

**DANGER**  
**KEEP OUT OF REACH OF CHILDREN**  
**ECOTOXIC**



# CHIEF<sup>®</sup> FUNGICIDE

GROUP **1** FUNGICIDE

***A broad spectrum fungicide for control of a range of diseases of grass seed and selected fruit, vegetable and cereal crops and for control of the causal organism (*Pithomyces chartarum*) of facial eczema***

**READ THE ATTACHED BOOKLET COMPLETELY BEFORE MIXING OR APPLYING**

**Active ingredient:**

Contains 500 g/L CARBENDAZIM in the form of a suspension concentrate

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  
**5 L, 10 L,  
20 L**

**ADAMA**

**REFER TO BOOKLET FOR FULL LABEL INSTRUCTIONS.  
SHAKE OR STIR WELL BEFORE USE**

**HAZARD CLASSIFICATIONS: 6.6A, 6.8A, 6.9B, 9.1A, 9.2B**



**TOXIC - CHRONIC**



**ECOTOXIC**

**PCBU RESPONSIBILITIES**

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 kg 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.

**TOXICITY**

**DANGER**

**May cause genetic defects.**

**May damage fertility or the unborn child.**

**WARNING**

**May cause damage to organs through prolonged or repeated exposure.**

**ECOTOXICITY**

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

**Toxic to the soil environment.**

**HANDLING PRECAUTIONS**

Keep out of reach of children.

Do not eat, drink or smoke while using.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breath spray mist or vapours.

Use personal protective equipment as required.

**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 locked up 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, impervious, elbow-length gloves. Remove protective clothing and wash hands, arms and face with soap and water before meals and after work.

**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, burn in an appropriate incinerator if circumstances such as wind direction permit, or puncture and bury in a suitable landfill. Avoid contamination of any water supply with product or empty container.

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**FIRST AID**

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

**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.



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**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*

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**SAFETY DATA SHEET**

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

**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	DISEASES	RATE	COMMENTS
Apples	Blackspot	25 mL/100 L water	Apply in combination with a non-benzimidazole fungicide. Confine use to the period from second cover to pre-harvest when infection pressure is high. Do not apply more than twice in any growing season.
Beans	Botrytis, Sclerotinia	2 L in 700-1000 L water/ha	Apply during the early season period immediately after emergence. Use no more than 2 applications per season.
Barley	Scald	300-500 mL in 200 L water/ha	For combined eyespot and scald control use as for eyespot below. For scald control apply the high rate at the first sign of disease. Use no more than 2 applications per season
Barley/wheat	Eyespot	300-500 mL in 200 L water/ha	To prevent build-up of resistant strains of eyespot, do not apply on cereal crops in the same paddock for more than 2 consecutive seasons. Apply 300 mL rate at Feekes G.S. 7-8 and 500 mL at Feekes G.S.5.

CROP	DISEASES	RATE	COMMENTS
<b>Citrus</b>	Blue mould	50 mL/100 L water	Dip fruit in mixture for about 30 seconds. Resistance is widespread. Use only in regions where control of blue mould is still effective.
	Melanose, verrucosis	25 mL/100 L water	Make one application pre-bloom and another immediately post bloom. If conditions are wet over summer, use alternative protective fungicides.
<b>Cucurbits</b>	Powdery mildew	300-500 mL/1000 L water/ha	Apply on a regular schedule throughout the season.
<b>Grapes</b>	Botrytis	50 mL/100 L water	<b>Resistance management:</b> Use only 1 application per season in a programme with alternative fungicides registered for this use.
<b>Kiwifruit</b>	Sclerotinia	50 mL/100 L water 1 L/ha	One application during full bloom. Do not apply after petal fall.
<b>Kumara</b>	Scurf	250 mL/50 L water	Immerse plants for 3 minutes prior to setting out in the field.
<b>Lettuce</b>	Sclerotinia	2 L in 600-1000 L water/ha	Apply soon after transplanting or emergence of direct seeded crops. Use no more than 2 applications per season
<b>Maize</b>	Head smut	100 mL/800 mL water	To treat 45 kg of seed, mix with 100 g MERPAN FUNGICIDE to form a slurry.
<b>Onions</b>	Botrytis	500 ml/ha in 400-600 L water	Apply at 'flag stage' and again 14-21 days later. Treat again 30 days before harvest with a further application 10-14 days later if infection persists. Apply no more than 4 applications per season and use in a programme with alternative botryticides of different chemical groups.
	Smut (seed treatment)	100 mL/400 g of seed	Wet onion seed with methyl cellulose adhesive – 25 g/500 ml water, using 20 mL/3 kg of seed. Add the CHIEF FUNGICIDE and shake thoroughly to ensure complete coverage.
<b>Pasture</b>	Causal organism (Pithomyces chartarum) of facial eczema	300 mL in 100–400 L of water	Ensure complete coverage of all areas likely to be grazed, e.g. under and through fences, hedges and trees. Add a surfactant. Protection normally lasts for up to 6 weeks, where possible pastures should be treated in anticipation of danger. In early February treat enough pasture for 14 days grazed, then treat further areas as required so stock will graze 7-10 after spraying. If heavy rain occurs within 3 days of treatment, pasture should be re-sprayed. During danger periods limit stock to treated areas. In an emergency situation stock may graze pasture sprayed at least 24 hours earlier and obtain worthwhile protection.
<b>Raspberries, brambles</b>	Botrytis, cane spot	50 mL/100 L water	Use no more than one application per season, in a programme with alternative fungicides registered for this use.
<b>Ryegrass seed crops</b>	Blind seed disease	500 mL in 200 L water/ha	Apply 10-14 days after early flowering to reduce secondary infection. Under moist, cool or irrigated conditions, and in paddocks with a



