

SPOREKILL® AGRICULTURAL DISINFECTANT

1.0 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name SPOREKILL® AGRICULTURAL DISINFECTANT
Synonym(s) SPORE KILL, SPORE KILL AGRICULTURAL DISINFECTANT, SPOREKILL, SPOREKILL DISINFECTANT

1.2 Uses and advised against

Uses AGRICULTURAL APPLICATIONS, DISINFECTANT

1.3 Details of the supplier of the product

Supplier name Grochem Australia Pty Ltd
Address Suite 1, Level 3, 262 Lorimer St, Port Melbourne, VIC, 3207, AUSTRALIA
Telephone 1800 777 068
Email grochem@grochem.com.au
Website www.grochem.com

1.4 Emergency telephone number(s)

Emergency 1800 127 406

2.0 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

Physical hazards Not classified as a physical hazard
Health hazards Skin corrosion/irritation: Category 1B
Serious eye damage/eye irritation: Category 1
Environmental hazards Not classified as an environmental hazard

2.2 GHS label elements

Signal word DANGER



Hazard statement(s) H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

Prevention statement(s) P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response statement(s) P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
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 or doctor/physician.
P321 Specific treatment is advised - see first aid instructions.
P363 Wash contaminated clothing before reuse.

Storage statement(s) P405 Store locked up.

Disposal statement(s) P501 Dispose of contents/container in accordance with relevant regulations.

2.3 Other hazards

No information provided.

3.0 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances/mixtures

Ingredient	CAS number	EC number	Content
DIDECYL DIMETHYL AMMONIUM CHLORIDE	7173-51-5	230-525-2	12%
SURFACTANT(S)	-	-	<=10%
WATER	7732-18-5	231-791-2	Remainder

4.0 FIRST AID MEASURES

4.1 Description of first aid measures

Eye If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

Inhalation If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

Skin If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.

Ingestion For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting. Rinse mouth out with water and give plenty of water to drink.

First aid facilities Eye wash facilities and safety shower should be available.

4.2 Most important symptoms and effects, both acute and delayed

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

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

5.0 FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

5.2 Special hazards arising from the substance or mixture

Non flammable. May evolve toxic gases (carbon/ nitrogen oxides, ammonia, chlorides, hydrocarbons) when heated to decomposition.

5.3 Advice for firefighters

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

5.4 Hazchem code

2X
2 Fine water spray.
X Wear liquid-tight chemical protective clothing and breathing apparatus. Contain spill and run-off.

6.0 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7.0 HANDLING AND STORAGE

7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Store removed from direct sunlight.

7.3 Specific end uses

No information provided.

8.0 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure standards No exposure standards have been entered for this product.

Biological limits No biological limit values have been entered for this product.

8.2 Exposure controls

Engineering controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

PPE

Eye/face	Wear splash-proof goggles.
Hands	Wear full-length PVC gloves.
Body	Wear a washable hat and coveralls.
Respiratory	Where an inhalation risk exists, wear a Type A (Organic vapour) respirator. If spraying, wear a Type A-Class P1 (Organic gases/vapours and Particulate) respirator.



9.0 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Liquid
Odour	Slight odour
Flammability	Non flammable
Flash point	Not relevant
Boiling point	100°C (approximately)
Melting point	< 0°C
Evaporation rate	As for water
pH	5 to 8
Vapour density	Not available
Specific gravity	1
Solubility (water)	Soluble
Vapour pressure	18 mm Hg @ 20°C
Upper explosion limit	Not relevant

Lower explosion limit	Not relevant
Partition coefficient	Not available
Autoignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available
Odour threshold	Not available

9.2 Other information

% volatiles	> 60 % (water)
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10.0 STABILITY AND REACTIVITY

10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization is not expected to occur.

10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

10.5 Incompatible materials

Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), alkalis (e.g. sodium hydroxide), anionic detergents and heat sources.

10.6 Hazardous decomposition products

May evolve toxic gases (carbon/ nitrogen oxides, ammonia, chlorides, hydrocarbons) when heated to decomposition.

11.0 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity Ingestion may result in burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.

