



# SAFETY DATA SHEET

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

Revision date 03/21/2024

Revision Number 1

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

### 1.1. Product identifier

**Product Code(s)** 345001  
**Safety data sheet number** 0000062  
**Product Name** Pet Stain & Odour Neutraliser  
**Pure substance/mixture** Mixture

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

**Recommended use** Elimination of malodours from fabrics. Cleaning pet urine, vomit and faeces.

**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 (8am-4pm Mon-Fri)  
[www.astonish.co.uk](http://www.astonish.co.uk)

For further information, please contact

**E-mail address** [info@astonish.co.uk](mailto:info@astonish.co.uk)

### 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, 7 days a week):  
Website [111.nhs.uk](http://111.nhs.uk) or a doctor

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

Serious eye damage/eye irritation	Not classified
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**2.2. Label elements****Hazard statements****Precautionary statements**

P101 - If medical advice is needed, have product container or label at hand

P102 - Keep out of reach of children

P103 - Read label before use

**Unknown acute toxicity****Unknown aquatic toxicity** Contains 0.73416 % of components with unknown hazards to the aquatic environment.**2.3. Other hazards**

Not applicable.

**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)
15-hydroxypentadecanoic acid, omega-lactone 106-02-5	<0.025%	203-354-6	-	Aquatic Chronic 2 (H411) Skin Sens. 1A (H317)	-	-	-

**Full text of H- and EUH-phrases: see section 16**This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (UK REACH Article 59)**SECTION 4: First aid measures****4.1. Description of first aid measures****General advice**

Show this safety data sheet to the doctor in attendance.

Inhalation	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. Get medical attention if irritation develops and persists.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.
Ingestion	Rinse mouth. Do NOT induce vomiting.
Self-protection of the first aider	Use personal protective equipment as required.

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

Symptoms	May cause redness and tearing of the eyes.
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.
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Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
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Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
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#### **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	Avoid contact with eyes.
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** Avoid contact with eyes.

**General hygiene considerations** Avoid contact with eyes.

**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**

**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
Sulfuri Acid, Mono C12-14 Alkyl (Even Numbered) Esters, Sodium Salts 85586-07-8		4060 mg/kg bw/day [4] [6]	285 mg/m <sup>3</sup> [4] [6]
Phenoxyethanol 122-99-6		20.83 mg/kg bw/day [4] [6]	5.7 mg/m <sup>3</sup> [4] [6] 5.7 mg/m <sup>3</sup> [5] [6]
Sodium C14-C16 Olefin Sulphonate 68439-57-6		2158.33 mg/kg bw/day [4] [6]	152.22 mg/m <sup>3</sup> [4] [6]

