

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

1.1. Product identifier

MAC Hi-Power

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

For use only as a professional use biocide

1.3. Details of the supplier of the safety data sheet

ProGreen Weed Control Solutions Ltd
Unit 7 Spalding Road Business Park
Spalding Road
Bourne
Lincolnshire
PE10 9LF

T 0800 032 6262

E info@progreen.co.uk

W <https://www.progreen.co.uk/>

1.4. Emergency telephone number

For product-related advice, our customer service team are available on 0800 032 6262 from Monday – Friday 8.30am – 5.00pm

For medical help or advice, contact the NHS by calling 111.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Acute Tox.4: H302
Skin Corr. 1B: H314
Eye Dam. 1: H318
STOT SE 3: H336
Aquatic Acute 1: H400
Aquatic Chronic 2: H411

2.2. Label elements

Label elements in accordance with Regulation (EC) 1272/2008:

Hazardous ingredients to be declared:

Contains didecyldimethylammonium chloride and propan-2-ol.

Hazard pictograms: GHS05, GHS07, GHS09



Signal word:

Danger

Hazard statements:

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H336: May cause drowsiness or dizziness.

H400: Very toxic to aquatic life

H411: Toxic to aquatic life with long lasting effects

Precautionary statements:

P264: Wash skin thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/ shower.

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

P310: Immediately call a POISON CENTER/doctor.

P405: Store locked up.

P501: Dispose of contents/container in accordance with national regulation.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Index No / REACH reg. No	International Chemical Identification	EC No	CAS No	Classification in accordance with Regulation (EC) 1272/2008	% w/w
Index: 612-131-00-6	didecyldimethylammonium chloride	230-525-2	7173-51-5	Met. Corr. 1; H290 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400 (M=10) Aquatic Chronic 2; H411 Acute Tox. 4; H302 Acute Tox. 4; H312	40
Index: 603-117-00-0 REACH: 01-2119457558-25	propan-2-ol	200-661-7	67-63-0	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	8 - 20

Please refer to section 16 for full text of hazard statements not displayed in section 2 or 3.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: Remove from source of exposure to fresh air. Seek medical attention if symptoms persist or develop.

Skin contact: Drench skin with water. Remove any contaminated clothing and launder before re-use. Seek medical attention immediately.

Eye contact: Irrigate with copious amounts of clean water for at least 10 minutes. Remove contact lenses, if present and easy to do. Seek medical attention immediately.

Ingestion: Do not induce vomiting. Wash out mouth with water and give water to drink. Seek medical attention if symptoms persist or develop.

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

Harmful if swallowed. Causes severe skin burns and eye damage.
May cause drowsiness or dizziness.

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

Seek immediate medical attention if product comes into contact with skin or eyes.
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Product is not classified as flammable. In case of fire, choose extinguishing media suitable for the surrounding materials.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products may be released in case of fire.

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus and chemical protective suit. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Isolate area of spill. Prevent contact with skin and eyes. Wear protective goggles with side shields, protective gloves and protective clothing. Suitable respiratory equipment should be used where necessary. Ensure adequate ventilation.

6.2. Environmental precautions

Do not allow product to enter drains or water courses, including via contaminated soil. If product enters drain or water course in large quantities, contact the Environment Agency.

6.3. Methods and material for containment and cleaning up

Absorb with inert material (sand, vermiculite etc.). Collect mechanically and dispose of via specialist hazardous waste contractor.

6.4. Reference to other sections

See section 8 for personal protection and section 13 for disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent contact with skin and eyes. Wear protective goggles with side shields, protective gloves and protective clothing. Ensure adequate ventilation. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Store locked up in a well-ventilated area.

7.3. Specific end use(s)

For use only as a professional use biocide.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits in accordance with HSE document EH40/2005:

Substance	CAS Number	Workplace Exposure Limit			
		Long-term exposure limit (8-hr TWA reference period)		Short-term exposure limit (15 minute reference period)	
		ppm	mg.m ⁻³	ppm	mg.m ⁻³
Propan-2-ol	67-63-0	400	999	500	1250

8.2. Exposure controls

The use of appropriate technical measures should always take priority over personal protection equipment. Ensure adequate ventilation. Ensure eye wash stations are available.

Eye protection: Safety goggles with side shields (e.g. EN 166)

Skin protection: Protective clothing/coveralls.

