7 WORLDS AG

Safety Data Sheet (SDS)

according to Work Health and Safety (WHS) Regulations

1st January 2024 – valid for 5 years (next revision due 1st January 2029)

1. Identification

Product Name:	**SPOREKILL AGRICULTURAL DISINFECTANT**
Product Code(s):	GM13011L/GM13055L/GM132020L/GM1320200Ll/GM131000L
Product Type:	Broad spectrum sanitation and water treatment solution for use in Agriculture & Horticulture
APVMA Number:	51141
CAS Name:	Sporekill
CAS Number:	7173-51-5
Other Means of Identification:	Didecyldimethylammonium Chloride (DDAC)
Recommended Use of the chemical and restrictions on Use:	Disinfectant/Fungicide/Agricultural Sanitiser
Details of Manufacturer or Importer:	**Grochem Australia Pty Ltd trading as 7 Worlds Ag** Suite 1, Level 3 262 Lorimer Street Port Melbourne VIC 3207 Email: grochem@grochem.com.au Website: www.grochem.com.au
Phone Number:	1800 777 068 or +61 3 9676 9930
Emergency Telephone Number:	National Poison Information Centre: 13 11 26

2. Hazards Identification

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classified as Hazardous accordingly to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS 7) and Safe Work Australia criteria.

Classified as Dangerous Goods according to the Australia Code for the Transport of Dangerous Goods by Road and Rail (7.8 Edition 2022)

2.2 LABELS ELEMENTS

GHS Classification of product

- Combustible liquid – Category 4
- Acute Toxicity Oral – Category 5
- Acute Toxicity Dermal – Category 5
- Acute Inhalation – Category 4
- Skin Corrosion/Irritation – Category 2
- Serious Eye damage/Irritation – Category 1
- Acute Aquatic Toxicity – Category 1
- Chronic Aquatic Toxicity – Category 3

GHS Signal Word: DANGER

Hazard Pictograms

GHS05 Corrosion

GHS07 Exclamation mark

GHS09 Environment

Hazard Statement(s):

H227:	Combustible liquid
H303:	Maybe harmful if swallowed.
H313:	Maybe harmful in contact with skin
H315:	Causes skin irritation.
H318:	Causes serious eye damage.
H332:	Harmful if inhaled.
H410:	Very toxic to aquatic life with long lasting effects.

Precautionary statement(s):

P101:	If medical advice is needed, have product container or label at hand.
P102:	Keep out of children reach.
P103:	Read carefully and follow all instructions.

Prevention statement(s):

P210:	Keep away from heat, hot surface, sparks open flames and other **ignition** sources. No smoking.
P261:	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 + P265:	Wash and face thoroughly after handling. Do not touch eyes.
P271:	Use only outdoors or in a well-ventilated area.
P273:	Avoid release to the environment.
P280:	Wear protective gloves/protective clothing/eye protection/face protection when handling concentrate.

Response statement(s):

P301 + P317:	IF SWALLOWED: Get medical help
P302 + P317:	IF ON SKIN. Get medical help.
P302 + P352:	IF ON SKIN: Was with plenty of water.
P304 + P340:	IF INHALED: Remove person to fresh sir and keep comfortable for breathing
P305+P354+P338:	IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses of present and easy to do. Continue rinsing.
P321:	Do NOT induce vomiting.
P332 +P317:	If skin irritation occurs: Get medical help.
P362+P364:	Take off contaminated clothing and wash before reuse.
P370+P378:	Incase of fire: Use dry chemical, CO_2, water spray or alcohol-resistant foam to extinguish.
P391:	Collect Spillage

Storage statement(s):
P403: Store in a well-ventilated place
Disposal statement(s):
P501: Dispose of contents/container in accordance with local regulations.

3. Composition and Information on Ingredients

3.1 SUBSTANCE

Chemical Characterization: Didecyldimethylammonium Chloride (DDAC)

Description: Mixture of substances listed below

Name	CAS No.	Content/Proportion %	Hazard classification
Didecyldimethylammonium Chloride	7173-51-5	12	• Acute oral toxicity (category 4): H302 • Skin Corrosion (category 1B): H314
Isotridecanol, ethoxylated	69011-36-5	<10	• Aquatic Acute (category 1): H400 • Aquatic Chronic (category 3): H412
Ethanol	64-17-5	<10	• Flammable Liquid (category 2): H225
Secret		to 100	• Non-Hazardous

4. First Aid Measures

4.1 DESCRIPTION OF FIRST AID MEASURES

You should call The Poisons Information Centre if you feel that you have been poisoned, burned or irritated by this product. The number is 13 11 26 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

Ingestion:
If swallowed, do not induce vomiting, unless instructed to do so by poison control center or doctor.
Give the person some water to drink if able to swallow. Never give anything by mouth to an unconscious person.

Inhalation:
Can cause respiratory corrosion/irritation. Remove the victim from immediate source of exposure. Move victim to fresh air, if it can be done safely, and keep comfortable. If the victim's breathing has stopped, perform artificial respiration. DO NOT perform mouth-to-mouth resuscitation if victim ingested or inhaled the substance; wash face and mouth before giving artificial respiration. Use a pocket mask equipped with a one-way valve or other proper respiratory medical device. Administer oxygen if victim's breathing is difficult or irregular. Get medical help.

Skin Contact:
Can cause skin irritation. Remove and isolate contaminated clothing, shoes, and leather goods immediately and take a shower. Rinse affected areas (skin) immediately with non-abrasive soap or mild detergent and large amounts of running water. Wash contaminated clothing before reuse. Get medical help if irritation. develops and persists

Eye Contact:
Can cause severe eye damage, burning of eyes. Rinse eyes IMMEDIATELY with clean running water for at least 15 minutes, while holding eyelids apart. Remove contact lenses after 5 minutes if present and easy to do. Continue rinsing while holding eyelids apart. Seek medical help if irritation continues.

4.2 OTHER INFORMATION

Note to Doctor / Potential Health Effects, Acute and Delayed:

There is no specific antidote. All treatments should be based on observed signs and symptoms of distress in the patient. Effects of exposure (inhalation, ingestion, or skin contact) to substance may be delayed.

5. Fire Fighting Measures

5.1 EXTINGUISHING MEDIA

Suitable Extinguishing Media:	**Small fires:** Dry chemical powder, carbon dioxide (CO2), water spray or alcohol-resistant foam **Large fires:** Water spray, fog, or alcohol-resistant foam.
UnSuitable Extinguishing Media:	DO NOT use high volume water jet, due to contamination risk.
Fire Involving Tanks:	Cool containers with flooding quantities of water until well after fire is out. DO NOT get water inside containers. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire.
HAZCHEM:	**2X**

5.2 SPECIFIC EXTINGUISHING METHODS

Fight fire from maximum distance. For a massive fire, use unmanned hose holder or monitor nozzles. Collect contaminated extinguishing water separately; do not allow contaminated water to reach the sewage or effluent systems.

5.3 SPECIFIC HAZARDS ARISING FROM COMBUSTION PRODUCTS

In case of fire, the formation of very toxic fumes of /nitrogen oxides, ammonia, and hydrogen chloride can be expected.

5.4 SPECIAL PROTECTIVE EQUIPMENT AND PRECATIONS FOR FIRE FIGHTERS

Fire fighters should wear full protective gear including self-contained breathing apparatus (SCBA). Fight fire from safe distance. Contact with the fumes and vapours should be avoided by staying upwind. Clean all clothing before reuse. Severely contaminated clothing cannot be adequately decontaminated and must be disposed of as a hazardous waste. Shower with soap and water after contact with chemical product.

5.5 FURTHER INFORMATION

If possible, safely move undamaged intact containers away from the area around the fire.
Keep containers cool by spraying with water if exposed to fire.
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.
In case of fire and/or explosion do not breathe fumes.

6. Accidental Release Measures

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Evacuate the spill area and deny entry to unnecessary and unprotected personnel.
Wear full PPE (Personal Protective Equipment) gear with breathing apparatus (refer to Section 8 for standards)
Avoid contact with skin and eyes. Do not touch or walk through spilled material. Do not inhale spray or fumes.
Eliminate all ignition sources (no smoking, flares, sparks, or flames) from immediate area. All equipment used when handling the product must be grounded.
Use water spray to reduce vapours or divert vapour cloud drift.

6.2 ENVIRONMENTAL PRECAUTIONS

PREVENT spilled material from entering waterway and sewer systems, basements, and confined areas. If the product contaminates rivers and lakes or waterways immediately inform respective authorities.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Containment
Contain and absorb liquid spills with inert material, remove by scoop or vacuum. Use approved industrial vacuum cleaner for removal and place in clearly marked waste containers.

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). Use clean, non-sparking tools to collect absorbed material.

7. Handling and Storage

7.1 PRECAUTIONS FOR SAFE HANDLING

- Always store products in their original containers, which include the label listing ingredients, directions for use, and first aid steps in case of accidental poisoning.
- Use of safe work practices are recommended to avoid eye or skin contact (PPE).
- The working area must be well aerated – provide suction extractors if dust is formed.
- Keep the container tightly closed and dry.
- Food, beverages, and tobacco products should not be stored or consumed where this material is in use.
- Always wash your hands before smoking, eating, drinking, or using the toilet.
- Wash contaminated clothing and other protective equipment before storage or re-use.
- Provide eyewash fountains and safety showers near points of potential exposure.
- Prevent by any means possible spillage from entering drain systems or watercourses.

7.1 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

- Store in a clean, cool, dry, and well-ventilated area
- Store away from direct sunlight
- Do not store near food or within reach of children.
- Keep the container tightly closed and dry.
- Do not store it in an unlabeled container.
- Do not reuse the container for any other purpose

8. Exposure Controls / Personal Protection

8.1 PERSONAL PROTECTION

The following Australian Standards will provide general advice regarding safety clothing and equipment: Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: **AS/NZS 4501 set 2008**, Industrial Eye Protection: **AS 1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS 2210**

SWA Exposure Limits	TWA (mg/m^3)	STEL (mg/m^3)
Ethanol	**1800**	**Not set**

8.2 EXPOSURE STANDARDS

ADI (Acceptable Daily Intake)	0.1mg Kg^{-1} bw day $^{-1}$(EFSA)
AOEL (Accepted Operator Exposure Level	Not allocated
National Exposure Standards	Not available
Biological Limit Values	Note available
Engineering Standards	Handle in well-ventilated areas, generally natural ventilation is adequate. When airborne mist/vapours are generated use local exhaust ventilation controls. Facilities should be equipped with an eyewash station and a safety shower. Where necessary, seek additional occupational hygiene advice.
Personal Protective Equipment	**Respiratory Protection:** Where exposure through inhalation may occur when handling and/or when preparing the spray mixture, wear a face mask. If the product is used in confined spaces a respirator suitable for protection from mists of product is adequate. **Hand Protection:** Wear chemical-resistant gloves made of any waterproof material such as nitrile rubber. Glove thickness: 0.5 mm **Eye Protection:** The use of safety goggles (full-face shield) is recommended. **Skin and Body Protection:** Wear suitable protective clothing which includes chemical-resistant overalls, footwear, socks, dust mask, eye shields and gloves. Remove and wash contaminated protective clothing daily.

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

9. Physical and Chemical Properties

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical State	Liquid,
Colour	Clear with colour varying between colourless, straw and pink
Odour	Slight bitter smell
Melting Point / Freezing Point:	Active ingredient: 94 – 100 °C
Boiling Point:	Active ingredient: > 180 °C; decomposes before boiling at 1 atm
Decomposition Temperature (a.i)	Active ingredient: 180 °C
Flammability	Not applicable
Explosive Limits	Not applicable
Flash Point	92 °C (Pensky Martens Closed Cup) – Category 4
Auto-Ignition Temperature	No applicable
pH Value	5 – 8 (1% in water)
Kinematic Viscosity	Not available
Viscosity	Not available
Density / Relative Density	~ 0,986 g/mℓ
Solubility in water (a.i)	Active ingredient: In water, 0.65 g/ℓ at 20 °C
N-Octanol / Water partition Coefficient (a.i)	log P_{ow} = 2,59 at 20 °C, pH7
Vapour Pressure (a.i)	<4.3X10-5 mm Hg at 25 °C & <1.1X10-5 mm Hg at 20 °C
Relative Vapour Density	Not available
Particle Characteristics	Not applicable

10. Stability and Reactivity

10.1 REACTIVITY

No data available.

10.2 CHEMICAL STABILITY

This substance is stable under normal ambient temperature and storage conditions of use.

10.3 HAZARDOUS REACTIONS

None Expected

10.4 CONDITIONS TO AVOID

Excessive heat and fire

10.5 INCOMPATIBLE MATERIALS

Avoid mixing with strong oxidising and strong reducing agents as well as anionic detergents.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS:

11. Toxicological Information

11.1 TOXICITY AND IRRITATION

Oral toxicity (Animal):	LD_{50} (rat) = 4 032 mg/kg bw – CATERGORY 5
Dermal toxicity (Animal):	LD_{50} (rat) > 2000 mg/kg bw – CATERGORY 5
Inhalation toxicity:	LC_{50} (4h) rat - The substance is classified as corrosive EC1272/2008. Expected to be corrosive
Skin corrosion / irritation:	Prolonged skin contact, especially with the concentrate, will cause severe irritation/burning, rash, itching, and blistering.
Serious eye damage / irritation:	Risk of serious damage to eyes. Exposure can lead to irritation/burning, eye pain, conjunctivitis, swelling of eye and swelling of eyelid. – CATERGORY 1
Respiratory or skin sensitisation:	Not expected
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive toxicity	Not classified
STOT – single exposure:	Not classified
STOT – repeated exposure:	Not classified
Aspiration hazard:	Not classified
Neurotoxicity:	Not classified

12. Ecological Information

12.1 ECOTOXICITY

DDAC	Birds: LD_{50} (oral)	Not hazardous to birds.
	Fish: LC_{50}	Oncorhynchus mykiss (Rainbow trout) Acute (96h) LC50 = 1.16 mg a.i./ℓ Brachydanio rerio (Zebrafish) NOEC = 0,032 mg a.i./ℓ (21-day)
	Aquatic invertebrates - Daphnia	Daphnia magna (Water flea) Acute (48h) EC50 = 0,094 mg a.i./ℓ Chronic (21-day) NOEC = 0,01 mg a.i./ℓ
	Algae - EC_{50} / NOEC	Selenastrum capricornutum Acute (72h) EC50 = 0,026 mg a.i./ℓ Chronic (96h) NOEC = 0,014 mg a.i./ℓ
	Bees	Apis mellifera Acute contact 48-hour LD50 = >100 (µg bee^{-1})
	Earthworms: LC_{50} / NOEC	Eisenia fetida Acute (14-day) LC50 > 1000 mg a.i./kg d.w. soil

Aquatic Toxicity:	***Summation Method*** Aquatic Acute – Category 1 Aquatic Chronic – Category 3
Persistence, Degradability and Mobility	Bioaccumulation is not expected to be significant. This product is readily biodegradable. K_{foc} = 1470000 Didecyldimethylammonium Chloride not mobile in the soil.
Bio-accumulative Potential	Low potential for bio-concentration
Soil micro-organisms	Carbon transformation – no significant adverse/long term effect Nitrogen transformation – no significant adverse/long term effect

13. Disposal Considerations

13.1 DISPOSAL METHODS AND CONTAINERS

Disposal of this product, solutions and any by-products should always comply with the requirements of environmental protection and waste disposal legislation and any regional and local authority requirements.

TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS: Containers must be completely emptied before being disposed of. Invert the empty container over the spray or mixing tank and drain for at least 30 seconds until the flow has slowed down to a drip. Triple rinse the empty container with clean water equal to a minimum of 30 % of the volume of the container. Add rinsing to the contents of the spray tank. Dispose of at authorised landfill. Do not use containers for any other purpose.

