

# Flute<sup>®</sup>

**FUNGICIDE**



**Powdery mildew control in grapevines  
sounds sweeter with Flute**

Innovation. Quality. Solutions.

# Flute<sup>®</sup> 50 EW

## FUNGICIDE

**Unique chemistry for powdery mildew programs.**

**Flute contains 50 g/L cyflufenamid.**

### Flute has a unique mode of action

Flute<sup>®</sup> 50 EW is the product of choice in Australia for the control of powdery mildew in grapevines, with several years of successful commercial use. With a unique mode of action (GROUP U6), Flute provides extremely effective disease control.

**Flute is now even more flexible and economical to use with a new use rate range of 25 mL to 35 mL/100 L.**

**Check out the AgNova App for calculating rates and spray volumes; search AgNova at your App store.**

### Flute:

- Is highly effective at low use rates.
- Controls powdery mildew strains resistant to other fungicide groups.
- Has translaminar and vapour action which improves control of the disease in dense canopies.
- Is the only fungicide in its mode of action group.
- Is an EW (emulsion, oil in water) formulation for a high level of crop safety.
- Has an excellent environmental profile when used as directed.

### Flute has a versatile withholding period

- Grapes for domestic wine can be treated up to 5 weeks before harvest.
- Grapes for wine intended for export can be treated up to growth stage E-L 31 [berries pea-size].
- When fruit is grown for export (either fresh or dried), growers should consult their peak industry body for the latest information on MRLs and import tolerances.

Applying powdery mildew sprays over the flowering/fruit set period is critical: the absence of sprays over this period can result in significant levels of bunch infections by the middle of February. Two sprays of Flute over flowering and fruit set give excellent control of powdery mildew in grapes.

### Flute has proven performance controlling powdery mildew

Summary of seven trials conducted between 2008 and 2011 in Australia

State	Variety	Bunch severity (% area infected)		
		Unsprayed	Standard	Flute (35 mL/100 L)
SA	Chardonnay	64	0 (Cab)	1
SA	Chardonnay	88	2.4 (Cab)	1
Tas	Riesling	13	0 (Cab)	0
Vic	Chardonnay	51.5	1.4 (Pros)	0.4
WA	Cabernet	30.9	10.3 (Pros)	9.8
Tas	Chardonnay	28	0.2 (Pros)	0.4
Vic	Chardonnay	81	6.6 (Pros)	3.8

Where Cab = Cabrio\* and Pros = Prosper\*

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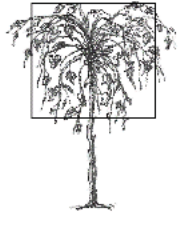
Yarra Valley Grower Trial on Chardonnay, 2013		
Treatments mL/100 L	Mean % infected bunches 29/1/13	Mean % infected bunches 14/2/13
1. Untreated	15.5 a	23.0 a
2. Flute 35 mL	0.0 b	0.0 c
3. Vivando* 20 mL Mycloss* 25 mL	0.0 b	1.0 bc
4. Grower sprayed block	0.2 b	2.0 b

This Yarra Valley grower trial was representative of grower scale trials conducted in five states in the 2012/13 season. In this trial, three sulphur sprays and a Bayfidan\* spray were applied pre-flowering to all four treatments. Treatment 2 (Flute) and 3 (Vivando\* and Mycloss\*) comprised 2 sprays over the flowering / fruit set period. Treatment 4 was the grower's application of Treatment 3.

The results show the importance of powdery mildew sprays over the flowering / fruit set period. The absence of sprays over this period resulted in 23% infected bunches by the middle of February. The results also show the excellent control achieved by two sprays of Flute over flowering and fruit set.

## Directions For Use Table

The following is an extract of the product label and does not constitute the complete directions for use. The product label should be read thoroughly before opening the packaging.

CROPS	DISEASE	RATE	WHP	CRITICAL COMMENTS
Grapevines	Powdery mildew ( <i>Erysiphe necator</i> )	<p><i>Dilute spraying:</i> 25 - 35 mL/100 L water</p> <p><i>Concentrate spraying:</i> Refer to the Mixing/ Application section</p>	5 weeks	<p><b>Apply before first sign of disease or when conditions (varietal and climatic) are conducive to disease development as part of a protectant disease management program.</b></p> <p>Apply one to two applications from E-L 18 (caps changing colour) to E-L 31 (berries pea-size) using the full dilute spray volume matched with the size of the target canopy.</p> <p>Use a spray interval of 7 to 10 days at a rate of 25 mL/100 L and 10 to 21 days at a rate of 35 mL/100 L in a program of effective powdery mildew fungicides to ensure that new growth is protected.</p> <p>Use the shorter intervals in each range under conditions favouring disease infection, and at the start of the season when there has been a heavy carry-over of powdery mildew infection, or during periods of rapid vine growth.</p> <p>Apply by dilute or concentrate spraying equipment. Apply in sufficient water volume to obtain thorough coverage of the crop. The required dilute spray volume will increase and the sprayer setup and operation may also need to be changed, as the crop grows.</p> <div style="display: flex; align-items: flex-start;"> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;"> <p>1 m x 1 m vine canopy (end of row)</p>  </div> <div> <p>As an example, a 1 m x 1 m canopy (refer diagram) with a 3 m row spacing requires a true dilute water volume of around 1000 L/ha when using dilute application. In this case the dose will be 350 mL/ha when using a rate of 35 mL/100 L. For the same canopy, if using concentrate application equipment achieving good coverage applying 500 L/ha, then the concentrate factor is 2X. This means a rate of 70 mL/100 L. The dose will remain at 350 mL/ha. For further advice on application, contact AgNova.</p> </div> </div> <p>Refer to the section on concentrate spraying if low spray volumes are to be used.</p> <p>Apply the same amount of product to the target crop whether applying by dilute or concentrated spray volumes.</p> <p>Do not apply at concentrations greater than 3X.</p> <p>Do not apply more than 2 (two) Flute® 50 EW sprays per season, and follow the CropLife Australia resistance management guidelines.</p>

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### Timing

Apply Flute as part of a protectant fungicide program before disease symptoms are visible.

Apply two consecutive sprays of Flute at an interval of 7-10 days at the 25 mL rate, or 10-21 days at the 35 mL rate.

At the 35 mL rate, under conditions favouring disease infection and rapid crop growth, reduce the interval to 10-14 days; under low pressure conditions and when crop growth rates have slowed, extend the interval to 14-21 days. To optimize performance, apply Flute as two consecutive sprays over the flowering/fruit set stage up to berries pea-size.

### Application

Flute may be applied as a dilute or concentrate spray depending on the application equipment used; refer to the product label for details. Add the required amount of Flute to a partly filled tank and agitate.

Complete filling while agitating.

AgNova has developed an App to make the calculation of rates and spray volumes easier; search AgNova at your App store.

### Fungicide Resistance Strategy

Do not apply more than two Flute applications per season. This is consistent with the CropLife resistance management strategy to reduce the risk of fungicide resistance.

### Compatibility

Flute has demonstrated physical compatibility with a wide range of commonly used insecticides and fungicides, however not all products have yet been tested. For updated information, please refer to [agnova.com.au](http://agnova.com.au)

### Rainfastness

Flute should not be applied if spray irrigation or rainfall is expected within two hours of application.

### Beneficial Safety

Flute was safe to bees, ladybeetles, green lacewing and Trichogramma wasps in Australian trials. This replicates the results of trial work conducted overseas on beneficial insects. Local testing on other beneficial species continues.

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**Data referred to herein were generated using products and rates that were registered at the time. Always read and follow product labels.**

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