Perseus®

MAPP No: 18397
A suspension concentrate containing 75 g/l fluxapyroxad and 50 g/l difenoconazole for the control of a range of diseases in carrot, cabbage, Brussels sprouts, potato, cauliflower, broccoli/cabrese, vining peas and lettuce (outdoor and protected).

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 gloves and face protection (faceshield) when handling the concentrate.
However, engineering controls may replace personal protective equipment if a COSHH assessment shows that they provide an equal or higher standard of protection.
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 5m 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 1m of the top of a ditch which is dry at the time of application. Aim spray away from water.

Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1m 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 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 inspection for three years.

Storage and disposal
KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS
KEEP OUT OF REACH OF CHILDREN
DO NOT RE-USE CONTAINER for any purpose
STORE IN ORIGINAL CONTAINER tightly closed, in a safe place
ON EMPTYING THE CONTAINER, 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.

This label is compliant with the CPA Voluntary Initiative Guidance

Supplied by:
BASF plc
Agricultural Division
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Cheshire SK8 6QG
Emergency Information,
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0845 602 2553

The Voluntary Initiative

BASF
We create chemistry
**Perseus®**

A suspension concentrate containing 75 g/l fluxapyroxad and 50 g/l difenoconazole for the control of a range of diseases in carrot, cabbage, Brussels sprouts, potato, cauliflower, broccoli/calabrese, vining peas and lettuce (outdoor and protected).

Contains 2-methylisothiazol-3(2H)-one and 1-2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

**Warning:**
- Suspected of causing cancer.
- Causes serious eye irritation.
- Very toxic to aquatic life with long lasting effects.

Obtain special instructions before use.

Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/attention. Store locked up.

Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

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

This product is approved under the Plant Protection Products Regulation 1107/2009.

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**IMPORTANT INFORMATION**

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

<table>
<thead>
<tr>
<th>Crops</th>
<th>Maximum Individual Dose</th>
<th>Maximum Number of Applications per crop</th>
<th>Pre-harvest Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrot #</td>
<td>1 l/ha</td>
<td>2</td>
<td>7 days</td>
</tr>
<tr>
<td></td>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 l/ha</td>
<td>1</td>
<td>7 days</td>
</tr>
<tr>
<td>Cabbage, Brussels sprouts,</td>
<td>1 l/ha</td>
<td>3</td>
<td>14 days</td>
</tr>
<tr>
<td>Cauliflower, Broccoli/Calabrese</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potato</td>
<td>0.75 l/ha</td>
<td>4</td>
<td>3 days</td>
</tr>
<tr>
<td>Vining peas</td>
<td>2 l/ha</td>
<td>1</td>
<td>7 days</td>
</tr>
<tr>
<td>Lettuce (outdoor)</td>
<td>2 l/ha</td>
<td>1</td>
<td>14 days</td>
</tr>
<tr>
<td>Lettuce (protected)</td>
<td>1.2 l/ha</td>
<td>2</td>
<td>14 days</td>
</tr>
</tbody>
</table>

# For disease-specific maximum individual dose rates refer to the directions for use.

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.

1. Restrictions/Warnings
Consult processors before using Perseus on vining peas or potatoes.
Do not use Perseus on crops intended for fermentation.
Do not use on protected crops intended for production of seed or propagation material.
Avoid overlapping sprays.

2. Disease Control
Perseus is a protectant fungicide for the control of a range of diseases in carrot, cabbage, Brussels sprouts, potatoes, cauliflower, broccoli/calabrese, vining peas and lettuce (outdoor and protected). See summary below:

<table>
<thead>
<tr>
<th>Disease/Pathogen</th>
<th>Carrot</th>
<th>Cabbage</th>
<th>Brussels sprouts</th>
<th>Potato</th>
<th>Cauliflower, Broccoli, Calabrese</th>
<th>Vining peas</th>
<th>Lettuce (outdoor)</th>
<th>Lettuce (protected)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powdery mildew (Erysiphe heraclei)</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternaria spp.</td>
<td>C</td>
<td>C</td>
<td>R</td>
<td>MC</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sclerotinia spp.</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>C</td>
<td>MC</td>
</tr>
<tr>
<td>Ringspot (Mycosphaerella brassicicola)</td>
<td>C</td>
<td>C</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mycosphaerella pinodes (Ascochyta blight) and Ascochyta pisi (Leaf and pod spot)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MC</td>
</tr>
</tbody>
</table>

C = Control
MC = Moderate control
R = Reduction of disease

2.1 Resistance management
Perseus contains the SDHI fungicide, fluxapyroxad (FRAC Code 7) and the triazole (SBI) fungicide, difenoconazole (FRAC Code 3). Perseus should be used in accordance with FRAC advice for SDHI’s and SBIs.
Effective disease management is a critical component in delaying the build-up of resistant pathogen populations. Therefore, Perseus should be applied according to the manufacturer’s recommended dose rate and spray interval for the target crop and disease.

Perseus should be used preventatively or at the early stages of disease development, following warnings from Decision Support Systems where these are available.

The maximum permitted number of applications of Perseus should not be exceeded.
- **Vining peas and outdoor lettuce**: Only one application of Perseus is permitted per crop.
- **Carrots, protected lettuce**: A maximum of two applications of Perseus are permitted per crop.
- **Cabbage, Brussels sprouts, cauliflower, broccoli/calabrese**: A maximum of three applications of Perseus are permitted per crop.
- **Potatoes**: A maximum of four applications of Perseus are permitted per crop. If the total number of fungicide applications per crop is ten or fewer, then the number of applications of Perseus should be reduced to a maximum of three.

