

**TOXIC CORROSIVE
ECOTOXIC
KEEP OUT OF REACH OF CHILDREN**

zelam

 **COBRA™**

A systemic and protectant fungicide for the control of various diseases in Potatoes, Onions, Lettuce and Grapes

Contains: 90g/litre dimethomorph & 450g/litre chlorothalonil in the form of a suspension concentrate

F U N G I C I D E

NET CONTENTS: 10 LITRES

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Registered Pursuant to the ACVM Act 1997, No. P7351. See www.nzfsa.govt.nz/acvm/ for registration conditions

PLEASE READ ENTIRE LABEL BEFORE MIXING OR APPLYING. SHAKE OR STIR WELL BEFORE USE.

HARZARD CLASSIFICATION: 6.1B, 6.3B, 6.5B, 6.7B, 6.9A, 8.3A, 9.1A, 9.2B, 9.3B Active ingredient contains less than 2% benzisothiazolin-3-one 20% & formaldehyde 37% Also contains less than 2% benzisothiazolin-3-one 20% & formaldehyde 37%

APPROVED HANDLER: This product must be under the control of an approved handler during use. See MSDS for full details.

RECORD KEEPING: Records of use must be kept under certain circumstances. See MSDS for details.

DANGER: May be fatal if swallowed, inhaled or absorbed through the skin. This product is corrosive and may cause eye damage. May cause organ damage from repeated oral exposure at high doses.

WARNING: May cause mild skin irritation or an allergic skin reaction. Avoid contact with skin. Suspected of causing cancer.

FIRST AID: If swallowed do not induce vomiting. For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Do not scrub the skin. If splashed in eyes, wash out immediately with water for at least 15 minutes. If inhaled move the victim to fresh air immediately. Begin artificial respiration if breathing has stopped.

PERSONAL PROTECTION: To prevent harm to human beings - A source of fresh, clean water for flushing eyes must be available in the treated area for seven days following application of **Cobra** to plants. Workers must be informed, in a manner they can understand, that residues in the treated area may be highly irritating to their eyes. Care should be taken to keep the residue out of eyes (e.g. refrain from rubbing eyes), if residue in eyes, immediately flush eyes with fresh, clean water. Instructions for use of a specialised eye wash facility must be available. Gloves should be worn at all times. Wear eye protection when handling the concentrate. Ensure adequate ventilation when handling concentrate. Remove protective clothing and wash hands and face thoroughly before meals and after work.

Wash protective clothing daily after work. Do not eat, drink or smoke while using.

ECOTOXICITY: Very toxic to aquatic organisms. Avoid contamination of any water supply with product or empty container. Toxic to the soil environment and to terrestrial vertebrates.

STORAGE: Store in original container, tightly closed, away from foodstuffs. Keep out of reach of children.

SHELF LIFE: When stored appropriately, this product should show no significant degradation for 2 years from the date of manufacture. Contact your supplier for further information about the use of any product that is older than this.

DISPOSAL: For containers of 20 litres or less, rinse container until wash water is clear. Dispose of container at an approved landfill or AgRecovery Depot. Avoid contamination of any water supply, with product or empty container.

It is an offence to use this product on animals.

CROP	DISEASE	RATE	DIRECTIONS FOR USE
POTATOES	Early blight <i>Alternaria solani</i> , Late blight <i>Phytophthora infestans</i>	2L/ha	Use as a foliar spray in sufficient water to achieve uniform coverage. Apply as a preventative application and repeat at 10-14 day intervals. Use the closer interval during periods of intense disease pressure especially in the period prior to flowering.
ONIONS	Downy Mildew <i>Peronospora destructor</i>	2L/ha plus 420ml Barrachlor per ha	Use as a foliar spray in sufficient water to achieve uniform coverage. Apply as a preventative application and repeat at 10 day intervals during active crop growth when conditions of temperature and high humidity favour disease development.
LETTUCE	Downy Mildew <i>Bremia lactucae</i>	2L/ha plus a protectant fungicide at label rates	Use as a foliar spray in sufficient water to achieve uniform coverage. Apply two consecutive applications of Cobra 7 to 10 days apart when conditions favour disease development but before symptoms are evident any time from seedling emergence. Use closer interval when conditions are creating a high disease risk. Use a protectant such as Kotek (mancozeb) at other times.
	Ring Spot (Anthracnose) <i>Microdochium panattonianum</i>	2L/ha plus 850ml/ha of Barrachlor	
GRAPES	Downy Mildew <i>Plasmopara viticola</i> Black spot, Powdery Mildew, Botrytis	200ml plus 850ml Barrachlor per 100L or a minimum 2L plus 850ml Barrachlor/ha	Use as a foliar spray in 1000 litres water per ha to achieve uniform coverage. For concentrate spraying adjust dilution rates accordingly. Do not use on table grapes as russet may occur. Cover sprays of chlorothalonil will prevent botrytis, however during periods of high risk, ie wet humid weather, use a specific botrytis fungicide such as Pinnacle (fluzinam).



BATCH NO:
Cobra

D.O.M:

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

WITHHOLDING PERIOD: Potatoes, onions and lettuce - 14 days. Grapes 28 days.

MODE OF ACTION: **Cobra** provides the systemic activity of dimethomorph and the contact protectant activity of chlorothalonil. Dimethomorph penetrates the plant and moves systemically upwards to protect leaves and stem. Localised systemic activity ensures adequate translaminar movement within the foliage. Chlorothalonil is a protectant fungicide dependent on complete coverage of foliage to prevent disease establishment.

MANDATORY DIRECTIONS: As **Cobra** contains minute quantities of HCB, a compound that can be taken up by grazing stock to give unacceptable residues in meat and milk, by law the following restrictions on the use of the product must be observed: DO NOT graze treated crops in the field. CULTIVATE areas thoroughly BEFORE ALLOWING ANIMALS TO ACCESS (i.e. not direct drilling or other minimum tillage techniques) and before sowing pasture or any animal feed crop. DO NOT feed any part of a treated crop to stock other than harvested mature bulb onions.

RESISTANCE MANAGEMENT: When disease risk is high, apply two close interval applications of **Cobra**, followed by applications of either protectant fungicides or fungicides from another chemical group.

To minimise the development of resistant disease strains, DO NOT apply more than 4 applications of **Cobra** in one season.

MIXING: Pour the correct amount of **Cobra** into the partly filled tank and while agitating add the remainder of the water. Agitation is required during spraying and after any stoppages. Use the spray mixture within 24 hours of mixing.

APPLICATION: Apply in sufficient water to ensure thorough coverage of all foliage. As a guide use 500 litres/ha with ground broadcast equipment and a minimum of 200 litres/ha for aerial application.

RAINFALL: Apply to dry foliage and when no rain is expected for at least 2 hours following treatment.

COMPATIBILITY: May be tank mixed with most commonly used insecticides and fungicides. Do not mix with strongly alkaline or acidic materials.

MATERIAL SAFETY DATA SHEET: Additional information is listed in the MSDS available from Zelam Limited or www.zelam.com

ERMA NEW ZEALAND: Additional information is available from the ERMA NZ website - www.ermanz.govt.nz. Approval Code: HSR001672.

NOTICE TO BUYER: The manufacturer and vendors of **Cobra** warrant the formulation to contain the specified active ingredient within accepted tolerance but make no warranty of any kind on the uses of material and accept no responsibility, whether the material is used in accordance with the label directions or not.

REGISTERED TO: Tapuae Partnership, Hudson Rd, New Plymouth, NZ Tel: 06 755-9234 Fax: 06 755-1174

EMERGENCY PHONE: 0800 CHEMCALL - 0800 243 622

