

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

 **COBRA**<sup>®</sup>

## **FUNGICIDE**

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

**A systemic and protectant fungicide  
to control various diseases in potatoes,  
onions, lettuce and grapes**



**PLEASE READ THE ENTIRE LABEL BEFORE MIXING OR APPLYING. SHAKE OR STIR WELL BEFORE USE.****HAZARD CLASSIFICATION:**6.1B, 6.3B, 6.5B, 6.7B, 6.9A, 8.3A, 9.1A, 9.2B, 9.3B**APPROVED HANDLER:** This product must be under the control of an approved handler or secured. See MSDS for full details.**RECORD KEEPING:** Records of use must be kept. 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 kidney or lung 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, under lock and key, away from foodstuffs. Keep out of reach of children.**DISPOSAL:** Triple rinse empty container and add rinsate to the spray tank. If recycling, discard cap and deliver clean container to an Agrecovery depot. Alternatively crush and bury in an approved landfill.

Dispose of product only by using according to this label, or at an approved disposal facility.

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

Approved pursuant to the HSN Act 1996, No HSR001672. See www.epa.govt.nz for approval conditions.

Registered pursuant to the ACVM Act 1997, No. P007351 See www.foodsafety.govt.nz for registration conditions.

It is an offence to use this product on animals.

**DIRECTIONS FOR USE**

| CROP     | DISEASE   | RATE  | DIRECTIONS FOR USE   |
|----------|---|---|--|
| Potatoes | Early blight, <i>Alternaria solani</i> ,<br>Late blight <i>Phytophthora infestans</i> | 2 litres/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,<br><i>Peronospora destructor</i>  | 2 litres/ha plus Barrachlor 420 ml/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,<br><i>Bremia lactucae</i>   | 2 litres/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 the closer interval when conditions are creating a high disease risk. Use a protectant such as Kotek (mancozeb) at other times. |
|          | Ring spot (Anthracnose),<br><i>Microdochium panattonianum</i>                         | 2 litres/ha plus Barrachlor 850 ml/ha   |  |
| Grapes   | Downy mildew,<br><i>Plasmopara viticola</i> , Black spot,<br>Powdery mildew, Botrytis | 200 ml/100 litres plus Barrachlor 850 ml/100 litres. Use a minimum of 2 litres/ha plus Barrachlor 850 ml/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).             |

**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 stems. 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.**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.**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.

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

**WITHHOLDING PERIOD:** Potatoes, onions and lettuce - 14 days. Grapes 28 days.**RESISTANCE MANAGEMENT:** **GROUP 40 FUNGICIDE** Cobra contains a carboxylic acid amide fungicide with the inhibition of cellulose synthase mode of action. Naturally occurring strains of disease causing fungi resistant to the carboxylic acid amides may exist or develop. These resistant strains may dominate when Cobra or other related group 40 fungicides are used excessively. To minimise this risk use strictly in accordance with label instructions and resistance management strategies that may exist for particular diseases on this label. Since Cobra also contain chlorothalonil, a broad spectrum protectant fungicide, further tank mixing is not required. 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. DO NOT apply more than 4 applications of Cobra in one season. For further information see: www.nzpps.org/resistance**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:** Zelam Limited Hudson Rd,

New Plymouth, NZ. Tel: 06 755-9234 Fax: 06 755-1174

**EMERGENCY PHONE: 0800 CHEMCALL 0800 243 6225**