The total number of applications of Perseus and other SDHI containing products should make up no more than half (50%) of the total number of fungicides applied per season.

No more than two consecutive applications of Perseus or another SDHI fungicide should be applied.

For further advice on resistance management contact your agronomist or specialist advisor or visit the FRAG-UK website.

### 3. Crop specific information

#### 3.1 Carrots

<table>
<thead>
<tr>
<th>Target(s):</th>
<th>Powdery mildew, <em>Alternaria</em> spp. and <em>Sclerotinia</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Time of application:</td>
<td>Apply Perseus as a protectant spray or at the first sign of disease, after nine leaves have developed.</td>
</tr>
<tr>
<td>EITHER two applications of up to 1.0 l/ha Perseus OR one application of 2.0 l/ha Perseus are permitted.</td>
<td></td>
</tr>
<tr>
<td>A minimum spray interval of 7 days should be observed.</td>
<td></td>
</tr>
<tr>
<td>A minimum of 7 days must elapse between the last spray and harvest.</td>
<td></td>
</tr>
<tr>
<td>Dose rate: 0.6-2.0 l/ha:</td>
<td>For the control of powdery mildew, apply Perseus at a rate of 0.6 l/ha. For the control of <em>Alternaria</em>, apply Perseus at a rate of 1.0 l/ha. For a reduction of <em>Sclerotinia</em>, apply Perseus at a rate of 2.0 l/ha.</td>
</tr>
<tr>
<td>Water volume:</td>
<td>200-800 l/ha</td>
</tr>
</tbody>
</table>
### 3.2 Cabbage, Cauliflower, Broccoli/Calabrese, Brussels sprouts

**Target(s):**
*Alternaria* and ringspot.

**Time of application:**
Apply Perseus as a protectant spray or at the first sign of disease, after rosette formation has finished/heads have begun to form. Up to three applications can be made, but a minimum of 14 days must elapse between the last spray and harvest. A minimum spray interval of 7 days should be observed.

<table>
<thead>
<tr>
<th>Dose rate:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 l/ha</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water volume:</th>
</tr>
</thead>
<tbody>
<tr>
<td>200-800 l/ha</td>
</tr>
</tbody>
</table>

### 3.3 Potatoes

**Target(s):**
*Alternaria spp.*

**Time of application:**
Apply Perseus preventatively or at the first sign of disease, but not before the crop meets between the rows.

Up to four applications can be made, but a minimum of 3 days must elapse between the last spray and harvest. A minimum spray interval of 7 days must be observed.

<table>
<thead>
<tr>
<th>Dose rate:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.75 l/ha</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water volume:</th>
</tr>
</thead>
<tbody>
<tr>
<td>150-400 l/ha</td>
</tr>
</tbody>
</table>

### 3.4 Vining peas

**Target(s):**
*Ascochyta* blight and leaf and pod spot.

**Time of application:**
Apply Perseus as a protectant spray, from the flower buds visible stage of the crop. Only one application is permitted. A minimum of 7 days must elapse between the last spray and harvest.

<table>
<thead>
<tr>
<th>Dose rate:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0 l/ha</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water volume:</th>
</tr>
</thead>
<tbody>
<tr>
<td>200-800 l/ha</td>
</tr>
</tbody>
</table>
3.5 Lettuce (outdoor and protected)

**Target(s):**
*Sclerotinia*

**Time of application:**
Apply Perseus as a protectant spray, after plants have established and have at least nine leaves.
Only one application is permitted in outdoor crops. Up to two applications can be made in protected crops, but a minimum spray interval of 7 days should be observed.
A minimum of 14 days must elapse between the last spray and harvest.

**Dose rate:** 1.2-2.0 l/ha
- For the control of *Sclerotinia* in outdoor lettuce, apply Perseus at a rate of 2.0 l/ha.
- For the moderate control of *Sclerotinia* in protected lettuce, apply Perseus at a rate of 1.2 l/ha. DO NOT exceed a dose rate of 1.2 l/ha in protected crops.

**Water volume:**
200-1000 l/ha

4. Mixing and application

4.1 Mixing
Never prepare more spray solution than is required.
Three quarters fill the tank with clean water and start the agitation. To ensure thorough mixing of the product, invert the container several times before opening. Add the required quantity of Perseus to the spray tank while re-circulating. Add the remainder of the water and continue agitation until spraying is complete.
When tank mixes are to be used, take due note of any instructions given as to the order of mixing. Each product should be added separately to the spray tank and fully dispersed before the addition of any further product(s).
All tank mixes should be used immediately after mixing.
On emptying the container, rinse container thoroughly by using an integrated pressure rinsing device or by manually rinsing three times. Add washings to tank at time of filling and dispose of container safely.

4.2 Application
Apply as a MEDIUM spray, as defined by BCPC.

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

5. Compatibility
For details of compatibilities contact your distributor, local BASF representative, the BASF Technical Services Hotline: 0845 602 2553 or visit our website on: www.agriCentre.basf.co.uk
This product is approved under the Plant Protection Products Regulation (EC) No 1107/2009.

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 Products Regulations.

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:

bit.ly/Perseus_sds

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

SAFETY PRECAUTIONS

Operator protection
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DO NOT RE-USE CONTAINER for any purpose
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