Chemical name	Oral	Dermal	Inhalation
Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate 51981-21-6		15000 mg/kg bw/day [4] [6]	7.3 mg/m <sup>3</sup> [4] [6]
3-octanol, 3,7-dimethyl 78-69-3		3.16 mg/kg bw/day [4] [6] 190 µg/cm <sup>2</sup> [5] [6]	11.14 mg/m <sup>3</sup> [4] [6]
Amines, C12-18(even numbered)-alkyldimethyl, N-oxides 68955-55-5		11 mg/kg bw/day [4] [6]	6.2 mg/m <sup>3</sup> [4] [6]
3-methyl-5-phenyl pentanol 55066-48-3		0.5 mg/kg bw/day [4] [6] 3 mg/kg bw/day [4] [7] 0.13 mg/cm <sup>2</sup> [5] [6]	0.88 mg/m <sup>3</sup> [4] [6] 5.3 mg/m <sup>3</sup> [4] [7]
p-(2-methylpropyl)-4-hydroxy-4-methyl tetrahydropyran 63500-71-0		41.7 mg/kg bw/day [4] [6]	44.1 mg/m <sup>3</sup> [4] [6]
2,6-dimethyloct-7-en-2-ol 18479-58-8		20.8 mg/kg bw/day [4] [6]	73.5 mg/m <sup>3</sup> [4] [6]
Amyl salicylate 2050-08-0		0.9 mg/kg bw/day [4] [6]	3.17 mg/m <sup>3</sup> [4] [6]
Linalyl acetate 115-95-7		2.5 mg/kg bw/day [4] [6] 236.2 µg/cm <sup>2</sup> [5] [6] 236.2 µg/cm <sup>2</sup> [5] [7]	2.75 mg/m <sup>3</sup> [4] [6]
2-Methyl-3-(p-isoPropylPhenyl)Propion aldehyde 103-95-7		1.67 mg/kg bw/day [4] [6] 7.43 µg/cm <sup>2</sup> [5] [6]	5.83 mg/m <sup>3</sup> [4] [6]
α-Hexylcinnamaldehyde 165184-98-5		18.2 mg/kg bw/day [4] [6] 525 µg/cm <sup>2</sup> [5] [6] 525 µg/cm <sup>2</sup> [5] [7]	0.078 mg/m <sup>3</sup> [4] [6] 6.28 mg/m <sup>3</sup> [5] [7]
Geranyl acetate 105-87-3		35.5 mg/kg bw/day [4] [6]	62.59 mg/m <sup>3</sup> [4] [6]
Heliotropin 120-57-0		2.5 mg/kg bw/day [4] [6]	17.6 mg/m <sup>3</sup> [4] [6]
Coumarin 91-64-5		0.79 mg/kg bw/day [4] [6]	6.78 mg/m <sup>3</sup> [4] [6]
Benzyl cinnamate 103-41-3		2 mg/kg bw/day [4] [6]	7.05 mg/m <sup>3</sup> [4] [6]
Citral 5392-40-5		1.7 mg/kg bw/day [4] [6] 140 µg/cm <sup>2</sup> [5] [6]	9 mg/m <sup>3</sup> [4] [6]
benzyl benzoate 120-51-4		2.6 mg/kg bw/day [4] [6]	5.1 mg/m <sup>3</sup> [4] [6] 102 mg/m <sup>3</sup> [4] [7]
Linalool 78-70-6		2.5 mg/kg bw/day [4] [6] 5 mg/kg bw/day [4] [7] 3 mg/cm <sup>2</sup> [5] [6] 3 mg/cm <sup>2</sup> [5] [7]	2.8 mg/m <sup>3</sup> [4] [6] 16.5 mg/m <sup>3</sup> [4] [7]
benzaldehyde 100-52-7		1.14 mg/kg bw/day [4] [6] 1 % in mixture (weight basis) [5] [7]	9.8 mg/m <sup>3</sup> [4] [6] 9.8 mg/m <sup>3</sup> [5] [6]
Trimethylcyclopentenyl Methylisopentenol 67801-20-1		6.67 mg/kg bw/day [4] [6]	92.75 mg/m <sup>3</sup> [4] [6]
Geraniol 106-24-1		12.5 mg/kg bw/day [4] [6] 11800 µg/cm <sup>2</sup> [5] [6]	161.6 mg/m <sup>3</sup> [4] [6]
Methyl Salicylate 119-36-8		6 mg/kg bw/day [4] [6]	17.5 mg/m <sup>3</sup> [4] [6] 285 mg/m <sup>3</sup> [4] [7]

**Notes**

[4]

[5]

Systemic health effects.

Local health effects.

[6] Long term.  
[7] Short term.

