

HAIL

MAPP *****

An emulsion (oil in water) containing 250 g/litre tebuconazole.
HAIL is a broad spectrum systemic fungicide for wheat (excluding durum), barley, oats, rye (winter) and oilseed rape, field beans and linseed.

Net Contents: 5 Litres e

Authorization Holder & Marketing Company: Agform Limited
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Contains 250g/L (25.9%) tebuconazole



Danger

Harmful if swallowed.



Causes serious eye damage.

Harmful if inhaled.

Suspected of damaging the unborn child.

Very toxic to aquatic life with long lasting effects.



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.

Immediately call a poison centre or doctor/physician.



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

IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL/HORTICULTURAL FUNGICIDE

Crops/ situations	Maximum individual dose: (l product / ha)	Maximum total dose: (l product / ha)	Latest time of application:
Wheat, barley, rye (winter) and oats:	1.0	2.0	Before grain watery ripe stage (GS 71)
Oilseed Rape	First application between growth stages BBCH 14 and at or before BBCH 19		See 'Other specific restrictions'
	0.5	0.5	
	OR First application at or after BBCH 20		See 'Other specific restrictions'
	1.0		
Field beans	1.0	1.0	Not less than 35 days before harvest
Linseed	1.0	1.0	At any time before brown capsule stage or 35 days before harvest; whichever is sooner.

Earliest time of application:

For wheat, barley, oats, and rye application must be made after BBCH 30.

Oilseed rape - BBCH 14 see other specific restrictions.

For linseed application must be made after BBCH 20.

For field beans application must be made after BBCH 40.

Other specific restrictions:

For use on cereals a maximum dose of 1.0 L/ha applies after BBCH 30 and before early boot stage (BBCH 39). A further maximum dose of 1.0 L/ha cannot be applied until after BBCH40 stage.

For use on oilseed rape a maximum total dose of 0.5 L /ha can be applied between growth stages BBCH 14 and BBCH 19.

For use on oilseed rape a maximum total dose of 1.0 L /ha can be applied between growth stages BBCH 20 and BBCH 69.

For use on oilseed rape if an application is made before BBCH 19 then no further applications are allowed on the crop.

A minimum interval of 14 days applies between applications.

Do not apply by hand-held equipment.

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.

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 when handling contaminated surfaces.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when handling the concentrate. 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. IN CASE OF CONTACT WITH EYES RINSE IMMEDIATELY with plenty of water and seek medical advice.

WASH HANDS AND EXPOSED SKIN before meals and after work.

IF YOU FEEL UNWELL, seek medical advice (show 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).

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 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.

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.

Storage and Disposal

DO NOT RE-USE CONTAINER FOR ANY PURPOSE.

KEEP IN ORIGINAL CONTAINER tightly closed in a safe place.

KEEP OUT OF REACH OF CHILDREN.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

WASH OUT CONTAINER THOROUGHLY, emptying washings into spray tank and dispose of safely.

PROTECT FROM FROST.

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.

HAIL is recommended for control of a wide range of diseases on winter and spring sown cereals, oilseed rape, field beans and linseed.

For best disease control and yield benefit HAIL should be applied at an early stage of disease development, before infection spreads to new crop growth.

RESISTANCE MANAGEMENT

Tank mixtures or alternation with fungicides having a different mode of action have been shown to protect against the development of resistant forms of disease.

The possible development of diseases resistant to HAIL cannot be excluded or predicted. Where such resistant strains occur, HAIL is unlikely to give satisfactory control.

HAIL contains tebuconazole a DMI fungicide. Resistance has been identified in Septoria leaf blotch (*Mycosphaerella graminicola*) which may seriously affect the performance of some products. HAIL is not recommended for the control of this disease.

For further advice on resistance management in DMI's contact your agronomist or specialist advisor, and visit the FRAG-UK 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.

DISEASES CONTROLLED

Wheat

Septoria (moderate control of glume blotch), powdery mildew (moderate control), yellow rust, brown rust, ear disease complex – Fusarium, Alternaria and Cladosporium).

Barley

Powdery mildew (moderate control), yellow rust, brown rust, Rhynchosporium (moderate control) and net blotch (useful reduction).

Rye

Powdery mildew, yellow rust, brown rust and Rhynchosporium (moderate control). Oats Crown rust and mildew.

Oilseed rape

Light leaf spot, Phoma leaf spot and stem canker and Sclerotinia stem rot, dark leaf spot/pod spot (Alternaria), ringspot (Mycosphaerella brassicicola).

Field Beans

Chocolate spot, bean rust.

Linseed

Powdery mildew, Botrytis.

APPLICATION

Sprayers should be THOROUGHLY CLEANED before use and filters and jets checked for damage and blockages.

A pressure of 2-3 bar (30-40 psi) is recommended.

Apply as a MEDIUM quality spray (as defined by BCPC).

Boom height and water volume should be adjusted to ensure good coverage of the crop, particularly at later growth stages. In dense crops at later growth stages, higher water volumes should be used as recommended.

CROP SPECIFIC INFORMATION

CEREALS

HAIL may be used on all varieties of winter and spring wheat (excluding durum), barley, rye, and winter and spring oats.

Maximum individual dose: 1.0 L/ha

Maximum total dose: 2.0 L/ha

Earliest time of application: For winter and spring wheat, barley, oats, rye application must be made after BBCH 30. For use on cereals a maximum dose of 1.0 L/ha applies after BBCH 30 and before early boot stage.

A further maximum dose of 1.0 L/ha cannot be applied until after BBCH40 stage.

Latest time of application: before grain watery ripe stage (BBCH 71).

Water Volume

Most crops 100-200 L/ha

The higher spray volumes are recommended where the crop is dense or disease pressure / risk is high to ensure good penetration to the lower leaves and stem bases. Disease control may be compromised by reducing water volumes, where good spray coverage is difficult to achieve.

Diseases Controlled - Application Timing

Where disease pressure remains high application with an alternative effective product may be required to maintain control.

Septoria Glume Blotch (*S. nodorum*)

To protect the flag leaf and ear from apply HAIL from flag leaf emergence (GS 37) until ear fully emerged (GS 59) prior to development of visible disease.

Yellow Rust and Brown Rust

Apply HAIL at the first signs of disease. Applications made to established infections are likely to be less effective.

Ear Disease Complex

HAIL applied preventatively before an infection event. Applications soon after ear emergence can give a good reduction of Fusarium ear blight and a reduction of sooty moulds (*Alternaria* and *Cladosporium*) and can result in cleaner, brighter ears.

Powdery Mildew

HAIL should be applied at first signs of disease. When disease pressure remains high repeat applications with alternative effective product – see “Resistance Management”

Rhynchosporium (leaf blotch)

Application of HAIL will provide a moderate reduction in Rhynchosporium secalis. Apply HAIL at the onset of disease. For moderate to severe infections a second application with an alternative effective product may be necessary 2-3 weeks later. On disease susceptible varieties in high risk situations tank mixing HAIL with other products may improve control (contact Agform Limited for details).

Net Blotch

Application of HAIL will provide a moderate reduction in net blotch. Apply HAIL at the very first signs of disease in spring/early summer. A second application with an alternative effective product 2-3 weeks later will give most effective control when conditions remain favourable for disease development. When disease develops after flag leaf emergence a single application of HAIL will generally provide moderate protection.

Crown Rust

HAIL applied to control mildew on oats will also reduce crown rust infections occurring around this time. Alternatively, apply HAIL on first appearance of crown rust.

Occasionally, after the application of HAIL, some transient leaf speckling on wheat or leaf reddening/scorch on oats may occur, but these symptoms have not been shown to adversely affect yield responses accruing from the benefits of disease control.

OILSEED RAPE

HAIL may be used on all varieties of winter or spring sown oilseed rape.

a) First application between growth stages BBCH 14 and at or before BBCH 19

Maximum individual dose 0.5 L product per hectare

Maximum total dose: 0.5 L product per hectare

Or

b) First application at or after BBCH 20

Maximum individual dose 1.0 L product per hectare

Maximum total dose: 1.0 L product per hectare

For use on oilseed rape a maximum total dose of 0.5 L/ha can be applied between growth stages BBCH 14 and BBCH 19.

For use on oilseed rape a maximum total dose of 1.0 L/ha can be applied between growth stages BBCH 20 and BBCH 69.

For use on oilseed rape if an application is made before BBCH 19 then no further applications are allowed on the crop.

Latest time of application: up to and including the end of flowering.

Water volume

HAIL should be applied in 100-400 L/ha of water, using the higher volume in dense crops.

Diseases Controlled

Light Leaf Spot

Autumn/Winter: HAIL will control light leaf spot in oilseed rape. Light leaf spot should be prevented from developing early in the life of the crop and good protection from subsequent disease development will be provided by an application of HAIL in autumn/winter after GS 20 (usually late October to early December). Follow up spray(s) with an alternative effective product may be required in the spring/summer depending on disease development.

Spring/Summer: If an autumn treatment of HAIL has not been made and disease develops in the crop over winter, an early spring (late February/March) application of 1.0 L/ha may be made from the onset of stem extension. The application of 1.0 L/ha of HAIL either pre- or post-flowering will generally control late development of light leaf spot on pods and leaves.

Phoma Leaf Spot/Stem Canker

Leaf spot can be found from October onwards and best control of stem canker may be expected from an autumn/early winter application (after GS 20) of HAIL applied at first signs of disease, followed by an alternative effective product in late winter/early spring.

Dark Leaf/Pod Spot (*Alternaria spp*)

Treatment with 1.0 L/ha HAIL should begin at the onset of disease i.e. when black pin-head spots first appear on the pods.

Sclerotinia Stem Rot

1.0 L/ha of HAIL applied at early to full flower will give some reduction of Sclerotinia stem rot.

Ringspot (*Mycosphaerella brassicicola*)

Spring/summer applications of HAIL made for the control of light leaf spot may also give some reduction of this disease.

FIELD BEANS

Maximum individual dose: 1.0 L per hectare

Maximum number of applications: 1 per crop

Earliest time of application: Do not apply before GS 40. HAIL must not be applied less than 35 days before harvest.

Diseases Controlled - Application Timing

Chocolate Spot and Bean Rust

Apply HAIL at first signs of disease from the early flower stage.

LINSEED

Maximum individual dose: 1.0 L per hectare.

Maximum number of applications: 1 per crop.

Earliest time of application: For linseed application must be made after BBCH 20.

Water volume

HAIL should be applied in 100-400 L/ha of water, using the higher volume in dense crops. HAIL may be applied at any time before brown capsule stage or 35 days before harvest whichever is sooner.

Diseases Controlled - Application Timing

Powdery Mildew

HAIL applied at first signs of disease will give control.

Botrytis

HAIL applied at first signs of disease can give a reduction in this disease.

MIXING

Thoroughly shake the pack before use.

Add the required quantity of HAIL to the half-filled spray tank with the agitation system in operation and then fill to the required level.

Continue agitation at all times during spraying and stoppages until the tank is completely empty.

Spray immediately after mixing.

Where tank mixes are used HAIL should be added to the spray tank last, after first dispersing the other product(s)

CONDITIONS OF SUPPLY

All goods supplied by us are of high grade and we believe them to be suitable but, 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.

SPECIMEN