13.2 SPECIAL PRECAUTIONS FOR LANDFILL OR INCINERATION

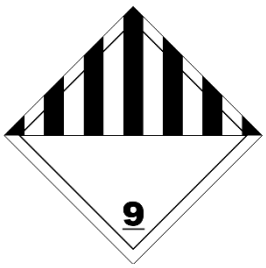
Please consult your state Land Waste Management Authority for more information

14. Transport Information

14.1 INTERNATIONAL REGULATIONS

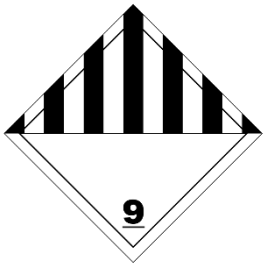
IATA - DGR Code
(Air Transport)

UN Number	:	UN 3082
Proper Shipping Name	:	ENVIRONMENTAL HAZARDOUS SUBSTANCE, LIQUID (didecyldimethylammonium chloride 12%)
Class	:	9
Packing Group	:	III (low danger)
Marine Pollutant	:	Yes Symbol (fish and tree)
Excepted Quantities	:	E1
Packing Instruction *(Passenger & cargo aircraft)*	:	Y964, 964
Packing Max Net Qty Pkge *(Passenger & cargo aircraft*	:	30KG, 450L
Packing Instruction *(Cargo aircraft)*	:	964
Packing Max Net Qty Pkge *(Cargo aircraft*	:	450L
Special Provisions	:	A97, A158, A197, A215
ERG Code	:	9L



IMDG Code
(Sea Transport)

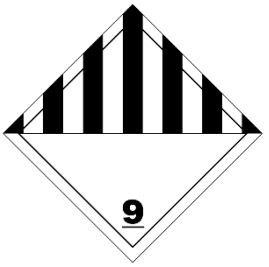
UN Number	:	UN 3082
Proper Shipping Name	:	ENVIRONMENTAL HAZARDOUS SUBSTANCE, LIQUID (didecyldimethylammonium chloride 12%)
Class	:	9
Packing Group	:	III (low danger)
Marine Pollutant	:	Yes Symbol (fish and tree)
EMS Number	:	F-A.S-F
Special Provisions	:	274,335,969
Limited Quantities	:	5L
Excepted Quantities	:	E1
Packaging's & IBC's *(Packing Instructions)*	:	P001, IBC03
Packaging's & IBC's *(Special Provisions)*	:	LP01
Stowage & Handling	:	Category A
NOTE:	:	No transport in Bulk



14.2 DOMESTIC REGULATIONS

ADG Code
(Road/Rail Transport)

UN Number	:	UN 3082
Proper Shipping Name	:	ENVIRONMENTAL HAZARDOUS SUBSTANCE, LIQUID (didecyldimethylammonium chloride 12%)
Class	:	9
Hazchem Code	:	2X
Packing Group	:	III (low danger)
Marine Pollutant	:	Yes Symbol (fish and tree)
Special Provisions	:	274,335,969
Limited Quantities	:	5L
Excepted Quantities	:	E1
Packaging's & IBC's *(Packing Instructions)*	:	P001, IBC03
Packaging's & IBC's *(Special Provisions)*	:	LP01
Stowage & Handling	:	Category A



15. Regulatory Information

15.1 AIIC

All of the significant ingredients in this formulation are compliant with AICIS regulations.

16. Other Information

This SDS contains only safety-related information. For other date see product literature

Date of Preparation: Revised (1st January 2024)

Last Revision: This SDS replaces document dated May 2023

Prepared By: Grochem Australia Pty Ltd trading as 7 Worlds Ag

Abbreviations and acronyms:

ADG:	Australian Dangerous Goods
IMDG:	International Maritime Code for Dangerous Goods
IATA:	International Air Transport Association
GHS:	Globally Harmonised System of Classification and Labelling of Chemicals
CAS:	Chemical Abstracts Service (division of the American Chemical Society)
IARC:	International Agency for Research on Cancer
STEL:	Short Term Exposure Limit
TWA:	Time Weighted Average
NES:	National Exposure Standard (Safe Work Australia - Workplace Exposure Standards for Airborne Contaminants)

Disclaimer

This SDS is prepared in accordance with the SWA document “preparation of Safety Data Sheets for Hazardous Chemicals – Code of Practice” (July 2020) along withClassified as Hazardous accordingly to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS 7) and Safe Work Australia criteria as well as Classified as Dangerous Goods according to the Australia Code for the Transport of Dangerous Goods by Road and Rail (7.8 Edition 2022) and the current IMDG code (edition 2022) and IATA Dangerous Goods Regulations (Edition 65)

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▪▪▪▪ ***End of Safety Data Sheet*** ▪▪▪▪