



SAFETY DATA SHEET

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

Revision date 12/06/2023

Revision Number 1

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

1.1. Product identifier

Product Code(s) 233901

Product Name Astonish Cream Lemon

Pure substance/mixture Mixture

Contains 2-Octyl-2H-isothiazol-3-one

Formula 2339F6V2

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

Recommended use Hard surface cleaning.

Uses advised against

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 (8pm-4pm Mon-Fri) www.astonishcleaners.com
Astonish Cleaner Europe Ltd
38 Main Street
Swords
Co. Dublin
Republic of Ireland
K67E0A2
Tel: +353 768 885288 (8am-4pm Mon-Fri)
www.astonishcleaners.eu

For further information, please contact

1.4. Emergency telephone number

Emergency Telephone

UK - Emergency Telephone: +44 (0) 1274 767440 (8am-4pm Mon-Fri).
Alternatively in UK: Contact NHS 111 Telephone 111 (24 hours a day, 7days a week):
Website 111.nhs.uk or a doctor

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

Serious eye damage/eye irritation	Category 2 - (H319)
Skin sensitization	Category 1 - (H317)
Chronic aquatic toxicity	Not classified chronic

2.2. Label elements

Contains 2-Octyl-2H-isothiazol-3-one

**Signal word**

Warning

Hazard statements

H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation

Precautionary statements

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
P337 + P313 - If eye irritation persists: Get medical advice/attention
P101 - If medical advice is needed, have product container or label at hand
P102 - Keep out of reach of children
P280 - Wear eye protection/ face protection
P103 - Read label before use
P264 - Wash hands thoroughly after handling

Unknown aquatic toxicity

Contains 2.04648 % of components with unknown hazards to the aquatic environment.

2.3. Other hazards

Causes mild skin irritation.

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)
Undecanol, branched and linear, ethoxylated (>5-15 EO) 68439-46-3	2.5 - <5%	-	-	Acute Tox. 4 (H302) Eye Dam. 1 (H318)	-	-	-
Coconut Diethanolamide 68603-42-9	1 - <2.5%	271-657-0	-	Aquatic Chronic 2 (H411) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	-	-	-
Glycerol 56-81-5	0.025 - <0.25%	200-289-5	-	-	-	-	-
Sodium Hydroxide 1310-73-2	<0.025%	(011-002-00-6) 215-185-5	-	Skin Corr. 1A (H314) Met. Corr. 1 (H290)	Eye Irrit. 2 :: 0.5%≤C<2% Skin Corr. 1A :: C≥5% Skin Corr. 1B :: 2%≤C<5% Skin Irrit. 2 :: 0.5%≤C<2%	-	-
2-Octyl-2H-isothiazol-3-one 26530-20-1	<0.025%	(613-112-00-5) 247-761-7	-	Skin Corr. 1B (H314) Aquatic Chronic 1 (H410) Aquatic Acute 1 (H400) Skin Sens. 1A (H317) Acute Tox. 3 (H311) Acute Tox. 4 (H302) Acute Tox. 3 (H331)	Skin Sens. 1A :: C≥0.0015%	100	100
turpentine, oil 8006-64-2	<0.025%	(650-002-00-6) 232-350-7	-	Aquatic Chronic 2 (H411) Asp. Tox. 1 (H304) Flam. Liq. 3 (H226) Acute Tox. 4 (H332) Skin Sens. 1 (H317) Eye Irrit. 2 (H319) Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Acute Tox. 4 (H312)	-	-	-
2,6-di-tert-butyl-p-cresol 128-37-0	<0.025%	204-881-4	-	Aquatic Chronic 1 (H410) Aquatic Acute 1 (H400)	-	-	-

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.
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 with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.
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. May cause redness and tearing of the eyes. Burning sensation. Prolonged contact may cause redness and irritation.
Effects of Exposure	None known.

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

Note to physicians	May cause sensitization in susceptible persons. 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	Product is or contains a sensitizer. May cause sensitization by skin contact.
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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	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away
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from and upwind of spill/leak.

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 See Section 12 for additional Ecological Information.

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 before reuse.

