

# Cassiopeia®



## MAPP 16522

An emulsifiable concentrate containing 40 g/l (3.8% w/w) pyraclostrobin and 72 g/l (6.9% w/w) dimethomorph. A fungicide with a combination of protectant, translaminar and locally systemic activity for the moderate control of downy mildew (*Peronospora destructor*) in bulb onions, shallot and garlic.

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

### 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 CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES when handling the concentrate. WEAR SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces.

However, engineering controls may replace personal protective equipment if a COSHH assessment shows that they provide an equal or higher standard of protection.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

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

WASH HANDS AND EXPOSED SKIN before meals and after work.

#### 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.

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5 metres of the top of the bank of a static or flowing water body, unless a Local Environmental Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1 metre from 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 metre 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 CRD'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.

To protect non-target arthropods, maintain a non-treated zone of 5 metres from adjacent, non-cultivated areas.

#### Storage and disposal

KEEP OUT OF REACH OF CHILDREN.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS. RINSE 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 container safely.

Store in a suitable pesticide store. Keep dry and protect from frost.

Do not re-use container for any purpose.

This label is compliant with the CPA Voluntary Initiative Guidance



® = Registered trademark of BASF

81150470 GB 2011



The  
Voluntary  
Initiative

# 5 L

Supplied by: BASF plc, 4th and 5th Floors, 2 Stockport Exchange, Railway Road, Stockport SK1 3GG,  
Telephone: 0161 475 3000

Emergency Information (24 hours freephone): 0049 180 227 3112  
Technical Enquiries: 0845 602 2553 (office hours)

# Cassiopeia®

An emulsifiable concentrate containing  
40 g/l (3.8% w/w) pyraclostrobin and  
72 g/l (6.9% w/w) dimethomorph.

## Danger

Harmful if swallowed.

May be fatal if swallowed and enters  
airways.

Causes skin irritation.

Harmful if inhaled.

Very toxic to aquatic life  
with long lasting effects.

Wear protective gloves and eye/face  
protection.

Avoid breathing vapours.

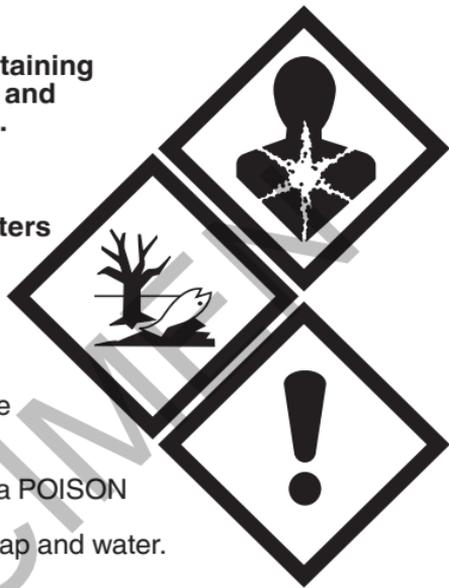
IF SWALLOWED: Immediately call a POISON  
CENTRE or doctor/physician.

IF ON SKIN: Wash with plenty of soap and water.

Do NOT induce vomiting.

Take off immediately all contaminated clothing.

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



## IMPORTANT INFORMATION

**FOR USE ONLY AS AN HORTICULTURAL FUNGICIDE, as directed below:**

Crop	Maximum Individual Dose	Maximum Number of Treatments	Latest Time of Application
Bulb onion, shallot and garlic	2.5 litres product per hectare	3 per crop	7 days before harvest

**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.**

## 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/Warnings

Consult processors before use on bulb onions, shallots or garlic for processing.

## Disease control

Cassiopeia is a fungicide with a combination of protectant, translaminar and locally systemic activity for the moderate control of downy mildew (*Peronospora destructor*) in bulb onions, shallot and garlic.

Cassiopeia should be applied as a preventative treatment before disease symptoms occur, or in accordance with appropriate disease monitoring and forecasting systems following periods of high infection risk.

## Resistance Management

Cassiopeia contains pyraclostrobin (a QoI fungicide) and dimethomorph (a CAA fungicide).

Effective disease management is a critical component in delaying the build-up of resistant pathogen populations. Therefore Cassiopeia should be applied according to the label recommendations for the target disease at the rate and timings indicated.

Cassiopeia should be applied preventatively, up to a maximum of three times per crop.

Cassiopeia should be applied in a programme containing fungicides with different modes of action.

When Cassiopeia is used in a programme with other CAA or QoI containing products, the total number of CAA or QoI applications should not comprise more than half of the total number of intended sprays for disease control per season.

For further advice on resistance management contact your agronomist or specialist advisor, or visit the FRAC website.

