# WARNING KEEP OUT OF REACH OF CHILDREN



# ORIUS® FUNGICIDE

GROUP 3 FUNGICIDE

A systemic fungicide for disease control in cereals, ryegrass seed crops, peas and onions

READ THE ATTACHED BOOKLET COMPLETELY BEFORE MIXING OR APPLYING

### **Active Ingredient:**

Contains 250 g/L TEBUCONAZOLE in the form of an oil in water emulsion

ADAMA New Zealand Limited Level 1, 93 Bolt Road Tahunanui, Nelson 7011 PO Box 1799, Nelson 7040 New Zealand Telephone 03 543 8275 www.adama.com

**NET CONTENTS** 

1 L, 5 L, 10 L



#### REFER TO BOOKLET FOR FULL LABEL INSTRUCTIONS.

#### HAZARD CLASSIFICATIONS: 6.1E, 6.4A, 6.9B, 9.1A





#### **PCBU RESPONSIBILITES**

A PCBU with management or control of work using this substance must ensure that every worker who uses, handles, manufactures, or stores this hazardous substance (including hazardous waste) is, before the worker is allowed to carry out or supervise work involving those substances, provided with adequate information, training and instruction. This includes the use of personal protective equipment to be used to minimise risks to the health and safety of workers when carrying out work using this substance.

#### **QUALIFICATIONS REQUIRED FOR APPLICATION OF CLASS 9 SUBSTANCES**

Anyone who mixes, loads, or applies this product, either by air or ground based methods, is required to be suitably qualified, or must receive guidance and, if required, assistance from a suitably qualified person. Refer to Schedule 10 of the Hazardous Substances (Hazardous Property Controls) notice 2017 for a list of suitable qualifications.

#### **RECORD KEEPING**

Where 3 L or more of the substance is applied within 24 hours, in a place where the substance is likely to enter air or water and leave the application area, a PCBU with management or control of the substance must ensure that a written record is kept of each application of the substance. Refer to Part 4 Clause 48 of the Hazardous Substances (Hazardous Property Controls) notice 2017 for details of information that must be recorded.

#### **WARNING**

May be harmful if swallowed, in contact with skin or inhaled.

Causes eye irritation.

May cause damage to organs from prolonged or repeated oral exposure.

#### **ECOTOXICITY**

**Very toxic to aquatic life with long lasting effects.** Do not spray onto or into water. Avoid contamination of any water supply with product or empty container.

#### HANDLING PRECAUTIONS

Keep out of reach of children.

Do not eat, drink or smoke while using.

Do not breathe spray mist or vapours.

Wash exposed skin thoroughly after handling.

#### **EQUIPMENT**

A PCBU with management or control of work using this substance must ensure that equipment used to handle this substance retains the substance, without leakage, at all of the temperatures and pressures at which the equipment is to be used; and dispenses or applies the substance, without leakage, at a rate and in a manner that the equipment is designed for. The PCBU must ensure that the equipment is accompanied by documentation that is readily available and readily understandable about the use and maintenance of the equipment.

#### STORAGE

Store in the original, unopened container in a cool, dry place, out of direct sunlight and away from stockfeed or foodstuffs.

There are requirements when storing this product in a workplace, relating to labelling, safety data sheets, stationary container systems, separation distances, secondary containment, emergency response plans, and signage; and in a place other than a workplace, relating to stationary container systems, separation distances, emergency response plans, secondary containment, and signage.

Secondary containment and emergency response plans are required where greater than 100 L of this product are stored. Refer to the product SDS for further information.

#### **SHELF LIFE**

When stored appropriately this product should show no significant degradation for two years from the date of manufacture. Contact your supplier for further information about the use of any product that is older than this.

#### PERSONAL PROTECTION

When mixing or applying wear appropriate protective clothing including cotton overalls buttoned to the neck and wrist, eye protection, impervious, elbow-length gloves and boots. Wash hands, arms and face with soap and

water before meals and after work. Wash protective clothing after use.

#### **SPILLAGE**

Exclude all bystanders from the vicinity of the spill and prevent material from entering waterways. Wear appropriate protective clothing as in the personal protection section of this label to clean up spills. Absorb spills with an inert material (such as vermiculite, earth, sand or synthetic absorbent substance) and place in waste containers. Wash area with water and alkaline detergent. Then absorb any remaining liquid with further inert material. Dispose of the waste safely in an approved landfill.

