

## WARNING

Keep out of reach of children

# Acrobat<sup>®</sup> MZ690

**A systemic and protectant fungicide for the control of downy mildew on grapes, lettuce and onions, and early and late blight on potatoes.**

**Contains 90 g/kg dimethomorph and 600 g/kg mancozeb in the form of a water dispersible granule.**

# 10 kg

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 **BASF**  
The Chemical Company

## Hazard Classification

6.3A, 6.4A, 6.5B, 6.9B, 9.1A



## WARNING

HARMFUL. May cause skin irritation. May cause eye irritation. May cause sensitisation from prolonged skin contact. May cause liver damage from repeated oral exposure at high doses. **VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.** Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites.

## PRECAUTIONS

**HANDLING:** This product must be under the personal control of an APPROVED HANDLER when used in a wide dispersive manner or by a commercial contractor.

**STORAGE:** Keep out of reach of children. Store in the closed, original container in a dry, well-ventilated area, as cool as possible, away from food and feedstuffs. Do NOT store in direct sunlight. Stores containing 100 kg or more of this product require emergency response plans and are subject to signage. 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.

**TRANSPORT:** Do NOT carry this product on a passenger service vehicle.

**SPILLAGE:** Prevent further spillage and product from entering waterways. Wear overalls, gloves, footwear, safety goggles and dust mask. Sweep and shovel up spill and place in sealable container labelled for disposal. Avoid dust formation. Wash affected area with water and detergent. Absorb and collect washings and place in the same sealable container as the spilled material. Dispose of the waste safely in suitable landfill.

**PERSONAL PROTECTION:** When mixing and preparing spray, wear cotton overalls buttoned to the neck and wrist, a washable hat, suitable gloves and safety goggles.

**GENERAL SAFETY AND HYGIENE MEASURES:** Avoid contact with skin, eyes and clothing. Avoid inhalation of dust or spray mist. Do NOT eat, drink or smoke while using this product. Remove protective clothing and wash hands and exposed skin thoroughly with soap and water before meals and after work. Wash protective clothing after each days use. Store work clothing separately.

**USE:** Apply with well-maintained and accurately calibrated equipment. Do NOT spray over, or allow drift over, surface water. Clean out application equipment thoroughly after use. Dispose of equipment wash waters on suitable ground away from surface water and crops. Do NOT contaminate surface or ground water by cleaning of equipment or disposing of equipment wash waters

**RECORD KEEPING:** Records of use must be kept if 3 kg or more of this product is applied within 24 hours in a place where it is likely to enter air or water and leave the place.

**NOTE:** Storage, application and record keeping must be as described in the current version of the New Zealand Standard for the Management of Agrichemicals NZS8409.

**DISPOSAL:** Container: Empty bag completely into the spray tank. Burn empty bag in a suitable incinerator if circumstances, especially wind direction, permit. Otherwise crush and bury in suitable landfill. Product: Dispose of this product only by using according to the label or at an approved landfill. Do NOT burn product. Do NOT contaminate surface water with chemical or empty container.

## FIRST AID

If swallowed, do NOT induce vomiting. For advice, contact the National Poisons Centre 0800 POISONS (0800 764 766) or a doctor immediately. If skin or hair contact occurs, remove contaminated clothing and wash skin and hair with soap and running water. Do NOT scrub skin. If in eyes, rinse out cautiously for several minutes. If skin or eye irritation persists get medical advice. If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing.

## GENERAL INFORMATION

ACROBAT MZ 690 is an Oomycete fungicide, which has protectant and anti-sporulant activity against downy mildew on grapes, lettuce and onions, and late blight on potatoes. Dimethomorph has a unique mode of action with systemic, penetrant and curative properties. Dimethomorph is systemically translocated upwards in the plant and is translaminar with local systemicity when applied to the foliage. ACROBAT MZ 690 combines the locally systemic, translaminar properties of dimethomorph with the protective properties of mancozeb. ACROBAT MZ 690 should always be used as part of a protective spray programme and applied before disease symptoms appear. No cross-resistance with phenylamide resistant strains has been observed with ACROBAT MZ 690. To prevent or delay the development of strains of disease fungi resistant to dimethomorph, it is recommended that this product be used in spray programmes including fungicides with different modes of action. Refer to the Critical Comments section of this label.

