

MODIF® - MAPP 18583

Contains 37.5% w/w cyprodinil and 25% w/w fludioxonil as a water-dispersible granule.

MODIF® is a broad-spectrum fungicide for use in a wide range of horticultural and agricultural crops. It may be used on fresh (broad, green and runner) beans, dried (dried broad, dwarf French, haricot, kidney and navy (Phaseolus) beans, vining, edible-podded and dried peas (combining and marrowfat), strawberry (outdoor and protected), raspberry, blackberry, blueberry, bilberry, cranberry, redcurrant, blackcurrant, whitecurrant, gooseberry, apple, crab apple, pear, quince, ornamental plant production (including forest nursery - outdoor and protected), carrots and celeriac.

PEEL BACK FOR DIRECTIONS FOR USE LEAFLET

WARNING



May cause an allergic skin reaction.

Very toxic to aquatic life with long-lasting effects.

Keep out of reach of children.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wear protective gloves, protective clothing and eye/face protection.

If skin irritation or rash occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

Collect spillages.

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.

MAPP 18583

IMPORTANT INFORMATION - FOR USE ONLY AS A PROFESSIONAL FUNGICIDE

Crops and situations:	Maximum individual dose (Kg Product/ha)	Maximum number of applications	Latest time of application-days before harvest
Broad bean, Dwarf French bean, green bean and runner bean	1.0	2 per crop	14 days
Vining pea and edible-podded pea	1.0	2 per crop	14 days
Dry harvested broad bean, dwarf French bean and combining peas	1.0	2 per crop	28 days
Strawberry	1.0	2 per crop	3 days
Raspberry and blackberry	1.0	3 per year	14 days
Outdoor crops of blueberry, bilberry, cranberry, redcurrant, blackcurrant and gooseberry	1.0	3 per year	10 days
Apple, crab apple, pear and quince	0.8	3 per year	3 days
Ornamental plant production (including forest nursery - outdoor)	1.0	3 per year	-
Ornamental plant production (including forest nursery - protected)	0.8	3 per year	-
Carrot	0.8	3 per year	7 days
Celeriac	0.8	2 per year	14 days

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

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THE (COSHH) CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH REGULATIONS MAY APPLY TO THE USE OF THIS PRODUCT AT WORK.

For 24-hour emergency information contact NHS 111

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PROTECT FROM FROST STORE IN A COOL DRY PLACE MADE IN EU BATCH NO. SEE PACKAGING

SAFETY PRECAUTIONS

Operator protection

When making broadcast air-assisted applications only spray equipment where the operators normal working position is inside a closed cab on a tractor or on a self-propelled sprayer may be used. Other engineering control of operator exposure must be used where reasonably practical in addition to the following personal protective equipment:

WEAR SUITABLE PROTECTIVE GLOVES when handling the concentrate or handling contaminated surfaces.

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 that they provide an equal or higher standard of protection.

WASH HANDS AND EXPOSED SKIN before eating, drinking or smoking and after work.

Environmental protection:

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

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.



DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5 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 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.

DO NOT ALLOW DIRECT SPRAY from broadcast air-assisted sprayers to fall within 30 m^a or 10 m^b of the top of the bank of a static or flowing water body 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.

^a for applications to apple, crab apple, pear and quince.

^b for applications to blackberry, raspberry, blueberry, bilberry, cranberry, redcurrant, whitecurrant, blackcurrant, gooseberry, ornamental plant production and forest nurseries.

This product qualifies for inclusion in the Local Environment Risk assessment for Pesticides Scheme (LERAPS). Before each application from a horizontal boom sprayer or a broadcast air-assisted sprayer, either a LERAP must be carried out in accordance with the 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 IN ORIGINAL CONTAINER tightly closed in a safe place.

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

DIRECTIONS FOR USE

IMPORTANT: This information is authorised 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.

MODIF® is a broad spectrum fungicide mixture for use in a wide range of crops. It is most effective when used as a protectant treatment or in the earliest stages of disease development. It is less effective against established disease. While multiple applications are permitted on each crop it is advisable to alternate applications with fungicides which work by a different mode of action against the target disease to reduce the risk of the development of resistance.

RESTRICTIONS

Consult processor before application to any crops grown for processing.

