## **CAUTION** KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING



# syngenta

ACTIVE CONSTITUENTS: 125 g/L DIFENOCONAZOLE 75 g/L PYDIFLUMETOFEN



For the control of various diseases in Fruiting vegetables, Cucurbits, Root vegetables, Celery and Peanuts as per the Directions for Use

Syngenta Australia Pty Ltd Level 1, 2 Lyonpark Road, Macquarie Park NSW 2113

In a transport emergency dial 000, Police or Fire Brigade For specialist advice in an emergency only, call 1800 033 111 (24 hours)

APVMA Approval no. 91192/131168





### DIRECTIONS FOR USE

#### Restraints

For PROFESSIONAL use only

DO NOT apply to nursery crops

DO NOT apply with aircraft, except on potatoes and processing tomatoes

DO NOT apply if heavy rains or storms that are likely to cause environmental runoff are forecast within 3 days

DO NOT irrigate to the point of environmental runoff for at least 3 days after application

#### Spray Drift Restraints:

Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift.

DO NOT allow bystanders to come into contact with the spray cloud.

DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.

DO NOT apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application.

DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.

DO NOT apply by a boom sprayer unless the following requirements are met:

- spray droplets not smaller than a MEDIUM spray droplet size category

- minimum distances between the application site and downwind sensitive areas (see 'Mandatory buffer zones' section of the following table titled 'Buffer zones for boom sprayers') are observed. 1

#### Buffer zones for boom spravers

Application rate		Mandatory buffer zones					
	Boom height above target canopy	Bystander areas	Natural aquatic areas	Pollinator areas	Vegetation areas	Livestock areas	
Up to 1.0 L/ha	0.5 m or lower	0 metres	0 metres	0 metres	0 metres	0 metres	
	1.0 m or lower	0 metres	15 metres	0 metres	0 metres	0 metres	

DO NOT apply by a vertical sprayer unless the following requirements are met:

- spray is not directed above the target canopy

- the outside of the sprayer is turned off when turning at the end of rows and when spraying the outer row on each side of the application site

- for dilute water rates up to the maximum listed for each type of canopy specified, minimum distances between the application site and downwind sensitive areas (see 'Mandatory buffer zones' section of the following table titled 'Buffer zones for vertical sprayers') are observed.

Buffer zones for vertical sprayers						
Application rate		Mandatory buffer zones				
	Type of target canopy	Bystander areas	Natural aquatic areas	Pollinator areas	Vegetation areas	Livestock areas
Up to 1.0 L/ha	All types	0 metres	5 metres	0 metres	0 metres	0 metres

DO NOT apply by aircraft unless the following requirements are met:

- spray droplets not smaller than a MEDIUM spray droplet size category

- for maximum release heights above the target canopy of 3m or 25% of wingspan or 25% of rotor diameter whichever is the greatest, minimum distances between the application site and downwind sensitive areas (see 'Mandatory buffer zones' section of the following table titled 'Buffer zones for aircraft') are observed.

Buffer zones for aircraft						
		Mandatory buffer zones				
Application rate	Type of aircraft	Bystander areas	Natural aquatic areas	Pollinator areas	Vegetation areas	Livestock areas
Up to 1.0 L/ha	Fixed-wing	0 metres	60 metres	0 metres	0 metres	0 metres
	Helicopter	0 metres	50 metres	0 metres	0 metres	0 metres