CROP	DISEASES	RATE	COMMENTS
			persistent blind seed problem, a second application may be needed.
<b>Strawberries</b>	Botrytis, leaf spot (Mycosphaerella)	500 mL/1000 L water/ha	Use no more than one application per season, in a programme with alternative fungicides registered for this use.
<b>Stonefruit</b>	Brown rot, Peach scab	25-50 mL/100 L water	Apply during blossom period only. Use no more than 2 applications per season. When disease pressure is severe, use the higher rate.
<b>Tomatoes: Field</b>	Sclerotinia	2 L in 700-1100 L water/ha	Begin applications soon after transplanting or seedling emergence. Use no more than 2 applications per season.
<b>Glasshouse</b>	Botrytis fruit rot	50 mL/100 L water	Begin application when first flowers appear.

**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

<b>Stonefruit:</b>	<b>Do not use after start of petal fall.</b>
<b>Kiwifruit:</b>	<b>Do not apply after petal fall.</b>
<b>Apples:</b>	<b>7 days</b>
<b>Cucurbits:</b>	<b>7 days</b>
<b>Grapes:</b>	<b>7 days</b>
<b>Raspberries, brambles, strawberries:</b>	<b>1 day</b>
<b>Lettuce:</b>	<b>21 days</b>
<b>Beans:</b>	<b>14 days</b>
<b>Tomatoes (field and glasshouse):</b>	<b>3 days</b>
<b>Wheat, barley:</b>	<b>60 days</b>
<b>Onions:</b>	<b>14 days</b>
<b>Ryegrass seed crops:</b>	<b>Allow 14 days between last application and harvest (cutting).</b>
	<b>Allow 35 days between last application and introduction of stock for grazing.</b>

#### MIXING

STIR OR SHAKE WELL BEFORE USE. Pour the correct amount of CHIEF FUNGICIDE into the partly filled tank and while agitating add the remainder of the water. The addition of a wetting/penetrating agent e.g. LI-700® will improve distribution and uptake on hard to wet plants.

#### COMPATIBILITY

CHIEF FUNGICIDE is compatible with most common pesticides except some highly alkaline materials such as Bordeaux mixtures or lime sulphur.

#### RESISTANCE MANAGEMENT

CHIEF FUNGICIDE contains the GROUP 1 benzimidazole fungicide, carbendazim. Do not use another product containing a fungicide in the same group in conjunction with CHIEF FUNGICIDE, and alternate with fungicides from a different group. Avoid benzimidazole use where resistant strains of the pathogen are known or are likely to occur. If resistance frequency is nil or low, use a maximum of two applications per crop per 12 month period (unless otherwise specified in the directions for use), including crops where benzimidazoles may be indicated for the control of two or more pathogens, e.g. *Sclerotinia* spp. and *Botrytis* spp. in vegetables.

Confine use to periods when disease risk is high, but disease level is low. Where practical apply in a mixture with a protectant fungicide. Comply with the label application rates at all times. Practise good crop hygiene and cultural controls.

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