General hygiene considerations Avoid contact with skin, eyes or clothing. 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)

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
Glycerol 56-81-5	TWA: 10 mg/m ³ STEL: 30 mg/m ³
Sodium Hydroxide 1310-73-2	STEL: 2 mg/m ³

turpentine, oil 8006-64-2	TWA: 100 ppm TWA: 566 mg/m ³ STEL: 150 ppm STEL: 850 mg/m ³
2,6-di-tert-butyl-p-cresol 128-37-0	TWA: 10 mg/m ³ STEL: 30 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
Undecanol, branched and linear, ethoxylated (>5-15 EO) 68439-46-3		2080 mg/kg bw/day [4] [6]	294 mg/m ³ [4] [6]
Glycerol 56-81-5			56 mg/m ³ [5] [6]
2,2'-iminodiethanol 111-42-2		0.13 mg/kg bw/day [4] [6]	0.75 mg/m ³ [4] [6] 0.5 mg/m ³ [5] [6]
Sodium Hydroxide 1310-73-2			1 mg/m ³ [5] [6]
Citral 5392-40-5		1.7 mg/kg bw/day [4] [6] 140 µg/cm ² [5] [6]	9 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]
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]
Decanal 112-31-2		7.05 mg/kg bw/day [4] [6] 14.1 mg/kg bw/day [4] [7] 17.62 mg/cm ² [5] [6] 35.24 mg/cm ² [5] [7]	24.86 mg/m ³ [4] [6] 49.71 mg/m ³ [4] [7] 62.14 mg/m ³ [5] [6] 124.28 mg/m ³ [5] [7]
n-Octanal 124-13-0		0.37 mg/kg bw/day [4] [6]	1.3 mg/m ³ [4] [6]
p-Mentha-1,3-diene 99-86-5		0.833333 mg/kg bw/day [4] [6]	2.938596 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]
Nonanal 124-19-6		7 mg/kg bw/day [4] [6]	24.9 mg/m ³ [4] [6]
2,6-di-tert-butyl-p-cresol 128-37-0		0.5 mg/kg bw/day [4] [6]	3.5 mg/m ³ [4] [6]
3,7-dimethyl-6-octen-1-ol 106-23-0		1.7 mg/kg bw/day [4] [6] 140 µg/cm ² [5] [6]	9 mg/m ³ [4] [6]
Eucalyptol 470-82-6		2 mg/kg bw/day [4] [6]	7.05 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]
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]
Undecanal 112-44-7		8.3 mg/kg bw/day [4] [6]	59 mg/m ³ [4] [6]
Allyl hexanoate		4.3 mg/kg bw/day [4] [6]	15 mg/m ³ [4] [6]

Chemical name	Oral	Dermal	Inhalation
123-68-2			
3,7-Dimethyl-2(3),6-Nonadienitrile 61792-11-8		1.5 mg/kg bw/day [4] [6] 3 mg/kg bw/day [4] [7] 3.75 mg/cm ² [5] [6] 7.5 mg/cm ² [5] [7]	5.29 mg/m ³ [4] [6] 10.58 mg/m ³ [4] [7] 13.22 mg/m ³ [5] [6] 26.45 mg/m ³ [5] [7]
Camphene 79-92-5		0.21 mg/kg bw/day [4] [6] 1.25 mg/kg bw/day [4] [7]	110.19 mg/m ³ [4] [6] 110.19 mg/m ³ [4] [7]
alpha-Pinene 80-56-8		0.542 mg/kg bw/day [4] [6]	3.8 mg/m ³ [4] [6]
2-ethoxynaphthalene 93-18-5		79.8 µg/kg bw/day [4] [6]	0.281 mg/m ³ [4] [6]
dl-Citronellol 106-22-9		327.4 mg/kg bw/day [4] [6] 2950 µg/cm ² [5] [7]	161.6 mg/m ³ [4] [6] 10 mg/m ³ [5] [6] 10 mg/m ³ [5] [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
Undecanol, branched and linear, ethoxylated (>5-15 EO) 68439-46-3	25 mg/kg bw/day [4] [6]		87 mg/m ³ [4] [6]
Glycerol 56-81-5	229 mg/kg bw/day [4] [6]		33 mg/m ³ [5] [6]
2,2'-iminodiethanol 111-42-2	0.06 mg/kg bw/day [4] [6]		0.125 mg/m ³ [4] [6] 0.125 mg/m ³ [5] [6]
Sodium Hydroxide 1310-73-2			1 mg/m ³ [5] [6]
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]
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]
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]
Decanal 112-31-2	3.52 mg/kg bw/day [4] [6] 7.05 mg/kg bw/day [4] [7]	7.05 mg/kg bw/day [4] [6] 7.05 mg/kg bw/day [4] [7] 8.81 mg/cm ² [5] [6] 17.62 mg/cm ² [5] [7]	6.13 mg/m ³ [4] [6] 12.26 mg/m ³ [4] [7] 15.32 mg/m ³ [5] [6] 30.65 mg/m ³ [5] [7]
n-Octanal 124-13-0	0.19 mg/kg bw/day [4] [6]		0.32 mg/m ³ [4] [6]
p-Mentha-1,3-diene 99-86-5	0.4166666 mg/kg bw/day [4] [6]		0.724638 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]
Nonanal 124-19-6	3.5 mg/kg bw/day [4] [6]		6.1 mg/m ³ [4] [6]
2,6-di-tert-butyl-p-cresol 128-37-0			0.86 mg/m ³ [4] [6]

