

SAFETY DATA SHEET



HG algae and mould remover

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

1.1 Product identifier

Product name : HG algae and mould remover
Product code : 181 BIO UK
Product description : Biocide.
Product type : Liquid.
Other means of identification : Not available.

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

HG "algae and mould remover" is a surface Biocide for amateur use for the control of fungi, mould, lichen, mildew and algae on external surfaces such as masonry, tiles, roofs, walls, patios, paths, fences, boats, caravans etc. HG "algae and mould remover" also slows down regrowth.

STATUTORY CONDITIONS OF APPROVAL RELATING TO USE.
FOR USE ONLY AS A SURFACE BIOCIDES.

Dilute 1 litre of product with 20 litres of water, then apply at a rate of 1 litre of diluted product per 10 square metres of surface. The (COSHH) Control of Substances Hazardous to Health Regulations 1994 may apply to the use of this product at work. Wear suitable protective clothing, gloves and eye/face protection. THIS MATERIAL AND ITS CONTAINER must be disposed of in a safe way. DO NOT APPLY TO SURFACES on which food or feed is stored, prepared or eaten. KEEP AWAY FROM TREATED SURFACES UNTIL DRY. FOR OUTDOOR USE ONLY. Remove or cover fish tanks and bowls before application. WHEN USING DO NOT EAT, DRINK OR SMOKE. COVER WATER STORAGE TANKS before application. REMOVE OR COVER ALL FOODSTUFFS before application. AVOID ALL CONTACT WITH PLANT LIFE. Avoid contact with eyes. Do not empty into drains. DO NOT USE NEAR DRAINS, PREVENT ANY SURFACE RUN-OFF FROM ENTERING DRAINS. Users must comply in full with all their legal responsibilities under the Control of Pesticides Regulations 1986 (as amended), including complying with all Conditions of Approval. READ ALL PRECAUTIONS BEFORE USE. HSE 6086

1.3 Details of the supplier of the safety data sheet

HG International BV
Damsluisweg 70 - NL-1332 EJ - Almere - The Netherlands
Tel.: +31 (0)36 54 94 700 - Fax: +31 (0)36 54 94 744
Email: info@hg.eu - Internet: www.hg.eu

e-mail address of person responsible for this SDS : safety@hg.eu

National contact

HG Hagesan UK Ltd.
Unit 2
Lanswood Park
Broomfield Road
Elmstead Market
Colchester
Essex
CO7 7FD
Tel.: 0044 (0)1206 822744
Fax: 0044 (0)1206 827019

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

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : England and Wales
NHS Direct: 0845 4647

Scotland
NHS 24: 08454 24 24 24

Republic of Ireland
01 809 2166

Supplier

Telephone number : +31 (0)36 54 94 777

Hours of operation : Mo-Fr 9.00-17.00

Information limitations : Only for medical personnel.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Skin Irrit. 2, H315
Eye Dam. 1, H318
Aquatic Acute 1, H400 (M=1)

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Ingredients of unknown toxicity : 5 percent of the mixture consists of component(s) of unknown dermal toxicity
7 percent of the mixture consists of component(s) of unknown inhalation toxicity

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : Causes serious eye damage.
Causes skin irritation.
Very toxic to aquatic life.

Precautionary statements

General : If medical advice is needed, have product container or label at hand. Keep out of reach of children.

Prevention : Wear protective gloves and eye protection:

Response : IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage : Not applicable.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients : didecyltrimethylammonium chloride
propan-2-ol

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SECTION 2: Hazards identification

Supplemental label elements : Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

Biocidal products regulation

Active substances

Ingredient name		%
didecyldimethylammonium chloride	-	2.5 - 10
propan-2-ol	-	1 - 2.5

Authorisation number : HSE 6086

2.3 Other hazards

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
didecyldimethylammonium chloride	EC: 230-525-2 CAS: 7173-51-5 Index: 612-131-00-6	≥3 - <5	Acute Tox. 3, H301 Skin Corr. 1B, H314 Eye Irrit. 2, H319 Aquatic Acute 1, H400 (M=100000) Aquatic Chronic 2, H411	[1]
propan-2-ol	REACH #: 01-2119457558-25 EC: 200-661-7 CAS: 67-63-0 Index: 603-117-00-0	≥1 - <5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 See Section 16 for the full text of the H statements declared above.	[1] [2]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

[6] Additional disclosure due to company policy

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SECTION 3: Composition/information on ingredients

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention if symptoms occur. Remove victim to fresh air and keep at rest in a position comfortable for breathing. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Chemical burns must be treated promptly by a physician.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Not applicable
- Unsuitable extinguishing media** : Not applicable

5.2 Special hazards arising from the substance or mixture

SECTION 5: Firefighting measures

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
halogenated compounds
- 5.3 Advice for firefighters**
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

- : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

6.4 Reference to other sections

- : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Seveso Directive - Reporting thresholds (in tonnes)

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
E1	100	200

7.3 Specific end use(s)

- Recommendations** : HG "algae and mould remover" is a surface Biocide for amateur use for the control of fungi, mould, lichen, mildew and algae on external surfaces such as masonry, tiles, roofs, walls, patios, paths, fences, boats, caravans etc. HG "algae and mould remover" also slows down regrowth.

