

# POISON

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

TITAN

# Copper Plus

## Systemic Fungicide

ACTIVE CONSTITUENTS: 350 g/kg COPPER (Cu)  
present as COPPER OXYCHLORIDE  
150 g/kg METALAXYL

GROUP **4 M1** FUNGICIDE



Controls Downy Mildew on grapevines, and phytophthora Trunk Canker and Root Rot of macadamia nuts as per the Directions for Use.

**IMPORTANT: READ THOROUGHLY BEFORE OPENING OR USING THIS PRODUCT.**

APVMA Approval No.: 67854/56967

Contents: 2.5 kg (5 x 500 g water soluble bags),  
7.5 kg (15 x 500 g water soluble bags)



**TITAN AG Pty Ltd**

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IN A TRANSPORT EMERGENCY

**DIAL 000**

POLICE OR FIRE BRIGADE

TRANSPORT AND HANDLING  
NOT A DANGEROUS GOOD  
ACCORDING TO THE AUSTRALIAN  
DANGEROUS GOODS (ADG) CODE  
FOR TRANSPORT BY ROAD AND RAIL.

**POISON**

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

**TITAN**

# **Copper Plus**

## **Systemic Fungicide**

**ACTIVE CONSTITUENTS: 350 g/kg COPPER (Cu)  
present as COPPER OXYCHLORIDE  
150 g/kg METALAXYL**

**NOT TO BE SOLD SEPARATELY  
BEFORE USE  
READ ALL DIRECTIONS ON THE OUTER PACK**

**WATER SOLUBLE PACKAGING – KEEP DRY**

**NET CONTENTS: 500 G**

APVMA Approval No.: 67854/56967



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**DIRECTIONS FOR USE**

CROP	DISEASE CONTROLLED	STATE	APPLICATION RATE			WHP	CRITICAL COMMENTS
			HIGH VOLUME APPLICATION	LOW VOLUME OR AIRCRAFT APPLICATION	TRUNK SPRAY AND SOIL DRENCH		
Grapevines	Downy Mildew ( <i>Plasmopara viticola</i> )	NSW (Riverina – MIA only), VIC, TAS, SA, WA only	150 g per 100 litres of water	<b>Before Flowering</b> 1 to 1.5 kg per hectare depending on severity of the disease <b>After Flowering</b> 1.5 kg per hectare		7 days	<p>Apply by dilute or concentrate spraying equipment.</p> <p><b>Apply the same amount of product to the target crop whether applying this product by dilute or concentrate spraying methods.</b></p> <p><b>This use is subject to an AVCARE antiresistance strategy.</b></p> <p>Use in a protectant programme commencing before disease occurs. Limit the use of Group 4 fungicides to periods when conditions favour disease development.</p> <p><b>Protective Treatment</b></p> <p>Commence spraying when the grapevine shoots are approximately 20 cm (200 mm) long and continue spraying at 7 to 21 day intervals, using the shorter interval under prolonged humid and wet conditions. (See tank mix recommendations below.)</p> <p><b>Post Infection (curative) Treatment</b></p> <p>After flowering and when conditions favour Downy Mildew development (prolonged humid and wet conditions) apply before the first sign of oil spots or as soon as possible after the infection period. (See tank mix recommendations below.) Apply further sprays as required at 7 to 21 day intervals. DO NOT apply more than 2 consecutive sprays of a Group 4 product. Resume the program of protectant sprays. Apply a maximum of 4 TITAN Copper Plus Systemic Fungicide sprays per season. DO NOT spray grapevines in Queensland when grapes are flowering. Minor phytotoxic reactions of some varieties of grapes may occur under certain conditions.</p> <p><b>For High Volume Spraying</b></p> <p>Use a minimum of 500 litres mixture per hectare before flowering, increasing volume to a minimum of 1000 litres per hectare when vines are in full foliage. Use the tank mix when prolonged humid and wet conditions continue for more than 7 days after previous TITAN Copper Plus Systemic Fungicide application.</p>
		QLD, NSW (except Riverina – MIA only)	150 g per 100 litres of water	1.5 kg per hectare			
		NSW, VIC, TAS, SA only	150 g plus 200 g of copper oxychloride per 100 litres of water	1.5 kg plus 2 kg of copper oxychloride per hectare			
Macadamia Nuts (Queensland Nut) – Field treatment of plantations	<i>Phytophthora</i> Trunk Canker & Root Rot	QLD, NSW only			Trunk Spray and Soil Drench Application 25 g per litre. Apply 1 to 5 litres of drench per tree depending on tree size.	28 days	<p>Before treatment clear all weed growth from under the tree. Use the highest volume for large trees. Apply to the affected trunk and limbs, and as a soil drench to approximately 1 square metre around the base of the tree. Apply at the beginning of the summer wet season and again 8 to 12 weeks later. It is essential that good management practices including proper weed control, fertilisation and irrigation (where applicable) be followed to allow satisfactory response to the disease control achieved with TITAN Copper Plus Systemic Fungicide.</p>

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

**WITHHOLDING PERIODS:**

**GRAPES: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.**

**MACADAMIA NUTS: DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION.**



## GENERAL INSTRUCTIONS

TITAN Copper Plus Systemic Fungicide is a fungicide combining both systemic and curative properties of metalaxyl with the protective properties of copper oxychloride.

