



# Unique chemistry for powdery mildew programs

Flute contains 50 g/L cyflufenamid (MOA Group U6)

### Flute has a Unique Mode of Action

Flute® 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 effective disease control.

Flute is flexible and economical to use with a rate range of  $25\ \text{mL}$  to  $35\ \text{mL}/100\ \text{L}$ .

## Flute has a Versatile Withholding Period

- Grapes for domestic wine production 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.

#### Flute:

- · Is highly effective at low use rates.
- Controls powdery mildew strains resistant to other fungicide groups.
- Has translaminar and vapour action which helps to improve control of the disease in dense canopies.
- Is the only fungicide in the U6 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.

Applying powdery mildew sprays over the flowering/fruit set period is essential. Missing sprays over this period can result in significant levels of bunch infection by the middle of February. Two sprays of Flute in a program over flowering and fruit set give excellent control of powdery mildew in grapes.

# **Flute has Proven Performance in Grapevines**

Summary of selected trials conducted between 2013 and 2017 in Australia								
State	Variety	Disease severity (% area infected)						
		Unsprayed	Standard	Flute (25 mL/100 L)	Tissue Assessed			
Willunga, SA	White Frontignac	1.4	0.05	0.0	Bunch			
Pemberton, WA	Cabernet Sauvignon	10.1	0.1	0.0	Bunch			
White Hills, Tas	Riesling	6.8	0.0	0.0	Leaf only			
Woodside, SA	Chardonnay	2.1	0.3	0.0	Bunch			
White Hills, Tas	Chardonnay	2.7	0.0	0.0	Bunch			
Coldstream, Vic	Shiraz	13.6	0.0	0.0	Bunch			



## **Spray Volume Calculator App**

AgNova has designed an app to check and calculate the required full dilute spray volume for a given vine canopy, explain the difference between dilute and concentrate spray volumes, determine the rate and consequent dose.

Search the app store for AgNova or follow these links to download it:



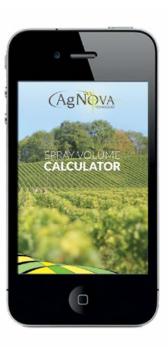
iPhone

https://tinyurl.com/vineyardapp



Android

https://tinyurl.com/vineyardcalc



#### **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.

CROP	DISEASE	RATE	WHP	CRITICAL COMMENTS	
Grapevines	Powdery mildew (Erysiphe necator)	Dilute spraying: 25 - 35 mL/100 L water	5 weeks	Apply before first sign of disease or when conditions (varietal and climatic) are conducive to disease development as part of a disease management program.	
		Concentrate		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.	
		spraying: Refer to the Mixing/ Application section		Use a spray interval of 10 to 14 days in a program of effective powdery mildew fungicides to ensure that new growth is protected. Use the shorter interval during periods of rapid vine growth. A rate of 25 mL/100 L is applicable in most situations. If conditions favour high levels of infection or if powdery mildew levels were significant in the previous season, use the higher rate. A rate of 35 mL/100 L may be used with a spray interval up to 21 days provided disease pressure is low and before rapid vine growth or once vine growth has slowed.	
				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.	
				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.	
				Refer to the section on concentrate spraying if low spray volumes are to be used.	
				Apply the same amount of product to the target crop whether applying by dilute or concentrated spray volumes.	
				Do not apply at concentrations greater than 3X.	
				Do not apply more than 2 (two) Flute® 50 EW Fungicide sprays per season, and follow the CropLife Australia resistance management guidelines.	





#### **Timing**

Apply before first sign of disease or when conditions (varietal and climatic) are conducive to disease development as part of a disease management program.

Apply two consecutive sprays of Flute at an interval of 10 to 14 days in a program of effective powdery mildew fungicides to ensure that new growth is protected. Use the shorter interval during periods of rapid vine growth.

A rate of 25 mL/100 L is applicable in most situations.

If conditions favour high levels of infection or if powdery mildew levels were significant in the previous season, use the higher rate. A rate of 35 mL/100 L may be used with a spray interval up to 21 days provided disease pressure is low and before rapid vine growth or once vine growth has slowed.

To optimise 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.

## **Fungicide Resistance Strategy**

Do not apply more than two Flute applications per season. This is consistent with the CropLife Australia resistance management guidelines 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** 

#### **Rainfastness**

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

# **Safety to Beneficials**

Flute has not shown any adverse effects to bees, green lacewing, ladybeetles, Orius, parasitic wasps (*Aphidius* spp. and *Trichogramma* spp.) and predatory mites (*Persimilis* spp.) in Australia. This confirms the results of trial work conducted overseas on beneficial species.

The information provided herein may include extracts from the product label and does not constitute the complete directions for use. READ THE PRODUCT LABEL THOROUGHLY BEFORE OPENING OR USING FLUTE

AgNova Technologies Pty Ltd ABN 70 097 705 158 PO Box 2069 Box Hill North Victoria 3129 Australia Ph 03 9899 8100 Data referred to herein were generated using products and rates that were registered at the time. Always read and follow product labels. AgNova Technologies Pty Ltd shall not be liable for any consequential or other loss or damage relating to the supply or subsequent handling or use of this product, unless such liability by law cannot be lawfully excluded or limited. All warranties, conditions or rights implied by statute or other law which may be lawfully excluded are so excluded. Where the liability of AgNova Technologies Pty Ltd for breach of any such statutory warranties and conditions cannot be lawfully excluded but may be limited to it re-supplying the product or an equivalent product or the cost of a product or an equivalent product, then the liability of AgNova Technologies Pty Ltd for any breach of such statutory warranty or condition is so limited.

© Copyright AgNova Technologies 2018. FLUGRA 200918

® Flute is a registered trademark of Nippon Soda Co Ltd.

\* Vivando, Mycloss, Bayfidan, Cabrio and Prosper are registered trademarks.