Chemical name	Oral	Dermal	Inhalation
3,7-dimethyl-6-octen-1-ol 106-23-0	0.6 mg/kg bw/day [4] [6]	140 µg/cm ² [5] [6]	2.7 mg/m ³ [4] [6]
Eucalyptol 470-82-6	600 mg/kg bw/day [4] [6]		1.74 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]
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]
Undecanal 112-44-7	4.2 mg/kg bw/day [4] [6]		14.5 mg/m ³ [4] [6]
Allyl hexanoate 123-68-2	2.1 mg/kg bw/day [4] [6]		3.7 mg/m ³ [4] [6]
3,7-Dimethyl-2(3),6-Nonadienitrile 61792-11-8	0.75 mg/kg bw/day [4] [6] 1.5 mg/kg bw/day [4] [7]	1.5 mg/kg bw/day [4] [6] 1.5 mg/kg bw/day [4] [7] 1.88 mg/cm ² [5] [6] 3.75 mg/cm ² [5] [7]	1.3 mg/m ³ [4] [6] 2.61 mg/m ³ [4] [7] 3.26 mg/m ³ [5] [6] 6.52 mg/m ³ [5] [7]
Camphene 79-92-5	0.1 mg/kg bw/day [4] [6] 0.625 mg/kg bw/day [4] [7]	0.625 mg/kg bw/day [4] [6] 0.625 mg/kg bw/day [4] [7]	54.3 mg/m ³ [4] [6] 54.3 mg/m ³ [4] [7]
alpha-Pinene 80-56-8	0.225 mg/kg bw/day [4] [6]		0.674 mg/m ³ [4] [6]
2-ethoxynaphthalene 93-18-5	28.5 µg/kg bw/day [4] [6]		42.2 µg/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]
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
Undecanol, branched and linear, ethoxylated (>5-15 EO) 68439-46-3	0.10379 mg/L	0.014 mg/L	0.10379 mg/L		
Glycerol 56-81-5	0.885 mg/L	8.85 mg/L	0.0885 mg/L		
2,2'-iminodiethanol 111-42-2	0.021 mg/L	0.095 mg/L	0.002 mg/L		
2-Octyl-2H-isothiazol-3-one 26530-20-1	2.2 µg/L	1.22 µg/L	0.22 µg/L	0.122 µg/L	
Citral 5392-40-5	0.00678 mg/L	0.0678 mg/L	0.000678 mg/L		
Linalool 78-70-6	0.2 mg/L	2 mg/L	0.02 mg/L		

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
2,6-dimethyloct-7-en-2-ol 18479-58-8	27.8 µg/L	0.278 mg/L	2.78 µg/L		
Decanal 112-31-2	1.17 µg/L	11.7 µg/L	0.117 µg/L		
n-Octanal 124-13-0	0.00154 mg/L		0.000154 mg/L		
p-Mentha-1,3-diene 99-86-5	0.0017 mg/L	0.017 mg/L	0.00017 mg/L	0.017 mg/L	
Geraniol 106-24-1	0.0108 mg/L	0.108 mg/L	0.00108 mg/L		
Nonanal 124-19-6	1.45 µg/L	14.5 µg/L	0.145 µg/L		
2,6-di-tert-butyl-p-cresol 128-37-0	0.199 µg/L	1.99 µg/L	0.0199 µg/L		
3,7-dimethyl-6-octen-1-ol 106-23-0	0.00868 mg/L	0.0868 mg/L	0.00087 mg/L		
Eucalyptol 470-82-6	57 µg/L	0.57 mg/L	5.7 µg/L		
3,7-dimethyl-2,6-octadien-1-ol 106-25-2	7.45 µg/L	74.5 µg/L	0.745 µg/L		
2-Methylundecanal 110-41-8	0.66 µg/L	1.8 µg/L	66 ng/L	0.18 µg/L	
Undecanal 112-44-7	0.0025 mg/L	0.5 mg/L	0.00025 mg/L		
Allyl hexanoate 123-68-2	0.117 µg/L	1.17 µg/L	0.0117 µg/L		
3,7-Dimethyl-2(3),6-Nonadienitrile 61792-11-8	0.0024 mg/L	0.024 mg/L	0.00024 mg/L		
alpha-Pinene 80-56-8	0.606 µg/L	3.03 µg/L	0.0606 µg/L	0.303 µg/L	
2-ethoxynaphthalene 93-18-5	2.31 µg/L	23.1 µg/L	0.231 µg/L	2.31 µg/L	
dl-Citronellol 106-22-9	0.0024 mg/L	0.024 mg/L	0.00024 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
Undecanol, branched and linear, ethoxylated (>5-15 EO) 68439-46-3	13.7 mg/kg sediment dw	13.7 mg/kg sediment dw	1.4 mg/L	1 mg/kg soil dw	
Glycerol 56-81-5	3.3 mg/kg sediment dw	0.33 mg/kg sediment dw	1000 mg/L	0.141 mg/kg soil dw	
2,2'-iminodiethanol 111-42-2	0.092 mg/kg sediment dw	0.0092 mg/kg sediment dw	100 mg/L	1.63 mg/kg soil dw	1.04 mg/kg food
2-Octyl-2H-isothiazol-3-one 26530-20-1	47.5 µg/kg sediment dw	4.75 µg/kg sediment dw		8.2 µg/kg soil dw	
Citral	0.125 mg/kg	0.0125 mg/kg	1.6 mg/L	0.0209 mg/kg soil	

