

POISON

**KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING**



ACTIVE CONSTITUENT: 120 g/L DIDECYLDIMETHYL-AMMONIUM CHLORIDE

A broad spectrum sanitation and water treatment solution for use in agriculture & horticulture as specified in the Directions For Use table.

**Non-Rusting
Hard Water
Biodegradable
Wide pH Range**

DIRECTIONS FOR USE

CROP	RATE	CRITICAL COMMENTS
Disinfection		
General disinfection of growing medium (Inert or non-organic), equipment (such as pruning shears & ploughs), footbaths & hands	100mL/10L water (1% solution)	Keep wet for over 10 minutes for best results.
General disinfection of cold rooms, packing sheds, tunnels, seedtrays & other surfaces	100mL/100L water (0.1% solution)	First remove all organic matter from surfaces and keep wet with Sporekill solution for over 10 minutes for best results.
Disinfection of irrigation water (non-food crops only)	5–20mL/1000L water for continuous dosing.	When dosing for the first few times, the dirt/algae/organic matter will be discharged and may clog your drippers, spitters or sprinklers. Therefore, rinse your irrigation pipes frequently. The cleaner the irrigation water to be treated, the better the results. May be used in fertigated water. DO NOT apply directly via fertilizer tank. DO NOT use treated irrigation water on crops grown as animal feeds.
Sugarcane - Aid in the control of sugarcane smut (<i>Ustilago scitaminea</i>)	100mL/10L water (1% solution)	DO NOT apply directly to sugarcane plants. Appliances: Apply to appliances that are clean and free of detergent. Apply a 1% solution of the disinfectant to all parts of the appliance and keep the surfaces wet for a minimum of 5 minutes. Prior to leaving the property: Disinfection of equipment associated with, for example, surveying for sugarcane smut, maintenance of gas pipes, etc. Apply to equipment that is clean and free of detergent. Apply by spraying a 1% solution of the disinfectant to all parts of the equipment. Keep the surfaces wet for a minimum of 5 minutes. Alternatively, immerse the equipment in the solution (eg, a footbath) for a minimum of 5 minutes. Equipment includes hats, plastic bags (used to enclose, for example, GPS equipment and folders), footbaths, immersion containers, spray equipment. Disposal: Dispose of used treatment solutions (footbaths/immersion containers) before leaving the property in accordance with Dip Disposal statements as shown below. General hygiene measures for vehicles: Remove visible soil and plant material from the vehicle and tyres. Spray tyres with disinfectant (1% solution) to run-off.
Control of the spread of sugarcane Ratoon Stunting Disease (RSD)	100mL/10L water (1% solution)	Clean knives of all debris and sugar sap, which will reduce strength of the solution. Immerse knives in solution for a minimum of 5 minutes. Dispose of unwanted solution safely before leaving the property – refer to disposal statements as shown below.
Postharvest treatment: Control of post-harvest decay and diseases caused by relevant micro-organisms in water for washing or dip treatment processes		
Assorted tropical and Sub Tropical Fruit (inedible peel) (except bananas)	100mL/100L solution (0.1%)	Dip fruit for 3 minutes. Keep Sporekill concentration at recommended rate by using "Sporekill Test Kit". Growers are advised to check for varietal differences by first treating a small sample.
Cut flowers in containers	15mL/10L water	The stock solution may be used for up to 7-10 days if kept clean. Do not keep cut flowers in stock solution for longer than 48 hours.
Plant Sanitisation		
Grapevine Cuttings - Disinfection of propagation material against <i>Botryosphaeria</i> , <i>Cylindrocarpon</i> , <i>Phomopsis</i> , <i>Phaemoniella</i> & <i>Phaeoacremonium</i> spp.	150mL/100L water	Apply as a dip. Keep Sporekill concentration at recommended rate by using "Sporekill Test Kit". Rootstock and Scion Cutting Treatment Immediately after cutting preparation and pre-cold storage, soak for 1 hour in Sporekill solution. After cold storage one day prior to grafting, soak for 10 minutes. This treatment can also be done in cool-down water following hot water treatment. Pre-Plant Treatment: After callus, directly prior to planting, dip for 5 seconds in Sporekill solution. General Sanitation: For disinfection of grafting equipment, tables, work surfaces, grafting sheds, callusing boxes, etc. First wash surfaces to remove dirt and then disinfect by keeping surfaces wet for 10 min for best results.
Carnations, Chrysanthemums and Cut Flowers	100mL/100L water	Growers are advised to check for varietal differences by first treating a small sample. Apply to foliage with first application after transplanting or 6 weeks after planting seed. Apply at 7 days intervals.
Roses in green/shade houses	50mL/100L water	Growers are advised to check for varietal differences by first treating a small sample. Apply to foliage at 10-14 day intervals.

EXPORT ADVICE

As Sporekill is not registered in all countries overseas, please check with a Grochem representative before treating product destined for export.