#### **DISPOSAL**

**Container Disposal -** Triple rinse empty container and add rinsate to spray tank. Submit clean empty container to an Agrecovery<sup>®</sup> depot for recycling. Alternatively, puncture and bury in a suitable landfill. Avoid contamination of any water supply with product or empty container.

**Product Disposal -** Dispose of this product only by using according to the label, or through the Agrecovery<sup>®</sup> Chemical Recovery service or other approved facility.

#### **FIRST AID**

If medical advice, is needed, have product container or label at hand.

For advice, or if you feel unwell, contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately.

IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.

IF ON SKIN: Call a POISON CENTRE or doctor if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy

to do. Continue rinsing. If eye irritation persists, get medical attention. **IF INHALED:** Call a POISON CENTRE or doctor if you feel unwell.

#### **CONDITIONS OF SALE**

ADAMA New Zealand Limited will not accept any responsibility whatsoever and howsoever arising and whether for consequential loss or otherwise in connection with the supply of these goods other than the responsibility for the merchantable quality of the goods and such responsibilities mandatorily imposed by the Statutes applicable to the sale and supply of these goods. To the extent allowed by such Statutes the liability of ADAMA New Zealand Limited is limited to the replacement of the goods or (at the option of ADAMA New Zealand Limited) the refund of the price paid and is conditional upon a claim being made in writing and where possible sufficient part of the goods to enable proper examination being returned to ADAMA New Zealand Limited within thirty days of delivery.



Registered to and distributed by: ADAMA New Zealand Limited Level 1, 93 Bolt Road Tahunanui, Nelson 7011 PO Box 1799, Nelson 7040 New Zealand Telephone 03 543 8275 www.adama.com

Registered pursuant to the ACVM Act 1997, No. P7274 See www.foodsafety.govt.nz for registration conditions

Approved pursuant to the HSNO Act 1996, Approval No. HSR000751 See www.epa.govt.nz for approval controls

Orius is a registered trademark of an ADAMA Group Company.



#### **EMERGENCY RESPONSE**

(All hours)
Ring from anywhere in New Zealand
0800 734 607

In a Transport Emergency Phone 111 Police or Fire

Batch Number:
Date of Manufacture:

Bar code to be inserted

# WARNING KEEP OUT OF REACH OF CHILDREN



# ORIUS® FUNGICIDE

GROUP 3 FUNGICIDE

A systemic fungicide for disease control in cereals, ryegrass seed crops, peas and onions

READ THIS BOOKLET COMPLETELY BEFORE MIXING OR APPLYING

### **Active Ingredient:**

Contains 250 g/L TEBUCONAZOLE in the form of an oil in water emulsion

ADAMA New Zealand Limited Level 1, 93 Bolt Road Tahunanui, Nelson 7011 PO Box 1799, Nelson 7040 New Zealand Telephone 03 543 8275 www.adama.com

**NET CONTENTS** 

1 L, 5 L, 10 L



#### READ THIS BOOKLET COMPLETELY BEFORE MIXING OR APPLYING.

#### HAZARD CLASSIFICATIONS: 6.1E, 6.4A, 6.9B, 9.1A





#### **PCBU RESPONSIBILITES**

A PCBU with management or control of work using this substance must ensure that every worker who uses, handles, manufactures, or stores this hazardous substance (including hazardous waste) is, before the worker is allowed to carry out or supervise work involving those substances, provided with adequate information, training and instruction. This includes the use of personal protective equipment to be used to minimise risks to the health and safety of workers when carrying out work using this substance.

#### **QUALIFICATIONS REQUIRED FOR APPLICATION OF CLASS 9 SUBSTANCES**

Anyone who mixes, loads, or applies this product, either by air or ground based methods, is required to be suitably qualified, or must receive guidance and, if required, assistance from a suitably qualified person. Refer to Schedule 10 of the Hazardous Substances (Hazardous Property Controls) notice 2017 for a list of suitable qualifications.

#### **RECORD KEEPING**

Where 3 L or more of the substance is applied within 24 hours, in a place where the substance is likely to enter air or water and leave the application area, a PCBU with management or control of the substance must ensure that a written record is kept of each application of the substance. *Refer to Part 4 Clause 48 of the Hazardous Substances (Hazardous Property Controls) notice 2017 for details of information that must be recorded.* 

#### WARNING

May be harmful if swallowed, in contact with skin or inhaled.

