



# **KLEENGROW**

# GREEN HOUSE SANITIZER · FUNGISTAT · DEODORIZER · KILLS BACTERIA · CONTROLS MILDEW

Controls or suppresses certain fungal and bacterial plant pathogens, algae, and liverworts in greenhouse ornamental plant production

**Registration No. 13148 Pest Control Products Act** 

#### **SOLUTION · COMMERCIAL**

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on the label. It is an offence under the Pest Control Products Act to use this product in a way that is inconsistent with the directions on the label.

Active Ingredient: Didecyldimethylammonium chloride: **7.5%** 

#### **DIRECTIONS FOR USE**

### For Sanitizing and Deodorizing

- 1. Prepare use-solution according to chart below.
- 2. Clean area with good detergent.
- 3. Rinse with clean water.
- 4. Apply use-solution by spray, brush or dipping.
- 5. Rinse with potable water where indicated.

### For Footbaths Use

- 1. Prepare use-solution according to chart below.
- 2. Allow a minimum of 30 seconds contact time.
- 3. Do not rinse.

| GREEN HOUSE<br>APPLICATIONS                            | Amt./<br>Litre | Active<br>Quaternary | Rinse<br>Required |
|--|----------------|----------------------|-------------------|
| Food Contact<br>Benches, Horticulture<br>Equipment     | 4-8 ml         | 300-600<br>ppm       | Yes               |
| Non-Food Contact<br>Benches, Horticulture<br>Equipment | 4-8 ml         | 300-600<br>ppm       | No                |
| Floors, Walkways,<br>Walls, Ceilings                   | 4-8 ml         | 600 ppm              | No                |
| Foodbaths  | 15 ml          | 1200 ppm             | No                |

## Microbicidal Properties A.O.A.C. Use-Dilution Confirmation Test

| ORGANISM                 | Dilution | Amt/Litre |
|--------------------------|----------|-----------|
| Clavibacter Michiganesis | 1:250    | 4 ml      |

### **Ornamentals, Grown in Greenhouses**

Do not apply this product using fogging equipment (hand held or automated), or using handheld mist blowers/airblast equipment.

Do not apply to fruits or vegetables or other food crops. This product is to be used in greenhouse grown ornamentals only. Certain recommended rates do not allow for use on plants grown for, and marketed as "cut flowers", refer to the "Restrictions" column in the table below. Do not spray directly on fruits and vegetables. Do not apply to tools or equipment that will contact food.

This product may be tank mixed with a fertilizer, a supplement, or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Pace Solutions Corp. at info@pacesolutions.com for information before applying any tank mix that is not specifically recommended on this label. A jar test should be performed with any partner products to confirm compatibility.

**\*\*\*NOTE:** KleenGrow<sup>™</sup> has been tested on certain species and varieties of the following greenhouse ornamental crops and shown not to cause adverse effects on host crops when applied according to label directions.

KleenGrow™ may be phytotoxic to some ornamental plants or individual varieties and phytotoxicity may develop after repeated applications in a short time interval. A test spray or drench is recommended before treating the entire crop, especially when using the higher concentration. Use with caution on young seedlings or tender young growth.

| Alstromeria spp | Astelia spp       | Athyrium<br>niponicum        |
|-----------------|-------------------|------------------------------|
| Buddleia        | Campsis radicans  | Caryopteris                  |
| Coprosma spp    | Cordyline spp     | Cornus alba                  |
| Euonymus        | Gerbera spp       | Hebe spp                     |
| Hydrangea       | llex              | Lavatera                     |
| Lonicera        | Magnolia          | Matteuccia<br>struthiopteris |
| Ophiopogon spp  | Oncidium orchids  | Pittosporum                  |
| Potentilla      | Rhododendron      | Spiraea                      |
| Strathiopteris  | Thuja pyramidalis |                              |

