



**LAGUNA™**



**WILBUR-ELLIS®**

Ideas to Grow With®

**[ TAKE CONTROL OF  
POWDERY MILDEW ]**

[ag.wilburellis.com](http://ag.wilburellis.com)





# LAGUNA™

LAGUNA is a premium fungicide providing effective, consistent control of powdery mildew in grapes. LAGUNA offers California growers a reliable and flexible tool in their resistance management arsenal.

LAGUNA is a demethylation inhibitor of sterol biosynthesis (DMI), part of the GROUP 3 class of fungicides. It is the only product on the market offering growers the powdery mildew control of difenoconazole in a value oriented straight-goods formulation. Powdery Mildew control is dependent on resistance management and MOA rotation...LAGUNA gives growers a new tool in their arsenal to alternate their plan of attack.

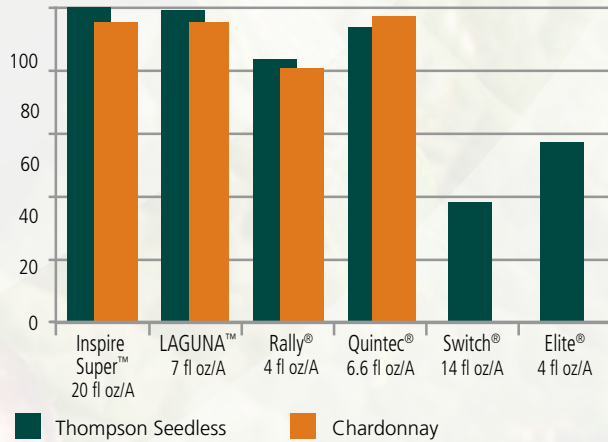
## LAGUNA Benefits:

- Flexible 10-21 day spray intervals and rate structure
- Single Mode of Action allows more rotational options for changing disease pressure or subsequent applications
- Proven track record in years of research and commercial use
- LAGUNA outperforms other FRAC Group 3 fungicides head-to-head for control of powdery mildew
- California testing has shown no phytotoxicity to common *Vitis vinifera* grape varieties. Consult your agronomist for specific variety information.



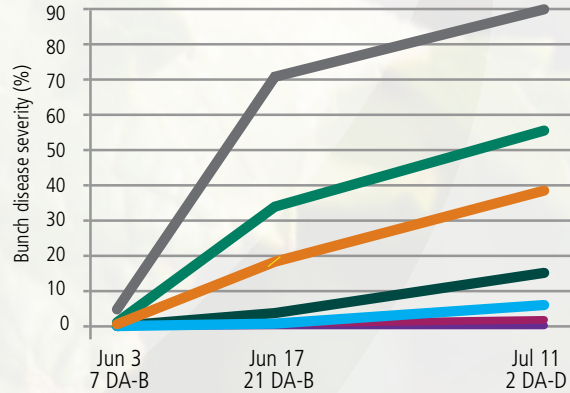
# LAGUNA Performance in Head-to-Head Powdery Mildew Comparison

**% CONTROL (BUNCH DISEASE SEVERITY) AT 21-DAY INTERVAL**



\*4 applications in 2-spray block w/ Flint 2 oz at (C)  
 \*\*3 applications in alternation with Flint 2 oz (B), except Rally (ABC)

**SEVERITY OF BUNCH DISEASE (%) IN THOMPSON SEEDLESS**



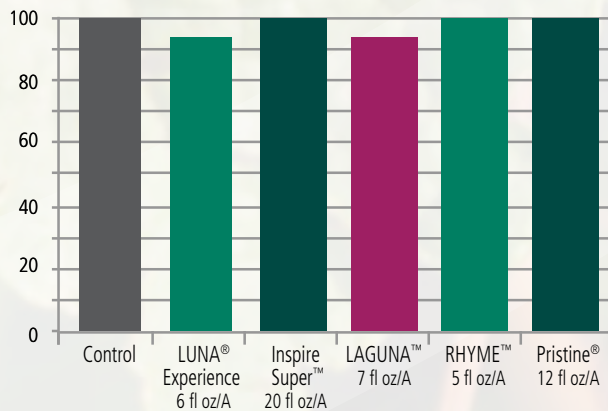
21-day interval 4 apps in 2-spray block program w/ Flint 2 oz (C)

Legend: Check, Switch 14® oz, Quintec® 6.6 oz, Elite® 4 oz, LAGUNA™ 7 oz, Rally® 4 oz, Inspire Super™ 20 oz

# LAGUNA Performance under Severe Powdery Mildew Conditions vs. Competitive Products incl. Premixes

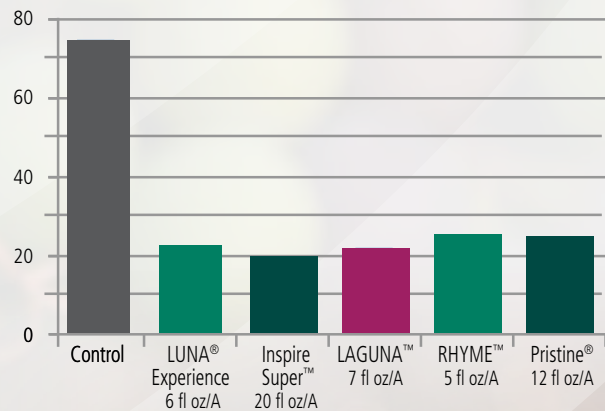
Replicated Trial in Chardonnay and Carignan Varieties

**% DISEASE INCIDENCE**



\*All plots received 4 applications in a 2-spray block with Quintec at 4 oz

**% POWDERY MILDEW DISEASE SEVERITY**



\*All plots received 4 applications in a 2-spray block with Quintec at 4 oz



## ACTIVE INGREDIENT BY WT.

Difenoconazole*	23.2%
OTHER INGREDIENTS**	76.8%
Total	100.00%

\*CAS No. 119446-68-3

\*\*Contains petroleum distillates

Contains 2.08 lb. a.i./gal. of difenoconazole

EPA Reg. No. 100-1262-2935

## GENERAL USE INFORMATION

**LAGUNA** is a broad spectrum fungicide with systemic and curative properties recommended for the control of many important plant diseases. **LAGUNA** may be applied as a foliar spray in alternating spray programs or in tank mixes with other crop protection products. All applications must be made according to the use directions that follow.

## PRODUCT USE INSTRUCTIONS

### ALWAYS READ AND FOLLOW LABEL INSTRUCTIONS

**Application:** Thorough coverage is necessary to provide good disease control. Make up no more spray solution than is needed for application. Avoid spray overlap, as crop injury may occur.

**Efficacy:** Under certain conditions conducive to extended infection periods, use another registered fungicide for additional applications if maximum amount of **LAGUNA** has been used. If resistant isolates to Group 3 fungicides are present, efficacy can be reduced. Under high disease pressure, it is recommended to use the highest rate and shortest interval.

**Crop Tolerance:** Plant tolerance has been found acceptable for all crops on the label, however, not all possible tank-mix combinations have been tested under all conditions. When possible, it is recommended to test the combinations on a small portion of the crop to ensure a phytotoxic response will not occur as a result of application.

**Spray Drift Management:** To avoid spray drift, do not apply when conditions favor drift beyond the target area. The interaction of many equipment and weather related factors determine the potential for spray drift. AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER.

**IPM:** **LAGUNA** should be integrated into an overall disease and pest management strategy (IPM) whenever the use of a fungicide is required. Cultural practices known to reduce disease development should be followed.

Consult your local agricultural authorities for additional IPM strategies established for your area. **LAGUNA** may be used

in State Agricultural Extension advisory (disease forecasting) programs which recommend application timing based on environmental factors favorable for disease development.

## RESISTANCE MANAGEMENT

**LAGUNA** is in the Group 3 class fungicides. The mode of action of **LAGUNA** is as a demethylation inhibitor of sterol biosynthesis (DMI), which disrupts membrane synthesis by blocking demethylation. Fungal pathogens can develop resistance to products with the same mode of action when used repeatedly. Because resistance development cannot be predicted, use of this product should conform to resistance management strategies established for the crop and use area. Consult your local or State agricultural authorities for resistance management strategies that are complementary to those in this label. Resistance management strategies may include rotating and/or tank mixing with products having different modes of action or limiting the total number of applications per season. Wilbur-Ellis Company encourages responsible resistance management to ensure effective long-term control of the fungal diseases on this label. **LAGUNA** should not be alternated or tank mixed with any fungicide to which resistance has already developed.

### SEE LABEL FOR SPECIFIC MIXING AND APPLICATION PROCEDURES.

CROP	TARGET DISEASES	USE RATE fl. oz. product/A (lb. a.i.)	REMARKS
<b>Grapes</b> (except Concord, Concord Seedless, and Thomcord. See Precaution below)	Alternaria rot ( <i>A. alternata</i> )	5 - 7 (0.08 - 0.114)	For powdery mildew, begin at bud break and apply on a 10- to 21-day interval, making no more than 2 sequential applications before alternating to a fungicide with a different mode of action.  For Black rot - begin when shoot length is 1-3 inches and continue on a 10-day interval.  For all other diseases, begin applications prior to disease onset when conditions are conducive for disease. Apply <b>LAGUNA</b> on a 10- to 21-day schedule making no more than 2 sequential applications before alternating to another fungicide with a different mode of action.
	Powdery mildew ( <i>Uncinula necator</i> )		
	Rotbrenner ( <i>Pseudopezizica tracheiphila</i> )		
	Septoria leaf spot ( <i>S. ampelina</i> )		
	Black Rot ( <i>Guignardia bidwellii</i> )		
	Angular leafspot ( <i>Mycosphaerella angulata</i> )		
	Anthracnose ( <i>Elsinoe ampelina</i> )		
Leaf Blight ( <i>Pseudocercospora vitis</i> )			

**PRECAUTION:** On *V. labrusca*, *V. labrusca* hybrids and other non-vinifera hybrids where sensitivity is not known, the use of **LAGUNA** by itself or in tank mixtures with materials that may increase uptake (adjuvants, foliar fertilizers) may result in leaf burning or other phytotoxic effects.

**APPLICATION:** For best results, sufficient water volume must be used to provide thorough coverage. **LAGUNA** can be applied by either ground or aerial application. A minimum of 15 gal./A for ground applications is recommended. For aerial applications a minimum of 10 gal./A of water is recommended.

#### SPECIFIC USE RESTRICTIONS:

- 1) Do not apply more than 28 fl. oz./A of **LAGUNA** per crop (0.46 lb. a.i./A per season).
- 2) Do not apply within 7 days of harvest (7-day PHI).