TITAN Copper Plus Systemic Fungicide should be applied as a protective fungicide before Downy Mildew disease occurs. However if infection has already occurred TITAN Copper Plus Systemic Fungicide should be applied as soon as possible after the infection period and preferably before oil-spots appear, to obtain optimum control of Downy Mildew.

## FUNGICIDE RESISTANCE WARNING

TITAN Copper Plus Systemic Fungicide is a combination of a Phenylamide and a Multi-site Activity Fungicide. For fungicide resistance management TITAN Copper Plus Systemic Fungicide is both a Group 4 and a Group M1 fungicide. Some naturally occurring individual fungi resistant to TITAN Copper Plus Systemic Fungicide and other Group 4 and/or Group M1 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 TITAN Copper Plus Systemic Fungicide and other Group 4 and/or 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, TITAN AG Pty Ltd accepts no liability for any losses that may result from the failure of TITAN Copper Plus Systemic Fungicide to control resistant fungi.

## MIXING

TITAN Copper Plus Systemic Fungicide is a wettable powder formulation packed in water soluble packaging. The water soluble bags dissolve easily in water.

DO NOT excessively handle water soluble bags or expose to moisture.

DO NOT touch bags with wet hands. Return unused bags to a primary pack. For mixing adhere to the following recommendations.

1. Partially fill the spray tank with water.
2. Throw in the required number of water soluble bags (or premix bags in bucket and add slurry to spray tank).
3. Ensure agitation system is fully engaged. Ensure bag does not enter filter system.
4. Top up with correct volume of water. Bag should be completely dissolved before spraying commences. Continue agitation to ensure TITAN Copper Plus Systemic Fungicide is in suspension during spraying.
5. DO NOT store prepared spray solution, when spray solutions have been allowed to stand in the spray tank thoroughly re-agitate before using.

## APPLICATION

### Application in tree and vine crops

**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 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 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.

### Concentrate Spraying:

Use a sprayer designed and set up for the 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 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 250 L/ha.
3. The concentration factor in this example is:  
 $4 \times$  (ie  $1000 \text{ L} \div 250 \text{ L} = 4$ ).
4. If the dilute label rate is 225 g/100 L, then the concentrate rate becomes  $4 \times 225$ , that is 900 g/100 L of concentrate spraying.

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.

**While spraying:** Continue agitation during spraying. Agitate vigorously from the bottom of the spray tank if material is left to stand.

Knapsack sprayers: Pre-mix product before adding to the spray tank.

Pour the pre-mix into the partly filled tank, adding remaining water and stir vigorously.

## RE-ENTRY PERIOD

DO NOT re-enter treated areas until spray has dried.

## COMPATIBILITY

AXIOM PLUS is compatible with Supracide\* 400, Tilt\* 250 EC and some formulations of azinphos-methyl, chlorpyrifos, carbaryl, methyl parathion, dimethoate, dicofol, wettable sulphur, zineb. It is not compatible with Ziram.

## PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate ponds, waterways and drains 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. Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. 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.

## SAFETY DIRECTIONS

Harmful if swallowed. May irritate the eyes and skin. Avoid contact with eyes and skin. DO NOT inhale dust or spray mist. When opening the container and preparing spray wear elbow-length PVC gloves, disposable dust face mask covering mouth and nose. Wash hands after use. After each day's use wash gloves.

## FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.

## MATERIAL SAFETY DATA SHEET

Additional information is listed in the material safety data sheet (MSDS). A material safety data sheet for TITAN Copper Plus Systemic Fungicide is available from TITAN AG Pty Ltd on request. Call Customer Service on (02) 9999 6655 or visit [www.titanag.com.au](http://www.titanag.com.au)

**CONDITIONS OF SALE:** TITAN AG Pty Ltd shall not be liable for any loss injury damage or death whether consequential or otherwise whatsoever or howsoever arising whether through negligence or otherwise in connection with the sale supply use or application of this product. The supply of this product is on the express condition that the purchaser does not rely on TITAN AG's skill or judgment in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of TITAN AG Pty Ltd has any authority to add to or alter these conditions.

\* Other registered trademarks

BATCH NO:

DATE OF MANUFACTURE:

