# READ SAFETY DIRECTIONS BEFORE OPENING OR USING



# For the control of grey mould (*Botrytis cinerea*) including fungal strains resistant to dicarboximides and benzimidazoles, in grapevines, strawberries and tolerant ornamental species

# **GENERAL INSTRUCTIONS**

## **Fungicide Resistance Warning**

Scala 400 SC Fungicide is a member of the anilinopyrimidine group of fungicides. For fungicide resistance management Scala is a Group I fungicide.

Some naturally occurring individual fungi resistant to Scala and other Group I 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 Scala and other Group I fungicides, thus resulting in a reduction in efficacy and possible yield loss. Since the occurrence of resistant fungi is difficult to detect prior to use, Bayer CropScience Pty Ltd accepts no liability for any losses that may result from the failure of Scala to control resistant fungi.

### **Resistance Management Strategy**

Scala is a Group I fungicide. Avcare resistance management strategies restrict the use of sprays containing Group I fungicides. Sprays of fungicides from other chemical groups may also be restricted by Avcare resistance management strategies and/or specific product label requirements and these should be considered when planning a grey mould control program.

For Scala and other Group I fungicides;

### Grapevines

- If three or fewer grey mould sprays are applied in a season, use only one spray per season containing a Group I fungicide. If four or more grey mould sprays are applied use no more than two sprays containing Group I fungicides. Alternate applications of Group I containing fungicides with effective fungicides from other fungicide groups.
- 2. Late season fungicide treatments should be applied before grey mould infection reaches unacceptably high levels in the vineyard.
- 3. DO NOT apply more than two consecutive sprays from the same fungicide group, including from the end of one season to the next.

### Strawberries

- 1. Apply a program of protectant fungicides during flowering. Only use Scala if conditions favour disease development during this period.
- 2. Avoid applying more than two successive sprays of Scala (or other Group I fungicides), including from the end of one season to the next.
- 3. If three or fewer grey mould fungicide sprays are applied per crop, use only one Scala (or other Group I fungicide) spray. If four to six sprays are applied per crop use a maximum of two sprays of Scala (or other Group I fungicides). If seven or more sprays are applied per crop use a maximum of three Scala (or other Group I fungicide) sprays.

### **Ornamentals**

- 1. Do not apply more than two successive sprays of Scala (or other Group I fungicides), including from the end of one season to the next.
- If three or fewer grey mould fungicide sprays are applied per crop, use only one Scala (or other Group I fungicide) spray. If four to six sprays are applied per crop use a maximum of two sprays of Scala (or other Group I fungicides). If seven or more sprays are applied per crop use a maximum of three Scala (or other Group I fungicide) sprays.

### Export of Treated Produce

Growers should note that suitable MRLs or import tolerances may not be established in all markets for fruit treated with Scala 400 SC Fungicide. If you are growing strawberries for export or grapes for export (either fresh, dried or as wine), please check with Bayer CropScience Pty Ltd or the Australian Wine Research Institute (in the case of wine), for the latest information on MRLs and import tolerances BEFORE using Scala.

# Mixing

Add the required amount of Scala directly to the half-filled spray tank with agitators in motion, or with constant mechanical agitation.

Complete filling of spray tank under constant agitation. Do not allow the spray mixture to remain in the tank for long periods without agitation.

# Application

Equipment

NOT to be applied by aircraft.

<u>Grapevines</u> - Scala can be applied using suitable dilute or concentrate ground application equipment. Equipment should produce a spray that ensures penetration of the canopy and coverage of the flowers or bunches.

<u>Strawberries</u> - Scala can be applied using suitable high or low volume application equipment. Equipment should produce a spray that ensures penetration of the canopy and coverage of the flowers and/or fruit.

<u>Ornamentals</u> - Scala can be applied using suitable high volume ground or hand-held application equipment. Equipment should produce a spray that ensures penetration of the canopy and coverage of the foliage and flowers.