Causes eye irritation.

May cause damage to organs from prolonged or repeated oral exposure.

#### **FCOTOXICITY**

**Very toxic to aquatic life with long lasting effects.** Do not spray onto or into water. Avoid contamination of any water supply with product or empty container.

#### HANDLING PRECAUTIONS

Keep out of reach of children.

Do not eat, drink or smoke while using.

Do not breathe spray mist or vapours.

Wash exposed skin thoroughly after handling.

#### **EQUIPMENT**

A PCBU with management or control of work using this substance must ensure that equipment used to handle this substance retains the substance, without leakage, at all of the temperatures and pressures at which the equipment is to be used; and dispenses or applies the substance, without leakage, at a rate and in a manner that the equipment is designed for. The PCBU must ensure that the equipment is accompanied by documentation that is readily available and readily understandable about the use and maintenance of the equipment.

#### **STORAGE**

Store in the original, unopened container in a cool, dry place, out of direct sunlight and away from stockfeed or foodstuffs.

There are requirements when storing this product in a workplace, relating to labelling, safety data sheets, stationary container systems, separation distances, secondary containment, emergency response plans, and signage; and in a place other than a workplace, relating to stationary container systems, separation distances, emergency response plans, secondary containment, and signage.

Secondary containment and emergency response plans are required where greater than 100 L of this product are stored. Refer to the product SDS for further information.

#### **SHELF LIFE**

When stored appropriately this product should show no significant degradation for two years from the date of manufacture. Contact your supplier for further information about the use of any product that is older than this.

#### PERSONAL PROTECTION

When mixing or applying wear appropriate protective clothing including cotton overalls buttoned to the neck and wrist, eye protection, impervious, elbow-length gloves and boots. Wash hands, arms and face with soap and water before meals and after work. Wash protective clothing after use.

#### **SPILLAGE**

Exclude all bystanders from the vicinity of the spill and prevent material from entering waterways. Wear appropriate protective clothing as in the personal protection section of this label to clean up spills. Absorb spills with an inert material (such as vermiculite, earth, sand or synthetic absorbent substance) and place in waste containers. Wash area with water and alkaline detergent. Then absorb any remaining liquid with further inert material. Dispose of the waste safely in an approved landfill.

#### **DISPOSAL**

**Container Disposal -** Triple rinse empty container and add rinsate to spray tank. Submit clean empty container to an Agrecovery<sup>®</sup> depot for recycling. Alternatively, puncture and bury in a suitable landfill. Avoid contamination of any water supply with product or empty container.

**Product Disposal -** Dispose of this product only by using according to the label, or through the Agrecovery<sup>®</sup> Chemical Recovery service or other approved facility.

#### **FIRST AID**

If medical advice, is needed have product container or label at hand.

For advice, or if you feel unwell, contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately.

**IF SWALLOWED:** Call a POISON CENTRE or doctor if you feel unwell.

IF ON SKIN: Call a POISON CENTRE or doctor if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy

to do. Continue rinsing. If eye irritation persists, get medical attention.

IF INHALED: Call a POISON CENTRE or doctor if you feel unwell.

#### **SAFETY DATA SHEET**

A Safety Data Sheet for this product is available from ADAMA New Zealand Limited on request. Call 03 543 8275.

#### PRODUCT INFORMATION

ORIUS FUNGICIDE is a DMI fungicide with eradicant and protectant activity against certain diseases in cereals, peas and ryegrass seed crops, and white rot in onions. It is best used as a protectant and applied at first sign of disease symptoms. Activity will last from 2-4 weeks depending on disease incidence and severity.

#### **DIRECTIONS FOR USE**

## TAKE ALL REASONABLE STEPS TO ENSURE THAT THE SUBSTANCE DOES NOT CAUSE ANY SIGNIFICANT ADVERSE EFFECTS TO THE ENVIRONMENT BEYOND THE APPLICATION AREA.

It is an offence to use this product on animals.