KLEENGROW™ is effective in controlling or suppressing the following diseases and target weeds:

| <b>Target Pest</b>  | <b>Application Rate</b> | Restrictions  | Instructions  |  |
|---|-------------------------|---|---|--|
| Alternaria leaf spot<br>(Alternaria spp.)   | 98 mL/ 100L             | <b>DO NOT</b> apply KleenGrow™ to control Alternaria leaf spot on plants grown for, and marketed as "cut flowers."            | Apply foliar spray to runoff up to a maximum spray volume of 1000 L/ha. Begin KleenGrow™ applications when conditions are favorable for disease development. Use a watering device to spray the top and bottom of the leaves and stems, avoiding flowers in full bloom. Apply KleenGrow™ with a direct spray every 14 days to prevent the spread of spores. Do not apply more than 6 applications per crop cycle. |  |
| Botrytis blight<br>and grey mould<br>(Botrytis cinerea)<br>- suppression          | 100 - 400 mL/<br>100L   | <b>DO NOT</b> apply KleenGrow™ to suppress Botrytis blight and grey mould on plants grown for, and marketed as "cut flowers." |   |  |
| Downy mildew(Peronospora spp.)  | 100 - 400 mL/<br>100L   | <b>DO NOT</b> apply KleenGrow™ to control Downy mildew on plants grown for, and marketed as "cut flowers."                    |   |  |
| Powdery mildew (Sphaerotheca spp.) - suppression                                  | 100 - 400 mL/<br>100L   | <b>DO NOT</b> apply KleenGrow™ to control Powdery mildew on plants grown for, and marketed as "cut flowers."                  |   |  |
| Bacterial blights,<br>spots and soft rots<br>caused by Erwinia<br>spp suppression | 47 mL/ 100L             | No restrictions when used to suppress<br>Bacterial blights, spots and soft rots on<br>all ornamentals grown in greenhouses    |   |  |
| Soil-borne algae<br>Liverworts<br>(Marchantia spp.)                               | 100 - 400 mL/<br>100L   | No restrictions when used as a soil directed spray to control Soil-borne algae and Liverworts.                                | Apply to a maximum spray volume of 1000 L/ha. Application of KleenGrow™ to Liverwort and algae should be as a soil directed spray thoroughly saturating target weed. Apply KleenGrow™ every 14 days. Do not apply more than 6 applications per crop cycle.  |  |

## PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN

Fatal or poisonous if swallowed. May be harmful if absorbed through the skin. May be fatal if inhaled. Avoid inhaling sprays. Corrosive to the eye. Severely irritating to the skin. Do not get in eyes, on skin or on clothing. Protect eyes and skin when handling. When handling this concentrate wear goggles or a face shield, chemical-resistant gloves, long pants, a long-sleeved shirt, and shoes plus socks. For use in greenhouses, workers shall wear chemical resistant coveralls with elastic face hood, designed to accommodate full-face respirator, chemical resistant gloves, rubber boots and a full-face respirator with either a NIOSH approved organic-vapour-removing cartridge with prefilter approved for pesticides or a NIOSH approved canister, approved for pesticides during mixing, loading, application cleanup and repair. Do not allow greenhouse workers to enter area during treatment. Ventilate prior to entry. Do not re-enter treated areas for 12 hours.

**TOXICOLOGICAL INFORMATION:** Note to physician: Probable mucosal damage following ingestion may contraindicate gastric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed.

**FIRST AID:** IF SWALLOWED: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person. IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice. IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**ENVIRONMENTAL PRECAUTIONS** This product is toxic to fish and other aquatic organisms. It is not to be used in circumstances that would cause or allow it to enter lakes, streams, ponds, estuaries, oceans or other waters in con-

travention of federal or provincial regulatory requirements. Do not discharge effluent containing this product into sewer systems without previously notifying the sewage treatment plant authority. The requirements of applicable laws should be determined before using the product.

This product may be toxic to bees and other beneficial insects. May harm bees and other beneficial insects, including those used in greenhouse production. DO NOT apply when bees or other beneficial insects are actively visiting the treatment area.

#### **DISPOSAL:**

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to treatment site.
- 2. Follow provincial instruction for any required additional cleaning of the container prior to its disposal.
- 3. Make the empty container unsuitable for further use.
- 4. Dispose of the container in accordance with provincial requirements.
- 5. For information on the disposal of unused, unwanted product, contact the Provincial Regulatory Agency or the manufacturer. Contact the manufacturer and the Provincial Regulatory Agency in case of a spill, and for clean-up of spills.

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### **READ THE LABEL BEFORE USING**