STATUTORY CONDITIONS OF APPROVAL RELATING TO USE.
FOR USE ONLY AS A SURFACE BIOCIDES.

Dilute 1 litre of product with 20 litres of water, then apply at a rate of 1 litre of diluted product per 10 square metres of surface. The (COSHH) Control of Substances Hazardous to Health Regulations 1994 may apply to the use of this product at work. Wear suitable protective clothing, gloves and eye/face protection. THIS MATERIAL AND ITS CONTAINER must be disposed of in a safe way. DO NOT APPLY TO SURFACES on which food or feed is stored, prepared or eaten. KEEP AWAY FROM TREATED SURFACES UNTIL DRY. FOR OUTDOOR USE ONLY. Remove or cover fish tanks and bowls before application. WHEN USING DO NOT EAT, DRINK OR SMOKE. COVER WATER STORAGE TANKS before application. REMOVE OR COVER ALL FOODSTUFFS before application. AVOID ALL CONTACT WITH PLANT LIFE. Avoid contact with eyes. Do not empty into drains. DO NOT USE NEAR DRAINS, PREVENT ANY SURFACE RUN-OFF FROM ENTERING DRAINS. Users must comply in full with all their legal responsibilities under the Control of Pesticides Regulations 1986 (as amended), including complying with all Conditions of Approval. READ ALL PRECAUTIONS BEFORE USE. HSE 6086

- Industrial sector specific solutions** : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
propan-2-ol	EH40/2005 WELs (United Kingdom (UK), 12/2011). STEL: 1250 mg/m ³ 15 minutes. STEL: 500 ppm 15 minutes. TWA: 999 mg/m ³ 8 hours. TWA: 400 ppm 8 hours.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead. Recommended: chemical splash goggles.

Skin protection

Hand protection : Use protective gloves. Staff training in the correct use and maintenance of personal protective equipment must be guaranteed.

- Protection for long-term use or submersion
For long-term use or submersion, use nitrile rubber gloves of a thickness of at least 0.38mm (thickness depends on type of glove and quality), for a penetration time of at least 480 minutes, tested according to the standard EN 374:2003.
- Protection for short-term use (≤30 min) or splash protection
For short-term use (≤30 min) or splash protection, use nitrile rubber gloves of a thickness of at least 0.38mm (thickness depends on type of glove and quality), for a

SECTION 8: Exposure controls/personal protection

penetration time of at least 30 minutes, tested according to the standard EN 374: 2003.

IMPORTANT: in order to guarantee the safe use of gloves, the following has to be considered when choosing suitable protective gloves:

- The simultaneous use of other chemical products;
- Necessary protection against physical risks like cutting, perforation or thermal hazards; and
- The manufacturer's instructions and/or specifications for the gloves.

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Liquid.
- Colour** : Colourless.
- Odour** : Characteristic.
- Odour threshold** : Not available.
- pH** : 7,9 [Conc. (% w/w): 100%]
- Melting point/freezing point** : Not available.
- Initial boiling point and boiling range** : Not available.
- Flash point** : Closed cup: 86°C
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Upper/lower flammability or explosive limits** : Not available.
- Vapour pressure** : Not available.
- Vapour density** : Not available.
- Relative density** : 0,99
- Solubility(ies)** : Easily soluble in the following materials: cold water and hot water.
- Partition coefficient: n-octanol/ water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Not available.
- Explosive properties** : Not available.
- Oxidising properties** : Not available.

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SECTION 9: Physical and chemical properties

9.2 Other information

Solubility in water : Not available.

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : Not applicable

10.5 Incompatible materials : No specific data.

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
didecyldimethylammonium chloride	LD50 Oral	Rat	84 mg/kg	-
propan-2-ol	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
didecyldimethylammonium chloride	Skin - Severe irritant	Rabbit	-	500 milligrams	-
propan-2-ol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	10 milligrams	-
	Eyes - Severe irritant	Rabbit	-	100 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-

Conclusion/Summary : Not available.

Sensitisation

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

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SECTION 11: Toxicological information

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
propan-2-ol	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye damage.
Inhalation : No known significant effects or critical hazards.
Skin contact : Causes skin irritation.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

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

Short term exposure

- Potential immediate effects** : Not available.
Potential delayed effects : Not available.

Long term exposure

- Potential immediate effects** : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Not available.

- Conclusion/Summary** : Not available.
General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.

