



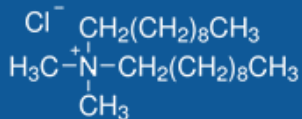
## GERM-KILL 120 SL™

Agricultural Disinfectant & Bactericide

### Unique chemistry behind Germ-Kill 120 SL™ :

- Contains Didecyl dimethyl ammonium chloride 120 g/ L

- **Chemical structure:**



- **Chemical formula:** C<sub>22</sub>H<sub>48</sub>ClN
- **Substance group:** Quaternary ammonium compound

### Germ-Kill 120 SL is an innovative disinfectant, providing a highly effective and non-polluting disinfection technology.

#### How Germ-Kill 120 SL™ works:

The active substance in **Germ-Kill 120 SL™**, when in contact with oxygen and water, releases highly active oxygen that immediately attacks the cell membrane of the target organism. This reaction quickly destroys the cell wall and the effect is further intensified by the depletion of intercellular ions, which form a bond with cell proteins, inactivating or precipitating these proteins.

#### Salient features of Germ-Kill 120 SL™:

- Actively penetrates and eliminates bio-film layers
- Depot effect (inhibits recontamination with germs)
- Highly effective in modest concentrations
- Exceeds the effect of most sanitizers with its ability to kill off bacteria, fungi, viruses, mildews, salmonellae and legionella
- Stabilized: long shelf-life when stored correctly
- Effective through a wide temperature range
- Free from chlorine, formaldehyde, ammonium compounds

#### Types of uses:

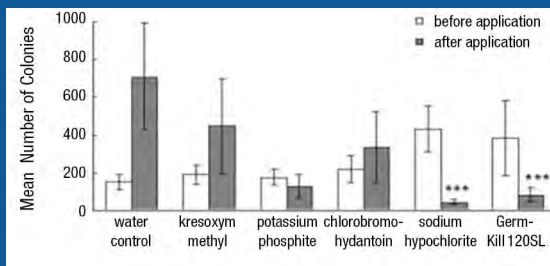
- Foliar
- Post-harvest
- General sanitation of hands, pruning shears, ploughs, cold rooms, packing sheds, tunnels, seed trays and other surfaces.
- Irrigation water sanitation



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## Efficacy trials

Extensive field trials and commercial applications have proven the efficacy of **Germ-Kill 120 SL™** against a wide range of bacterial and fungal pathogen.



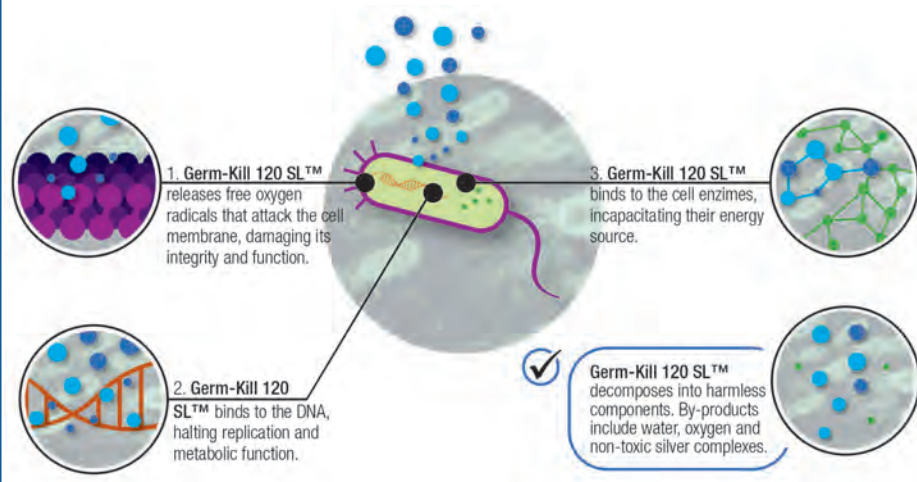
Reduction in bacterial and fungal colonies after application

## Agricultural application rates:

CROPS	DISEASE / PATHOGEN	RATE
Wheat, Soy beans, Peppers	<i>Pseudomonas syringae</i> , <i>Xanthomonas campestris</i>	100 – 200 ml/ 100 L Water
Maize, Vegetables	<i>Erwinia Sp.</i>	100 – 200 ml/ 100 L Water
Seed Potato Tubers (Pre-plant treatment)	Bacterial soft rot caused by contamination of tubers during the washing and dip treatment process.	200 ml/ 100 L Water
Tomatoes & Cucurbits	Powdery mildew	100 – 200 ml/ 100 L Water
Mangoes (Post-harvest treatment)	Anthracnose, <i>Colletotrichum gloesporiodes</i>	100 – 150 ml/ 100 L Water
Citrus (Post-harvest treatment)	<i>Penicillium digitatum</i> , <i>P. italicum</i> , <i>Geotrichum candidum</i>	100 – 150 ml/ 100 L Water

USE	RATE
General disinfection of cold rooms, packing sheds, tunnels, seed trays & other hard surfaces	100 ml/ 100 L of water (0.1% solution)
General disinfection of growing medium and equipment	1% solution
Post-harvest treatment of cut flowers in containers	20 ml/ 10 L water
Plant sanitation: Carnations, Chrysanthemums and Cut Flowers	100 – 150 ml/ 100 L water
Plant sanitation: Roses in green/ shade houses	100 – 150 ml/ 100 L water

## Mode of action:



**Germ-Kill 120 SL™** causes denaturation of cell proteins in target pathogens, which eventually results in death by leakage of vital substances from cells.