Hand protection: Plastic or rubber gloves (also consider your own risk assessment; e.g. breakthrough times, rates of diffusion and degradation, tasks undertaken)

Respiratory protection: Approved respirator if ventilation is judged to be insufficient.

Hygiene measures: Wash hands thoroughly after work. Do not eat, drink or smoke during use.
Keep away from food and feedstuffs.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

APPEARANCE	Clear, colourless solution
ODOUR	Alcoholic
ODOUR THRESHOLD	No data available
PH (NEAT)	6.5 ± 0.5
MELTING POINT/FREEZING POINT	No data available
INITIAL BOILING POINT	No data available
FLASH POINT	No data available
EVAPORATION RATE	No data available
FLAMMABILITY (solid, gas)	No data available
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	No data available
VAPOUR PRESSURE	No data available
VAPOUR DENSITY	No data available
RELATIVE DENSITY (20°C)	0.96 ± 0.01
SOLUBILITY	No data available
PARTITION COEFFICIENT: N-OCTANOL/WATER	No data available
AUTO-IGNITION TEMPERATURE	No data available
DECOMPOSITION TEMPERATURE	No data available
VISCOSITY (20°C)	<500 cPs
EXPLOSIVE PROPERTIES	No data available
OXIDISING PROPERTIES	No data available

9.2. Other information

None specified.

SECTION 10: Stability and reactivity

10.1. Reactivity

None known.

10.2. Chemical stability

Stable under normal conditions of storage and use.

10.3. Possibility of hazardous reactions

Information not available.

10.4. Conditions to avoid

Information not available.

10.5. Incompatible materials

Information not available.

10.6. Hazardous decomposition products

In case of thermal decomposition or in case of combustion gases and vapours may be formed which are potentially hazardous for the health.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information is not available for this mixture. The CLP classification is established based on toxicological information for the components.

ACUTE ORAL TOXICITY

Harmful if swallowed.

SKIN CORROSION/IRRITATION

Causes severe skin burns and eye damage (calculation)

SERIOUS EYE DAMAGE/IRRITATION

Causes serious eye damage (calculation)

RESPIRATORY OR SKIN SENSITISATION

Not sensitising (calculation)

GERM CELL MUTAGENICITY

Not mutagenic

CARCINOGENICITY

Not carcinogenic

REPRODUCTIVE TOXICITY

Not toxic to reproduction

STOT SE

May cause dizziness or drowsiness.

STOT RE

Not classified for Specific Target Organ Toxicity – Repeated Exposure.

ASPIRATION HAZARD

Not classified as hazardous via aspiration.

Information on components:

Didecyldimethylammonium chloride

Dermal – corrosive (rabbit) (OECD 404)

Sensitisation – not sensitising (guinea pig) (OECD 406)

SECTION 12: Ecological information

12.1. Toxicity

The product is classified as very toxic to aquatic life and toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Didecyldimethylammonium chloride

OECD 301 D Closed-Bottle-Test: >70% (Activated Sludge) (OECD 301 D)

This component is rapidly biodegradable.

12.3. Bioaccumulative potential

Didecyldimethylammonium chloride

OECD 117 Log Kow (HPLC method): (n-Octanol/water) (OECD 117) – not determinable.

OECD 305 Bioconcentration Factor BCF: 81 BCF (Fish) (OECD 305) – literature

12.4. Mobility in soil

Information not available.

12.5. Results of PBT and vPvB assessment

Didecyldimethylammonium chloride is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

12.6. Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of unused product via specialist hazardous waste contractor and in accordance with local and national regulations.

SECTION 14: Transport information

14.1. UN number

UN 1760

14.2. UN proper shipping name

CORROSIVE LIQUID, N.O.S.
(DIDECYLDIMETHYLAMMONIUM CHLORIDE)

14.3. Transport hazard class(es)

8

14.4. Packing group

II

14.5. Environmental hazards

Very toxic to aquatic life

14.6. Special precautions for user

Tunnel restriction code: (E)
Transport category: (2)

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

N.A.

SECTION 15: Regulatory information

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

This mixture is classified and labelled in accordance with Regulation (EC) 1272/2008.

15.2. Chemical safety assessment

CSA not undertaken for this mixture.

SECTION 16: Other information

Full text of hazard statements not displayed in full in sections 2 or 3:

H225: Highly flammable liquid and vapour.
H290: May be corrosive to metals.
H312: Harmful in contact with skin.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.

This Safety Data Sheet is compiled in accordance with 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), as amended by Regulation (EU) 2015/830.



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MAC Hi-Power

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