# NIMROD **MAPP 18522**

A systemic fungicide with curative and protectant action which controls powdery mildew on apple, pears, soft fruits, cucumber and ornamental plants.

An emulsifiable concentrate formulation containing 250 g/l (26.8% w/w) bupirimate, n-butanol and hydrocarbons. May produce an allergic reaction.



## ADAMA



https://bit.ly/2KrSkG6

### Danger

Flammable liquid and vapour. May be fatal if swallowed and enters airways. Causes serious eye irritation. May cause respiratory irritation. Suspected of causing cancer. Very toxic to aquatic life with long lasting effects. Repeated exposure may cause skin dryness or cracking. Contains bupirimate. May produce an allergic reaction. Keep out of reach of children. Keep away from heat, sparks, open flames, hot surfaces and other ignition sources. No smoking. Take precautionary measures against static discharge. Avoid breathing vapours or spray. Wear protective gloves, protective clothing, eye protection, face protection. Do NOT induce vomiting. Collect spillage. Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for empty, clean

To avoid risks to human health and the environment, comply with the instructions for use.

For advice on medical emergencies, fires or major spills telephone the National Chemical Emergency Centre on 01865 407333

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#### SHAKE WELL BEFORE USE

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

Batch No.: see packaging

#### This leaflet is part of the approved label.

For advice on medical emergencies, fires or major spills telephone the National Chemical Emergency Centre on 01865 407333

## IMPORTANT INFORMATION

#### FOR PROFESSIONAL USE ONLY AS A HORTICULTURAL FUNGICIDE

Сгор	Maximum individual dose (litres/ha)	Maximum number of applications	Latest time of application	Aquatic buffer (m)*
Apples and pears	0.9	4 per year	14 days before harvest	15
Strawberry (outdoor)	1.0	4 per year	3 days before harvest	-
Strawberry (permanent protection with full enclosure)	1.0	4 per crop	3 days before harvest	-
Raspberry, blackcurrants, redcurrants and gooseberries (outdoor)	1.0	4 per year	7 days before harvest	5
Raspberry (permanent protection with full enclosure)	1.0	4 per year	7 days before harvest	-
Chrysanthemum (outdoor)	0.7	3 per crop	-	5
Chrysanthemum (protected)	0.7	3 per crop	1 day before harvest	-
Roses (outdoor)	1.0	3 per crop	-	5
Roses (permanent protection with full enclosure)	1.0	3 per crop	6 days before harvest	-
Begonia (outdoor)	1.1	3 per crop	-	5
Begonias (permanent protection with full enclosure)	1.1	3 per crop	6 days before harvest	-
Ornamental plant production other than chrysanthemum and begonias including in containers (outdoor)	1.0	3 per crop	-	5
Ornamental plant production other than chrysanthemum and begonias, including in containers (permanent protection with full enclosure)	1.0	3 per crop	6 days before harvest	-

Qualified minor use recommendation							
Cucumber (permanent protection with full enclosure)	1.5	4 per year	1 day before harvest	-			

\*Further details provided under 'Environmental Protection'. Relevant to outdoor crops only.

#### Other specific restrictions:

Where application is applied for indoor use:

- 1. Treatment must only be made under 'permanent protection' situations which provide full enclosure (including continuous top and side barriers down to below ground level) and which are present and maintained over a number of years.
- 2. Reasonable precautions must be taken to prevent access of birds, wild mammals and honey bees to treated crops.
- 3. To minimise airborne environmental exposure, vents, doors and other openings must be closed during, and after application, until the applied product has fully settled.

READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.

## SAFETY PRECAUTIONS

#### **Operator Protection**

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment.

WEAR SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when handling the concentrate.

WEAR SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces or applying by broadcast air-assisted equipment.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES when applying by hand-held equipment.

However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection. WHEN USING DO NOT EAT, DRINK OR SMOKE. WASH HANDS AND EXPOSED SKIN before meals and after work

TAKE OFF IMMEDIATELY all contaminated clothing. WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the insides of gloves.

IF YOU FEEL UNWELL, seek medical advice immediately (show the label where possible).

#### **Environmental Protection**

Do not contaminate water with the product or its container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads.

To protect aquatic organisms respect an unsprayed buffer zone to surface water bodies in line with LERAP requirements.

#### Apple and Pear:

DO NOT ALLOW DIRECT SPRAY from broadcast air-assisted sprayers to fall within 15 m of the top of the bank of a static or flowing waterbody, unless a Local Environment Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 5 m of the top of a ditch which is dry at the time of application. Aim spray away from water.

This product qualifies for inclusion within the Local Environment Risk Assessment for Pesticides (LERAP) scheme. Before each spraying operation from a broadcast air-assisted sprayer, either a LERAP must be carried out in accordance with HSE's published guidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for three years.

