



Fathom[®]

Fungicide

PCS 04688

An emulsifiable concentrate containing 200 g/l (20.5% w/w) tebuconazole

A fungicide for control of diseases in barley, oats, rye, triticale, wheat, oilseed rape, cabbage, field bean, linseed, swede, turnip, carrot, horseradish, parsnip and leek

IMPORTANT INFORMATION: FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL FUNGICIDE



WARNING

Causes serious eye irritation
May cause an allergic skin reaction
Suspected of damaging the unborn child
Very Toxic to aquatic life with long lasting effects

Avoid release to the environment
Avoid breathing vapours
Wash hand thoroughly after handling

Wear protective gloves/clothing/eye/face protection
IF IN EYES rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for triple rinsed empty containers which can be disposed of as non-hazardous waste
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 avoid risks to human health and the environment, comply with the instructions of 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.

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Emergency No.s - Medical Incidents Involving Crop Protection Products: England & Wales: 111, Scotland: 08454 24 24 24, Northern Ireland: Local GP or Pharmacist, Republic of Ireland: 01 837 9964. Healthcare professionals seeking poisons information: www.toxbase.org.
Emergency No.s - Transportation, Warehousing & After Sale Incidents: CHEMTREC help centre Dialling from the UK and NI: 0870 820 0418, Dialling from Ireland: 01 901 4670

Batch number: See elsewhere on the bottle

Contents:

5 litres



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PEEL BACK FOR DIRECTIONS FOR USE LEAFLET

Crop	Max individual dose (l product/ha)	Max No. of treatments (per crop)	Latest Time of Application
Wheat, barley, rye, triticale and oats	1.25	1	End of flowering (BBCH 69)
Oilseed rape	1.25	2	Full flowering (BBCH 65)
Cabbage, field bean, linseed, swede, turnip	1.25	1	35 days before harvest
Carrot, horseradish, parsnip	1.25	1	21 days before harvest
Leek	1.25	1	14 days before harvest

To protect aquatic organisms respect an unsprayed buffer zone of 5m to surface water bodies

Other Specific Restrictions
Do not handle treated crops for at least 3 days after treatment.
Application to linseed may only be made between BBCH 30 - 79. To protect aquatic organisms respect an unsprayed buffer zone of 5m to surface water bodies

SPECIFIC DISEASES CONTROLLED:

	Wheat	Barley	Oats	Rye	Triticale
Septoria tritici blotch (<i>Zymoseptoria tritici</i>)	R	-	-	-	R
Septoria glume blotch (<i>Septoria nodorum</i>)	C	-	-	-	C
Yellow rust (<i>Puccinia striiformis</i>)	C	C	-	C	C
Brown rust	C	C	-	C	C
Fusarium ear blight	R	-	-	-	-
Sooty moulds	R	-	-	-	-
Powdery mildew	MC	-	C	C	MC
Crown rust	-	-	C	-	-
Net blotch (<i>Pyrenophora teres</i>)	-	R	-	-	-
Leaf scald (<i>Rhynchosporium secalis</i>)	-	MC	-	-	MC

C = control, MC = Moderate control, R = Fungicide resistance

Oilseed rape:

Control of: Light leaf spot, Botrytis
Reduction of: Ringspot (*Mycosphaerella brassicicola*), Powdery mildew, stem canker, Stem rot (*Sclerotinia sclerotiorum*)

Carrot, horseradish, parsnip:

Control of: Alternaria, Powdery mildew
Reduction of: *Sclerotinia*

Field Bean:

Control of: Chocolate spot and Bean rust

Swede/turnip:

Control of: Powdery mildew

Linseed:

Control of: Powdery mildew

DIRECTIONS FOR USE

Important: The information in this leaflet 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.

FUNGICIDE RESISTANCE

FATHOM is a triazole fungicide. It is advisable to alternate the use of FATHOM with a fungicide with a different mode of action (e.g. a pyrazolone or morpholine fungicide) to avoid the build-up of resistant strains of disease.

Disease control may be reduced if strains of a disease less sensitive to FATHOM develop.

FATHOM contains a DMI fungicide. Resistance to some DMI fungicides has been identified in Septoria leaf blotch (*Mycosphaerella graminicola*) which may seriously affect the performance of some products. For the advice on resistance management in DMIs, contact your agronomist or specialist advisor and visit the Fungicide Resistance Action Group (FRAG) U.K. website.

