

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

Product Name: ALGOCLEAR

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

Use of substance / mixture: Biocide for surface treatment

1.3. Details of the supplier of the safety data sheet

Company name: CROPCARE Ltd
Willowgrove
Delgany
Co. Wicklow
Ireland

Email: info@cropcare.ie

1.4. Emergency telephone number

Emergency tel: +353 1 2874485 - Day only.

SECTION 2: Hazards identification

2.2 Label elements

2.1 Classification of the substance	
REGULATION (EC) No 1272/2008	
Flammable liquids; Category 3	H226 Flammable liquid and vapour.
Acute toxicity; Category 4 ; Oral	H302 Harmful if swallowed.
Skin corrosion; Category 1B	H314 Causes severe skin burns and eye damage.
Specific target organ toxicity - single exposure; Category 3	H336 May cause drowsiness or dizziness.
Acute aquatic toxicity; Category 1	H400 Very toxic to aquatic life.
Chronic aquatic toxicity; Category 1	H410 Very toxic to aquatic life with long lasting effects.
67/548/EEC / 1999/45/EC	
Flammable.	Harmful if swallowed.
Causes burns.	Very toxic to aquatic organisms.
Vapours may cause drowsiness and dizziness.	

Labelling according to EC Directives

REGULATION (EC) No 1272/2008

Pictogram

Signal word : DANGER



Hazardous components : Didecyldimethylammonium chloride			
CAS-No	EC-No. / Registration number	Classification	Concentration
7173-51-5	230-525-2	Acute Tox.; 3; H301 Skin Corr.; 1B; H314 Eye Dam.; 1; H318 Aquatic Acute; 1; H400 Aquatic Chronic; 1; H410 C, N; R22, R34, R50	ca. 50 %
Propan-2-ol			
67-63-0	200-661-7 / 01-2119457558-25-XXXX	Flam. Liq.; 2; H225 Eye Irrit.; 2; H319 STOT SE; 3; H336 F, Xi; R11, R36, R67	ca. 20 %
For the full text of the H-Statements mentioned in this Section, see Section 16. For the full text of the R-phrases mentioned in this Section, see Section 16. (*) Components with workplace control parameters See chapter 8			

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation : Move to fresh air. Call a physician immediately. If breathing is irregular or stopped, administer artificial respiration.

Skin contact : After contact with skin, wash immediately with plenty of soap and water. Call a physician immediately. Take off all contaminated clothing immediately.

Eye contact : Immediately flush eye(s) with plenty of water. Call a physician immediately.

Ingestion : Call a physician immediately. Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Dry powder, Water spray, Foam.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Heating or fire can release toxic gas.

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Further information : Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use respirator when performing operations involving potential exposure to vapour of the product.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

Additional advice : For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid contact with skin and eyes. Provide sufficient air exchange and/or exhaust in work rooms.

Advice on protection against fire and explosion : Highly flammable. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

Temperature class : T2

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed. To maintain product quality, do not store in heat or direct sunlight. Keep in a dry, cool and well-ventilated place.

7.3 Specific end use(s)

Specific use(s) : No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Propan-2-ol	67-63-0	TWA	200 ppm / 500 mg/m ³	SMAK
		STEL	400 ppm / 1 000 mg/m ³	SMAK
Propan-2-ol	67-63-0	MAK	200 ppm / 500 mg/m ³	DFG MAK
Propan-2-ol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
Propan-2-ol	67-63-0	REL	400 ppm / 980 mg/m ³	NIOSH/GUIDE
		STEL	500 ppm / 1 225 mg/m ³	NIOSH/GUIDE

8.2 Exposure controls

Personal protective equipment

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.
Respirator with a vapour filter (EN 141) Respirator with ABEK filter.

Hand protection : Suitable material : butyl-rubber Break through time: > 480 min Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Suitable material : Nitrile rubber Break through time: > 30 min Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Eye protection : Tightly fitting safety goggles. Face-shield.

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place. Rubber or plastic apron Rubber or plastic boots.

Hygiene measures : Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : liquid	Colour : light yellow
Odour : solvent-like	Odour Threshold : not determined
PH : 6,5 - 8 (10 g/l ; 20 °C)	Melting point/range : < 0 °C
Solidification / Setting point : < -15 °C	Boiling point/boiling range : 82 °C Solvent
Flash point : closed cup : 29 °C Method: DIN 51755 Part 1	Evaporation rate : Note: not determined
Lower explosion limit : min. 2 %(V) Solvent	Upper explosion limit : max. 12,7 %(V) Solvent
Vapour pressure : 43 hPa Solvent	Relative vapour density : 2,1 Solvent
Density : 0,908 g/cm ³	Water solubility : completely miscible
log Pow : Not applicable	Ignition temperature : 350 °C
Viscosity, dynamic : 25 mPa.s (20 °C)	Explosivity : Explosivity (EU-Regulations): No information available.
Viscosity, kinematic : 24,5 mm ² /s (20 °C) Method: OECD Test Guideline 114	Oxidizing properties : Not applicable

9.2 Other information : no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Stable under normal conditions.

Thermal decomposition : > 400 °C

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Strong oxidizing agents, Reducing agents

10.6 Hazardous decomposition products

Nitrogen oxides (NOx), Hydrogen chloride gas, Carbon oxides

11: Toxicological information

11.1 Information on toxicological effects

Additional advice : If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.