**Derived No Effect Level (DNEL) - General Public**

Chemical name	Oral	Dermal	Inhalation
Sulfuri Acid, Mono C12-14 Alkyl (Even Numbered) Esters, Sodium Salts 85586-07-8	24 mg/kg bw/day [4] [6]		85 mg/m <sup>3</sup> [4] [6]
Phenoxyethanol 122-99-6	9.23 mg/kg bw/day [4] [6] 9.23 mg/kg bw/day [4] [7]		2.41 mg/m <sup>3</sup> [4] [6] 2.41 mg/m <sup>3</sup> [5] [6]
Sodium C14-C16 Olefin Sulphonate 68439-57-6	12.95 mg/kg bw/day [4] [6]		45.04 mg/m <sup>3</sup> [4] [6]
Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate 51981-21-6	1.5 mg/kg bw/day [4] [6]		1.8 mg/m <sup>3</sup> [4] [6]
3-octanol, 3,7-dimethyl 78-69-3	1.58 mg/kg bw/day [4] [6]	190 µg/cm <sup>2</sup> [5] [6]	2.75 mg/m <sup>3</sup> [4] [6]
Amines, C12-18(even numbered)-alkyldimethyl, N-oxides 68955-55-5	0.44 mg/kg bw/day [4] [6]		1.53 mg/m <sup>3</sup> [4] [6]
3-methyl-5-phenyl pentanol 55066-48-3	0.06 mg/kg bw/day [4] [6] 0.375 mg/kg bw/day [4] [7]	1.5 mg/kg bw/day [4] [6] 1.5 mg/kg bw/day [4] [7] 0.065 mg/cm <sup>2</sup> [5] [6] 0.39 mg/cm <sup>2</sup> [5] [7]	0.21 mg/m <sup>3</sup> [4] [6] 1.3 mg/m <sup>3</sup> [4] [7]
p-(2-methylpropyl)-4-hydroxy-4-methyl tetrahydropyran 63500-71-0	7.5 mg/kg bw/day [4] [6]		13 mg/m <sup>3</sup> [4] [6]
2,6-dimethyloct-7-en-2-ol 18479-58-8	12.5 mg/kg bw/day [4] [6]		21.7 mg/m <sup>3</sup> [4] [6]
Amyl salicylate 2050-08-0	0.45 mg/kg bw/day [4] [6]		0.78 mg/m <sup>3</sup> [4] [6]
Linalyl acetate 115-95-7	0.2 mg/kg bw/day [4] [6]	236.2 µg/cm <sup>2</sup> [5] [6] 236.2 µg/cm <sup>2</sup> [5] [7]	0.68 mg/m <sup>3</sup> [4] [6]
2-Methyl-3-(p-isoPropylPhenyl)Propionaldehyde 103-95-7	0.83 mg/kg bw/day [4] [6]	3.72 µg/cm <sup>2</sup> [5] [6]	1.45 mg/m <sup>3</sup> [4] [6]
α-Hexylcinnamaldehyde 165184-98-5	0.056 mg/kg bw/day [4] [6]	78.7 µg/cm <sup>2</sup> [5] [6] 78.7 µg/cm <sup>2</sup> [5] [7]	0.019 mg/m <sup>3</sup> [4] [6] 4.71 mg/m <sup>3</sup> [5] [7]
Geranyl acetate 105-87-3	8.9 mg/kg bw/day [4] [6]		15.4 mg/m <sup>3</sup> [4] [6]
Heliotropin 120-57-0	1.25 mg/kg bw/day [4] [6]		4.3 mg/m <sup>3</sup> [4] [6]
Coumarin 91-64-5	0.39 mg/kg bw/day [4] [6]		1.69 mg/m <sup>3</sup> [4] [6]
Benzyl cinnamate 103-41-3	1 mg/kg bw/day [4] [6]		1.74 mg/m <sup>3</sup> [4] [6]
Citral 5392-40-5	0.6 mg/kg bw/day [4] [6]	140 µg/cm <sup>2</sup> [5] [6]	2.7 mg/m <sup>3</sup> [4] [6]
benzyl benzoate 120-51-4	0.4 mg/kg bw/day [4] [6] 78 mg/kg bw/day [4] [7]		1.25 mg/m <sup>3</sup> [4] [6] 25 mg/m <sup>3</sup> [4] [7]
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 <sup>2</sup> [5] [6] 1.5 mg/cm <sup>2</sup> [5] [7]	0.7 mg/m <sup>3</sup> [4] [6] 4.1 mg/m <sup>3</sup> [4] [7]
benzaldehyde 100-52-7	0.67 mg/kg bw/day [4] [6]	1 % in mixture (weight basis) [5] [7]	4.9 mg/m <sup>3</sup> [4] [6] 4.9 mg/m <sup>3</sup> [5] [6]
Trimethylcyclopentenyl	3.33 mg/kg bw/day [4] [6]		23.15 mg/m <sup>3</sup> [4] [6]

