



# DISINFECTION IN THE GREENHOUSES

## HALAMID®, A UNIQUE PRODUCT

- Large activity spectrum
- Non corrosive in solution for materials
- Easy to use and versatile
- Stable
- Readily biodegradable
- No risk of building up resistant microorganisms

Microorganisms are responsible for both qualitative and quantitative losses in the horticulture market. Pathogenic microorganisms are easily spread from plant to plant via contaminated tools and equipments, or from crop to crop if the greenhouse is initially infected.

To avoid spreading of bacteria and viruses due to infected tools and equipment, growers rely on Halamid® for its wide activity spectrum and because it does not damage materials.

Tomato growers will appreciate the proven efficacy of Halamid® against the Pepino Mosaic virus.

## EFFICACY

Halamid® is effective against many bacteria, virus and fungi related to greenhouse applications. **A few of them are indicated below, but the complete activity spectrum of Halamid® is much wider.**

### Bacteria

*Agrobacterium tumefaciens*  
*Clavibacter michiganensis subsp michiganensis*  
*Erwinia carotovora*  
*Pseudomonas sp. (aeruginosa, fluorescens etc...)*  
*Xanthomonas hyacinthi*

### Viruses

*Pepino Mosaic Virus (PepMV)*  
 This contagious and highly problematic virus affects tomato crops all over Europe. A 1% Halamid® solution with a contact time of 30 min efficiently destroys PepMV. (PPO, Netherlands, 2003)

### Fungi

*Fusarium moniliforme*  
*Geotrichum Candidum*

## RECOMMENDED CONCENTRATIONS

Application	Concentration	Remark
Equipment and greenhouse disinfection	1%	0.3L/m <sup>2</sup>
Vehicle disinfection	1%	
Footbath	2%	Renew as often as needed

## APPLICATIONS

### General disinfection

General disinfection rules

Always remember that cleaning is a required preliminary step before disinfection to ensure the best results.

Without proper cleaning, dirt and organic matter protect microorganisms against the killing effect of the disinfectant, resulting in an incomplete operation.

Start by dry cleaning to remove most of the organic matter, followed by cleaning with water or a detergent solution. Once it is done, disinfect with Halamid®.

Halamid® is always applied as an aqueous solution: simply dissolve the Halamid® in clean water at the required concentration.

### Surfaces and greenhouse disinfection

Between production cycles, when the buildings are empty, thoroughly clean and then disinfect with a Halamid® solution, which is either brushed, sprayed, or nebulized.

For spraying, use 0.3 L/m<sup>2</sup> of a Halamid® solution at 1%.

### Truck disinfection

Trucks contribute significantly to transmission of diseases from farm to farm. Make sure all vehicles are well disinfected (including the wheels) with a 1% Halamid® solution prior entrance to the farm.

Halamid® is particularly interesting for this application as solutions are non corrosive to materials and the product is active even at low temperature.

### Footbath

A footbath should be placed at the entrance of each building and everybody must use it. A 2% Halamid® solution is prepared and refreshed as often as needed (generally twice a week, but it depends on the soiling of the solution).

**Use biocides safely.  
Always read the label  
and product information  
before use.**

**Halamid® is an  
Axcentive product  
available in various  
packages, from  
1kg buckets to  
1000 kg big bags.**

axcentive

For more information,  
please contact Axcentive  
tel: +33.442.694.090  
fax: +33.442.694.099  
email: [info@axcentive.com](mailto:info@axcentive.com)  
or visit our website  
[www.halamid.com](http://www.halamid.com)

The use of Halamid® as a disinfectant may be submitted to local legislation and a registration may be required. Please check with your local authorities or contact us to check about the registration status in your country.

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