## Water Volume

# <u>Grapevines</u> - Refer to Special Instructions for Grapevines.

<u>Strawberries</u> - Use water volumes of 350 to 1000 L/ha depending on equipment and crop stage to ensure adequate penetration of the canopy and coverage of foliage and flowers and/or fruit.

<u>Ornamentals</u> – Apply Scala to the point of 'run-off' to ensure adequate penetration of the canopy and coverage of the foliage and flowers.

**IMPORTANT** - Apply only to field-grown ornamentals or to plants grown in **well-ventilated** plastic tunnel houses or glass houses. Application in enclosed areas with poor ventilation, and high humidity, may cause phytotoxicity to flowers and foliage of some ornamental species.

# **Special Instructions for Grapevines**

# Dilute spraying

- Use a sprayer designed to apply high spray volumes, up to the point of run-off and matched to the crop being sprayed.
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient spray volume to cover the crop to the point of run-off. Avoid excessive run-off.
- The required spray volume to achieve point of run-off may be determined by applying different test volumes, using different settings on the sprayer, or from industry guidelines or other expert advice.
- Add the amount of product specified in the Directions for Use table for each 100 L of water. However, if greater than 1000 L/ha is required to achieve point of run-off, adjust the amount of product added for each 100 L of water to ensure no more than 2.0 L/ha product is applied. Spray to the point of run-off.
- The required dilute spray volume to achieve point of run-off 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 spray volumes less than those required to reach the point of run-off) and matched to the crop being sprayed.
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy using your chosen spray
  volume.
- Based on your chosen spray volume per hectare, and the amount of product specified in the Direction for Use table for each hectare, calculate the mixing rate for concentrate spraying.
- The chosen spray volume 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.

## Compatibility

For use on grapevines, Scala is compatible with most commonly used fungicides and insecticides including; *Bacillus thuringiensis*, dimethoate, Bayfidan<sup>®</sup>, Blue Shield<sup>®</sup> DF, Lorsban<sup>®</sup> WP, mancozeb, Mycloss<sup>®</sup>, Oxydul<sup>®</sup>, ProGibb<sup>®</sup>, Ridomil<sup>®</sup> Plus, Spin<sup>®</sup> Flo and wettable sulphur. Do not mix Scala with products exhibiting alkaline reaction, including lime sulphur and Bordeaux mixtures. When mixing Scala with Bayfidan, use butyl gloves. Mixtures with Foli-R-Fos<sup>®</sup> may cause leaf damage.

# PRECAUTIONS

# **Re-entry Period**

Do not allow entry into treated areas until the spray deposits have dried. When prior entry is necessary, wear cotton overalls buttoned to the neck and wrist and elbow-length PVC gloves. Clothing must be laundered after each day's use.

# PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or the used containers.

# **DRIFT WARNING**

DO NOT apply under weather conditions or from spraying equipment which could be expected to cause spray to drift onto adjacent crops, crop lands, pasture or livestock.

# STORAGE AND DISPOSAL (5 and 10 L containers)

# Keep out of reach of children.

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 rinsings to spray 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 bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

# STORAGE AND DISPOSAL (60 L refillable container)

## Keep out of reach of children.

Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. Empty container by pumping through the dry-break connection system. Do not attempt to unscrew the valve or breach the locked filling point. Do not contaminate the container with water or other foreign material. Ensure that the coupler, pump, meter and hoses are disconnected, triple rinsed with clean water and drained after each use. Contact point of purchase to arrange return or collection of empty containers. This container remains the property of Bayer CropScience Pty Ltd.

## SAFETY DIRECTIONS

Will irritate the skin. Avoid contact with skin. When opening the container and preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length PVC 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 (telephone 13 11 26).

## MATERIAL SAFETY DATA SHEET

Additional information is listed in the Material Safety Data Sheet, which can be obtained from www.bayercropscience.com.au.

