

Safety Data Sheet

*According to Regulation (EC) No 2015/830

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name:** Pine Disinfectant**Code(s):** A756, A757, A758, A760, E443**1.2 Relevant identified uses of the substance or mixture and uses advised against****Identified uses:**

For professional and industrial use only.

Disinfection of surfaces

Uses advised against:

Uses other than those identified are not recommended

1.3 Details of the supplier of the safety data sheet

William Clements (Chemicals) Ltd
 The Old Transport Museum
 Witham Street
 Belfast
 BT4 1HP
 United Kingdom
 Tel: +44 (0) 28 9073 8395
 Fax: +44 (0) 28 9045 0532
 Email: info@clementschemicals.com

1.4 Emergency telephone number

+44 (0) 28 9073 8395 8.00am – 5.00pm Monday - Friday

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

The product has been classified and labeled in accordance with Regulation (EC) No 1272/2008.

***2.1.2 Classification – EC 1272/2008:** Eye Irrit. 2 H319**2.2 Label elements****Signal word:** Warning**Hazard statements:**

H319 - Causes serious eye irritation

Precautionary statements:

P280 Wear eye protection

P301+P313 IF SWALLOWED: Get medical advice/attention

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

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

P501 - Dispose of contents/container to an appropriate local waste system

2.3 Other hazards

No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.

SECTION 3: Composition/information on ingredients***3.2 Mixtures**

EC 1272/2008

Ingredient(s)	EC Number	CAS Number	Reach Number	Classification	Weight percent
Quaternary Ammonium Compounds, Benzyl-C12-14 (Even Numbered)-Alkyldimethyl, Chlorides	939-350-2	85409-22-9	01-219970550-39-xxxx	Acute Tox.4 H302 Skin Corr.1B H314 Aquatic Acute1 H400 Aquatic Chronic1 H410	1-3

C12-C15 Alcohol Ethoxylate With 7MEO		68131-39-5		Acute Tox. 4 H302 Eye Dam. 1 H318	<1
Pine Oil 85		8002-09-3		Acute Tox. 4 - H302 Eye Irrit. 2- H319	<1

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation

IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/attention.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Ingestion

IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Self-protection of first aider

Consider personal protective equipment as indicated in subsection 8.2.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation:

Coughing. sneezing.

Skin contact:

May cause redness or dryness.

Eye contact:

Pain. Redness. Swelling. Blurred vision.

Ingestion:

Oral mucosal or gastro-intestinal irritation.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

No special hazards known.

5.3 Advice for firefighters

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear suitable gloves and eye/face protection.

6.2 Environmental precautions

Products ending up down the drain after use. Prevent soil and water pollution. Prevent spreading in sewers.

6.3 Methods and material for containment and cleaning up

Absorb onto dry sand or similar inert material.

6.4 Reference to other sections

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire and explosions:

No special precautions required.

Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:

Avoid contact with eyes. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Do not handle until all safety precautions have been read and understood.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Keep only in original container. Store in a closed container. For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limits

C12-C15 Alcohol Ethoxylate With 7MEO				
DNEL/DMEL and PNEC values Human exposure	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
DNEL oral exposure - Consumer (mg/kg bw)	No data available	No data available	No data available	No data available
DNEL dermal exposure - Worker	No data available	No data available	No data available	No data available
DNEL dermal exposure - Consumer	No data available	No data available	No data available	No data available
DNEL inhalatory exposure - Worker (mg/m3)	No data available	No data available	No data available	No data available
DNEL inhalatory exposure - Consumer (mg/m3)	No data available	No data available	No data available	No data available
Environmental exposure -	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	(mg/l) Intermittent (mg/l)	Sewage treatment plant (mg/l)
PNEC	No data available	No data available	No data available	No data available
Environmental exposure	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m3)
PNEC	No data available	No data available	No data available	No data available

quaternary ammonium compounds, benzyl-c12-14 (even numbered)-alkyldimethyl, chlorides				
DNEL/DMEL and PNEC values Human exposure	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
DNEL oral exposure - Consumer (mg/kg bw)	No data available	No data available	No data available	3.4
DNEL dermal exposure - Worker	No data available	No data available	No data available	5.7
DNEL dermal exposure - Consumer	No data available	No data available	No data available	3.4
DNEL inhalatory exposure - Worker (mg/m3)	No data available	No data available	No data available	3.96
DNEL inhalatory exposure - Consumer (mg/m3)	No data available	No data available	No data available	1.64
Environmental exposure -	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	(mg/l) Intermittent (mg/l)	Sewage treatment plant (mg/l)
PNEC	0.0009	0.00096	0.00016	0.4
Environmental exposure	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m3)
PNEC	12.27	13.09	7	No data available