Information available for the ingredients:

Ingredient	Oral LD50	Dermal LD50	Inhalation LC50
DIDECYL DIMETHYL AMMONIUM CHLORIDE	84 mg/kg (rat)	> 2,000 mg/kg (rat)	--

Skin	Causes burns. Contact may result in irritation, redness, pain, rash, dermatitis and possible burns.
Eye	Causes burns. Contact may result in irritation, lacrimation, pain, redness, corneal burns and possible permanent damage.
Sensitisation	Not classified as causing skin or respiratory sensitisation. Occupational exposure to quaternary ammonium compounds has been reported to cause asthma, although rare.
Mutagenicity	Not classified as a mutagen.
Carcinogenicity	Not classified as a carcinogen.
Reproductive	Not classified as a reproductive toxin.
STOT - single exposure	Over exposure may result in irritation of the nose and throat, coughing, dizziness, drowsiness and headache.
STOT - repeated exposure	Not classified as causing organ damage from repeated exposure.
Aspiration	Not classified as causing aspiration.

12.0 ECOLOGICAL INFORMATION

12.1 Toxicity

This product is not classified as hazardous to the aquatic environment. LC50 = 0.58 mg/L/96h (Fish).

12.2 Persistence and degradability

No information provided.

12.3 Bioaccumulative potential

No information provided.

12.4 Mobility in soil

No information provided.

12.5 Other adverse effects

Benzalkonium chloride derivatives/quaternary ammonium compounds are commonly used as disinfectants, indicating toxicity to microorganisms.

13.0 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal

For small amounts, absorb with sand, vermiculite or similar and dispose of to an approved landfill site. For large quantities, contact the manufacturer/supplier for additional information. Prevent contamination of drains and waterways as aquatic life may be threatened and environmental damage may result.

Legislation

Dispose of in accordance with relevant local legislation.

14.0 TRANSPORT INFORMATION

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE



	Land transport (ADG)	Sea transport (IMDG/IMO)	Air transport (IATA/ICAO)
14.1 UN number	1760	1760	1760
14.2 Proper shipping name	CORROSIVE LIQUID, N.O.S. (contains didecyl dimethyl ammonium chloride)	CORROSIVE LIQUID, N.O.S. (contains didecyl dimethyl ammonium chloride)	CORROSIVE LIQUID, N.O.S. (contains didecyl dimethyl ammonium chloride)
14.3 Transport hazard class	8	8	8
14.4 Packing group	II	II	II

14.5 Environmental hazards

Not a marine pollutant.

14.6 Special precautions

Hazchem code 2X

GTEPG 8A1

EMS F-A, S-B

15.0 REGULATORY INFORMATION

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

Poison schedule Classified as a Schedule 6 (S6) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

APVMA numbers 51141

Classifications Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

Inventory listings

AUSTRALIA: AICS (Australian Inventory of Chemical Substances)

All components are listed on AICS, or are exempt.

EUROPE: EINECS (European Inventory of Existing Chemical Substances)

All components are listed on EINECS, or are exempt.

UNITED STATES: TSCA (US Toxic Substances Control Act)

All components are listed on the TSCA inventory, or are exempt.

16.0 OTHER INFORMATION

Additional information

Benzalkonium chloride

Benzalkonium chloride can be a severe eye & skin irritant & corrosive. Contact with concentrated solutions can cause deep injury and ulceration (Wahlberg, 1985). A 0.1% concentration will cause mild discomfort to the eye. Ingestion may cause a burning pain in the mouth, throat and abdomen, salivation, low blood pressure, CNS depression, excitement, confusion and weakness, laboured breathing & cyanosis (blue skin due to lack of oxygen in blood) or circulatory shock. When used in low concentrations there is little local or systemic toxicity.

Respirators

In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

Personal protective equipment guidelines

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

Health effects from exposure

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
GHS	Globally Harmonized System
GTEPG	Group Text Emergency Procedure Guide
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m³	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pH	Relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

Report status

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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This SDS summarises our best knowledge of the health and safety hazard information available for this product and how to safely handle and use it. Since the use of this information and the conditions of the use of this product are not under the control of Grochem, it is the user's responsibility to determine conditions of safe use of the product.