

STANDARD OPERATION PROCEDURES

PACE KleenGrow



DISEASE CONTROL Use on Ornamental Greenhouse Crops

and in Irrigation Water

PROPAGATION DIP, FOLIAR SPRAY/ DRENCH OR SUBIRRIGATION

Dip or Soak - Pre-planting and Storage: Seed or bulb, bareroots and cutting dips.

- Seed Dip/Soak: Submerge in the solution. Rate and soaking time is based on type of seeds coat and crop. Randomly check germination rate.
- Bulb or Bare-root or Cutting Dip: Submerge in the solution before planting or placing in storage. Monitor ppm of the solution using QAC test strips.

Misting/Hydroponics - Intermittent Injection: Use lower rates, longer intervals, and shorter duration time than your standard settings.

- NFT for hydroponics: Start intermediate injecting 1 to 4 days after placement young plants in channel.
- *Drip Hydroponics:* Start continuous injecting immediately upon setting plan.

Foliar or Subirrigation - Continuous/Intermittent Injection or Spray: Start applying at first watering.

WELL-ROOTED CROPS FOLIAR SPRAY/ DRENCH OR SUBIRRIGATION

Spray/Drench or Drip: Apply using a manual spray, boom, overhead or subirrigation system.

- Manual Spray or Drip: Intermittently apply to crops and continue applying until crops are shipped. Use in the final pre-ship watering.
- Intermittent Injection Flood Floors/Benches: For most bedding plants and perennials 6 fl oz/100 gal every 14 days is adequate.
- Continuous Injection: For most bedding and perennial crops, 2 5 ppm is recommended.

| USE RATES FOR GREENHOUSE & SHADEHOUSE CROPS | | | | | | | |
|---|--------------------|-------------|-------------------|--|-----|-------------------|--|
| Dip or Soak For Propagation | Soak Time | fl oz/gal | ppm | Comment | | | |
| Pre-Treated or Untreated Seeds | 30 sec to 5 min | 0.13 - 1.0 | 75 - 600 | Lower rate/ soaking time for pre-treated seeds | | | |
| Bulbs/ Bare Root Cuttings | 30 sec to 5 min | 0.13 - 0.25 | 75 - 145 | Use prior to planting or storing. | | | |
| Drip, Spray, Drench | Crop | fl oz/gal | fl oz/ 100 gal | mL/L | ppm | Frequency | |
| Propagation: Newly Sown Seeds, Bulbs, Bare-Root or Rooted Cuttings | Bedding/Perennials | 0.06 | 6 | 0.5 | 40 | Every 7 days | |
| | Woody Ornamentals | 0.13 | 13 | 1 | 75 | Every 14 days | |
| Well Rooted - Potted or Hydroponics | Bedding Perennials | 0.13 | 13 | 1 | 75 | Every 7 days | |
| | Woody Ornamentals | 0.25 | 25 | 2 | 145 | Every 14 days | |
| Pre-Ship Spray | All Crops | 0.13 | 13 | 1 | 75 | Prior to Shipping | |

| USE RATES FOR RECIRCULATED IRRIGATION SYSTEMS | | | | | | | |
|---|--------------------------------------|----------|--|---|----------------------------|--|--|
| Application | Inline Dilution fl oz/100 gal ppm | | Diluted Injection-1:100 % Stock Tank Solution | Direct Injection Ratio or Manual Applied Rates | Frequency of Use | | |
| ON CROPS: Overhead or Subirrigation Systems | | | | | | | |
| Continuous Injection | 0.34 - 1.2 | 2 - 7 | 0.03 - 1.0 | 1:37,500 to 1:10,714 | During All Watering Cycles | | |
| | 2.6 - 13 | 15 - 75 | 2.5 - 10 | 1:5000 to 1:937 | Every 7 Days | | |
| Intermittent Injection | 6.0 - 25 | 40 - 145 | 2.0 - 5.0 | 1:2143 to 1:517 | Every 14 Days | | |
| ON CROPS: Water Storage Tank or Reservoir | | | | | | | |
| Initial Dose - Shock Treatment | 2.6 - 3.4 | 15 - 20 | 2.5 - 3.0 | 2.5 - 3 gal / 10,000 gal | 1 - 2 Times Annually | | |
| Maintenance | 2.0 - 2.6 | 10 - 15 | 2.0 - 2.5 | 2 - 2.5 gal / 10,000 gal | Every 14 - 28 day | | |
| Cool Pad Water | | | | | | | |
| Initial Dose - Shock Treatment | 100.0 | 600 | 0 | Concentrated Product | 1 - 2 Times Annually | | |
| Maintenance | 2.0 - 6.0 | 10 - 40 | 2.0 - 5.0 | 2.0 - 6.0 fl oz /100 gal | Every 14 - 28 day | | |
| Irrigation Systems | | | | | | | |
| Shock Treatment Injection | 100.0 | 600 | 0 | Concentrated Product | 1 - 2 Times Annually | | |

PACE KleenGrow is not approved for algae control in California.

