



# DuPont™ Kocide® Opti fungicide

## Technical Information

### Active Constituent:

300 g/kg COPPER (Cu) present as cupric hydroxide

### Pack Sizes:

5 kg



### CAUTION

**KEEP OUT OF REACH OF CHILDREN**

**READ SAFETY DIRECTIONS BEFORE OPENING OR USING**

A fine dry flowable fungicide for the control of Downy mildew in Grapes as indicated in the Directions for use table

### SAFETY DIRECTIONS

May irritate the eyes and skin. Avoid contact with eyes and skin. Wash hands after use.

### FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

### SAFETY DATA SHEET

For further information refer to the Safety Data Sheet that can be obtained from [www.cropprotection.dupont.com.au](http://www.cropprotection.dupont.com.au)

### GENERAL INSTRUCTIONS

DuPont™ Kocide® Opti is a protectant fungicide. Applications should begin prior to any sign of disease. Complete spray coverage is essential to assure optimum performance from Kocide® Opti fungicide.

### FUNGICIDE RESISTANCE WARNING



DuPont™ Kocide® Opti fungicide is a member of the Inorganic group of fungicides. For resistance management the product is a Group M1 fungicide.

Some naturally occurring individual fungi resistant to Group M1 fungicides may exist through normal genetic variability in any fungal population. The resistant individuals can eventually dominate the fungal population if these fungicides are used repeatedly. These resistant fungi will not be controlled this product or other Group M1 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, DuPont accepts no liability for any losses that may result from the failure of this product to control resistant fungi.

### Mixing Instructions:

Fill the spray vat with good quality water. Remove top strainer from spray vat. With the agitation system operating, pour the required quantity of Kocide® Opti into the spray vat in a steady stream. **DO NOT** attempt to pre-mix Kocide® Opti in water before adding to the spray vat. If other pesticides are being used, fully mix the Kocide® Opti in the spray tank before adding other products. Always add and mix the Kocide® Opti first. Sprays containing Kocide® Opti should be used within 3 hours of preparation and they should be agitated continuously during this period.

### APPLICATION

#### Dilute Spraying

- Use a sprayer designed to apply high volumes of water 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 water to cover the crop to the point of run-off. Avoid excessive run-off.
- The required 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 Directions for Use table for each 100 L of water. Spray to the point of run-off.
- The required dilute spray volume will change and the sprayer set up and operation may also need to be changed, as the crop grows.
- Always apply sufficient water to cover the crop to the point of run-off, otherwise underdosing will occur and disease control may be inadequate.

#### 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 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 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 as determined above: For example 1,500 L/ha
2. Your chosen concentrate spray volume: For example 500 L/ha  
The concentration factor in this example is 3X (i.e.  $1,500 \text{ L} \div 500 \text{ L} = 3$ )
3. If the dilute label rate is 150 g/100 L, then the concentrate rate becomes  $3 \times 150$ , that is 450 g/100 L of concentrate spray.
4. 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 technical information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training, and follow Industry Best Practices.

#### WETTING AGENTS

The addition of a wetting agent is required when Kocide® Opti is applied as a concentrate spray or by aircraft. Add a wetting agent at label rates when suitable for these purposes, irrespective of the spray volume applied.

#### APPLICATION BY AIRCRAFT

Apply in a minimum of 20 L of water per hectare. May be applied with hydraulic nozzles or rotary atomisers operated to produce droplets with a V.M.D. of around 150 microns. Avoid application in calm or very windy conditions or when temperature and humidity cause rapid drying. To ensure good spray coverage, applications should ideally be made in a light crosswind.

#### COMPATIBILITY

DuPont™ Kocide® Opti is compatible with most

insecticides/ pyrethroids, dormant spraying oils, mancozeb, ziram, wettable sulphur and urea. Mixtures with more than one of the above products are not recommended. Such mixtures may be ineffective or may cause serious damage. DuPont™ Kocide® Opti may **NOT** be compatible with some foliar fertilisers and a test should be conducted before use. Always add Kocide® Opti to the spray solution and dissolve before other products are added.

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

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

#### STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight.

Single rinse before disposal. Add rinsings to spray tank.

**DO NOT** dispose of undiluted chemicals on site. Puncture and bury empty bags 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 bags and product should not be burnt.

**IN A MEDICAL EMERGENCY CALL  
1800 674 415 All hours**

#### NOTICE TO BUYER

To the extent permitted by the Competition and Consumer Act (2010) or any relevant legislation of any State or Territory (the "Legislation") all conditions and warranties and statutory or other rights of action, whether arising in contract or tort or whether due to the negligence of DuPont or Seller, which buyer or any other user may have against DuPont or Seller are hereby excluded provided however that any rights of the buyer pursuant to non excludable conditions or warranties of the Legislation are expressly preserved. DuPont hereby gives notice to buyer and other users that to the extent permitted by the Legislation it will not accept responsibility for any indirect or consequential loss of whatsoever nature arising from the storage, handling or use of this Product. Where permitted by the Legislation DuPont's liability shall in all circumstances be limited to the replacement of the product, or a refund of the purchase price paid therefor.

The Product must be used and applied strictly in accordance with the label instructions and other directions for use. It is impossible to eliminate all risks associated with the use of this product. Such risks may arise from factors such as weather conditions, soil factors, off target movement, unconventional technique, presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of DuPont or the Seller. Buyer accepts these risks.

Harmful if swallowed. Harmful if inhaled. Causes serious eye irritation. Avoid breathing mist/spray. **DO NOT** eat, drink, or smoke when using this product. Wear protective gloves, clothing, eye protection, and face protection.

APMVA Approval Number: 63216/0709

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**DIRECTIONS FOR USE****RESTRAINTS:**

**DO NOT** apply when temperatures exceed 35°C.

**DO NOT** apply when slow drying conditions prevail.

**DO NOT** apply to copper-shy crops or cultivars.

**DO NOT** apply if it is likely to rain before the spray is dry.

**DO NOT** apply to wet crops.

**DO NOT** apply in spray solutions having a pH of less than 6.5 as phytotoxicity may occur.

**ALL STATES**

All rates are for dilute spraying. For concentrate spraying rates, refer to the Mixing/Application section. If using concentrate application, apply the same total amount of product to the target crop.

CROP	DISEASE	DILUTE SPRAYING RATE	CRITICAL COMMENTS
Grapes	Downy mildew ( <i>Plasmopara viticola</i> )	80 to 115 g/100L	Apply when shoots are 10 cm long and repeat at 10 to 14 day intervals while weather conditions favour infection. Use the higher rate when conditions are highly favourable for infection.  Leaf damage may occur on 'copper-shy' varieties. Apply as a dilute or concentrate spray.  <b>DO NOT</b> use a concentration factor greater than 3X. For concentrate application use a minimum spray volume of 250 L per hectare.

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

**WITHHOLDING PERIOD:**

**DO NOT HARVEST FOR 1 DAY AFTER APPLICATION.**

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