### **KLEENGROW**

Product of Canada 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

### **SOLUTION**

### **INDUSTRIAL**

**ACTIVE INGREDIENT:** 

Didecyl dimethyl ammonium chloride 7.5%

REGISTRATION NO. 13148 PEST CONTROL PRODUCTS ACT

**DANGER** 



**POISON** 

CORROSIVE TO EYES. SKIN IRRITANT

### READ THE LABEL BEFORE USING

**NET CONTENTS: litres** 

PACE SOLUTIONS CORP.

1597 Derwent Way DELTA, B.C. V3M 6K8

TOLL FREE: 800-799-6211 www.pacesolutions.com

### **DIRECTIONS FOR USE**

### For Sanitizing and Deodorizing

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

### For Footbath Use

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

GREENHOUSE APPLICATIONS	AMT./ LITRE	ACTIVE QUATERNARY	RINSE REQUIRED
Food contact benches, horticultural equipment	4 - 8 mL	300 - 600 ppm	Yes
Non-food contact Benches, horticultural equipment	4 - 8 mL	300 - 600 ppm	No
Floors, walkways, walls, ceiling	4 - 8 mL	300 - 600 ppm	No
Footbaths	15 ml	1200 ppm	No

### **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.

KLEENGROW<sup>TM</sup> is effective in controlling or suppressing the following diseases and target weeds:

Target Pest	Application Rate	Restrictions	Instructions
Alternaria leaf spot	98 mL/100 L	DO NOT apply	Apply foliar spray to
(Alternaria spp.)		KleenGrow <sup>™</sup> to control	runoff up to a
		Alternaria leaf spot on plants	maximum spray
		grown for, and marketed as	volume of 1000
		"cut flowers."	L/ha.
Botrytis blight and grey	100 – 400 mL/100 L	DO NOT apply	
mould (Botrytis		KleenGrow <sup>™</sup> to suppress	Begin KleenGrow <sup>TM</sup>
cinerea) - suppression		Botrytis blight and grey	applications when
		mould on plants grown for,	conditions are
		and marketed as "cut	favorable for disease
		flowers."	development. Use a
Downy mildew	100 – 400 mL/100 L	DO NOT apply	watering device to
(Peronospora spp.)		KleenGrow <sup>TM</sup> to control	spray the top and
		Downy mildew on plants	bottom of the leaves
		grown for, and marketed as	and stems, avoiding
		"cut flowers."	flowers in full
Powdery mildew	100 – 400 mL/100 L	DO NOT apply	bloom. Apply

Target Pest	Application Rate	Restrictions	Instructions
(Sphaerotheca spp.)		KleenGrow <sup>TM</sup> to suppress	KleenGrow <sup>TM</sup> with a
- suppression		Powdery mildew on plants	direct spray every 14
		grown for, and marketed as	days to prevent the
		"cut flowers."	spread of spores. Do
Bacterial blights, spots	47 mL/100 L	No restrictions when used to	not apply more than
and soft rots caused by		suppress Bacterial blights,	6 applications per
Erwinia spp		spots and soft rots on all	crop cycle.
suppression		ornamentals grown in	
		greenhouses	
Soil-borne algae	100 – 400 mL/100 L	No restrictions when used as	Apply to a
Liverworts (Marchantia		a soil directed spray to	maximum spray
spp.)		control Soil-borne algae and	volume of 1000
		Liverworts.	L/ha.
			Application of
			KleenGrow <sup>TM</sup> to
			Liverwort and algae
			should be as a soil
			directed spray
			thoroughly
			saturating target weed. Apply
			KleenGrow <sup>TM</sup> every
			14 days. Do not
			apply more than 6
			apply more than o
			cycle.
			cycic.

\*\*\*NOTE: KleenGrow<sup>TM</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.

Alstromeria spp.,

Astelia spp

Athyrium niponicum

Buddleia

Campsis radicans

Caryopteris

Coprosma spp

Cordyline spp

Cornus alba,

Euonymus

Gerbera spp

Hebe spp

Hydrangea,

Ilex

Lavatera

Lonicera

Magnolia

Matteuccia struthiopteris

Ophiopogon spp

Oncidium orchids,

Pittosporum,

Potentilla

Rhododendron

Spiraea strathiopteris Thuja pyramidalis

KleenGrow<sup>TM</sup> 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.

# MICROBICIDAL PROPERTIES A.O.A.C. Use-Dilution Confirmation Test

### ORGANISM DILUTION AMOUNT PER LITRE

Clavibacter michiganensis 1:250 4 ml

## 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 contravention 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.

**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.