The following toxicological data refer to : Didecyldimethylammonium chloride (CAS-No.: 7173-51-5)

Information on toxicological effects

Acute oral toxicity (LD50) : 238 mg/kg Species: Rat Method: OECD Test Guideline 401

Acute dermal toxicity (LD50) : 3 342 mg/kg Species: Rabbit

Skin irritation : irritating Species: Rabbit Exposure time: 3 min Method: OECD Test Guideline 404

Sensitisation : not sensitizing Species: Guinea pig Buehler Test Method: US-EPA

Genotoxicity in vitro : Negative Ames test, Salmonella typhimurium Method: OECD Test Guideline 471
negative Chromosome aberration test in vitro, Chinese hamster ovary cells
negative Gene mutation, Chinese hamster ovary cells

Genotoxicity in vivo : negative Chromosome aberration test in vivo Application Route: Oral Species: Rat
Method: OECD Test Guideline 475

SECTION 12: Ecological information

12.1 Toxicity Toxicity to fish : no data available	12.2 Persistence and degradability Biodegradability : no data available
12.3 Bioaccumulative potential Bioaccumulation : no data available	12.4 Mobility in soil Behaviour in environmental compartments : no data available
12.5 Results of PBT and vPvB assessment Assessment : This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT). This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).	12.6 Other adverse effects Additional advice : Do not flush into surface water or sanitary sewer system. Discharge into the environment must be avoided.

The following ecotoxicological data refer to Didecyldimethylammonium chloride (CAS-No.: 7173-51-5)			
Toxicity			
Toxicity to fish (LC50)	0,19 mg/l Species: Pimephales promelas (fathead minnow) Acute toxicity Exposure time: 96 h Method: US-EPA	Toxicity to fish (NOEC)	0,032 mg/l Species: Danio rerio (zebra fish) Chronic toxicity Exposure time: 34 d Method: OECD Test Guideline 210
Toxicity to daphnia and other aquatic invertebrates (EC50)	0,062 mg/l Species: Daphnia magna (Water flea) Immobilization Exposure time: 48 h Method: EPA-FIFRA	(NOEC)	0,010 mg/l Species: Daphnia magna (Water flea) Reproduction Test Exposure time: 21 d Method: OECD Test Guideline 211
Toxicity to algae (ErC50)	0,026 mg/l Species: Pseudokirchneriella subcapitata (green algae) Growth inhibition Exposure time: 96 h Method: OECD Test Guideline 201	Toxicity to bacteria (EC50)	11 mg/l Species: activated sludge Respiration inhibition Exposure time: 3 h Method: OECD Test Guideline 209
M-Factor (Acute aquatic toxicity)	10	M-Factor (Chronic aquatic toxicity)	1
Persistence and degradability			
Biodegradability	Modified Sturm Test: 72 % Readily biodegradable Testing period: 28 d Method: OECD Test Guideline 301B Die-Away Test: 93,3 % Testing period: 28 d OECD Confirmatory Test: 91 % Testing period: 24 - 70 d Method: OECD Test Guideline 303 A The surfactant(s) contained in this mixture 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.		
Behaviour in environmental compartments	Mobile in soils Method: US-EPA		

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations. Contact waste disposal services.
Contaminated packaging : Dispose of as unused product. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information

<p>IATA 14.1 UN number 14.2 Proper shipping name 14.3 Transport hazard class 14.4 Packing group Labels 14.5 Environmental hazards</p>	<p>2920 Corrosive liquid, flammable, n.o.s. (Didecyldimethylammonium chloride, Isopropanol) 8 II 8 (3) No</p>
<p>IMDG 14.1 UN number 14.2 Proper shipping name 14.3 Transport hazard class 14.4 Packing group Labels EmS Number 1 EmS Number 2 14.5 Environmental hazards</p>	<p>2920 Corrosive liquid, flammable, n.o.s. (Didecyldimethylammonium chloride, Isopropanol) 8 II 8 (3) F-E S-C Marine pollutant: yes</p>
<p>ADR 14.1 UN number 14.2 Proper shipping name 14.3 Transport hazard class 14.4 Packing group Classification Code Hazard Identification Number Labels 14.5 Environmental hazards</p>	<p>2920 CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Didecyldimethylammonium chloride, Isopropanol) 8 II CF1 83 8 (3) yes</p>
<p>RID 14.1 UN number 14.2 Proper shipping name 14.3 Transport hazard class 14.4 Packing group Classification Code Hazard Identification Number Labels 14.5 Environmental hazards</p>	<p>2920 CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Didecyldimethylammonium chloride, Isopropanol) 8 II CF1 83 8 (3) yes</p>
<p>DOT & TDG 14.1 UN number 14.2 Proper shipping name 14.3 Transport hazard class 14.4 Packing group Labels Emergency Response Guidebook number (DOT) 14.5 Environmental hazards 14.6 Special precautions for user (TDG) 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code (TDG)</p>	<p>2920 Corrosive liquids, flammable, n.o.s. (Didecyldimethylammonium chloride, Isopropanol) 8 II 8 (3) 132 no none not applicable</p>

Full text of H-Statements	
H225 Highly flammable liquid and vapour.	H301 Toxic if swallowed.
H314 Causes severe skin burns and eye damage.	H318 Causes serious eye damage.
H319 Causes serious eye irritation.	H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.	H410 Very toxic to aquatic life with long lasting effects.
Full text of R-Phrases	
R11 Highly flammable.	R22 Harmful if swallowed.
R34 Causes burns.	R36 Irritating to eyes.
R50 Very toxic to aquatic organisms.	R67 Vapours may cause drowsiness and dizziness.

Section 15: Regulatory information

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

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Chemical safety assessment: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.