Strains of Light Leaf Spot resistant to azole fungicides are known to exist. To avoid development of resistance, apply product protectively in response to disease forecasts. Where possible, when Light Leaf Spot is present use a fungicide with an alternative mode of action or mixes containing an alternative mode of action when targeting other diseases such as *Sclerotinia* at mid flowering.

RECOMMENDATIONS FOR USE IN CEREAL CROPS

As a general rule, disease control and yield benefit will be optimal when treatment is made at an early stage of development.

Maximum Individual Dose: 1.25 litres/ha, 1 application per crop

Volume of Water:

Use at least 200 litres of water/ha. Increase the water volume to 300 litres/ha in very dense crops or susceptible varieties.

Crops: FATHOM can be applied to all varieties of barley, wheat (except Durum wheat), triticale, oats and rye:

Diseases Controlled and Application Timing

FATHOM can be applied to cereal crops to the end of flowering (BBCH 69). Where disease pressure remains high application with an alternative

effective product may be required to maintain control but only one application of Fathom may be applied per crop

RECOMMENDATIONS FOR USE IN OILSEED RAPE

As a general rule, disease control and yield benefit will be optimal when treatment is made at an early stage of development.

Maximum Individual Dose: 1.25 litres/ha and a maximum of 2 treatments per crop

Volume of Water:

Use at least 200 litres of water/ha. Increase the water volume to 400 litres/ha in very dense crops.

Crops:

FATHOM can be applied to all varieties of winter and spring oilseed rape.

Diseases Controlled and Application Timing

FATHOM can be applied to oilseed rape from BBCH 20 (no side shoots) up to full flowering: 50% flowers on main raceme open, older petals falling (BBCH 65). Do not apply more than 500 gms ai/ha total dose of FATHOM per crop.

1. Control of Light Leaf Spot

Apply 1.25 litre/ha depending on disease development from BBCH 20. An application of 1.25 litre/ha either before or after flowering will control late development of disease on the leaves and pods.

2. Control of Botrytis

Apply 1.25 litres/ha before and during flowering as soon as disease develops.

3. Reduction of Ringspot (*Mycosphaerella brassicicola*)

If the disease has developed over winter, an application from BBCH 20 in the early spring may be made, at 1.25 litre/ha. An application of 1.25 litre/ha either before or after flowering will control late development of disease on the leaves and pods

4. Reduction of Phoma Leaf Spot/Stem Canker

Apply 1.25 litre/ha from BBCH 20 in early spring. The treatment regime for light leaf spot (1 above) will also give a useful reduction of Leaf spot and Stem canker.

5. Reduction of Stem rot (*Sclerotinia sclerotiorum*),

Apply 1.25 litre/ha at early to full flower. Do not mix FATHOM with any other product when applying during the flowering period of oilseed rape.

RECOMMENDATIONS FOR USE IN FIELD BEANS

Maximum Individual Dose: 1.25 litres/ha

Volume of Water:

Use at least 200 litres of water/ha. Increase the water volume to 600 litres/ha in very dense crops.

Crops:

FATHOM can be applied to all varieties of field beans

Diseases Controlled and Application Timing

FATHOM can be applied to field beans from the flower buds present, still enclosed by leaves stage (BBCH 50) up to 35 days before harvest. Do not apply more than 250 gms ai/ha total dose of FATHOM per crop. Where disease pressure remains high application with an alternative effective product may be required to maintain control but only one application of Fathom may be applied per crop

1. Control of Chocolate Spot and Bean Rust

Apply 1.25 litre/ha at the first signs of disease from BBCH 50.

RECOMMENDATIONS FOR USE IN CABBAGES

Maximum Individual Dose: 1.25 litres/ha

Volume of Water:

Use at least 200 litres of water/ha. Increase the water volume to 600 litres/ha in very dense crops.

Crops:

FATHOM can be applied to all varieties of cabbages. Consult the processor before using FATHOM on crops intended for processing.

Diseases Controlled and Application Timing

FATHOM can be applied to cabbages from the beginning of heart formation (GS 40) up to 35 days before harvest. Do not apply more than 250 gms ai/ha total dose of FATHOM per crop. Where disease pressure remains high application with an alternative effective product may be required to maintain control but only one application of Fathom may be applied per crop

1. Control of Light Leaf Spot, Powdery Mildew, Ringspot and Alternaria

Apply 1.25 litres/ha as soon as disease is seen but not before beginning of heart formation.

RECOMMENDATIONS FOR USE IN SWEDES AND TURNIPS

Maximum Individual Dose: 1.25 litres/ha

Volume of Water:

Use at least 200 litres of water/ha. Increase the water volume to 600 litres/ha in very dense crops.

