

# Fungicide **Penkiler™** EC

**Controls black spot (apple scab and pear scab)  
of apples and pears, powdery mildew of apples  
and grapes and ring spot of brussels sprouts**

**ACTIVE INGREDIENT: % BY WT**

<b>PENCONAZOLE</b> .....	<b>10.0%</b>
<b>OTHER INGREDIENTS:</b> .....	<b>90.0%</b>
<b>TOTAL:</b> .....	<b>100.0%</b>

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

**See Inside for Additional Precautionary Statements and Directions for Use**



**CROWNBRIDGE**

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## DIRECTIONS FOR USE

Crop	Disease	Rate	Critical Comments
<b>Tree and Vine Crops</b>			
<b>Apples</b>	Suppression of primary infection and control of secondary infections of Powdery Mildew ( <i>Podosphaera leucotricha</i> )	Dilute Spraying 20 or 25 mL/100 L water  <b>Concentrate Spraying</b> Refer to the Application section	Apply by dilute or concentrate spraying equipment. Apply the same amount of product to the target crop whether applying this product by dilute or concentrate spraying methods. Apply 10 days after spurburst at approximately the pink stage (late September/early October). Repeat 4 to 5 times at 10 to 14 day intervals. susceptible varieties may need further sprays. Apply no more than 8 applications of PENKILER per season. <b>Dilute Spraying:</b> Use the higher rate for spraying of trees heavily infected with Powdery Mildew or under conditions most favourable for the disease. <b>Concentrate Spraying:</b> Use rates towards the higher end of the range on heavily infected trees and when conditions are favourable to mildew development. Care should be taken at the ends of rows, on headlands or at other places where a tree might receive more than the normal dose of fungicide as rates higher than recommended may cause damage to fruit and reduce fruit size.
<b>Apples, Pears</b>	Protective and curative control of Apple Scab or Black Spot ( <i>Venturia inaequalis</i> ) and Pear Scab ( <i>Venturia pirina</i> )	Dilute Spraying 25 mL/100 L water plus full recommended rate (tank mix) of a registered protectant Scab fungicide  <b>Concentrate Spraying</b> Refer to the Application section	Apply by dilute or concentrate spraying equipment. Apply the same amount of product to the target crop whether applying this product by dilute or concentrate spraying methods. Commence spraying at green tip with an approved fungicide, then apply a tank mixture of PENKILER plus registered protectant Scab fungicide at spurburst. Repeat applications at 7 to 10 day intervals until the end of October, then apply at 14 to 21 day intervals as required, depending on weather conditions and disease incidence. When conditions are likely to have produced an infection period for Apple or Pear Scab or when spore warning service indicates that an infection period has occurred, apply the tank mixture of PENKILER plus registered protectant Scab fungicide within 4 days to achieve a curative result. Apply no more than 8 applications of PENKILER per season. Care should be taken at the ends of rows, on headlands or at other places where a tree might receive more than the normal dose of fungicide as rates higher than recommended may cause damage to fruit and reduce fruit size.
<b>Grapes</b>	Powdery Mildew ( <i>Uncinula necator</i> )	Dilute Spraying 12.5 mL/100 L water  <b>Concentrate Spraying</b> Refer to the Application section	Apply by dilute or concentrate spraying equipment. Apply the same amount of product to the target crop whether applying this product by dilute or concentrate spraying methods. Apply before the development of disease when shoots are approximately 20 cm long. Apply 2 further treatments at 14 to 21 day intervals. Apply no more than 3 applications of PENKILER per season. DO NOT apply to established Powdery Mildew infections. Use a registered fungicide with a different mode of action if further applications are required.

Crop	Disease	Rate	Critical Comments
<b>Vegetable Crop</b>			
<b>Brussels Sprouts</b>	Ring Spot ( <i>Mycosphaerella brassicicola</i> )	Dilute Spraying 25 mL/100 L water plus a mancozeb product at 150 g/100 L water  <b>Concentrate Spraying</b> 250 mL/ha plus a mancozeb product at 1.7 kg/ha	Apply at the first sign of disease development. Make repeat applications at 10 to 14 day intervals during periods that are conducive to disease development. Apply no more than 6 applications of PENKILER per season.

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

#### **WITHHOLDING PERIODS**

**Apples, Pears, Grapes:**

**DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION**

**Brussels Sprouts:**

**DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION**

#### **GENERAL INSTRUCTIONS**

##### **Mixing**

Add the required amount of product directly to the spray tank and mix well.

##### **Application**

Apply by high volume (dilute) sprayer or by concentrate sprayer.

##### **Application in Tree and Vine Crops**

**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* above) 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 2000 L/ha
2. Your chosen concentrate spray volume: for example 500 L/ha
3. The concentration factor in this example is: 4 x (ie, 2000 L ÷ 500 L = 4)
4. If the dilute label rate is 25 mL/100 L, then the concentrate rate becomes 4 x 25, that is 100 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.

## Fungicide Resistance Warning

GROUP	3	FUNGICIDE
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PENKILER 100 EC Systemic Fungicide is a member of the DMI group of fungicides. For fungicide resistance management PENKILER is a Group 3 fungicide. Some naturally occurring individual fungi resistant to PENKILER and other Group 3 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 PENKILER and other Group 3 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, Crownbridge Management L.P. accepts no liability for any losses that may result from the failure of PENKILER to control resistant fungi.

## PRECAUTION

### Re-entry Period

DO NOT enter treated area until spray has dried

## PROTECTION OF LIVESTOCK

Low hazard to bees. May be applied to plants at any time.

## PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Medium toxicity to fish and aquatic invertebrates. DO NOT contaminate streams, rivers or waterways with the product or used containers.

## STORAGE AND DISPOSAL (1 and 5 L pack sizes only)

Store in closed original container in a dry, well ventilated place as cool as possible out of direct sunlight. Triple or preferably pressure rinse empty containers before disposal. Add rinsings to the spray tank. DO NOT dispose of undiluted chemicals on site. If recycling replace cap, and return clean containers to a recycler or designated collection point. If not recycling break, crush, puncture or 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.

## SAFETY DIRECTIONS

**Harmful if swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. DO NOT inhale spray mist.**

**When preparing spray wear:**

- cotton overalls buttoned to the neck and wrist
- washable hat
- elbow-length PVC gloves
- face shield or goggles

**If product on skin, immediately wash area with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use wash, wash gloves, face shield or goggles and contaminated clothing.**

## DISCLAIMER

This product complies with the specifications in its statutory registration. Implied terms and warranties are excluded. The company'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 Crownbridge Management L.P. shall have no liability.