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
5392-40-5	sediment dw	sediment dw		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
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
Decanal 112-31-2	0.0972 mg/kg sediment dw	0.00972 mg/kg sediment dw	3.16 mg/L	0.0187 mg/kg soil dw	313 mg/kg food
n-Octanal 124-13-0	0.07146 mg/kg sediment dw	0.00715 mg/kg sediment dw	3.16 mg/L	0.01339 mg/kg soil dw	
p-Mentha-1,3-diene 99-86-5	0.19618 mg/kg sediment dw	0.01962 mg/kg sediment dw	0.1 mg/L	0.02271 mg/kg soil dw	8.3333 mg/kg food
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	
Nonanal 124-19-6	0.1056 mg/kg sediment dw	10.56 µg/kg sediment dw	3.16 mg/L	20.22 µg/kg soil dw	313 mg/kg food
2,6-di-tert-butyl-p-cresol 128-37-0	99.6 µg/kg sediment dw	9.96 µg/kg sediment dw	0.17 mg/L	47.69 µg/kg soil dw	8.33 mg/kg food
3,7-dimethyl-6-octen-1-ol 106-23-0	0.159 mg/kg sediment dw	0.0159 mg/kg sediment dw	4 mg/L	0.0267 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
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	
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
Undecanal 112-44-7	0.0389 mg/kg sediment dw	0.00389 mg/kg sediment dw	5.5 mg/L	0.0063 mg/kg soil dw	
Allyl hexanoate 123-68-2	4.46 µg/kg sediment dw	0.446 µg/kg sediment dw	10 mg/L	0.825 µg/kg soil dw	47.56 mg/kg food
3,7-Dimethyl-2(3),6-Nonadienitrile 61792-11-8	0.248 mg/kg sediment dw	0.0248 mg/kg sediment dw	0.9 mg/L	0.0504 mg/kg soil dw	66.6 mg/kg food
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-ethoxynaphthalene 93-18-5	0.722 mg/kg sediment dw	72.2 µg/kg sediment dw		0.143 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	
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

Wear safety glasses with side shields (or goggles).

Hand protection

Wear suitable gloves.

Skin and body protection

Wear suitable protective 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	Avoid contact with skin, eyes or clothing. 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	Opaque White Viscous Liquid	
Color	white	
Odor	Sweet Lemon.	
Odor threshold	No data available	
Property	Values	Remarks • Method
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	8 - 10	pH (concentrated solution): 8.0 - 10.0
pH (as aqueous solution)	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	1800 - 3500 cP @ 20°C	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	1.21 - 1.35 @ 20°C	None known
Bulk density	No data available	
Liquid Density	1.21-1.35	
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.
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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 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	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
Skin contact	May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). May cause irritation. Prolonged contact may cause redness and irritation. Causes mild skin irritation.
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Itching. Rashes. Hives. May cause redness and tearing of the eyes. Prolonged contact may cause redness and irritation.

Acute toxicity

Numerical measures of toxicity

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

ATEmix (oral)	2,022.20 mg/kg
ATEmix (dermal)	3,475.50 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

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Undecanol, branched and linear, ethoxylated (>5-15 EO)	= 1400 mg/kg (Rat)	-	-
Coconut Diethanolamide	> 5000 mg/kg (Rat)	> 2 g/kg (Rabbit)	-
Glycerol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 2.75 mg/L (Rat) 4 h
Sodium Hydroxide	= 325 mg/kg (Rat)	= 1350 mg/kg (Rabbit)	-
2-Octyl-2H-isothiazol-3-one	= 550 mg/kg (Rat)	= 690 mg/kg (Rabbit)	-
turpentine, oil	= 5760 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 13.7 mg/L (Rat) 4 h
2,6-di-tert-butyl-p-cresol	> 2930 mg/kg (Rat)	> 2000 mg/kg (Rat)	-

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

Skin corrosion/irritation May cause skin irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitization 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

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Not considered to be harmful to aquatic life.

