



SAFETY DATA SHEET

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

Revision date 01/30/2024

Revision Number 1

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

1.1. Product identifier

Product Code(s)	192601
Safety data sheet number	0000015
Product Name	Astonish Fabric Refresher - Cotton Fresh
Pure substance/mixture	Mixture
	<5% Non-ionic Surfactants, Perfume
Formula	1926F3V1

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

Recommended use	Elimination of malodours from fabrics. Elimination of malodours from carpet
Uses advised against	Do not use on delicate fabrics such as wool, silk, suede or leather. Do not use on waterproof or flameproof fabrics. Do not mix with Chlorine based bleaching agents. Avoid contact with natural stone or acid sensitive surfaces.

1.3. Details of the supplier of the safety data sheet

Manufacturer

The London Oil Refining Company Ltd
Astonish House
Unit 8 Thornbury Ind. Est.
Woodhall Road
Bradford BD3 7AF, UK
Tel: +44 1274 767440 (8am-4pm Mon-Fri)
www.astonish.co.uk

Supplier

The London Oil Refining Company Ltd
Astonish House
Unit 8 Thornbury Ind. Est.
Woodhall Road
Bradford BD3 7AF, UK
Tel: +44 1274 767440 (8am-4pm Mon-Fri)
www.astonish.co.uk

For further information, please contact

E-mail address	info@astonish.co.uk
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1.4. Emergency telephone number

Emergency Telephone

ROI - Emergency Telephone: +353 19131585 (8am-4pm Mon-Fri)
Poisons Information Centre of Ireland (ROI): +353 (1) 8092166 (8am-10pm 7 days a week)**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture**

Not classified

2.2. Label elements

<5% Non-ionic Surfactants, Perfume

Not classified

Hazard statements

Not classified

Unknown acute toxicity**Unknown aquatic toxicity****2.3. Other hazards**

No information available.

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

Not applicable

3.2 Mixtures

The product contains no substances which at their given concentration, are considered to be hazardous to health

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

Remove to fresh air.

Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.
Ingestion	Rinse mouth.

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

Symptoms	No information available.
Effects of Exposure	See Section 11 for additional Toxicological Information.

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

Note to physicians	Treat symptomatically.
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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	No information available.
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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. Use personal protection equipment.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions	See Section 12 for additional Ecological Information.
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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.
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SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Advice on safe handling	Ensure adequate ventilation.
General hygiene considerations	Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed in a dry and well-ventilated place.
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7.3. Specific end use(s)

Risk Management Methods (RMM)	The information required is contained in this Safety Data Sheet.
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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
Phenoxyethanol 122-99-6		20.83 mg/kg bw/day [4] [6]	5.7 mg/m ³ [4] [6] 5.7 mg/m ³ [5] [6]
Undecanol, branched and linear, ethoxylated (>5-15 EO) 68439-46-3		2080 mg/kg bw/day [4] [6]	294 mg/m ³ [4] [6]
2,6-dimethyloct-7-en-2-ol 18479-58-8		20.8 mg/kg bw/day [4] [6]	73.5 mg/m ³ [4] [6]
3a,4,5,6,7,7a-hexahydro-4,7- methanoinden-6-yl acetate 5413-60-5		0.84903399 mg/kg bw/day [4] [6]	0.96789875 mg/m ³ [4] [6]
Allyl Heptylate 142-19-8		0.84 mg/kg bw/day [4] [6]	2.97 mg/m ³ [4] [6]