CROP SPECIFIC INFORMATION

MODIF® will control the following diseases:

Crop	Disease
Fresh and dried beans	Grey mould (<i>Botrytis</i>) – moderate control only <i>Sclerotinia sclerotiorum</i>
Fresh and dried peas	Grey mould (<i>Botrytis</i>) – moderate control only <i>Sclerotinia sclerotiorum</i> <i>Mycosphaerella pinodes</i> – useful control <i>Ascochyta pisi</i> – useful control
Strawberries	Grey mould (<i>Botrytis</i>) Black spot (<i>Colletotrichum acutatum</i>) - Qualified Minor Use
Blackberry and raspberry (Outdoor and protected)	Grey mould (<i>Botrytis</i>)
Outdoor crops of blueberry, bilberry, cranberry, redcurrant, blackcurrant, white-currant and gooseberry	Grey mould (<i>Botrytis</i>) - Qualified Minor Use
Pears	Brown spot (<i>Stemphylium vesicarium</i>) – moderate control
Ornamental plant production (including forest nursery - outdoor and protected)	Grey mould (<i>Botrytis</i>)
Apples, crab apples, pears and quince	Pre-harvest sprays will give a reduction in orchard and storage rots caused by <i>Botrytis cinerea</i> (<i>Botryotinia fuckeliana</i>), <i>Monilinia</i> spp, <i>Nectria</i> spp, <i>Penicillium</i> spp, <i>Colletotrichum</i> spp, <i>Fusarium</i> spp, <i>Gloeosporium</i> spp, <i>Alternaria</i> spp and <i>Venturia</i> spp.
Carrots	<i>Alternaria</i> leaf blight (<i>Alternaria dauci</i>) – moderate control only <i>Sclerotinia sclerotiorum</i> – moderate control only
Celeriac	<i>Sclerotinia sclerotiorum</i> – moderate control only

Qualified Minor Use Recommendation

Evidence of effectiveness is limited for Black spot in strawberry and Botrytis in outdoor crops of blueberry, bilberry, cranberry, redcurrant, blackcurrant, whitecurrant and gooseberry.

1. **Fresh beans** (broad beans, runner beans, dwarf French beans and green beans) **and** **dried beans** (dried broad beans, navy (Phaseolus) beans, dwarf French beans, kidney and haricot beans): Apply 1.0 kg/ha MODIF® either at the first sign of disease in the crop or from early flowering onwards as a protectant application before the appearance of the disease following a risk assessment or where predictive systems indicate that a spray is warranted. If disease risk remains high, a second application can be made but allow an interval of at least 10 days between applications. Allow a harvest interval of at least 14 days for fresh beans and 28 days for dry-harvested beans.
2. **Peas** (Vining, Edible podded, Combining and marrowfat): Apply 1.0 kg/ha MODIF® either at the first sign of disease in the crop or as a protectant application before the appearance of the disease from early flowering onwards. If disease risk remains high, a second application can be made but allow an interval of at least 10 days between applications. **NOTE:** MODIF® shows good safety to vining peas but care should be taken when the crop is stressed due to environmental factors or due to previous treatments. Check that the peas have adequate wax protection with a Crystal Violet test kit before treatment. Allow a harvest interval of at least 14 days for vining and edible podded peas, 28 days for combining and marrowfat peas (harvested dry).
3. **Strawberries** (Protected and outdoor): Apply 1.0 kg/ha MODIF® as a protectant application at the beginning of blossoming (white bud). Where disease pressure remains high a second application can be made but maintain an interval of at least 10 days between applications and sequence treatment with other fungicides effective against *Botrytis* to reduce the risk of the development of resistance. Allow a harvest interval of at least 3 days.
4. **Blackberry and raspberry:** Apply 1.0 kg/ha MODIF® as a protectant application from early flowering (white bud). Where disease pressure remains high two more applications can be made but maintain an interval of at least 10 days between applications. Allow a harvest interval of at least 14 days.
5. **Blueberry, bilberry, cranberry, redcurrant, blackcurrant, whitecurrant and gooseberry** (outdoor crops): Apply 1.0 kg/ha MODIF® as a protectant application from late grape stage of currants and first open flower of gooseberries and the other berry crops. Where disease pressure remains high two more applications can be made but maintain an interval of at least 10 days between first and second application and at least 28 days between the second and third application. Allow a harvest interval of at least 10 days.
6. **Apple, crab apple, pear and quince:** For best activity apply 0.8 kg/ha MODIF® as a protectant application from the end of flowering. Where disease pressure remains high two further applications can be made in sequence with other products effective against the target diseases but maintain an interval of at least 7 days between applications. Allow a harvest interval of at least 3 days. There is a potential for increased russetting when MODIF® is used on Bramley apples. For best control of *Stemphylium* in pears three applications should be made shortly after fruit set in late May and early June.

