							
(E)-3-METHYL-2-(PENT-2-ENYL)CYCLOPENT-2-EN-1-ONE 6261-18-3	0 - 10%	228-410-7	-	-	-	-	-
MENTHONE 89-80-5	0 - 10%	201-941-1	-	Skin Irrit. 2 (H315) Skin Sens. 1B (H317)	-	-	-
1,1,4,7-TETRAMETHYLDECAHYDRO-1H-CYCLOPROPA[E]AZULEN-4-OL 51371-47-2	0 - 10%	-	-	-	-	-	-

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

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.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.

Skin contact May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a doctor. Wash off immediately with soap and plenty of water for at least 15 minutes.

Ingestion Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.

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 Itching. Rashes. Hives.

Dermal Hives. Itching. Rashes. Irritating. Erythema (skin redness). Prolonged contact may cause redness and irritation.

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

Note to doctors May cause sensitisation in susceptible persons. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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 Product is or contains a sensitiser. May cause sensitisation by skin contact.

Hazardous combustion products Carbon oxides.

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. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required.

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 Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

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 Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse.

General hygiene considerations Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

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
LIMONENE 138-86-3		222 µg/cm2 [7]	33.3 mg/m³ [6]
EUCALYPTOL TRT 470-82-6		2 mg/kg [4] [6]	7.05 mg/kg [4] [6]
2-PINENE 80-56-8		0.542 mg/kg bw/day [4] [6]	3.8 mg/m³ [4] [6]
MENTHONE 89-80-5		1.98 mg/kg bw/day [4] [6] 11.2 mg/kg bw/day [4] [6]	6.99 mg/m³ [4] [6] 39.5 mg/m³ [4] [6]

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

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
LIMONENE 138-86-3	4.76 mg/kg [6]	111 µg/cm2 [7]	8.33 mg/m³ [6]
EUCALYPTOL TRT 470-82-6	600 mg/kg bw/day [4] [6]	1 mg/kg/day [4] [6]	1.74 mg/m³ [4] [6]
2-PINENE 80-56-8	0.225 mg/kg bw/day [4] [6]		0.674 mg/m³ [4] [6]
MENTHONE 89-80-5	0.709 mg/kg bw/day [4] [6] 4 mg/kg bw/day [4] [6]		1.05 mg/m³ [4] [6] 5.92 mg/m³ [4] [6]

[4] Systemic 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
LIMONENE 138-86-3	5.4 µg/l		0.54 µg/l		
EUCALYPTOL TRT 470-82-6	0.057 mg/l	0.57 mg/L	0.0057 mg/l		
2-PINENE 80-56-8	0.606 µg/L	3.03 µg/L	0.0606 µg/L	0.303 µg/L	

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
LIMONENE 138-86-3	1.649 mg/kg/day	0.165 mg/kg/day		0.328 mg/kg	1.8 mg/l
EUCALYPTOL TRT 470-82-6	0.06732 mg/kg	0.00673 mg/kg	10 mg/L	0.2 mg/kg	10 mg/l
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

8.2. Exposure controls

Engineering controls No information available.

Personal protective equipment

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

Hand protection Wear suitable gloves. Impervious gloves. 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 suitable protective clothing. Long sleeved clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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

Property	Values	Remarks • Method
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	62 °C	
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	0.930	20 °C.
Bulk density		No information available
Liquid Density	No information available	No information available
Relative vapour density		No information available.
Particle characteristics		No information available.
Particle Size	No information available	
Particle Size Distribution	No information available	
Explosive properties	Not considered to be explosive.	
Oxidising properties	Does not meet the criteria for classification as oxidising	

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Stable under recommended storage conditions.

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 Carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Inhalation May cause irritation.

Eye contact May cause temporary eye irritation.

Skin contact May cause allergic skin reaction. Causes skin irritation.

Ingestion Gastrointestinal discomfort.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes.