#### Raspberries (outdoor), blackcurrant and redcurrant, gooseberry, rose (outdoor), begonia (outdoor), chrysanthemum (outdoor), other ornamentals (outdoor):

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5 m of the top of the bank of a tatic or flowing water body, unless a Local Environment Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1 m of the top of a ditch which is dry at the time of application. DO NOT ALLOW DIRECT SPRAY from hand-held sprayers to fall within 1 m of the top of the bank of a static or flowing water body. Aim spray away from water.

This product qualifies for inclusion within the Local Environment Risk Assessment for Pesticides (LERAP) scheme. Before each spraying operation from a horizontal boom sprayer, either a LERAP must be carried out in accordance with HSE's published guidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for three years.

#### Storage and Disposal

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.

WASH OUT CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of safely.

DO NOT RE-USE CONTAINER for any purpose.

THIS MATERIAL AND ITS CONTAINER must be disposed of in a safe way.

## DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

#### **RESTRICTIONS AND WARNINGS**

For varietal restrictions on ornamental plants please refer to 'Crop Specific Information'.

It is advisable to test for compatibility and tolerance to crop injury prior to full scale commercial use on ornamentals.

Warning for begonias: Never spray flowering plants or those with flower buds showing colour as this can scorch petals.

Crops should not be re-entered until spray residues are dry.

#### **Crops for processing**

NIMROD<sup>®</sup> has not caused taint in tests with blackcurrants and gooseberries but consult processor before using on <u>any</u> crops for processing.

#### RESISTANCE

NIMROD contains bupirimate. For resistance management purposes, it's mode of action is classified as A2 under the FRAC code. There is medium risk of resistance and cross resistance known in powdery mildews. Application should be made in accordance with FRAC Guidelines.

Use NIMROD as part of an Integrated Crop Management (ICM) strategy incorporating other methods of control. To reduce the likelihood of resistant strains of powdery mildew developing in all crops, it is recommended that NIMROD should be used in spray programmes with other suitable mildew fungicides with alternative modes of action.

The efficacy of this product may be affected if strains of disease pathogens resistant or less sensitive occur at any time. As such occurrences cannot be predicted no responsibility can be accepted for the results obtained.

#### DISEASE CONTROL

NIMROD is a systemic fungicide with curative and protectant action which controls powdery mildew in a range of crops.

## CROP SPECIFIC INFORMATION (including disease control)

#### APPLES AND PEARS

#### Rate of use and water volume:

0.9 litre/ha at a maximum concentration of 60 ml/100 litres water.

Where tree height and/or canopy density is reduced, the dose (and water volume) should be adjusted in accordance with an appropriate dose adjustment scheme. Consult your specialist advisor for further information. Further information on the PACE scheme is available from AHDB Horticulture (formerly HDC), or see the AHDB Horticulture leaflet (Orchard Spraying: Opportunities to reduce rates) available on the AHDB Horticulture website at: www.horticulture.ahdb.org.uk

Water volumes should be based on the size of the trees and leaf area at application and sufficient to ensure good coverage.

Apply from late green cluster (apples) or white bud stage (pears) and repeat at intervals of 10-14 days.

During periods conducive to powdery mildew and especially during rapid leaf development in June, best results are obtained by applying at the shorter spray intervals.

For season long control of powdery mildew, other products will need to be included in the treatment programme.

#### Timing

Apply at late green cluster/white bud stage and repeat until extension growth ceases, using up to a maximum of 4 sprays per year.

Harvest Interval: 14 days.

#### STRAWBERRIES (outdoor and protected)

#### Rate of use and timing:

1 litre in 500-1,000 litres water per hectare.

Apply at first signs of disease from just before blossom and repeat at 10-14 intervals as necessary, using up to a maximum of 4 sprays per crop. On protected strawberries 2 crops per year may be treated.

Harvest interval: 3 days.

RASPBERRIES (outdoor and protected), BLACKCURRANTS and REDCURRANTS (outdoor) AND GOOSEBERRIES (outdoor)

#### Rate of use and timing:

1 litre in 100-400 litres water per hectare.

Apply at first signs of disease and repeat at a minimum of 12 day intervals using up to a maximum of 4 sprays per year.

On susceptible raspberry varieties application at full flower has been shown to be important in giving best protection of fruit.

Harvest Interval: 7 days.

CHRYSANTHEMUMS (outdoor and protected)

#### Rate of use and timing:

0.7 litre/ha. Spray thoroughly to wet all foliage.

Apply as soon as infection is seen and repeat at 10-14 day intervals. A maximum of 3 applications may be made to any crop. A maximum of 2 protected crops may be treated per year. One outdoor crop may be treated per year.