7. **Ornamental plant production** (including forest nursery - outdoor and protected): Apply 1.0 kg/ha MODIF® to outdoor plants and 0.8 kg/ha to plants grown under protection as a protectant spray. Two more applications per year are permitted if required due to high disease pressure but maintain an interval of at least 7 days between applications. There is no specified harvest interval applicable to these crops.

Note: While a wide range of species have been treated with good crop safety, the large number of species and cultivars grown means that not all can have been tested. Therefore, it is advisable to test treat a limited number of plants to confirm crop safety before application to the whole crop. It is advisable to only make two applications to Anemone, Begonia, Kalanchoë at an interval of at least 10 days because of marginal tolerance by these species and Saintpaulia should only receive a single application. DO NOT treat *Exacum affine* (Persian Violet) or Impatiens.

8. **Carrots:** Apply 0.8 kg/ha MODIF® at the first sign of disease from the 4th true leaf stage (BBCH 14) onwards. If disease pressure remains high a further two applications can be made but maintain an interval of at least 12 days between applications. Allow a harvest interval of at least 7 days.
9. **Celeriac:** Apply 0.8 kg/ha MODIF® at the first sign of disease in the crop from the 4th true leaf stage (BBCH 14) onwards. If disease pressure remains high a second application can be made but maintain an interval of at least 14 days between applications. Allow a harvest interval of at least 14 days.

MIXING and SPRAYING

Before spraying it is important to check all hoses, filters and nozzles, and to ensure that the sprayer is clean and correctly set to give an even application at the correct volume. Half fill the spray tank with clean water. Begin agitation, shake the container well and add the required quantity of MODIF® directly to the tank. Add the remainder of the water and agitate the mixture thoroughly before and during spraying.

Wash out containers with an integrated pressure rinsing device or manually rinsing three times and add the washings to the spray tank. Do not leave the diluted spray in the tank for extended periods such as meal breaks or overnight.

Application should be made using a MEDIUM quality spray as defined by BCPC using a pressure of at least 2 bar (29 psi).

- For beans and peas use at least 200 L/ha.
- For protected strawberries use at least 600 L/ha.
- For outdoor strawberries use at least 500 L/ha.
- For redcurrant, blackcurrant, whitecurrant, gooseberry, blueberry, bilberry, cranberry, raspberry and blackberry use at least 800 L/ha.
- For apple, crab apple, pear and quince use at least 400 L/ha.
- For ornamental plant production (including forest nursery - outdoor and protected) use a maximum concentration of 80 grams product per 100 litres water.

After application clean out the sprayer according to the manufacturer's instructions and dispose of washings according to DEFRA code of practice and guidelines from local water authorities.

RESISTANCE MANAGEMENT

MODIF® contains active ingredients that belong to the anilinopyrimidine (ap) and phenylpyrrol classes of fungicides (FRAC Codes 9 & 12). To reduce the risk of the development of resistance MODIF® should not be used alone but in a program with other products that are effective against the target diseases via a different mode of action.

FRAC has published guidelines on the use of ap fungicides which advise that where two applications per season are approved, only one ap product should be used. Where control of Botrytis requires 6 sprays, only two of these should be ap products and if more than 6 fungicide treatments are required per crop, the maximum number of ap sprays should be limited to just 3 applications. Full details of the guidelines are given at:

<http://www.frac.info/working-group/ap-fungicides/general-use-recommendations>

CONDITIONS OF SUPPLY

All goods supplied by the company are of good quality and we believe them to be fit for purpose. However, as we cannot exercise control over their storage, handling, mixing or use or the weather conditions before, during or after application, which may affect the performance of the goods, 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 or re-sellers for any failure in performance, damage or injury whatsoever arising from their storage, handling, application or use. These conditions cannot be varied by our staff or agents whether or not they supervise or assist in the use of such goods.