Crops:

FATHOM can be applied to all varieties of swedes and turnips. Consult the processor before using FATHOM on crops intended for processing.

Diseases Controlled and Application Timing

FATHOM can be applied from when the roots begin to expand stage (BBCH 40) to 35 days before harvest. Do not apply more than 250 gms ai/ha total dose of FATHOM per crop. Where disease pressure remains high application with an alternative effective product may be required to maintain control but only one application of Fathom may be applied per crop

1. Control of Powdery Mildew

Apply 1.25 litre/ha at the first signs of disease but not before BBCH 40.

RECOMMENDATIONS FOR USE IN CARROTS, PARSNIPS AND HORSE RADISH

Maximum Individual Dose: 1.25 litres/ha

Volume of Water:

Use at least 400 litres of water. Increase the volume to 600 litres in very dense crops. Good foliar cover is extremely important.

Crops:

FATHOM can be applied to all varieties of carrots, parsnips and horseradish. Consult processor before using FATHOM on crops intended for processing.

Diseases Controlled and Application Timing

FATHOM can be applied at any stage from BBCH 20 up to 21 days before harvest. Do not apply more than 250 gms ai/ha total dose of FATHOM per crop. Where disease pressure remains high application with an alternative effective product may be required to maintain control but only one application of Fathom may be applied per crop

1. Control of: Alternaria, Powdery mildew

Apply when the disease is first seen in the crop but not before BBCH 20.

2. Reduction of: Sclerotinia

Apply when the disease is first seen in the crop but not before BBCH 20

RECOMMENDATIONS FOR USE IN LINSEED

Maximum Individual Dose: 1.25 litres/ha

Volume of Water:

Use at least 200 litres of water. Increase the volume to 400 litres in very dense crops.

Crops:

FATHOM can be applied to all varieties of linseed.

Diseases Controlled and Application Timing

FATHOM can be applied between the beginning of stem elongation (BBCH 30) to when nearly all pods have reached final size (BBCH 75). Do not apply more than 250 gms ai/ha total dose of FATHOM per crop.

Where disease pressure remains high application with an alternative effective product may be required to maintain control but only one application of Fathom may be applied per crop

1. Control of Powdery Mildew

Apply once, when the first signs of disease appear in the crop.

MIXING AND APPLICATION

Shake the container thoroughly before opening and use.

Half-fill the sprayer tank with clean water and begin agitation. Add the correct amount of FATHOM using a filling device (e.g. an induction hopper) or by direct addition to the tank, followed by the rest of the water and continue agitation until spraying is complete. Spray solution should be used as soon as practicable after mixing.

Rinse the container clean, preferably with an integrated pressure rinsing device, otherwise manually 3 times. Add the washings to the spray tank at the time of filling. Apply without delay. Maintain agitation while

travelling and throughout the spraying operation.

Apply as a 'Medium' spray at a pressure of 2-3 bar. Do not apply in frosty weather. Apply to dry foliage.

Thoroughly clean the sprayer after use.

COMPATIBILITY

FATHOM is physically compatible with a wide range of agricultural chemicals. Consult your FMC distributor for the latest recommendations. Alternatively, up-to-date compatibility information may be found on our web-site at <https://fmc-agro.co.uk/>

When tank-mixes are to be used, each product should be added separately to the spray tank, taking due note of any instructions given as to the order of mixing.

PHYTOTOXICITY

FATHOM is normally not phytotoxic at the recommended uses and application rates, if the instructions on the label are adhered to.

Do not apply FATHOM to any crop suffering from stress or likely to suffer from stress in the immediate future, particularly if this is due to water deficit, frost or herbicide damage.

Do not apply FATHOM if rain or frost is expected, nor if the crop is wet.

SAFETY PRECAUTIONS

Other specific instructions:

Do not handle area and crops for at least 3 days after treatment

Application to linseed may only be made between BBCH 30-79

Storage and Disposal

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS

KEEP OUT OF REACH OF CHILDREN

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

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

DO NOT RE-USE CONTAINER for any purpose

Store in a suitable pesticide store. Keep dry.

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Emergency No.s - Medical Incidents Involving Crop Protection

Products: England & Wales: 111, Scotland: 08454 24 24 24, Northern Ireland: Local GP or Pharmacist, Republic of Ireland: 01 837 9964.

Healthcare professionals seeking poisons information: www.toxbase.org.

Emergency No.s - Transportation, Warehousing & After Sale

Incidents: CHEMTREC help centre Dialling from the UK and NI: 0870 820 0418, Dialling from Ireland: 01 901 4670

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