



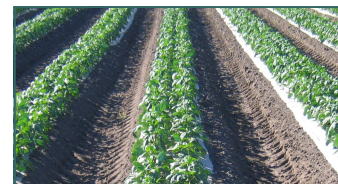
# Using Steri-maX Biocide for Hygiene

*infonote*  
Steri-maX Hygiene 07/10

## on equipment, appliances & footwear

### Introduction

The impact of pathogens in the health of crops and livestock is one of the greatest challenges facing today's farmers. Diseases not only reduce productivity but also cause disruption to the movement and marketability of produce. Having an effective hygiene management tool like Steri-maX is the first step towards minimizing the potential for disease spread. Steri-maX Biocide is highly effective against bacteria, fungal spores and viruses.



### Spread and Control

Some pathogens are spread by wind dispersal, soil and water movement or by planting infected or contaminated seed and transplants. Movement of pathogens on and off the property due to human activity is also a common method of infection.

There are of course a range of treatments which are practiced to prevent, control and eradicate fungi, bacteria and viruses from farms. As in most pest management programs, prevention is better than cure.

### Footbaths

The use of footbaths is a well documented method of prevention. Unfortunately, if they are not correctly used and maintained, growers can become over reliant on footbaths for protection of their property from disease. For a footbath to be effective it should have the liquid replaced with fresh water and product on a daily basis.

***The X factor in footbath effectiveness is organic matter and contact time.***

Even a stable product like Steri-maX will not tolerate high levels of soil and plant matter. And if boots are covered in mud, no biocide will be an adequate sterilizer. Also, the product requires contact time to do its job. Therefore in most cases, footwear should be removed and left to stand in a 1% Steri-maX solution for a minimum of 5 minutes.

Quaternary compounds such as Steri-maX Biocide are commonly used in hygiene programs for control of diseases such as Pythium and Phytophthora. Being a DDAC based product gives Steri-maX a performance edge of the older Benzalkonium Chloride products, which are more prone to breakdown in solutions where soil and organic matter are present.

### Equipment and appliance hygiene

This is also essential to prevent the spread of pathogens to surrounding crops or operations. Disease can be trapped in inaccessible parts of a machinery and freed to infect during transport, use or repairs in the field and can remain viable for many months. Therefore all plant material and soil should be removed before transporting equipment from one area to the next.

Once cleaned the equipment should then be sprayed with a 1% solution of **Steri-maX Biocide**. Laboratory and field trials have shown Steri-maX Biocide to be highly effective in controlling a wide range of bacteria, fungi spores and virus on equipment and appliances.  
(see directions for use on next page)

*The equipment/appliance should be ideally kept damp for a period of 5 minutes.*

## STERI-MAX BIOCIDES : USE SITUATIONS



SITUATION	RATE	CRITICAL COMMENTS
<b>Appliances</b> (Any vehicle, machinery, equipment or apparatus of any kind)	100 mL/10L water (1% solution)	Apply to appliances that are clean and free of detergent. Apply to all parts of the appliance and keep the surfaces wet for a minimum of 5 minutes
<b>Prior to leaving property / area</b> Equipment <i>includes</i> hats, plastic bags (used to enclose, for example, GPS equipment and folders), immersion containers, spray equipment	100 mL/10L water (1% solution)	Apply to appliances that are clean and free of detergent. Apply by spraying a 1% solution on all parts of the equipment. Keep the surfaces wet for a minimum of 5 minutes. Alternatively, immerse the equipment in the solution (e.g. a footbath or bucket) for a minimum of 5 minutes
<b>General hygiene measures for vehicles</b>	100 mL/10L water (1% solution)	Remove visible soil and plant material from vehicle and tyres. Spray tyres with a 1% solution to run-off.
<b>General disinfection.</b> Equipment such as pruning shears and ploughs.	100 mL/10L water (1% solution)	Keep wet for over 5 minutes for best results. Place 1% Steri-max solution into a bucket or pail and leave equipment to soak. <b><i>Replace solution daily as organic matter will degrade biocide activity.</i></b>
<b>As a foot bath hygiene treatment</b> Rubber boots, leather boots & shoes etc <i>For the control of soil borne diseases such as Phytophthora and Pythium.</i>	100 mL-500mL per 10L of water (1% solution)	Use the higher rate where heavy traffic and organic matter are present. Steri-max is a contact Biocide. Keep wet for at least 5 minutes for best results. Clean all debris from footwear then leave to soak. "No biocide can be effective if the person simply walks straight through the footbath". <b><i>Replace solution daily as organic matter will degrade biocide activity.</i></b>
<b>General disinfection</b> of cold rooms, packing sheds, tunnels, seed trays & other hard surfaces.	100 mL/100L water (0.1% solution)	First remove all organic matter from surfaces and keep wet with Steri-max solution for over 10 minutes for best results.

**NOT TO BE USED FOR ANY PURPOSE OR IN ANY MANNER, CONTRARY TO THE LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.**

### GENERAL INSTRUCTIONS:

- Effective against a range of fungi, bacteria and viral pathogens.
- Stays active as long as it is in solution (does not oxidize).
- Under heavy agitation, foam may form and a defoaming agent may be useful.
- Steri-max has wetting characteristics, so a wetting agent does not need to be added.
- If used in a dipping bath, organic matter will reduce activity.



### Agricrop contacts:-

Jim Lyons  
Stewart Frankling  
Andrew Downs

Brisbane, Qld  
Oxenford, Qld  
Tanunda, SA

0418 831 910  
0447 558 219  
0403 158 505

Agricrop Pty Ltd. A.C.N. 84 100 473 309. The information in this InfoNote is based on data believed by Agricrop to be accurate at the time of publication but is subject to change without notice. It is given in good faith but no warranty express or implied is made as to its accuracy, completeness or otherwise. Every person dealing with the products and/or materials referred to herein does so at their own risk absolutely and must make independent determination of suitability and completeness of information from all sources. Agricrop shall not be liable for any loss, injury, damage or death whether consequential or otherwise howsoever arising whether through negligence or otherwise in connection with the use or application of the products and/or materials referred to herein. © Copyright 2005

**Agricrop Pty Ltd**  
Tel (07) 3348 4113  
[www.agricrop.com.au](http://www.agricrop.com.au)



# AGRICROP