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PACE KleenGrow COMPATIBILITY CHART FOR TANK MIXING OR CHEMIGATION

| COMPATIBLE FUNGICIDE/BACTERICIDES | | | | | |
|-----------------------------------|-----------------------------|--------------------|-------------------------------|--|--|
| Product | Active Ingredient | Product | Active Ingredient | | |
| AgriMycin | Streptomycin sulfate | Kaligreen | Potassium bicarbonate | | |
| Adorn | Fluopicolide | Kalmor | Copper Hydroxide | | |
| Aliette | Aluminum tris | Kocide 3000 | Copper Hydroxide | | |
| Alude | Phosphorous acid | Medallion | Fludioxonil | | |
| Areca | Aluminum tris | MilStop | Potassium bicarbonate | | |
| Astun | Isofetamid | Orkestra Intrinsic | Fluxapyroxad + Pyraclostrobin | | |
| Banner MAXX | Propiconazole | Pageant Intrinsic | Boscalid + Pyraclostrobin | | |
| Broadform | Fluopyram + Trifloxystrobin | Palladium | Cyprodinil + Fludioxonil | | |
| Chipco 26019 | Iprodione | Phyton 27 | Copper sulfate pentahydrate | | |
| Camelot O | Copper octanoate | *Plantshield | Trichoderma harzianum | | |
| Decree | Fenhexamid | Postiva | Pydiflumetofen+Difenoconazole | | |
| Eagle 20 EW | Myclobutanil | *Rootshield | Trichoderma harzianum | | |
| Emblem (Spirato) | Flodioxonil | Segovis | Oxathiapiprolin | | |
| Empress | Pyraclostrobin | Segway O | Cyazofamid | | |
| Fame | Fluoxastrobin | **Stature SC | Dimethomorph | | |
| FenStop | Fenamidone | Subdue MAXX | Mefenoxam | | |
| Grotto | Copper octanoate | Terraguard | Triflumizole | | |
| Heritage | Azoxystrobin | | | | |

^{*}Rootshield/PlantShield - Tank mix or chemigation with KleenGrow or UpTake PRO at rates 0.06 fl oz/gal (40 ppm) or lower.

^{**}Stature SC - Test on Bloom

| COMPATIBLE INSECTICIDE/MITICIDE | | | | | |
|---------------------------------|-------------------------|----------------------------|------------------------------|--|--|
| Product | Active Ingredient | Product | Active Ingredient | | |
| Aria | Flonicamid | Judo (Savate) | Spiromesifen | | |
| Altus | Flupyradifurone | Mainspring | Cyantraniliprole | | |
| Avid/Agri-mek | Abamectin | Mavrick Aquaflow | Fluvalinate | | |
| Chlorpyrifos Pro 4 | Chlorpyrifos | Minx2 | Abamectin | | |
| Conserve | Spinosad | Neemix | Azadirachtin | | |
| Decathlon 20 WP | Cyfluthrin | Pylon | Chlorfenapyr | | |
| Discus | Cyfluthrin+lmidacloprid | Pyreth-It (Evergreen 6-60) | Pyrethrin+Piperonyl butoxide | | |
| Endeavor | Pymetrozine | Safari | Dinotefuran | | |
| Entrust | Spinosad | Sultan | Cyflumetofen | | |
| Flagship 25 WP | Thiamethoxam | Talstar | Bifenthrin | | |
| COMPATIBLE HERBICIDES | | COMPATIBLE PGR | | | |
| Product | Active Ingredient | Product | Active Ingredient | | |
| Roundup | Glyphosate | B-Nine/Dazide | Daminozide | | |

Prior to adding KleenGrow to a tank mix or irrigation lines, use jar test to check chemical compatibility and test on crops for physical compatibility.

Always add KleenGrow to a diluted solution and not to the concentrated product.

