LALGUARD M52 OD

LIQUID

BIOINSECTICIDE

BEST-USE PRACTICES GUIDE

Greenhouse



When used properly, LALGUARD M52 OD can be an effective tool against Spider Mites, Thrips, Whiteflies and Aphids on approved greenhouse vegetable and ornamental crops. Please follow the recommendations and precautions in this guide to promote the effective and safe application of LALGUARD M52 OD on labeled greenhouse crops.

RECOMMENDED APPLICATION CONCENTRATIONS

Apply LALGUARD M52 OD at the **Recommended Concentration** provided in the table below according to its approved crop and pest uses. It is essential to consult your Lallemand Plant Care representative ***before*** using label rates that are higher or lower than the recommended concentrations indicated in the table below.

GREENHOUSE CROP	PEST USE	APPLICATION METHOD	RECOMMENDED CONCENTRATION	LABEL RATE
Cucurbits	Thrips, Whiteflies, Mites	Drench	60 fl oz / 100 gal	40–80 fl oz / 100 gal
		Foliar	20 fl oz / 100 gal	8–64 fl oz / acre
Celery, lettuce, spinach	Thrips, Whiteflies, Mites, Aphids, Psyllids	Drench	60 fl oz/ 100 gal	40–80 fl oz / 100 gal
		Foliar	20 fl oz / 100 gal	8–64 fl oz / acre
Peppers, tomatoes	Thrips, Whiteflies, Mites, Aphids, Psyllids	Drench	60 fl oz/ 100 gal	40–80 fl oz / 100 gal
		Foliar	20 fl oz / 100 gal	8–64 fl. oz. / acre
Strawberry, cranberry, raspberry, blackberry, blueberry	Thrips, Whiteflies, Mites, Aphids, Psyllids, Weevils	Drench	60 fl oz/ 100 gal	40–80 fl. oz. / 100 gal
		Foliar	20 fl oz / 100 gal	8–64 fl. oz / acre
Ornamental plants and grasses	Thrips, Whiteflies, Mites, Weevils	Drench	60 fl oz/ 100 gal	40–80 fl. oz. / 100 gal
		Foliar	20 fl oz / 100 gal	8–32 fl. oz. / 100 gal

APPLICATION CONSIDERATIONS AND PRECAUTIONS

- It is best to begin applying LALGUARD M52 OD foliar sprays when pest populations are low followed by reapplication at 5-10-day intervals, depending on timing of target pests' life cycles and the severity of the infestation.
- For best efficacy against aerial pests, assure that spray coverage is complete on all upper and lower exposed plant surfaces inside and outside of the plant canopy.
- Apply foliar sprays through standard and low-volume greenhouse sprayers using a fine droplet size or smaller. Spray to wet all aerial plant surfaces but *avoid runoff*. DO NOT apply with regular thermal foggers.
- LALGUARD M52 OD can be applied through filters or screens with openings ≥ 120 mesh (125) and at system pressures up to a maximum of 200 psi.
- LALGUARD M52 OD has not been tested on all varieties of listed crops and should be spot tested for plant compatibility on crops and varieties that have not yet been treated with LALGUARD M52. As such, apply LALGUARD M52 OD at recommended concentrations up to 3 times on a small number of plants to test for potential damage before applying to a larger number of plants.
- **Apply foliar sprays when temperature is 60 – 90 °F, relative humidity is 50 – 90% in and around the plant canopy, and spray droplets can dry and evaporate within 1 – 2 hours. DO NOT apply when evaporation times will be longer and during periods of intense overhead sun exposure or extreme heat.**
- **Horticultural oils contained in LALGUARD M52 OD and other products may interfere with or delay plant transpiration and respiration when applied to compromised plants. DO NOT apply on stressed plants, especially during periods of drought or sustained high humidity, or when plants exhibit moisture stress or other physiological disorders.**
- **DO NOT apply on crops which have been or will be treated with foliar sulfur applications.**
- **DO NOT allow direct sprays or over sprays of LALGUARD M52 OD to contact heating components in or directly adjacent to the plant canopy during application unless these heating components are < 95 °F at time of application and until spray has completely dried on plant surfaces.**
- Avoid applications when pollinators are foraging. Apply at least 1 day prior to releases of macrobeneficials and remove or protect banker plants during foliar applications.
- For growing media drenches, apply a minimum of 8 fl oz of drench suspension per square foot of growing medium surface area or per gallon pot volume in advance of target pest's presence in the growing medium and every 4-8 weeks, thereafter, depending on pest pressure. Drenches should be irrigated afterward with enough water to move LALGUARD M52 OD spores into the upper 6 inches of growing medium but not enough to drain through.
- For soil applications, drench a minimum of 8 fl oz of drench suspension per square foot of soil surface or planting bed area. Application should be targeted to move LALGUARD M52 OD into the top 2 inches of soil and thoroughly watered-in after application without causing water to move laterally.
- Storage information: 12 month shelf-life in a dry and cool place ≤68°F. 18 months at 39°F. For optimal performance, use the entire bottle after opening. If not fully used, reseal tightly, store at 39°F, and use within 3 weeks of initial opening.
- Please consult your Lallemand Plant Care representative or LALGUARD M52 OD compatibility tables for more information about compatible application timing of LALGUARD M52 OD with other products and macrobeneficials.

MIXING INSTRUCTIONS AND PRECAUTIONS

- Only mix and apply LALGUARD M52 OD in containers and application equipment (including tanks, tubing, booms, filters and nozzles) that have been washed, rinsed and made free from residues and debris from prior uses.
- Spray preparation:
  - Shake LALGUARD M52 OD container well before using.
  - Fill spray or drench tank with water to 1/2 the desired application volume and begin thorough agitation.
  - Continue agitation throughout mixing and application to build and maintain a homogenous mixture.
  - Slowly add LALGUARD M52 OD to the tank at the recommended volume corresponding to desired application volume. Triple rinse empty LALGUARD M52 OD container with water and add rinse water to mixture. Add enough water to application tank to reach desired application volume.
- **Do not mix more LALGUARD M52 OD than can be applied within 6 hours of mixing.**
- **Do not tank mix LALGUARD M52 OD with fungicides. Please consult the Lallemand Plant Care US website or your representative for information, precautions and recommendations when considering tank mixing with other products. Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures.**

For additional support, contact your Lallemand Plant Care representative, e-mail support@lallemandplantcare.com, or call, toll-free, 1-888-236-7378.