Pine Oil 85				
DNEL/DMEL and PNEC values Human exposure	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
DNEL oral exposure - Consumer (mg/kg bw)	No data available	No data available	No data available	No data available
DNEL dermal exposure - Worker	No data available	No data available	No data available	No data available
DNEL dermal exposure - Consumer	No data available	No data available	No data available	No data available
DNEL inhalatory exposure - Worker (mg/m3)	No data available	No data available	No data available	No data available
DNEL inhalatory exposure - Consumer (mg/m3)	No data available	No data available	No data available	No data available
Environmental exposure -	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	(mg/l) Intermittent (mg/l)	Sewage treatment plant (mg/l)
PNEC	No data available	No data available	No data available	No data available
Environmental exposure	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m3)
PNEC	No data available	No data available	No data available	No data available

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2. If available, please refer to the product information sheet for application and handling instructions. Normal use conditions are assumed for this section.

Recommended safety measures for handling the product:

Covering activities such as filling and transfer of product to application equipment, flasks or buckets

Appropriate engineering controls:

Not applicable

Appropriate organisational controls:

Avoid direct contact and/or splashes where possible.

Personal protective equipment Eye / face protection:

Wear eye/face protection.

Hand protection:

Wear domestic gloves if possible

Body protection:

Not applicable

Respiratory protection:

Not applicable

Environmental exposure controls:

Not Available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Information in this section refers to the product, unless it is specifically stated that substance data is listed

Physical State: Liquid

Colour: Green

Odour: Pine

Odour threshold: Not applicable

pH: 6

Melting point/freezing point (°C): Not determined

Initial boiling point and boiling range (°C): Not determined

Flash point (°C): Not applicable.

Sustained combustion: Not determined

Evaporation rate: Not determined

Flammability (solid, gas): Not determined

Upper/lower flammability limit (%): Not determined

Vapour pressure: Not determined

Vapour density: Not determined

Relative density: 1.02 g/cm³ (20 °C)

Solubility in / Miscibility with Water: Fully miscible

Autoignition temperature: Not determined

Decomposition temperature: Not determined

Viscosity: ~10 mPa.s (20C)

Explosive properties: Not explosive

Oxidising properties: Not oxidising

9.2 Other information

Surface tension (N/m): Not determined

Corrosion to metals: Not Corrosive

Substance data, dissociation constant, if available:

SECTION 10: Stability and reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid

None known under normal storage and use conditions.

10.5 Incompatible materials

None.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

Mixture data:

C12-C15 Alcohol Ethoxylate With 7MEO					
	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
Acute oral toxicity	LD 50	> 300 - 2000	Rat	OECD 423 (EU B.1 tris)	-
Acute dermal toxicity	LD 50	> 2000	Rabbit	Method not given	-
Acute inhalative toxicity		No data available			
Sub-acute or sub-chronic oral toxicity		No data available			
Sub-chronic dermal toxicity		No data available			
Sub-chronic inhalation toxicity		No data available			
Chronic toxicity oral	NOAEL	50	Rat	Method not given	24 months
Carcinogenicity	No evidence				
Mutagenicity	No evidence				
		Result	Species	Method	Exposure time (h)
Skin irritation and corrosivity		Not irritant	Rabbit	OECD 404 (EU B.4)	
Eye irritation and corrosivity		Severe damage	Rabbit	Method not given	
Respiratory tract irritation and corrosivity		No data available			
Sensitisation by skin contact		Not sensitising	Guinea pig	Method not given	
Sensitisation by inhalation		No data available			
Sensitisation by skin contact		Not sensitising	Guinea pig	Method not given	