Chemical name	Oral	Dermal	Inhalation
Benzyl acetate 140-11-4		2.5 mg/kg bw/day [4] [6]	9 mg/m ³ [4] [6]
2-Methylundecanal 110-41-8		10.46 mg/kg bw/day [4] [6] 100 mg/kg bw/day [4] [7] 35.7 mg/cm ² [5] [6] 71.43 mg/cm ² [5] [7]	36.89 mg/m ³ [4] [6] 352.63 mg/m ³ [4] [7] 92.21 mg/m ³ [5] [6] 881.58 mg/m ³ [5] [7]
Alpha-Isomethyl Ionone 127-51-5		0.375 mg/kg bw/day [4] [6]	8.22 mg/m ³ [4] [6]
10-Undecanal 112-45-8		4.67 mg/kg bw/day [4] [6]	16.4 mg/m ³ [4] [6]
ethyl-2-methylpentanoate 39255-32-8		6.67 mg/kg bw/day [4] [6]	52.08 mg/m ³ [4] [6]
Eucalyptol 470-82-6		2 mg/kg bw/day [4] [6]	7.05 mg/m ³ [4] [6]
Citronellyl Acetate 150-84-5		4.8 mg/kg bw/day [4] [6]	17 mg/m ³ [4] [6]
Phenethyl acetate 103-45-7		2.27 mg/kg bw/day [4] [6]	6.5 mg/m ³ [4] [6]
Hex-3-en-1-yl acetate 3681-71-8		3.33 mg/kg bw/day [4] [6]	11.75 mg/m ³ [4] [6]
2'-acetonaphthone 93-08-3		0.462 mg/kg bw/day [4] [6]	1.63 mg/m ³ [4] [6]
Methyl Anthranilate 134-20-3		1.5 mg/kg bw/day [4] [6]	5.28 mg/m ³ [4] [6]
Linalool 78-70-6		2.5 mg/kg bw/day [4] [6] 5 mg/kg bw/day [4] [7] 3 mg/cm ² [5] [6] 3 mg/cm ² [5] [7]	2.8 mg/m ³ [4] [6] 16.5 mg/m ³ [4] [7]
Benzoic Acid 65-85-0		62.5 mg/kg bw/day [4] [6]	3 mg/m ³ [4] [6] 0.1 mg/m ³ [5] [6]
cis-3-Hexenyl salicylate 65405-77-8		0.9 mg/kg bw/day [4] [6]	1.59 mg/m ³ [4] [6]
1-(5,5-Dimethyl-1-cyclohexen-1-yl)pent-4-en-1-one 56973-85-4		0.714 mg/kg bw/day [4] [6]	2.52 mg/m ³ [4] [6]
2-propenyl(3-methylbutoxy)acetate 67634-00-8		1.4 mg/kg bw/day [4] [6]	4.93 mg/m ³ [4] [6]
(+)-Bornan-2-one 76-22-2		10 mg/kg bw/day [4] [6]	17.6316 mg/m ³ [4] [6]
ethyl acetate 141-78-6		63 mg/kg bw/day [4] [6]	734 mg/m ³ [4] [6] 1468 mg/m ³ [4] [7] 734 mg/m ³ [5] [6] 1468 mg/m ³ [5] [7]
Cineole 470-82-6		2 mg/kg bw/day [4] [6]	7.05 mg/m ³ [4] [6]
bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimethyl-, (1S-endo)- 464-45-9		0.05895 mg/kg bw/day [4] [6]	0.207876316 mg/m ³ [4] [6]
3,7-dimethyl-2,6-octadien-1-ol 106-25-2		1.25 mg/kg bw/day [4] [6]	4.4 mg/m ³ [4] [6]
Linalyl acetate 115-95-7		2.5 mg/kg bw/day [4] [6] 236.2 µg/cm ² [5] [6] 236.2 µg/cm ² [5] [7]	2.75 mg/m ³ [4] [6]
1-(4-Methylphenyl)ethanone 122-00-9		5.78 mg/kg bw/day [4] [6]	20.36 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]
dl-Citronellol		327.4 mg/kg bw/day [4] [6]	161.6 mg/m ³ [4] [6]

Chemical name	Oral	Dermal	Inhalation
106-22-9		2950 µg/cm ² [5] [7]	10 mg/m ³ [5] [6] 10 mg/m ³ [5] [7]
Hydroxycitronellal 107-75-5		1.9 mg/kg bw/day [4] [6] 500 µg/cm ² [5] [7]	18 mg/m ³ [4] [6]
hydrogen chloride 7647-01-0			8 mg/m ³ [5] [6] 15 mg/m ³ [5] [7]
Citral 5392-40-5		1.7 mg/kg bw/day [4] [6] 140 µg/cm ² [5] [6]	9 mg/m ³ [4] [6]
alpha-Pinene 80-56-8		0.542 mg/kg bw/day [4] [6]	3.8 mg/m ³ [4] [6]
Coumarin 91-64-5		0.79 mg/kg bw/day [4] [6]	6.78 mg/m ³ [4] [6]
glutaral 111-30-8		6.25 mg/kg bw/day [4] [6]	
acetic acid ... % 64-19-7			25 mg/m ³ [5] [6] 25 mg/m ³ [5] [7]
benzyl benzoate 120-51-4		2.6 mg/kg bw/day [4] [6]	5.1 mg/m ³ [4] [6] 102 mg/m ³ [4] [7]
Eugenol 97-53-0		6 mg/kg bw/day [4] [6]	21.2 mg/m ³ [4] [6]

