ENSURING SUCCESS WITH MAINSPRING GNL

Mainspring® GNL insecticide is a powerful tool that protects ornamental crops from key chewing and sucking pests, such as thrips, whiteflies, aphids, caterpillars, leafminers, leaf-feeding beetles, soft scales and lacebugs. To get the best results with Mainspring GNL, it is important to remember:

**IT’S UNIQUE**

Mainspring GNL contains cyantraniliprole, a novel active ingredient to a recently added chemistry class (IRAC group 28), which makes it a powerful resistance management tool.

Mainspring GNL:
- Works primarily through ingestion
- Delivers exceptional protection when used as part of a preventive pest management strategy
- Offers an alternative to neonicotinoid chemistries
- Is compatible with many biological control agents

**IT’S A SHIELD**

Apply Mainspring GNL as part of a preventive pest management strategy to keep pests out and crops clean!

- Mainspring GNL prevents pest populations from building to damaging levels
- Insects stop feeding shortly after ingestion, which limits damage and disease transmission
- Insect mortality occurs within 2 - 7 days

Mainspring GNL should not be used as a clean-up insecticide. Tank mix with another insecticide if quick knock down of adults is needed.

**IT’S CONVENIENT**

- 4-hour REI (restricted-entry interval)
- No signal word
- Mainspring GNL was registered by the U.S. EPA under its Reduced Risk Program*
- Improved worker safety compared to pyrethroids, organophosphates and carbamates
  - Gloves and coveralls are not required for early entry
- Mainspring GNL has been tested across a wide range of ornamental plant species and has shown excellent plant safety

**IT’S EFFICIENT**

Mainspring GNL offers growers added value and efficiency:
- Systemic control provides extended protection, saving time and labor on repeated applications
  - Drench applications: 5 - 8 weeks of protection
  - Spray applications: 14 - 21 days of protection
  - 4-hour REI is less disruptive to work schedules
- Broad-spectrum control of multiple key pests: thrips, aphids, caterpillars, leafminers, leaf-feeding beetles (adults and larval stage), whiteflies (*Bemisia sp.*), soft scales and lacebugs
- Can be used in integrated crop management programs with biological control agents

**IT’S FLEXIBLE**

Mainspring GNL can be used at many stages of greenhouse and nursery crop production.

**Greenhouse Crops:**
- Apply as a foliar spray during production for crops with growing cycles 8 weeks or less
  - Mainspring GNL prevents pest populations from building to damaging levels
  - Insects stop feeding shortly after ingestion, which limits damage and disease transmission
  - Insect mortality occurs within 2 - 7 days
- Use systemic soil treatments for season-long protection from pests such as soft scales, adelgids, plant bugs, psyllids, leafminers and leaf-feeding beetles

**Nursery Perennial & Woody Crops:**
- Begin foliar applications on two-week intervals as pest pressure is starting
- Drench applications can be made once plants are well rooted for longer residual and broader control across the pest spectrum

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*syngenta*
APPLICATION RECOMMENDATIONS

Recommended foliar rates:
- 4 - 8 fl. oz./100 gal. Apply 2 times on a 14-day interval
- Use as a spray for young plants and ornamentals with crop times less than 8 weeks
- Foliar applications at 16 fl. oz./100 gal. deliver maximum residual control of target pests

Recommended drench rates:
- 8 - 12 fl. oz./100 gal.
- Use as a drench for plants with larger biomass and crop times longer than 8 weeks
- Drench applications should be made once plants have begun to root into their container (2 - 3 weeks after transplant)

Recommended soil treatment rates:
- 0.125 - 0.25 fl. oz. per foot of height or per inch of trunk diameter at breast height (DBH) for large containerized or in-ground grown plant material
- Use soil treatments for season-long protection from difficult to control pests

The more roots present, the more Mainspring GNL will be absorbed and moved up into the plant canopy to provide the protection you need.

CONTROL OF WHITEFLY
(BEMISIA TABACI - BIOTYPE B) ON POINSETTIA

CONTROL OF FOXGLOVE APHID
(AULACORTHUM SOLANI) ON SALVIA

For more information on how to ensure success with the protection of Mainspring GNL, please visit www.GreenCastOnline.com/MainspringGNL.

*A reduced risk pesticide use is defined as one which may reasonably be expected to accomplish one or more of the following: (1) reduces pesticide risks to human health; (2) reduces pesticide risks to non-target organisms; (3) reduces the potential for contamination of valued, environmental resources, or (4) broadens adoption of IPM or makes it more effective. Mainspring GNL qualifies under one or more of the above criteria.