quaternary ammonium compounds, benzyl-c12-14 (even numbered)-alkyldimethyl, chlorides					
	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
Acute oral toxicity	LD50	397.5	Rat		
Acute dermal toxicity	LD50	3412	Rabbit		
Acute inhalative toxicity					
Sub-acute or sub-chronic oral toxicity					
Sub-chronic dermal toxicity					
Sub-chronic inhalation toxicity					
Chronic toxicity oral					
Carcinogenicity	No evidence				
Mutagenicity	Based on available data the classification criteria are not met				
Reproductive Toxicity	No evidence				
		Result	Species	Method	Exposure time (h)
Skin irritation and corrosivity		Irritating	Rabbit		
Eye irritation and corrosivity		Corrosive	Rabbit		
Respiratory tract irritation and corrosivity		Irritating	Rabbit		
Sensitisation by skin contact					
Sensitisation by inhalation					
Sensitisation by skin contact					

Pine Oil 85					
	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
Acute oral toxicity	LD50	3200	Rat		
Acute dermal toxicity	LD50	5	Rabbit		
Acute inhalative toxicity					
Sub-acute or sub-chronic oral toxicity					
Sub-chronic dermal toxicity					

Sub-chronic inhalation toxicity					
Chronic toxicity oral					
Carcinogenicity	No evidence				
Mutagenicity	Based on available data the classification criteria are not met				
Reproductive Toxicity	No evidence				
		Result	Species	Method	Exposure time (h)
Skin irritation and corrosivity		Irritating	Rabbit		
Eye irritation and corrosivity		Irritating	Rabbit		
Respiratory tract irritation and corrosivity		Irritating	Rabbit		
Sensitisation by skin contact					
Sensitisation by inhalation					
Sensitisation by skin contact					

Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

Potential adverse health effects and symptoms

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

SECTION 12: Ecological information**12.1 Toxicity**

Ecology - general

No known adverse effects on the functioning of water treatment plants under normal use conditions as recommended. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Substance data, where relevant and available, are listed below

C12-C15 Alcohol Ethoxylate With 7MEO					
	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
Aquatic short-term toxicity - fish	LC 50	1 - 10	Cyprinus carpio	OECD 203	96
Aquatic short-term toxicity - crustacea	EC 50	1 - 10	Daphnia magna Straus	OECD 202, static	48
Aquatic short-term toxicity - marine species		1 - 10	No data available		
Impact on sewage plants - toxicity to bacteria	EC 10	> 10000	Activated sludge	DIN 38412 / Part 8	17
Aquatic long-term toxicity - fish		No data available			
Aquatic long-term toxicity - crustacea		No data available			
Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms		No data available			
Terrestrial toxicity - soil invertebrates, including earthworms	NOEC	220 (mg/kg dw soil)	Eisenia fetida		
Terrestrial toxicity - plants, if available:	NOEC	10 (mg/kg dw soil)	Lepidium sativum	OECD 208	

quaternary ammonium compounds, benzyl-c12-14 (even numbered)-alkyldimethyl, chlorides					
	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
Aquatic short-term toxicity - fish	LC 50	1-10	Not specified		96
Aquatic short-term toxicity - crustacea	EC 50	<1	Daphnia		48
Aquatic short-term toxicity - marine species	IC 50	<1	algae		72
Impact on sewage plants - toxicity to bacteria		No data available			
Aquatic long-term toxicity - fish		No data available			
Aquatic long-term toxicity -		No data available			

crustacea					
Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms		No data available			
Terrestrial toxicity - soil invertebrates, including earthworms		No data available			
Terrestrial toxicity - plants, if available:		No data available			

Pine Oil 85					
	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
Aquatic short-term toxicity - fish		No data available			
Aquatic short-term toxicity - crustacea		No data available			
Aquatic short-term toxicity - marine species		No data available			
Impact on sewage plants - toxicity to bacteria		No data available			
Aquatic long-term toxicity - fish		No data available			
Aquatic long-term toxicity - crustacea		No data available			
Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms		No data available			
Terrestrial toxicity - soil invertebrates, including earthworms		No data available			
Terrestrial toxicity - plants, if available:		No data available			