Notes

[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
Phenoxyethanol 122-99-6	9.23 mg/kg bw/day [4] [6] 9.23 mg/kg bw/day [4] [7]		2.41 mg/m ³ [4] [6] 2.41 mg/m ³ [5] [6]
Undecanol, branched and linear, ethoxylated (>5-15 EO) 68439-46-3	25 mg/kg bw/day [4] [6]		87 mg/m ³ [4] [6]
2,6-dimethyloct-7-en-2-ol 18479-58-8	12.5 mg/kg bw/day [4] [6]		21.7 mg/m ³ [4] [6]
3a,4,5,6,7,7a-hexahydro-4,7- methanoinden-6-yl acetate 5413-60-5	1.698068 mg/kg bw/day [4] [6]		0.24077083 mg/m ³ [4] [6]
Allyl Heptylate 142-19-8	0.42 mg/kg bw/day [4] [6]		0.73 mg/m ³ [4] [6]
Benzyl acetate 140-11-4	1.3 mg/kg bw/day [4] [6]		2.2 mg/m ³ [4] [6]
2-Methylundecanal 110-41-8	5.23 mg/kg bw/day [4] [6] 25 mg/kg bw/day [4] [7]	50 mg/kg bw/day [4] [6] 50 mg/kg bw/day [4] [7] 17.86 mg/cm ² [5] [6] 35.71 mg/cm ² [5] [7]	9.1 mg/m ³ [4] [6] 86.96 mg/m ³ [4] [7] 22.74 mg/m ³ [5] [6] 217.39 mg/m ³ [5] [7]
Alpha-Isomethyl Ionone 127-51-5	35.5 µg/kg bw/day [4] [6]		1.45 mg/m ³ [4] [6]
10-Undecanal 112-45-8	1.67 mg/kg bw/day [4] [6]		2.47 mg/m ³ [4] [6]
ethyl-2-methylpentanoate 39255-32-8	3.33 mg/kg bw/day [4] [6]		12.95 mg/m ³ [4] [6]
Eucalyptol 470-82-6	600 mg/kg bw/day [4] [6]		1.74 mg/m ³ [4] [6]
Citronellyl Acetate	2.4 mg/kg bw/day [4] [6]		4.2 mg/m ³ [4] [6]