Chemical name	Oral	Dermal	Inhalation
Methylisopentenol 67801-20-1			
Geraniol 106-24-1	13.75 mg/kg bw/day [4] [6]	11800 µg/cm <sup>2</sup> [5] [6]	47.8 mg/m <sup>3</sup> [4] [6]
Methyl Salicylate 119-36-8	1 mg/kg bw/day [4] [6] 5 mg/kg bw/day [4] [7]		4 mg/m <sup>3</sup> [4] [6] 213 mg/m <sup>3</sup> [4] [7]

**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
Sulfuri Acid, Mono C12-14 Alkyl (Even Numbered) Esters, Sodium Salts 85586-07-8	0.131 mg/L	0.036 mg/L	0.0131 mg/L		
Phenoxyethanol 122-99-6	0.943 mg/L	3.44 mg/L	0.0943 mg/L		
Sodium C14-C16 Olefin Sulphonate 68439-57-6	0.024 mg/L	0.0197 mg/L	0.0024 mg/L		
Tetrasodium N,N-bis(carboxylatomethyl) -L-glutamate 51981-21-6	9.45 mg/L	0.953 mg/L	0.945 mg/L	0.0953 mg/L	
3-octanol, 3,7-dimethyl 78-69-3	0.0089 mg/L	0.089 mg/L	0.00089 mg/L		
Amines, C12-18(even numbered)-alkyldimethyl, N-oxides 68955-55-5	0.0335 mg/L	0.0335 mg/L	0.00335 mg/L		
3-methyl-5-phenyl pentanol 55066-48-3	0.013 mg/L	0.13 mg/L	0.0013 mg/L		
p-(2-methylpropyl)-4-hydro xy-4-methyl tetrahydropyran 63500-71-0	0.094 mg/L	0.94 mg/L	0.0094 mg/L		
15-hydroxypentadecanoic acid, omega-lactone 106-02-5	2.7 µg/L		0.27 µg/L		
2,6-dimethyloct-7-en-2-ol 18479-58-8	27.8 µg/L	0.278 mg/L	2.78 µg/L		
Amyl salicylate 2050-08-0	0.77 µg/L	7.7 µg/L	0.077 µg/L		
Linalyl acetate 115-95-7	0.011 mg/L	0.11 mg/L	0.0011 mg/L		
2-Methyl-3-(p-isoPropylPh enyl)Propionaldehyde 103-95-7	1.09 µg/L	10.92 µg/L	0.11 µg/L		