Crop	Disease	Rate	Critical Comments
Fruiting vegetables including: tomatoes, capsicums, chillies, eggplants Open field and protected cropping	Early blight (target spot) ( <i>Alternaria</i> spp.) Powdery mildew ( <i>Leveillula taurica,</i> <i>Odiopsis</i> spp. and <i>Oidium</i> spp.) Cercospora leaf spot ( <i>Cercospora</i> spp.)	Dilute spraying (trellised crops only): 80-100 mL/100 L Refer to Mixing/Application section for concentrate spraying of trellised crops Non-trellised crops: 800-1000 mL/ha	Apply MIRAVIS <sup>®</sup> Duo fungicide as part of a protectant program. Begin applications when conditions favour disease development and before the onset of symptoms. Allow a minimum of 7-10 days between applications. Use the higher rate under conditions of high disease pressure and/or where a longer period of control is desired. Apply in an appropriate volume of water to thoroughly cover all parts of the crop canopy. In the case of dilute spraying for trellised crops, apply to the point of run-off. The volume of water required to achieve this will depend on the stage of growth and the method of trellising which influences canopy volume. DO NOT apply more than two (2) applications per crop per year. If products containing pydiflumetofen have been applied to the area to be treated in the last 12 months, consult with your local Syngenta Australia representative before using MIRAVIS <sup>®</sup> Duo fungicide. This use pattern is subject to a crop life resistance management strategy. Refer to <u>www.croplife.org.au</u> for more information.
Cucurbits including Asian melons, Bitter melon Chokos, Cucumber, Gherkin, Marrow, Melons, Pumpkin, Squash, Rockmelon, Watermelon, Zucchini Open field and protected cropping	Powdery mildew (Sphaerotheca fuliginea, Erysiphe spp., Podosphora xanthii) Gummy stem blight (Stagonosporopsis cucurbitacearum nee Didymella bryoniae) Alternaria leaf spot (Alternaria spp.) Cercospora leaf spot (Cercospora spp.)	Dilute spraying (trellised crops only): 80-100 mL/100 L Refer to Mixing/Application section for concentrate spraying of trellised crops Non-trellised crops: 800-1000 mL/ha	Apply MIRAVIS <sup>®</sup> Duo fungicide as part of a protectant program. Begin applications when conditions favour disease development and before the onset of symptoms. Allow a minimum of 7-10 days between applications. Use the higher rate under conditions of high disease pressure and/or where a longer period of control is desired. Apply in an appropriate volume of water to thoroughly cover all parts of the crop canopy. In the case of dilute spraying for trellised crops, apply to the point of run-off. The volume of water required to achieve this will depend on the stage of growth and the method of trellising which influences canopy volume. DO NOT apply more than two (2) applications per crop per year. If products containing pydiflumetofen have been applied to the area to be treated in the last 12 months, consult with your local Syngenta Australia representative before using MIRAVIS <sup>®</sup> Duo fungicide. This use pattern is subject to a crop life resistance management strategy. Refer to <u>www.croplife.org.au</u>

Crop	Disease	Rate	Critical Comments
Root vegetables including: Beetroot, Carrots, Celeriac, Parsnips, Potatoes, Radish, Swedes Sweet potato Turnip	Early blight (target spot, leaf spot) ( <i>Alternaria</i> spp.) Powdery mildew ( <i>Erysiphe</i> spp., <i>Oidium</i> spp.)	700-1000 mL/ha	Apply MIRAVIS <sup>®</sup> Duo fungicide as part of a protectant program. Begin applications when conditions favour disease development and before the onset of symptoms. Allow a minimum of 7-10 days between applications. Use the higher rate under conditions of high disease pressure and/or where a longer period of control is desired. Apply in an appropriate volume of water to thoroughly cover all parts of the crop canopy. DO NOT apply more than two (2) sequential applications of MIRAVIS <sup>®</sup> Duo fungicide or other Group 7 fungicides before switching to a fungicide with a different mode of action. DO NOT apply more than two (2) applications per crop per year. If products containing pydiflumetofen have been applied to the area to be treated in the last 12 months, consult with your local Syngenta Australia representative before using MIRAVIS <sup>®</sup> Duo fungicide. This use pattern is subject to a crop life resistance management strategy. Refer to <u>www.croplife.org.au</u> for more information.
Celery	Cercospora leaf spot ( <i>Cercospora apii</i> ) Septoria leaf spot ( <i>Septoria apiicola</i> )	750-1000 mL/ha	Apply MIRAVIS <sup>®</sup> Duo fungicide as part of a protectant program. Begin applications when conditions favour disease development and before the onset of symptoms. Allow a minimum of 7-10 days between applications. Use the higher rate under conditions of high disease pressure and/or where a longer period of control is desired. Apply in an appropriate volume of water to thoroughly cover all parts of the crop canopy. DO NOT apply more than two (2) applications per crop per year. If products containing pydiflumetofen have been applied to the area to be treated in the last 12 months, consult with your local Syngenta Australia representative before using MIRAVIS <sup>®</sup> Duo fungicide.

Crop	Disease	Rate	Critical Comments
Peanuts	Early leaf spot ( <i>Mycosphaerella arachidis</i> ) Late leaf spot ( <i>Mycosphaerella berkeleyi</i> )	300 - 600 mL/ha	Apply MIRAVIS <sup>®</sup> Duo fungicide as part of a protectant program. Begin applications when conditions favour disease development and before the onset of symptoms. Make a further application at 21-28 day intervals. Use the higher rate under conditions of high disease pressure and/or where a longer period of control is desired.
	Net blotch ( <i>Didymella</i> <i>arachidicola</i> ) Rust (suppression only) ( <i>Puccinia arachidis</i> )		DO NOT apply more than two (2) sequential applications of MIRAVIS <sup>®</sup> Duo fungicide or other Group 7 fungicides before switching to a fungicide with a different mode of action. Ensure that Group 7 fungicides do not comprise more than 50% of the fungicide spray program.
			DO NOT apply more than two (2) applications per crop per year. If products containing pydiflumetofen have been applied to the area to be treated in the last 12 months, consult with your local Syngenta Australia representative before using MIRAVIS <sup>®</sup> Duo fungicide.
			This use pattern is subject to a crop life resistance management strategy. Refer to <u>www.croplife.org.au</u> for more information.

# NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION

HARVEST WITHHOLDING PERIOD: Fruiting vegetables, celery, and cucurbits: DO NOT HARVEST FOR 1 DAY AFTER APPLICATION

Potatoes, root, and tuber vegetables: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION

Peanuts: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION

GRAZING WITHHOLDING PERIOD: Potatoes, root, and tuber vegetables: DO NOT GRAZE OR CUT FOR STOCKFOOD AFTER APPLICATION

Peanuts:

DO NOT GRAZE OR CUT FOR STOCKFOOD FOR 14 DAYS AFTER APPLICATION DO NOT FEED PEANUT FORAGE OR FODDER TO LACTATING DAIRY ANIMALS PRODUCING MILK FOR HUMAN CONSUMPTION LIVESTOCK THAT HAS BEEN GRAZED ON OR BEEN FED TREATED PEANUT FODDER OR FORAGE SHOULD BE PLACED ON CLEAN FEED FOR 6 WEEKS PRIOR TO SLAUGHTER

#### **EXPORT OF TREATED PRODUCE**

Crops treated with MIRAVIS<sup>®</sup> Duo fungicide may contain finite (measurable) residues of pydiflumetofen and may pose a risk to trade in situations where no residue tolerance (import tolerance) is established in the importing country or where residues in Australian commodities are likely to exceed a residue tolerance (import tolerance) established in the importing country. For further information, please contact your export organisation or Syngenta Australia for the latest information on MRLs and import tolerances before using MIRAVIS<sup>®</sup> Duo fungicide.

#### **GENERAL INSTRUCTIONS**

MIRAVIS<sup>®</sup> Duo fungicide is a broad spectrum fungicide, recommended for preventative control of foliar and soil borne plant diseases.

#### Mixing

MIRAVIS<sup>®</sup> Duo fungicide is a Suspension Concentrate (SC) formulation that mixes readily with water and is applied as a foliar spray.

Measure the required amount of MIRAVIS<sup>®</sup> Duo fungicide, add to the partly filled spray tank, and then add the remainder of the water. If oil is recommended add this after the MIRAVIS<sup>®</sup> Duo fungicide is well mixed. Wetting agent is not required.

#### Application

#### Vine tomatoes and cucurbits - Ground Application only

Ensure thorough coverage of foliage and/or fruit (or bunches) using equipment delivering a MEDIUM spray quality. Ensure that the correct amount of MIRAVIS<sup>®</sup> Duo fungicide is applied per hectare irrespective of water application rate per hectare. Apply to vine crops by high volume (dilute) sprayer or by concentrate sprayer. Apply the same total amount of product to the target crop whether applying via dilute or concentrate spraying equipment.

#### **Dilute Spraying**

Use a sprayer designed to apply high volumes of water up to the point of runoff and matched to the crop being sprayed. Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient water to cover the crop to the point of runoff. Avoid excessive runoff. The required water volume may be determined by applying different test volumes, using different settings on the sprayer, from industry guidelines or expert advice. Add the amount of product specified in the Direction for Use table for each 100 L of water. Spray to the point of runoff. The required dilute spray volume will change, and the sprayer set up and operation may also need to be changed, as the crop grows.

#### Concentrate Spraying

Use a sprayer designed and set up for concentrate spraying (that is a sprayer which applies water volumes less than those required to reach the point of runoff) and matched to the crop being sprayed. Set up and operate the sprayer to achieve even coverage throughout the crop canopy using your chosen water volume. Determine an appropriate dilute spray volume (see Dilute Spraying) for the crop canopy. This is needed to calculate the concentrate mixing rate. The mixing rate for concentrate spraying can then be calculated in the following way: Example only

- 1. Dilute spray volume as determined above: for example, 1000 L/ha
- 2. Your chosen concentrate spray volume: for example, 500 L/ha
- 3. The concentration factor in this example is:  $2 \times (ie, 1000 \text{ L} \div 500 \text{ L} = 2)$
- 4. If the dilute label rate is 100 mL/100 L, then the concentrate rate becomes 2 x 100, that is 200 mL/ 100 L of concentrate spray.

The chosen spray volume, amount of product per 100 L of water, and the sprayer set up and operation may need to be changed as the crop grows. For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training, and follow industry Best Practices.

#### Ground application – all other crops

Ensure thorough coverage of foliage using equipment delivering a MEDIUM spray quality. A water volume of 200 to 300 L/ha is suggested at the start of the season, increasing to 500 to 600 L/ha in a vigorous crop at full canopy.