Chemical name	Oral	Dermal	Inhalation
150-84-5			
Phenethyl acetate 103-45-7	0.42 mg/kg bw/day [4] [6] 2.5 mg/kg bw/day [4] [7]		1.61 mg/m ³ [4] [6]
Hex-3-en-1-yl acetate 3681-71-8	1.67 mg/kg bw/day [4] [6]		2.9 mg/m ³ [4] [6]
2'-acetonaphthone 93-08-3	0.165 mg/kg bw/day [4] [6]		0.287 mg/m ³ [4] [6]
Methyl Anthranilate 134-20-3	0.75 mg/kg bw/day [4] [6]		1.3 mg/m ³ [4] [6]
Linalool 78-70-6	0.2 mg/kg bw/day [4] [6] 1.2 mg/kg bw/day [4] [7]	2.5 mg/kg bw/day [4] [6] 2.5 mg/kg bw/day [4] [7] 1.5 mg/cm ² [5] [6] 1.5 mg/cm ² [5] [7]	0.7 mg/m ³ [4] [6] 4.1 mg/m ³ [4] [7]
Benzoic Acid 65-85-0	16.6 mg/kg bw/day [4] [6]		1.5 mg/m ³ [4] [6] 0.06 mg/m ³ [5] [6]
cis-3-Hexenyl salicylate 65405-77-8	0.23 mg/kg bw/day [4] [6]		0.39 mg/m ³ [4] [6]
1-(5,5-Dimethyl-1-cyclohexen-1-yl)pent-4-en-1-one 56973-85-4	0.255 mg/kg bw/day [4] [6]		0.377 mg/m ³ [4] [6]
2-propenyl(3-methylbutoxy)acetate 67634-00-8	0.5 mg/kg bw/day [4] [6]		0.87 mg/m ³ [4] [6]
(+)-Bornan-2-one 76-22-2	5 mg/kg bw/day [4] [6]		4.3478 mg/m ³ [4] [6]
ethyl acetate 141-78-6	4.5 mg/kg bw/day [4] [6]		367 mg/m ³ [4] [6] 734 mg/m ³ [4] [7] 367 mg/m ³ [5] [6] 734 mg/m ³ [5] [7]
Cineole 470-82-6	600 mg/kg bw/day [4] [6]		1.74 mg/m ³ [4] [6]
bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimethyl-, (1S-endo)- 464-45-9	0.029475 mg/kg bw/day [4] [6]		0.05126087 mg/m ³ [4] [6]
3,7-dimethyl-2,6-octadien-1-ol 106-25-2	0.62 mg/kg bw/day [4] [6]		1.09 mg/m ³ [4] [6]
Linalyl acetate 115-95-7	0.2 mg/kg bw/day [4] [6]	236.2 µg/cm ² [5] [6] 236.2 µg/cm ² [5] [7]	0.68 mg/m ³ [4] [6]
1-(4-Methylphenyl)ethanone 122-00-9	2.89 mg/kg bw/day [4] [6]		5.03 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]
dl-Citronellol 106-22-9	13.8 mg/kg bw/day [4] [6]	2950 µg/cm ² [5] [7]	47.8 mg/m ³ [4] [6] 10 mg/m ³ [5] [6] 10 mg/m ³ [5] [7]
Hydroxycitronellal 107-75-5	0.6 mg/kg bw/day [4] [6]	500 µg/cm ² [5] [7]	5.4 mg/m ³ [4] [6]
hydrogen chloride 7647-01-0			8 mg/m ³ [5] [6] 15 mg/m ³ [5] [7]
Citral 5392-40-5	0.6 mg/kg bw/day [4] [6]	140 µg/cm ² [5] [6]	2.7 mg/m ³ [4] [6]
alpha-Pinene 80-56-8	0.225 mg/kg bw/day [4] [6]		0.674 mg/m ³ [4] [6]
Coumarin 91-64-5	0.39 mg/kg bw/day [4] [6]		1.69 mg/m ³ [4] [6]
glutaral 111-30-8	0.07 mg/kg bw/day [4] [6]		
acetic acid ... % 64-19-7			25 mg/m ³ [5] [6] 25 mg/m ³ [5] [7]

Chemical name	Oral	Dermal	Inhalation
benzyl benzoate 120-51-4	0.4 mg/kg bw/day [4] [6] 78 mg/kg bw/day [4] [7]		1.25 mg/m ³ [4] [6] 25 mg/m ³ [4] [7]
Eugenol 97-53-0	3 mg/kg bw/day [4] [6]		5.22 mg/m ³ [4] [6]

Notes

[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
Phenoxyethanol 122-99-6	0.943 mg/L	3.44 mg/L	0.0943 mg/L		
Undecanol, branched and linear, ethoxylated (>5-15 EO) 68439-46-3	0.10379 mg/L	0.014 mg/L	0.10379 mg/L		
2,6-dimethyloct-7-en-2-ol 18479-58-8	27.8 µg/L	0.278 mg/L	2.78 µg/L		
3a,4,5,6,7,7a-hexahydro- 4,7-methanoinden-6-yl acetate 5413-60-5	0.15795 mg/L	0.15795 mg/L	0.015795 mg/L		
Allyl Heptylate 142-19-8	0.12 µg/L	1.2 µg/L	0.012 µg/L		
Benzyl acetate 140-11-4	0.0184 mg/L	0.04 mg/L	0.00184 mg/L		
2-Methylundecanal 110-41-8	0.66 µg/L	1.8 µg/L	66 ng/L	0.18 µg/L	
Alpha-Isomethyl Ionone 127-51-5	1.43 µg/L	14.3 µg/L	0.143 µg/L	1.43 µg/L	
10-Undecanal 112-45-8	20.1 µg/L		2.01 µg/L		
ethyl-2-methylpentanoate 39255-32-8	0.026 mg/L		0.0026 mg/L		
Eucalyptol 470-82-6	57 µg/L	0.57 mg/L	5.7 µg/L		
Citronellyl Acetate 150-84-5	0.00348 mg/L	0.0348 mg/L	0.000348 mg/L		
Phenethyl acetate 103-45-7	0.011 mg/L	0.105 mg/L	0.0011 mg/L		
2'-acetoneaphthone 93-08-3	36 µg/L	50 µg/L	3.6 µg/L	5 µg/L	
Methyl Anthranilate 134-20-3	0.00912 mg/L	0.0912 mg/L	0.000912 mg/L		
Linalool 78-70-6	0.2 mg/L	2 mg/L	0.02 mg/L		
Benzoic Acid 65-85-0	0.34 mg/L	0.331 mg/L	0.034 mg/L		
cis-3-Hexenyl salicylate 65405-77-8	0.61 µg/L	6.1 µg/L	0.061 µg/L		