Unknown aquatic toxicity Contains 2.04648 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Coconut Diethanolamide	-	LC50: =3.6mg/L (96h, Brachydanio rerio)	-	-
Glycerol	-	LC50: 51 - 57mL/L (96h, Oncorhynchus mykiss)	-	-
Sodium Hydroxide	-	LC50: =45.4mg/L (96h, Oncorhynchus mykiss)	-	-
2,6-di-tert-butyl-p-cresol	EC50: =6mg/L (72h, Pseudokirchneriella subcapitata) EC50: >0.42mg/L (72h, Desmodesmus subspicatus)	-	-	-

12.2. Persistence and degradability

Persistence and degradability Not determined.

12.3. Bioaccumulative potential**Bioaccumulation****Component Information**

Chemical name	Partition coefficient
Glycerol	-1.75
2,6-di-tert-butyl-p-cresol	5.1

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.

Chemical name	PBT and vPvB assessment
Undecanol, branched and linear, ethoxylated (>5-15 EO)	The substance is not PBT / vPvB
Glycerol	The substance is not PBT / vPvB
Sodium Hydroxide	The substance is not PBT / vPvB
2-Octyl-2H-isothiazol-3-one	The substance is not PBT / vPvB
turpentine, oil	The substance is not PBT / vPvB
2,6-di-tert-butyl-p-cresol	The substance is not PBT / vPvB

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)

Chemical name	The Biocidal Products Regulations 2001 (as amended)
2-Octyl-2H-isothiazol-3-one - 26530-20-1	Product-type 6: Preservatives for products during storage Product-type 7: Film preservatives Product-type 8: Wood preservatives Product-type 9: Fiber, leather, rubber and polymerized materials preservatives Product-type 10: Construction material preservatives Product-type 11: Preservatives for liquid-cooling and processing systems Product-type 13: Working or cutting fluid preservatives

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

Not applicable

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

Chemical name	Poisons and Explosive Precursors
Sodium Hydroxide	Poison, Reportable 12 % of total caustic alkalinity

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****Full text of H-Statements referred to under section 3**

H226 - Flammable liquid and vapor
 H290 - May be corrosive to metals
 H302 - Harmful if swallowed
 H304 - May be fatal if swallowed and enters airways
 H311 - Toxic in contact with skin
 H312 - Harmful in contact with skin
 H314 - Causes severe skin burns and eye damage
 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
 H332 - Harmful if inhaled
 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

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	On basis of test data
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) (AEL(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 12/06/2023

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

Full text of H-Statements referred to under section 3

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 H317 - May cause an allergic skin reaction H318 - Causes serious eye damage H319 - Causes serious eye irritation H331 - Toxic if inhaled H332 - Harmful if inhaled 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

Chemical name	Classification according to GB CLP (SI 2020/1567 as amended)	Specific concentration limit (SCL)
Undecanol, branched and linear, ethoxylated (>5-15 EO)	Acute Tox. 4 (H302) Eye Dam. 1 (H318)	
Coconut Diethanolamide	Aquatic Chronic 2 (H411) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	
Sodium Hydroxide	Skin Corr. 1A (H314) Met. Corr. 1 (H290)	Eye Irrit. 2 :: 0.5%≤C<2% Skin Corr. 1A :: C≥5% Skin Corr. 1B :: 2%≤C<5% Skin Irrit. 2 :: 0.5%≤C<2%

2-Octyl-2H-isothiazol-3-one	Skin Corr. 1B (H314) Aquatic Chronic 1 (H410) Aquatic Acute 1 (H400) Skin Sens. 1A (H317) Acute Tox. 3 (H311) Acute Tox. 4 (H302) Acute Tox. 3 (H331)	Skin Sens. 1A :: C>=0.0015%
turpentine, oil	Aquatic Chronic 2 (H411) Asp. Tox. 1 (H304) Flam. Liq. 3 (H226) Acute Tox. 4 (H332) Skin Sens. 1 (H317) Eye Irrit. 2 (H319) Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Acute Tox. 4 (H312)	
2,6-di-tert-butyl-p-cresol	Aquatic Chronic 1 (H410) Aquatic Acute 1 (H400)	