## **EXCLUSION OF LIABILITY**

This product must be used strictly as directed, and in accordance with all instructions appearing on the label and in other reference material. So far as it is lawfully able to do so, Bayer CropScience Pty Ltd accepts no liability or responsibility for loss or damage arising from failure to follow such directions and instructions.

Bayfidan<sup>®</sup>, Blue Shield<sup>®</sup>, Scala<sup>®</sup> and Spin<sup>®</sup> and are Registered Trademarks of Bayer

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FOR 24 HOUR SPECIALIST ADVICE IN EMERGENCY ONLY PHONE 1800 033 111

## DIRECTIONS FOR USE Restraints

DO NOT apply to ornamentals without prior tolerance testing of each species/variety (refer to Critical Comments) DO NOT apply to ornamentals grown in poorly ventilated glasshouses or plastic tunnel houses

			ated glasshouses or plastic tunnel houses
CROP	DISEASE	RATE Dilute Sproving	CRITICAL COMMENTS
Grapevines	Grey mould	Dilute Spraying 200 mL/100 L water	Applications should be made at the critical timings for botrytis control.
	(Botrytis cinerea)	(maximum 2.0 L/ha) Concentrate	<b>Note:</b> This use is subject to an Avcare Resistance Management Strategy. Refer to 'Resistance Management Strategy – Grapevines' under General Instructions for guidelines.
		spraying Flowering*	Apply by dilute or concentrate spraying equipment. Use a sufficient
		1.5 to 2.0 L/ha	amount of water and/or adequate equipment to ensure penetration of the canopy and coverage of the flowers or bunches.
		Post-flowering 2.0 L/ha	May be used with a non-ionic wetting agent.
		Refer to the Application section in GENERAL	* For concentrate spraying at flowering use the high rate on dense canopies or when conditions favour disease.
Ornamentals (subject to a tolerance test)	Grey mould ( <i>Botrytis</i> <i>cinerea</i> )	INSTRUCTIONS 200 mL/ 100 L water	<ul> <li>IMPORTANT – Scala may damage flowers and foliage of some species/varieties of ornamentals under certain conditions, particularly where application occurs in enclosed areas with poor ventilation and high humidity.</li> <li>1. A test should be conducted on a small number of plants to demonstrate tolerance, prior to large scale use. Plant growth stage and environmental conditions should be similar for the test and any subsequent large scale use (see point 2 below).</li> <li>2. Apply only to field-grown ornamentals or to plants grown in well-ventilated plastic tunnel houses or glass houses.</li> </ul>
			Apply Scala when conditions favour disease development and repeat at 7 to 10 day intervals alternating with a fungicide of a different chemical group. Use the shorter interval when disease pressure is high.
			<b>Note:</b> This use is subject to an Avcare Resistance Management Strategy, which governs the <b>maximum number of applications</b> per season. Refer to 'Resistance Management Strategy – Ornamentals' under General Instructions for guidelines.
			Apply Scala to the point of 'run-off' ensuring adequate penetration of the plant canopy and coverage of the leaves and flowers.
			A non-ionic wetting agent is not generally required with Scala, but may be used provided it is included with Scala in a tolerance test (refer point 1 above).
Strawberries	Grey mould ( <i>Botrytis</i> <i>cinerea</i> )	2.0 L/ha	Apply Scala during flowering when conditions favour disease development. Repeat at 7 to 10 day intervals alternating with a fungicide of a different chemical group. Use the shorter application interval when disease pressure is high.
			<b>Note:</b> This use is subject to an Avcare Resistance Management Strategy, which governs the <b>maximum number of applications</b> per season. Refer to 'Resistance Management Strategy – Strawberries' under General Instructions for guidelines.
			Use water volumes of 350 to 1000 L/ha depending on equipment and crop stage to ensure adequate penetration of the canopy and coverage of foliage and flowers and/or fruit. May be used with a non-ionic wetting agent.

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

## WITHHOLDING PERIOD

Strawberries - DO NOT HARVEST FOR 1 DAY AFTER APPLICATION. Grapes - DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.