## Resistance Management

ACROBAT MZ690 contains dimethomorph, a cinnamic acid amide fungicide from the CCA (Carboxylic Acid Amides) mode of action group **GROUP 40 FUNGICIDE**, and mancozeb from the dithiocarbamate (EBDC) mode of action group **GROUP M3 FUNGICIDE**. Resistance to this fungicide could develop from excessive use. To minimise this risk use strictly in accordance with the label instructions and resistance management strategies that exist for any fungus listed on the label. Under high disease pressure, apply two close interval applications of ACROBAT MZ 690, followed by applications of either protectant fungicides or fungicides with different modes of action to that of a **GROUP 40 FUNGICIDE**. To minimize the development of resistant disease strains, do NOT apply more than four applications of ACROBAT MZ 690 to any one crop. Refer to the NZCPR web site ([www.nzpps.org/resistance/index.php](http://www.nzpps.org/resistance/index.php)) for more detailed information.

## DIRECTIONS FOR USE

**It is an offence to use this product on animals.**

The rates recommended are for high volume spraying to the point of run off. For concentrate spraying adjust dilution rate accordingly. Do NOT apply in less than 200 litres of water per hectare.

Crop	Disease	Rate g per 100 litres	Critical Comments
Grapes	Downy mildew ( <i>Plasmopara viticola</i> )	200 g/100 litres of water (2 kg/ha)	Apply in a minimum 1000 litres water per hectare. Apply at 14 day intervals from when shoots are 5-10 cm.
Lettuce	Downy mildew ( <i>Bremia lactucae</i> )	2 kg/ha	Maintain a regular protectant programme. Apply ACROBAT MZ 690 at 7 to 10 day intervals when conditions favour disease development but before the disease is evident. Apply two consecutive sprays of ACROBAT MZ 690 7 to 10 days apart, and then change to a fungicide from another chemical group. Use the shorter interval when conditions favouring infection are creating a high risk of disease. Apply in 500-750 litres of water per hectare. Use a surfactant at labelled rates.
Onions	Downy mildew ( <i>Peronospora destructor</i> )	2 kg/ha	Apply in 500-750 litres of water per hectare. Apply at 10 day intervals during the period of active growth when conditions of high humidity favour the disease. Use a surfactant at labelled rates.
Potatoes	Early blight ( <i>Alternaria solani</i> ) Late blight ( <i>Phytophthora infestans</i> )	2 kg/ha	Apply as a foliar spray to run-off when the crop has fully emerged but before any sign of disease and repeat at 10-14 day intervals. Use the closer interval when conditions favour the diseases especially during favourable growth conditions in the period prior to flowering. Use a surfactant at labelled rates. Note - where early blight infection is likely to be severe, the addition of a minimum 550 g/ha mancozeb 80% a.i. is recommended.

## Withholding Periods

**It is an offence for users of this product to cause residues exceeding the relevant MRL in the New Zealand (Maximum Residue Limits of Agricultural Compounds) Food Standards.**

On grapes, lettuce, onions and potatoes do not apply later than 14 days before harvest.

## Mixing

Half fill the spray tank with water then, with the agitators running, pour in the required quantity of ACROBAT MZ 690 and top up with water. Ensure that it is thoroughly mixed in the spray tank and the water level is over two thirds full before adding a surfactant at label rates. Agitation is required during spraying and after a stoppage.

**Application**

Ensure that spray equipment is properly calibrated. Complete spray coverage is essential for consistent disease control with any fungicide. Forward speeds should be sufficiently slow to ensure thorough spray coverage of the crop being treated. For specified crops do not apply less than the recommended label rate of ACROBAT MZ 690. Use a surfactant at labeled rates.

**Compatibility**

Do NOT mix with strongly alkaline or acidic materials. If compatibility is in question use the compatibility jar test before mixing a whole tank. For further information, consult your supplier.

**CONDITIONS OF SUPPLY**

Read "Conditions of Supply" before buying and using. If these conditions are unacceptable, return at once unopened. All goods supplied by BASF New Zealand Limited are of a high grade and conform to the chemical description on the label. However, to the extent permitted by law, neither BASF New Zealand Limited nor any of its Distributors accept any responsibility whatsoever for any loss, damage or injury whether direct, indirect or consequential howsoever arising in connection with supply of those goods including without limitation their storage, application, handling or use. BASF New Zealand Limited, nor any of its Distributors, makes any warranties of any kind, expressed or implied, with respect to the fitness for purpose (including crop injury, ineffectiveness or any other unintended consequence), merchantable quality or any other matter with respect of these goods. When you are a consumer as defined in the Consumer Guarantees Act 1993 (the Act) these conditions will be subject to the provisions of the Act. However the Act will not apply to goods supplied to you for business purposes.

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