## Crop Specific Information

### Bulb onions, shallots and garlic

#### Time of application

For the moderate control of downy mildew (*Peronospora destructor*) in bulb onions, shallots and garlic, Cassiopeia should be applied in a protectant spray programme, from the four leaf stage of the crop (BBCH 14) until when 50% of the plants have leaves bent over (BBCH 48).

#### Rate of application

Apply 2.5 kg/ha of Cassiopeia in a volume of 200–500 litres of water per hectare ensuring good coverage of the foliage. Repeat sprays at 7 – 10 day intervals, depending on disease pressure.

## Mixing and Application

### Mixing

Fill the spray tank with water to 3/4 of the volume required and start agitation. Shake the container of Cassiopeia and pour the required quantity into the spray tank. Add the remainder of the water whilst maintaining agitation. Rinse any empty containers thoroughly and add rinsings to the spray tank. Apply immediately and continue agitation until spraying is complete.

### Tank cleaning

Wash sprayer thoroughly immediately after use, using clean water and following the sprayer cleaning guidance provided by the equipment manufacturer.

### The following does not form part of the authorised label text.

With many products there is a general risk of resistance developing to the active ingredients. For this reason a change in activity cannot be ruled out. It is generally impossible to predict with certainty how resistance may develop because there are so many crop and use connected ways of influencing this. We therefore have to exclude liability for damage or loss attributable to any such resistance that may develop. To help minimise any loss in activity the BASF recommended rate should in all events be adhered to.

Numerous, particularly regional or regionally attributable, factors can influence the activity of the product. Examples include weather and soil conditions, crop plant varieties, crop rotation, treatment times, application amounts, admixture with other products, appearance of organisms resistant to active ingredients and spraying techniques. Under particular conditions a change in activity or damage to plants cannot be ruled out. The manufacturer or supplier is therefore unable to accept any liability in such circumstances. All goods supplied by us are of high grade and we believe them

to be suitable, but as we cannot exercise control over their mixing or use or the weather conditions during and after application, which may affect the performance of the material, all conditions and warranties, statutory or otherwise, as to the quality or fitness for any purpose of our goods are excluded and no responsibility will be accepted by us for any damage or injury whatsoever arising from their storage, handling, application or use; but nothing should be deemed to exclude or restrict any liability upon us which cannot be excluded or restricted under the provisions of the Unfair Contract Terms Act 1977 or any similar applicable law.

## **Section 6 of the Health and Safety at Work Act**

### **Additional Product Safety Information**

The product label provides information on a specific pesticidal use of the product; do not use otherwise, unless you have assessed any potential hazard involved, the safety measures required and that the particular use has “off-label” approval or is otherwise permitted under the Plant Protection Product Regulations (EC) No 1107/2009.

The information on this label is based on the best available information including data from test results.

### **Safety Data Sheet**

To access the Safety Data Sheet for this product scan the QR code or use the weblink below:



[agricentre.basf.co.uk/Cassiopeia/MSDS](http://agricentre.basf.co.uk/Cassiopeia/MSDS)

Alternatively, contact your supplier.

# Cassiopeia®



## MAPP 16522

An emulsifiable concentrate containing 40 g/l (3.8% w/w) pyraclostrobin and 72 g/l (6.9% w/w) dimethomorph. A fungicide with a combination of protectant, translaminar and locally systemic activity for the moderate control of downy mildew (*Peronospora destructor*) in bulb onions, shallot and garlic.

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

### 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 CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES when handling the concentrate. WEAR SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces.

However, engineering controls may replace personal protective equipment if a COSHH assessment shows that they provide an equal or higher standard of protection.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

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

WASH HANDS AND EXPOSED SKIN before meals and after work.

#### 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.

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5 metres of the top of the bank of a static or flowing water body, unless a Local Environmental Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1 metre from 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 metre 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 CRD'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.

To protect non-target arthropods, maintain a non-treated zone of 5 metres from adjacent, non-cultivated areas.

#### Storage and disposal

KEEP OUT OF REACH OF CHILDREN.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

RINSE 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 container safely.

Store in a suitable pesticide store. Keep dry and protect from frost.

Do not re-use container for any purpose.

**This label is compliant with the CPA Voluntary Initiative Guidance**



® = Registered trademark of BASF

81150470 GB 2011



The  
Voluntary  
Initiative

# 5 L

Supplied by: BASF plc, 4th and 5th Floors, 2 Stockport Exchange,  
Railway Road, Stockport SK1 3GG,  
Telephone: 0161 475 3000

Emergency Information (24 hours freephone): 0049 180 227 3112  
Technical Enquiries: 0845 602 2553 (office hours)