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SECTION 11: Toxicological information

Fertility effects : No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
didecyldimethylammonium chloride	Acute EC50 110 µg/l Fresh water	Algae - Chlorella pyrenoidosa - Exponential growth phase	72 hours
	Acute EC50 14,22 ppb Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 18 ppb Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 39 µg/l Marine water	Crustaceans - Americamysis bahia - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 0,01 µg/l Fresh water	Fish - Acipenser transmontanus - Larvae	96 hours
	Chronic NOEC 25 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
propan-2-ol	Chronic NOEC 125 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Acute EC50 929 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1400000 µg/l Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 4200 mg/l Fresh water	Fish - Rasbora heteromorpha	96 hours

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
didecyldimethylammonium chloride	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
propan-2-ol	0,05	-	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

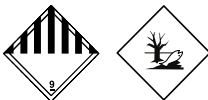
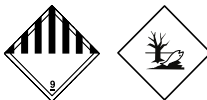
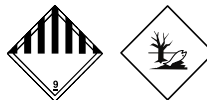
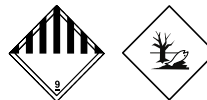
Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN3082	UN3082	UN3082	UN3082
14.2 UN proper shipping name	Environmental hazardous substance, liquid N.O.S (didecyldimethylammonium chloride, mixture)	Environmental hazardous substance, liquid N.O.S (didecyldimethylammonium chloride, mixture)	Environmental hazardous substance, liquid N.O.S (didecyldimethylammonium chloride, mixture)	Environmental hazardous substance, liquid N.O.S (didecyldimethylammonium chloride, mixture)
14.3 Transport hazard class(es)	9 	9 	9 	9 
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes.
Additional information	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. Hazard identification number 90 Limited quantity 5 L Tunnel code E	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. Emergency schedules F-A, S-F	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

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SECTION 14: Transport information

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code : Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Other EU regulations

Europe inventory : All components are listed or exempted.

Black List Chemicals (76/464/EEC) :

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Ingredient name	Annex	Status
Didecyldimethylammonium chloride	Annex I - Part 1	Listed

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
E1

National regulations

Biocidal products regulation

Product type : Liquid.

Avoid exposure. After accidental exposure, seek immediate medical attention. Do not induce vomiting.

Product waste and emptied containers should be disposed of in accordance with local waste regulations. Do not reuse container.

Expiry date : Not available.

Product Specific Information : STATUTORY CONDITIONS OF APPROVAL RELATING TO USE. FOR USE ONLY AS A SURFACE BIOCIDES.

Dilute 1 litre of product with 20 litres of water, then apply at a rate of 1 litre of diluted product per 10 square metres of surface. The (COSHH) Control of Substances Hazardous to Health Regulations 1994 may apply to the use of this product at work. Wear suitable protective clothing, gloves and eye/face protection. THIS MATERIAL AND ITS CONTAINER must be disposed of in a safe way. DO NOT APPLY TO SURFACES on which food or feed is stored, prepared or eaten. KEEP AWAY

SECTION 15: Regulatory information

FROM TREATED SURFACES UNTIL DRY. FOR OUTDOOR USE ONLY. Remove or cover fish tanks and bowls before application. WHEN USING DO NOT EAT, DRINK OR SMOKE. COVER WATER STORAGE TANKS before application. REMOVE OR COVER ALL FOODSTUFFS before application. AVOID ALL CONTACT WITH PLANT LIFE. Avoid contact with eyes. Do not empty into drains. DO NOT USE NEAR DRAINS, PREVENT ANY SURFACE RUN-OFF FROM ENTERING DRAINS. Users must comply in full with all their legal responsibilities under the Control of Pesticides Regulations 1986 (as amended), including complying with all Conditions of Approval. READ ALL PRECAUTIONS BEFORE USE.

Do not allow to enter drains or watercourses.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

International lists

National inventory

Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Japan	: Japan inventory (ENCS) : All components are listed or exempted. Japan inventory (ISHL) : Not determined.
Malaysia	: Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
Turkey	: Not determined.
United States	: All components are listed or exempted.

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

📄 Indicates information that has changed from previously issued version.

Abbreviations and acronyms	: ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number
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HG algae and mould remover

SECTION 16: Other information

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=1)	Expert judgment Expert judgment Expert judgment

Full text of abbreviated H statements

H225 H301 H314 H315 H318 H319 H336 H400 H411	Highly flammable liquid and vapour. Toxic if swallowed. Causes severe skin burns and eye damage. Causes skin irritation. Causes serious eye damage. Causes serious eye irritation. May cause drowsiness or dizziness. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.
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Full text of classifications [CLP/GHS]

Acute Tox. 3, H301 Aquatic Acute 1, H400 Aquatic Chronic 2, H411 Eye Dam. 1, H318 Eye Irrit. 2, H319 Flam. Liq. 2, H225 Skin Corr. 1B, H314 Skin Irrit. 2, H315 STOT SE 3, H336	ACUTE TOXICITY (oral) - Category 3 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 SKIN CORROSION/IRRITATION - Category 1B SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3
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Date of printing : 31-10-2017

Date of issue/ Date of revision : 31-10-2017

Date of previous issue : 31-10-2017

Version : 1.03

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