12.2 Persistence and degradability

C12-C15 Alcohol Ethoxylate With 7MEO				
Inoculum	Analytical method	DT 50	Method	Evaluation
	CO ₂ production	> 60 % in 28 day(s)	OECD 301B	Readily biodegradable

quaternary ammonium compounds, benzyl-c12-14 (even numbered)-alkyldimethyl, chlorides				
Inoculum	Analytical method	DT 50	Method	Evaluation
			.	Degrades rapidly

Pine Oil 85				
Inoculum	Analytical method	DT 50	Method	Evaluation
			.	Not readily biodegradable

Biodegradation

Ready biodegradability - aerobic conditions Ingredient(s)

The surfactant(s) contained in this preparation complies (comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

12.3 Bioaccumulative potential

C12-C15 Alcohol Ethoxylate With 7MEO					
	Value	Species	Method	Evaluation	Remark
Partition coefficient n-octanol/water (log Kow)	No data available	N/A			
Bioconcentration factor (BCF)	No data available				

quaternary ammonium compounds, benzyl-c12-14 (even numbered)-alkyldimethyl, chlorides					
	Value	Species	Method	Evaluation	Remark
Partition coefficient n-octanol/water (log Kow)			Method not given	Does not bioaccumulate	
Bioconcentration factor	No data				

(BCF)	available				
-------	-----------	--	--	--	--

Pine Oil 85					
	Value	Species	Method	Evaluation	Remark
Partition coefficient n-octanol/water (log Kow)	No data available				
Bioconcentration factor (BCF)	No data available				

12.4 Mobility in soil

C12-C15 Alcohol Ethoxylate With 7MEO					
	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
Partition coefficient n-octanol/water (log Kow)	No data available				Immobile in soil or sediment

quaternary ammonium compounds, benzyl-c12-14 (even numbered)-alkyldimethyl, chlorides					
	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
Partition coefficient n-octanol/water (log Kow)					Soluble in water

Pine Oil 85					
	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
Partition coefficient n-octanol/water (log Kow)	No data available				

12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

12.6 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods Waste from residues / unused products:

Disposal must be done according to official regulations.

Empty packaging Recommendation:

The waste codes/waste designations below are in accordance with EWC. Waste must be delivered to an approved waste disposal company. The waste is to be kept separate from other types of waste until its disposal. Do not throw waste product into the sewer. Where possible recycling is preferred to disposal or incineration. For handling waste, see measures described in section 7. Empty, uncleaned packaging need the same disposal considerations as filled packaging.

Suitable cleaning agents:

Water, if necessary with cleaning agent.

SECTION 14: Transport information

ADR, RID, ADN, IMO/IMDG, ICAO/IATA

14.1 UN number: N/A

14.2 UN proper shipping name: N/A

14.3 Transport hazard class(es): N/A

14.4 Packing group: N/A

14.5 Environmental hazards:

Environmentally hazardous: No

Marine pollutant: No

14.6 Special precautions for user: None known.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: The product is not transported in bulk tankers.

Other relevant information:

ADR

Classification code:

Tunnel restriction code:

Hazard identification number:

IMO/IMDG

Ems: F-A, S-B

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code. Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

*COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EU) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC. REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC. This product SDS has been compiled in relation to EU No: 2015/830 CLP Regulations

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

Ingredients according to EC Detergents Regulation 648/2004

<1% Nonionic Detergent 1-3% Cationic Detergent

CESIO recommendations

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out on the mixture

SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

Amendments marked *

Reason for revision:

*Overall design adjusted in accordance with Commission Regulation (EU) 2015/830

Classification procedure

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

Full text of the H and EUH phrases mentioned in section 3:

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H319 Causes serious eye irritation

H400 Very toxic to aquatic life.

H410 Toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:

AISE-The international Association for Soaps, Detergents and Maintenance Products

DNEL-Derived No Effect Limit

EUH-CLP Specific hazard statement

PBT-Persistent, Bioaccumulative and Toxic

PNEC-Predicted No Effect Concentration

REACH number-REACH registration number, without supplier specific part

vPvB-very Persistent and very Bioaccumulative

ATE-Acute Toxicity Estimate

End of Safety Data Sheet