Acute toxicity

Numerical measures of toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
D-P-MENTHA-1(6),8-DIEN-2-ONE	= 1640 mg/kg (Rat)	> 4000 mg/kg (Rat)	-
LIMONENE	= 5300 mg/kg (Rat)	-	-
2-METHYL-5-(1-METHYLVINYL)CYCLOHEXAN-1-ONE	> 5 g/kg (Rat)	-	-
MYRCENE	> 5 g/kg (Rat)	> 5 g/kg (Rabbit)	-
EUCALYPTOL TRT	= 2480 mg/kg (Rat)	-	-
OCTAN-3-OL	> 5 g/kg (Rat)	> 5000 mg/kg (Rabbit)	-
PIN-2-(10) ENE	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
P-MENTH-1-EN-4-OL	= 1300 mg/kg (Rat)	> 3 g/kg (Rabbit)	-
2-PINENE	= 3700 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
(1A,2B,5A)-2-METHYL-5-(1-METHYLVINYL)CYCLOHEXYL ACETATE	> 5 g/kg (Rat)	-	-
MENTHONE	= 500 mg/kg (Rat)	-	-

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

Skin corrosion/irritation Classification based on data available for ingredients. Causes skin irritation. Causes skin irritation.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Toxic to aquatic life. Toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
EUCALYPTOL TRT	-	LC50: 95.4 - 109mg/L (96h, Pimephales promelas)	-	-
OCTAN-3-OL	EC50: =2.7mg/L (96h, Pseudokirchneriella subcapitata)	LC50: 4.78 - 8.85mg/L (96h, Oncorhynchus mykiss) LC50: 3.6 - 5.1mg/L (96h, Lepomis macrochirus)	-	EC50: =3mg/L (48h, Daphnia magna) EC50: =320mg/L (48h, Daphnia magna) EC50: =8.5mg/L (48h, Daphnia magna) EC50: 4.78 - 8.87mg/L (48h, Daphnia magna)
2-PINENE	-	LC50: =0.28mg/L (96h, Pimephales promelas)	-	LC50: =41mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation No information available.

Component Information

Chemical name	Partition coefficient

MYRCENE	4.82
EUCALYPTOL TRT	3.4
OCTAN-3-OL	2.73
2-PINENE	4.1
THUJ-4-(10)-ENE	5.5
MENTHONE	2.295

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
MYRCENE	The substance is not PBT / vPvB
EUCALYPTOL TRT	The substance is not PBT / vPvB
PIN-2-(10) ENE	The substance is not PBT / vPvB
P-MENTH-1-EN-4-OL	The substance is not PBT / vPvB
2-PINENE	The substance is not PBT / vPvB
MENTHONE	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 Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

IATA

14.1 UN number or ID number UN3082
14.2 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (LIMONENE, PIN-2-(10) ENE)
14.3 Transport hazard class(es) 9
14.4 Packing group III
14.5 Environmental hazards Yes
14.6 Special precautions for user
Special Provisions A97, A158, A197
ERG Code 9L

IMDG

14.1 UN number or ID number UN3082
UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (LIMONENE, PIN-2-(10) ENE)
14.3 Transport hazard class(es) 9
14.4 Packing group III
14.5 Environmental hazards Yes

14.6 Special precautions for user
Special Provisions 274, 335, 969
EmS-No F-A, S-F
14.7 Maritime transport in bulk according to IMO instruments No information available

RID
14.1 UN number or ID number UN3082
14.2 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (LIMONENE, PIN-2-(10) ENE)
14.3 Transport hazard class(es) 9
14.4 Packing group III
14.5 Environmental hazards Yes
14.6 Special precautions for user
Special Provisions 274, 335, 375, 601
Classification code M6

ADR
14.1 UN number or ID number UN3082
14.2 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (LIMONENE, PIN-2-(10) ENE)
14.3 Transport hazard class(es) 9
14.4 Packing group III
14.5 Environmental hazards Yes
14.6 Special precautions for user
Special Provisions 274, 335, 601, 375
Classification code M6
Tunnel restriction code (-)

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

Dangerous substance category per COMAH Regulations 2015 (as amended)
E2 - Hazardous to the Aquatic Environment in Category Chronic 2

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)
Not applicable

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/NDSL	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
KECL	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 No information available

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
H319 - Causes serious eye irritation
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Legend
SVHC: Substances of Very High Concern for Authorisation:

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 ***Indicates updated data since last publication

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)
EPA (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)
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	Jitendra Panchal
Supercedes date	22-Aug-2018
Revision date	20-Feb-2024

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