Varieties: NIMROD has been used on the following varieties: Helen, White Marble, Pink Marble, Bronze Nero, Red Regalia, Bronze Hazel Zwager, Peter Zwager, Evelyn Bush and Puriton. On other chrysanthemums, first treat a few plants to check for damage before proceeding further.

Harvest interval (protected only): 1 day

#### ROSES (outdoor and protected)

#### Rate of use and timing:

1 litre/ha.

Apply sufficient spray to obtain complete crop cover.

Apply before, or at the first signs of disease and repeat at 10-14 day intervals. Under high disease pressure reduce spray interval to 5 days. A maximum of 2 protected crops may be treated per year. One outdoor crop may be treated per year.

**Note:** Some leaf puckering may occur on young soft growth during early spring and under low light intensity.

In these conditions, test varietal susceptibility by spraying a few plants and allowing 14 days for any symptoms to develop.

Harvest interval (protected only): 6 days

#### **BEGONIAS** (outdoor and protected)

#### Rate of use and timing:

1.1 litre/ha. Spray thoroughly to wet all foliage.

Apply at the first sign of infection and repeat at 14 day intervals until no new infections are seen. Where the disease is well established, spray at 5-7 day intervals until good control is achieved and thereafter at 14 day intervals until no new infections are seen. A maximum of 3 applications may be made to any crop. A maximum of one crop per year may be treated.

Varieties: NIMROD has been applied without affecting growth or damaging foliage to the following Rieger Begonia cultivars:

Rot, Rot K, Rosa, Orange, Krefeld Orange and Goldorgange. On other varieties, first treat a few plants to check for damage before proceeding further.

Warning - never spray flowering plants or those with flower buds showing colour as this can scorch petals.

Harvest interval (protected only): 6 days

#### OTHER ORNAMENTALS (outdoor and protected)

#### Rate of use and timing:

1 litre/ha

Apply sufficient spray to obtain complete crop cover.

Apply before, or at the first signs of disease and repeat at 5-14 day intervals, depending on disease pressure. A maximum of 2 protected crops may be treated per year. One outdoor crop may be treated per year.

It is advisable to test for compatibility and tolerance to crop injury prior to full scale commercial use on ornamentals.

Harvest Interval (protected only): 6 days

#### QUALIFIED MINOR USE RECOMMENDATION

#### CUCUMBER (protected)

NIMROD may be used as a fungicide for powdery mildew in cucumber on the basis of limited effectiveness data.

#### Rate of use and timing:

1.5 litre/ha. Spray thoroughly to wet all foliage.

Apply at the onset of disease and repeat at a minimum of 10 day intervals. Apply a maximum of 4 sprays per crop. A maximum of 3 crops per year may be treated.

**Note:** Some leaf spotting may occur during the winter and early spring when light levels are low. If it is necessary to spray in these conditions, test spray a few plants 10-14 days before spraying the whole crop.

Strains of powdery mildew (*Sphaerotheca fuligenea*) resistant to bupirimate are common in the UK. NIMROD is ineffective against these resistant strains.

Harvest interval: 1 day.

#### MIXING AND SPRAYING

Shake the container of NIMROD thoroughly before opening.

#### Hydraulic and orchard crop sprayers:

Add half the required volume of clean water to the spray tank. Add the recommended quantity of NIMROD. Agitate whilst filling the tank to the required water volume and continue agitation during spraying. Wash out all spray equipment with water immediately after use.

#### For knapsack sprayers:

Half-fill the sprayer tank with clean water. Add the measured amount of product, with rinsings, to the sprayer tank and fit the tank lid. Gently shake the sprayer, by rocking, to ensure thorough mixing. Top up the tank with water to the correct level. Refit the tank lid and again gently shake the sprayer, by rocking, to ensure thorough mixing.

Ensure good coverage and penetration of the spray and that the sprayer is correctly calibrated before use.

Do not leave the spray liquid in the sprayer for long periods (i.e. during meals or overnight).

#### DISCLAIMER/CONDITIONS OF SUPPLY

The specified properties of our products and the mode of application stated on this label have been established on the basis of research and experience. Products conform to specification at the time of delivery but, as we exercise no control over their subsequent storage, handling, mixing or use or the weather conditions before, during and after application, all of which may affect the performance of the products, no responsibility or liability will be accepted by us or our re-sellers for any failure in performance, damage or injury to person or property whatsoever arising from the storage, handling, application or use of the products. These conditions cannot be varied by our staff or agents whether or not they supervise or assist in or make recommendations concerning the use of such products. We recommend you contact your dealer to request advice on the suitability of this product for any new and/or unusual growing methods or for new varieties not listed on this label.

#### Marketed by

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