#### **Potatoes ONLY - Chemigation application**

Use with drive systems which provide uniform water distribution. DO NOT use end guns because of non-uniform application. Apply this product only through centre pivot irrigation systems. DO NOT apply this product through any other type of irrigation system. Crop injury, lack of effectiveness or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. DO NOT connect an irrigation system use for pesticide application to a public water system. Chemical tank and injector systems should be thoroughly cleaned and flushed with clean water prior to use. Good agitation should be maintained in the tank during the entire application period. When applying MIRAVIS® Duo fungicide through irrigation equipment, use the lowest obtainable water volume while maintaining uniform distribution. Using water, determine the injection pump output when operated at normal line pressure. Determine the amount of MIRAVIS® Duo fungicide required to treat the area covered by the irrigation system. Add the required amount of MIRAVIS® Duo fungicide and sufficient water to meet the injection time requirements for the solution tank. Make sure the system is fully charged with water before starting injection of the MIRAVIS<sup>®</sup> Duo fungicide system. Stop injection equipment after treatment is completed. Continue to operate the irrigation system until the MIRAVIS® Duo fungicide solution has cleared the last sprinkler head and then stop irrigation to minimise run-off. Appropriate valves and back-flow preventers need to be used to ensure that there is no backflow of product. As with ground and aerial application DO NOT apply when wind speed favours drift beyond the area intended for treatment. Further information should be sought from your local Syngenta Australia representative prior to first use.

#### Aerial application – potatoes and processing tomatoes only

Ensure thorough coverage of foliage using equipment delivering a MEDIUM spray quality. A water volume of 20 to 60 L/ha is suggested. If targeting a crop with a dense canopy the higher water volume maybe required to achieve control. Length of protection may be reduced in bulky crops where good coverage is hard to achieve, and where there is significant growth dilution of the fungicide.

#### Compatibility

MIRAVIS<sup>®</sup> Duo fungicide is compatible with a range of commonly used fungicides, insecticides, and fertilisers. Always consult your Syngenta Australia representative before mixing MIRAVIS<sup>®</sup> Duo fungicide with other products. As formulations of other manufacturer's products are beyond the control of Syngenta, and the quality of water may vary with location, all mixtures should be tested prior to mixing commercial quantities.

#### Fungicide Resistance Warning GROUP 3 7 FUNGICIDE

MIRAVIS<sup>®</sup> Duo fungicide is a combination of a succinate dehydrogenase and a triazole fungicide. For fungicide resistance management, MIRAVIS<sup>®</sup> Duo fungicide is both a Group 3 and a Group 7 fungicide. Some naturally occurring individual fungi resistant to MIRAVIS<sup>®</sup> Duo fungicide and other Group 3 and/or Group 7 fungicides may exist through normal genetic variability in any fungal population. The resistant individuals can eventually dominate the fungi population if these fungicides are used repeatedly. These resistant fungi will not be controlled by MIRAVIS<sup>®</sup> Duo fungicide and other Group 3 and/or Group 7 fungicides, thus resulting in a reduction in efficacy. Since the occurrence of resistant fungi is difficult to detect prior to use, Syngenta Australia Pty Ltd accepts no liability for any losses that may result from the failure of MIRAVIS<sup>®</sup> Duo fungicide to control resistant fungi.

MIRAVIS<sup>®</sup> Duo fungicide may be subject to specific resistance management strategies. To help prevent the development of resistance to MIRAVIS<sup>®</sup> Duo fungicide, use MIRAVIS<sup>®</sup> Duo fungicide in accordance with the current CropLife Australia fungicide resistance management strategy.

#### **PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT**

Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.

#### STORAGE AND DISPOSAL

Store in the closed original container in a cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight. Triple or preferably pressure rinse containers before disposal. Add rinsing solution to treatment tank. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation, and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

#### SAFETY DIRECTIONS

Harmful if swallowed. May irritate the eyes. Avoid contact with eyes. When opening the container, preparing, and using the spray wear:

- cotton overalls (or equivalent clothing) buttoned to the neck and wrist
- elbow-length chemical resistant gloves.

Wash hands after use. After each day's use wash gloves and contaminated clothing.

#### FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone 131 126.

#### SAFETY DATA SHEET

If additional hazard information is required refer to the Safety Data Sheet. For a copy visit our website at <u>www.syngenta.com.au</u> or use the QR code on this label.

#### DISCLAIMER

This product complies with the specifications in its statutory registration. Implied terms and warranties are excluded. Syngenta's liability for breach of the express or any non-excludable implied warranty is limited to product replacement or purchase price refund. The purchaser must determine suitability for intended purpose and take all proper precautions in the handling, storage and use of the product including those on the label and/or safety data sheet failing which Syngenta shall have no liability.

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Batch No.	
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