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
$\alpha$ -Hexylcinnamaldehyde 165184-98-5	0.00126 mg/L	0.00247 mg/L	0.000126 mg/L		
Geranyl acetate 105-87-3	3.72 $\mu$ g/L	37.2 $\mu$ g/L	0.372 $\mu$ g/L		
Heliotropin 120-57-0	2.5 $\mu$ g/L	25 $\mu$ g/L	0.25 $\mu$ g/L		
Coumarin 91-64-5	19 $\mu$ g/L	14.2 $\mu$ g/L	1.9 $\mu$ g/L		
Citral 5392-40-5	0.00678 mg/L	0.0678 mg/L	0.000678 mg/L		
benzyl benzoate 120-51-4	0.0168 mg/L		0.00168 mg/L		
Linalool 78-70-6	0.2 mg/L	2 mg/L	0.02 mg/L		
Trimethylcyclopentenyl Methylisopentenol 67801-20-1	0.0019 mg/L	0.019 mg/L	0.00019 mg/L		
Geraniol 106-24-1	0.0108 mg/L	0.108 mg/L	0.00108 mg/L		
Methyl Salicylate 119-36-8	20 $\mu$ g/L	200 $\mu$ g/L	2 $\mu$ g/L		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
Sulfuri Acid, Mono C12-14 Alkyl (Even Numbered) Esters, Sodium Salts 85586-07-8	4.61 mg/kg sediment dw	0.461 mg/kg sediment dw	1.35 mg/L	0.846 mg/kg soil dw	
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	
Sodium C14-C16 Olefin Sulphonate 68439-57-6	0.767 mg/kg sediment dw	0.0767 mg/kg sediment dw	4 mg/L	1.21 mg/kg soil dw	
Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate 51981-21-6			41.2 mg/L	0.5 mg/kg soil dw	67 mg/kg food
3-octanol, 3,7-dimethyl 78-69-3	0.0821 mg/kg sediment dw	0.00821 mg/kg sediment dw	450 mg/L	0.0112 mg/kg soil dw	
Amines, C12-18(even numbered)-alkyldimethyl, N-oxides 68955-55-5	5.24 mg/kg sediment dw	0.524 mg/kg sediment dw	24 mg/L	1.02 mg/kg soil dw	11.1 mg/kg food
3-methyl-5-phenyl pentanol 55066-48-3	1.0335 mg/kg sediment dw	0.10335 mg/kg sediment dw	10 mg/L	0.199 mg/kg soil dw	10 mg/kg food
p-(2-methylpropyl)-4-hydroxy-4-methyl tetrahydropyran 63500-71-0	0.412 mg/kg sediment dw	0.0412 mg/kg sediment dw	10 mg/L	0.0902 mg/kg soil dw	
15-hydroxypentadecanoic acid, omega-lactone 106-02-5	21 mg/kg sediment dw	4.2 mg/kg sediment dw	10 mg/L	5.44 mg/kg soil dw	



Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
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
Amyl salicylate 2050-08-0	0.389 mg/kg sediment dw	0.0389 mg/kg sediment dw	10 mg/L	1.786 mg/kg soil dw	80 mg/kg food
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	
2-Methyl-3-(p-isoPropylPhenyl)Propionaldehyde 103-95-7	0.126 mg/kg sediment dw	0.0126 mg/kg sediment dw	1 mg/L	0.0245 mg/kg soil dw	33.3 mg/kg food
$\alpha$ -Hexylcinnamaldehyde 165184-98-5	3.2 mg/kg sediment dw	0.064 mg/kg sediment dw	10 mg/L	0.398 mg/kg soil dw	6.6 mg/kg food
Geranyl acetate 105-87-3	0.442 mg/kg sediment dw	0.0442 mg/kg sediment dw	8 mg/L	0.0859 mg/kg soil dw	
Heliotropin 120-57-0	11.9 $\mu$ g/kg sediment dw	1.2 $\mu$ g/kg sediment dw	10 mg/L	0.84 $\mu$ g/kg soil dw	
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
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	
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	
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
Trimethylcyclopentenyl Methylisopentenol 67801-20-1	0.067 mg/kg sediment dw	0.0067 mg/kg sediment dw	1 mg/L	0.0534 mg/kg soil dw	33.3 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	
Methyl Salicylate 119-36-8	0.52 mg/kg sediment dw	0.052 mg/kg sediment dw	140 mg/L	0.35 mg/kg soil dw	

## 8.2. Exposure controls

**Engineering controls** No information available.

### Personal protective equipment

**Eye/face protection** Avoid contact with eyes.

**Hand 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.

**General hygiene considerations** Avoid contact with eyes.

## SECTION 9: Physical and chemical properties

**9.1. Information on basic physical and chemical properties**

Physical state	Liquid
Appearance	Clear colourless liquid
Color	Colourless
Odor	Fruity/Floral.
Odor threshold	Not applicable