GENERAL INSTRUCTIONS:

Sporekill is effective against a range of fungi and bacteria pathogens. Sporekill will remain active as long as it is in solution (does not oxidise). Under heavy agitation, foam may form and a defoaming agent (food grade) may be useful.

A test kit is available to measure active Sporekill in water. Sporekill has wetting characteristics, so a wetting agent does not need to be added.

Use on plant materials

Sporekill is not a single means of controlling disease infection. It is not intended to replace the use of fungicides. Sporekill is compatible with most fungicides and use should be incorporated into a normal treatment program for disease control.

Application

DO NOT apply using equipment carried on the back of the user.

For Plant Sanitation:

1. For foliar application as a plant sanitiser for flowers, good coverage is essential.
2. Ensure that both upper and lower leaf surfaces are covered.
3. Spray to runoff with standard spray application equipment.

For Postharvest Sanitation:

1. Shake concentrate before use.
2. No wetters need to be added since Sporekill has wetting characteristics.
3. The stability and efficacy of Sporekill is not pH dependent. If Sporekill is used with other chemicals, follow their pH recommendations.
4. During postharvest wash of avocado and mango, fruit must not be left in dumptank for long periods. This may result in serious burning of sensitive fruit.
5. Sporekill controls postharvest decay in avocado and mango fruit induced by infections taking place during the washing process. Registered fungicides still need to be applied for control of postharvest decay caused by orchard infections.
6. **DO NOT** use Sporekill in hot water dumptanks. This may result in serious burning of sensitive avocado and mango fruit.
7. Under heavy agitation foam may develop. Use a general silicon based anti-foam product, if necessary.

COMPATIBILITY

Sporekill may be used with fertigated water. **DO NOT** apply directly via fertiliser tank. Sporekill is compatible with Liquicop Copper Fungicide and a range of fungicides. Information can be obtained by contacting your Grochem representative.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

DO NOT apply with spray droplets smaller than FINE spray droplet size category according to nozzle manufacturer specifications that refer to the ASAE S572 Standard or the British Crop Protection Council guideline.

DO NOT apply if there are aquatic and wetland areas including aquacultural ponds, surface streams and rivers downwind from the application area and within the mandatory no-spray zones shown in the table below:

No spray zones for Protection of the Aquatic Environment

FOR GROUND APPLICATION	
From 3 to 20 kilometers	5 metres

DO NOT apply with aircraft.

STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area. **DO NOT** store for prolonged periods in direct sunlight.

Triple rinse containers before disposal. Dispose of rinsate or any undiluted chemical according to state/territory legislative requirements. If recycling, replace cap and return clean containers to recycler.

If not recycling, break, crush or puncture and deliver empty packaging to an approved waste management facility. **DO NOT** burn empty containers or product.

DIP DISPOSAL

Prior to disposal, deactivate the spent dip with bentonite clay or clay soil at a minimum ratio of 5 kg bentonite clay or clay soil per 100L.

Dispose of flocculate DDAC/bentonite clay by evenly spreading over flat land in a disposal site dedicated for spent dips that is adequately banded with soil to at least

15 cm high. Do not exceed the standard spent dip rate of 20,000L/ha.

RE-ENTRY

Do not enter treated areas or handle the treated material until the spray has dried, unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each days use.

SAFETY DIRECTIONS

Harmful if swallowed. Will irritate the skin. Will damage the eyes. Avoid contact with eyes and skin. DO NOT inhale spray mist. When opening the container, mixing and loading, preparing and using the product, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), a washable hat, chemical resistant gloves and goggles or safety glasses. If product on skin, immediately wash area with soap and water. If product in eyes wash it out immediately with water. Wash hands after use. After each day's use wash gloves, goggles and contaminated clothing.

FIRST AID

If poisoning occurs, contact a Doctor or Poisons Information Centre (Phone Australia 13 11 26). If swallowed, do NOT induce vomiting. Give a glass of water. If skin contact occurs, remove contaminated clothing and wash skin thoroughly. If in eyes, hold eyes open, flood with water for 15 minutes and see a doctor.

SAFETY DATA SHEET

Additional information is listed in the Safety Data Sheet for Sporekill Agriculture Disinfectant which is available from Grochem Australia Pty Ltd on request or the Grochem website www.grochem.com

LIMIT OF LIABILITY

1. Grochem Australia accepts responsibility for the consistent quality of the product.
2. Grochem Australia accepts no responsibility whatsoever for any damage, injury or loss following purchase and use of this product.
3. The extent of liability of Grochem Australia is limited to the replacement of goods or a refund on the price paid. This being conditional upon a claim being made in writing and within 30 days of delivery/receipt of product.
4. This product must also be used in strict accordance with the directions as detailed on this label. The buyer accepts and uses this material with an understanding of the above conditions.

© Sporekill is a registered trade mark of ICA Laboratories cc

APVMA Approval No.: No: 51141/123041

Wash hands and exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product.
Wear face protection. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

In a Transport Emergency
Dial 000
Police or Fire Brigade

Specialist Advice In Emergency Only
1800 033 111
All Hours - Australia Wide