CROP	DISEASE	RATE	CRITICAL COMMENTS
Barley	Leaf scald, net blotch, spot blotch, Ovularia leaf spot, leaf rust, ear disease complex	750 mL/ha in a minimum of 200 L water	Apply at first appearance of disease. A further application may be necessary 3-4 weeks later if disease pressure remains high.
Wheat	Glume blotch, leaf rust stripe rust, speckled leaf blotch	750 mL/ha in a minimum of 200 L water	Apply as a preventative spray at ear emergence especially during cool, moist conditions, which favour spread of disease.
			Apply at first appearance of disease. A further application may be necessary 3-4 weeks later if disease pressure remains high.
Oats	Crown rust	750 mL/ha in a	Apply as preventative spray on susceptible

CROP	DISEASE	RATE	CRITICAL COMMENTS
		minimum of 200 L water	cultivars and at first sign of disease on less susceptible ones.
Peas	Powdery mildew	250 mL/ha in a minimum of 200 L water	Apply as a preventative spray at flowering or at first sign of disease. If conditions that favour disease persist, a further application 14 days later may be necessary.
Onions	White rot	1.5 L/ha in a minimum of 1000 L water	Make the first application 6-8 weeks after sowing and follow with two further applications at 3-4 week intervals.
Ryegrass seed crops	Leaf rust, stem rust	750 mL/ha in a minimum of 200 L water	For best control on susceptible cultivars apply as a preventative spray after closing up for seed and repeat at 3-4 week intervals while disease pressure remains high.

It is an offence for users of this product to cause residues exceeding the relevant MRL in the Food Notice: Maximum Residue Levels for Agricultural Compounds.

#### **WITHHOLDING PERIODS:**

Cereals: 49 days
Onions: 35 days
Peas: 14 days
Ryegrass seed crops: 30 days

#### **MIXING**

Add the required quantity of ORIUS FUNGICIDE to spray tank partly filled with water and maintain gentle agitation through filling and spraying.

#### **COMPATIBILITY**

ORIUS FUNGICIDE can be tank-mixed with most commonly used fungicides, herbicides and insecticides. Where water has a high pH or water containing calcium salts cannot be avoided, the addition of a pH buffer is recommended to reduce chemical deactivation and hydrolysis.

#### **APPLICATION**

#### **Ground Application:**

Use a minimum of 200 L of water per hectare. For onions use a minimum of 1000 L of water per hectare. **Aerial Application:** 

Use a minimum of 50 L of water per hectare.

Use higher water volumes in dense or advanced crops, especially under dry weather conditions. ORIUS FUNGICIDE may cause yellow leaf spotting to some durum wheats, especially Tara, when applied after head emergence.

#### **RAINFALL**

Do not spray if rain is expected within 1 hour of spraying.

#### **RESISTANCE MANAGEMENT:**

ORIUS FUNGICIDE contains the GROUP 3 DMI fungicide, tebuconazole. Do not use another product containing a fungicide in the same group in conjunction with ORIUS FUNGICIDE, and alternate with fungicides from a different group. Strictly adhere to the application rate and timing listed in the directions for use. Apply a maximum of three DMI fungicides per crop at full recommended label rates. Exceeding the maximum number of applications per season will increase the risk of resistance development.

#### Booklet

Wherever practical, apply ORIUS FUNGICIDE in mixture with an effective dose of a fungicide from a different cross-resistance group. Apply preventatively when disease levels are low, but disease risk is high. Where ORIUS FUNGICIDE is used to control more than one pathogen in a crop the maximum numbers of applications allowed per season apply to the whole crop, not to each individual disease.

#### **CONDITIONS OF SALE**

ADAMA New Zealand Limited will not accept any responsibility whatsoever and howsoever arising and whether for consequential loss or otherwise in connection with the supply of these goods other than the responsibility for the merchantable quality of the goods and such responsibilities mandatorily imposed by the Statutes applicable to the sale and supply of these goods. To the extent allowed by such Statutes the liability of ADAMA New Zealand Limited is limited to the replacement of the goods or (at the option of ADAMA New Zealand Limited) the refund of the price paid and is conditional upon a claim being made in writing and where possible sufficient part of the goods to enable proper examination being returned to ADAMA New Zealand Limited within thirty days of delivery.



Registered to and distributed by: ADAMA New Zealand Limited Level 1, 93 Bolt Road Tahunanui, Nelson 7011 PO Box 1799, Nelson 7040 New Zealand Telephone 03 543 8275 www.adama.com

Registered pursuant to the ACVM Act 1997, No. P7274 See www.foodsafety.govt.nz for registration conditions

Approved pursuant to the HSNO Act 1996, Approval No. HSR000751 See www.epa.govt.nz for approval controls

Orius is a registered trademark of an ADAMA Group Company.