<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	7 - 9	pH (concentrated solution): 7.0 - 9.0
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
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Vapor pressure	No data available	None known
Relative density	1.000 - 1.010 @ 20°C	None known
Bulk density	No data available	
Liquid Density	1.000 - 1.010	
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	Stable.
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**10.2. Chemical stability**

Stability	Stable under normal conditions.
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**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.
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**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** No known effect based on information supplied.

**Eye contact** May cause slight eye irritation.

**Skin contact** No known effect based on information supplied.

**Ingestion** No known effect based on information supplied.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** May cause redness and tearing of the eyes.

**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****Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
15-hydroxypentadecanoic acid, omega-lactone	> 5 g/kg ( Rat )	-	-

**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	No other adverse effects expected.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecotoxicity	Not considered to be harmful to aquatic life.
Unknown aquatic toxicity	Contains 0.73416 % of components with unknown hazards to the aquatic environment.

### 12.2. Persistence and degradability

Persistence and degradability	None known.
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### 12.3. Bioaccumulative potential

Bioaccumulation	Not likely to bioaccumulate.
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#### Component Information

Chemical name	Partition coefficient
15-hydroxypentadecanoic acid, omega-lactone	5.79

### 12.4. Mobility in soil

Mobility in soil	Not determined.
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### 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.
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Chemical name	PBT and vPvB assessment
15-hydroxypentadecanoic acid, omega-lactone	The substance is not PBT / vPvB

**12.6. Other adverse effects****SECTION 13: Disposal considerations****13.1. Waste treatment methods**

<b>Waste from residues/unused products</b>	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
<b>Contaminated packaging</b>	Do not reuse empty containers.

**SECTION 14: Transport information****IATA**

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

**IMDG**

<b>14.1 UN number or ID number</b>	Not regulated
<b>14.2 UN proper shipping name</b>	Not regulated
<b>14.3 Transport hazard class(es)</b>	Not regulated
<b>14.4 Packing group</b>	Not regulated
<b>14.5 Environmental hazards</b>	Not applicable
<b>14.6 Special precautions for user</b>	
<b>Special Provisions</b>	None
<b>14.7 Maritime transport in bulk according to IMO instruments</b>	Not regulated

**RID**

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

**ADR**

<b>14.1 UN number or ID number</b>	Not regulated
<b>14.2 UN proper shipping name</b>	Not regulated
<b>14.3 Transport hazard class(es)</b>	Not regulated
<b>14.4 Packing group</b>	Not regulated
<b>14.5 Environmental hazards</b>	Not applicable
<b>14.6 Special precautions for user</b>	
<b>Special Provisions</b>	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**

<b>TSCA</b>	Contact supplier for inventory compliance status
<b>DSL/NDSL</b>	Contact supplier for inventory compliance status
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status
<b>ENCS</b>	Contact supplier for inventory compliance status
<b>IECSC</b>	Contact supplier for inventory compliance status
<b>KECL</b>	Contact supplier for inventory compliance status
<b>PICCS</b>	Contact supplier for inventory compliance status
<b>AIIC</b>	Contact supplier for inventory compliance status
<b>NZIoC</b>	Contact supplier for inventory compliance status

**Legend:**

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

H317 - May cause an allergic skin reaction

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	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) (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)  
 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 03/21/2024

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

Full text of H-Statements referred to under H317 - May cause an allergic skin reaction H411 - Toxic to aquatic life with long lasting effects  
section 3

Chemical name	Classification according to GB CLP (SI 2020/1567 as amended)	Specific concentration limit (SCL)
15-hydroxypentadecanoic acid, omega-lactone	Aquatic Chronic 2 (H411) Skin Sens. 1A (H317)	