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
1-(5,5-Dimethyl-1-cyclohexen-1-yl)pent-4-en-1-one 56973-85-4	1.7 µg/L	17 µg/L	0.17 µg/L	1.7 µg/L	
2-propenyl(3-methylbutoxy)acetate 67634-00-8	0.77 µg/L	7.7 µg/L	77 ng/L	0.77 µg/L	
(+)-Bornan-2-one 76-22-2	1.71 µg/L	17.1 µg/L	0.171 µg/L	1.71 µg/L	
ethyl acetate 141-78-6	0.24 mg/L	1.65 mg/L	0.024 mg/L		
Cineole 470-82-6	57 µg/L	0.57 mg/L	5.7 µg/L		
bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimethyl-, (1S-endo)- 464-45-9	0.00919 mg/L	0.0919 mg/L	0.00092 mg/L	0.0919 mg/L	
3,7-dimethyl-2,6-octadien-1-ol 106-25-2	7.45 µg/L	74.5 µg/L	0.745 µg/L		
Linalyl acetate 115-95-7	0.011 mg/L	0.11 mg/L	0.0011 mg/L		
1-(4-Methylphenyl)ethanone 122-00-9	0.031 mg/L	0.31 mg/L	0.0031 mg/L		
Geraniol 106-24-1	0.0108 mg/L	0.108 mg/L	0.00108 mg/L		
dl-Citronellol 106-22-9	0.0024 mg/L	0.024 mg/L	0.00024 mg/L		
Hydroxycitronellal 107-75-5	31.6 µg/L	316 µg/L	3.16 µg/L		
Citral 5392-40-5	0.00678 mg/L	0.0678 mg/L	0.000678 mg/L		
alpha-Pinene 80-56-8	0.606 µg/L	3.03 µg/L	0.0606 µg/L	0.303 µg/L	
2,2,5-Trimethyl-5-pentylcyclopentanone 65443-14-3	1.3 µg/L	13 µg/L	0.13 µg/L		
Coumarin 91-64-5	19 µg/L	14.2 µg/L	1.9 µg/L		
glutaral 111-30-8	0.0025 mg/L	0.006 mg/L	0.00025 mg/L		
acetic acid ... % 64-19-7	3.058 mg/L	30.58 mg/L	0.3058 mg/L		
benzyl benzoate 120-51-4	0.0168 mg/L		0.00168 mg/L		
Eugenol 97-53-0	1.13 µg/L	11.3 µg/L	0.113 µg/L		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
Phenoxyethanol 122-99-6	7.2366 mg/kg sediment dw	0.7237 mg/kg sediment dw	36 mg/L	1.31 mg/kg soil dw	
Undecanol, branched and	13.7 mg/kg	13.7 mg/kg	1.4 mg/L	1 mg/kg soil dw	

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
linear, ethoxylated (>5-15 EO) 68439-46-3	sediment dw	sediment dw			
2,6-dimethyloct-7-en-2-ol 18479-58-8	0.594 mg/kg sediment dw	0.0594 mg/kg sediment dw	10 mg/L	0.103 mg/kg soil dw	111 mg/kg food
3a,4,5,6,7,7a-hexahydro-4,7-methanoinden-6-yl acetate 5413-60-5	1.9509516 mg/kg sediment dw	1.9509516 mg/kg sediment dw	2.45 mg/L	0.90322886 mg/kg soil dw	
Allyl Heptylate 142-19-8	0.012 mg/kg sediment dw	0.0012 mg/kg sediment dw	10 mg/L	0.00233 mg/kg soil dw	
Benzyl acetate 140-11-4	0.526 mg/kg sediment dw	0.0526 mg/kg sediment dw	8.55 mg/L	0.09443 mg/kg soil dw	
2-Methylundecanal 110-41-8	0.265 mg/kg sediment dw	26.5 µg/kg sediment dw	10 mg/L	52.6 µg/kg soil dw	116 mg/kg food
Alpha-Isomethyl Ionone 127-51-5	0.443 mg/kg sediment dw	44.3 µg/kg sediment dw	10 mg/L	87.8 µg/kg soil dw	
10-Undecanal 112-45-8	94.5 mg/kg sediment dw	9.45 mg/kg sediment dw	0.625 mg/L	18.9 mg/kg soil dw	
ethyl-2-methylpentanoate 39255-32-8	0.426 mg/kg sediment dw	0.0426 mg/kg sediment dw	0.3 mg/L	0.0702 mg/kg soil dw	
Eucalyptol 470-82-6	1.425 mg/kg sediment dw	0.1425 mg/kg sediment dw	10 mg/L	0.25 mg/kg soil dw	40 mg/kg food
Citronellyl Acetate 150-84-5	0.851 mg/kg sediment dw	0.0851 mg/kg sediment dw	10 mg/L	0.168 mg/kg soil dw	
Phenethyl acetate 103-45-7	0.128 mg/kg sediment dw	0.0128 mg/kg sediment dw	10 mg/L	0.019 mg/kg soil dw	
2'-acetonaphthone 93-08-3	2.58 mg/kg sediment dw	0.258 mg/kg sediment dw		0.496 mg/kg soil dw	
Linalool 78-70-6	2.22 mg/kg sediment dw	0.222 mg/kg sediment dw	10 mg/L	0.327 mg/kg soil dw	7.8 mg/kg food
Benzoic Acid 65-85-0	1.75 mg/kg sediment dw	0.175 mg/kg sediment dw	100 mg/L	0.151 mg/kg soil dw	
cis-3-Hexenyl salicylate 65405-77-8	0.11 mg/kg sediment dw	0.011 mg/kg sediment dw	10 mg/L	0.0217 mg/kg soil dw	40 mg/kg food
1-(5,5-Dimethyl-1-cyclohexen-1-yl)pent-4-en-1-one 56973-85-4	0.242 mg/kg sediment dw	0.024 mg/kg sediment dw	4.6 mg/L	0.047 mg/kg soil dw	5.67 mg/kg food
2-propenyl(3-methylbutoxy)acetate 67634-00-8	8.93 µg/kg sediment dw	0.893 µg/kg sediment dw		1.33 µg/kg soil dw	
(+)-Bornan-2-one 76-22-2	0.139 mg/kg sediment dw	0.0174 mg/kg sediment dw	1 mg/L	0.01326 mg/kg soil dw	
ethyl acetate 141-78-6	1.15 mg/kg sediment dw	0.115 mg/kg sediment dw	650 mg/L	0.148 mg/kg soil dw	0.2 g/kg food
Cineole 470-82-6	1.425 mg/kg sediment dw	0.1425 mg/kg sediment dw	10 mg/L	0.25 mg/kg soil dw	40 mg/kg food
bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimethyl-, (1S-endo)- 464-45-9	0.10261 mg/kg sediment dw	0.01026 mg/kg sediment dw	10 mg/L	0.00999 mg/kg soil dw	1.31 mg/kg food
3,7-dimethyl-2,6-octadien-1-ol 106-25-2	133 µg/kg sediment dw	13.3 µg/kg sediment dw	12.9 mg/L	22.3 µg/kg soil dw	
Linalyl acetate 115-95-7	0.609 mg/kg sediment dw	0.0609 mg/kg sediment dw	1 mg/L	0.115 mg/kg soil dw	
1-(4-	0.214 mg/kg	0.0214 mg/kg	10 mg/L	0.0246 mg/kg soil	

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
Methylphenyl)ethanone 122-00-9	sediment dw	sediment dw		dw	
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	
dl-Citronellol 106-22-9	0.0256 mg/kg sediment dw	0.00256 mg/kg sediment dw	580 mg/L	0.00371 mg/kg soil dw	
Hydroxycitronellal 107-75-5	0.145 mg/kg sediment dw	0.0145 mg/kg sediment dw	10 mg/L	0.0105 mg/kg soil dw	
Citral 5392-40-5	0.125 mg/kg sediment dw	0.0125 mg/kg sediment dw	1.6 mg/L	0.0209 mg/kg soil dw	
alpha-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
2,2,5-Trimethyl-5- pentylcyclopentanone 65443-14-3	0.798 mg/kg sediment dw	0.08 mg/kg sediment dw	100 mg/L	0.159 mg/kg soil dw	45.5 mg/kg food
Coumarin 91-64-5	0.15 mg/kg sediment dw	0.015 mg/kg sediment dw	6.4 mg/L	0.018 mg/kg soil dw	30.7 mg/kg food
glutaral 111-30-8	0.091 mg/kg sediment dw	0.009 mg/kg sediment dw	0.8 mg/L	0.21 mg/kg soil dw	
acetic acid ... % 64-19-7	11.36 mg/kg sediment dw	1.136 mg/kg sediment dw	85 mg/L	0.47 mg/kg soil dw	
benzyl benzoate 120-51-4	10.66 mg/kg sediment dw	1.07 mg/kg sediment dw	100 mg/L	2.12 mg/kg soil dw	
Eugenol 97-53-0	0.081 mg/kg sediment dw	0.0081 mg/kg sediment dw		0.0155 mg/kg soil dw	

8.2. Exposure controls

Engineering controls

No information available.

Personal protective equipment

Eye/face protection

No special protective equipment required.

Skin and body protection

No special protective equipment required.

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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Colourless liquid Hazy thin liquid
Color	Colourless
Odor	Sweet Floral.
Odor threshold	No data available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	> 100 °C	Not measured (>100°C)
Flammability	No data available	Does not ignite
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
pH	6.3 - 8.3	pH (concentrated solution): 6.5 - 8.5
pH (as aqueous solution)	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	Not measured	None known
Water solubility	No data available Soluble in water	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Vapor pressure	No data available	None known
Relative density	0.983 - 1.003 @ 20°C	None known
Bulk density	No data available	
Liquid Density	No data available	
Relative vapor density	> 1 (Air=1)	None known
Particle characteristics		
Particle Size		
Particle Size Distribution		
Explosive properties	None	
Oxidizing properties	No information available	

9.2. Other information**SECTION 10: Stability and reactivity**10.1. Reactivity

Reactivity No information available.

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 None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

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

Inhalation	May cause irritation of respiratory tract.
Eye contact	May cause irritation.
Skin contact	May cause irritation.
Ingestion	May cause irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity**Numerical measures of toxicity**

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

ATEmix (oral)	99,999.00	mg/kg
ATEmix (dermal)	99,999.00	mg/kg
ATEmix (inhalation-gas)	99,999.00	ppm
ATEmix (inhalation-vapor)	99,999.00	mg/l
ATEmix (inhalation-dust/mist)	99,999.00	mg/l

Unknown acute toxicity**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.
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.
Respiratory or skin sensitization	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
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.

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

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

Unknown aquatic toxicity

12.2. Persistence and degradability

Persistence and degradability None known.

12.3. Bioaccumulative potential

Bioaccumulation None known.

12.4. Mobility in soil

Mobility in soil Not determined.

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 above the threshold of declaration.

12.6. Other adverse effects

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	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

IMDG

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
14.7 Maritime transport in bulk according to IMO instruments	Not regulated

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****Authorizations and/or restrictions on use:**

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

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)

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/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
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/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 A Chemical Safety Assessment has not been carried out for this mixture

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend**

SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: Exposure controls/personal protection

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

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 - vapor	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitization	Calculation method
Skin sensitization	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) (AELG(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)
Australia 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)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision date 01/30/2024

**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

UK SDS version information - XGHS

UL release:

GHS Revision 7
2022 Q1

United Kingdom

Partial process, including GHS Wizard, NO TW