Jackal

PROTECT FROM FROST SHAKE WELL BEFORE USE 5L_C

Batch No. and manufacturing date; see packing

MAPP 18912



An emulsion (oil in water) formulation containing 250 g/L (25.9% w/w) tebuconazole.

A broad spectrum systemic fungicide for winter and spring crops of wheat (excluding durum), barley, oats, rye and oilseed rape, field heans and linseed.

IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL / HORTICULTURAL FUNGICIDE

Crops: All varieties of wheat (excluding durum). barley, rve (winter), oats, oilseed rape, field beans and linseed

Maximum individual dose Maximum number of applications Earliest time of application Latest time of application Other specific restrictions

Full details are given in the attached leaflet

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:

Refer to leaflet attached to this bottle.



Marketing Company Gemini Agriculture Ltd 71-75 Shelton Street, Covent Garden, London, WC2H 9JQ

> **Authorisation Holder** Gemini Agriculture Ltd

for several minutes

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If in eves: rinse cautiously with water

Customer Services

instructions for use

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IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL/HORTICULTURAL FUNGICIDE

Crop	Maximum individual dose (L product/ha)	Maximum total dose (L product/ ha/crop)	Maximum number of treatments (per crop)	Latest time of application
Barley, oats, rye (winter), wheat	1 See 'Other Specific Restrictions'	-	2	before grain watery ripe stage
Oilseed rape	0.5 See 'Other Specific Restrictions'	0.5	-	9 or more leaves unfolded stage
	OR	-	-	-
	1 See 'Other Specific Restrictions'	1	-	end of flowering
Field bean	1	-	1	35 days before harvest
Linseed	1	-	1	35 days before harvest

Crops/situations	Aquatic buffer zone distance (metres)	Comment
Barley, field bean, linseed, oats, oilseed rape, rye (winter), wheat	5	see Environmental Protection Phrase 1

Other specific restrictions:

- 1. This product must not be applied via hand-held equipment.
- 2. Applications to linseed must be made after BBCH 20.
- 3. Applications to field bean must be made after BBCH 40.
- For use on cereals a maximum dose of 1 L/ha applies after BBCH 30 and before early boot stage (BBCH39). A further maximum dose of 1 L/ha cannot be applied until after BBCH 40 stage.
- 5. For use on oilseed rape a maximum total dose of 0.5 litres of product/ha can be applied between growth stages BBCH 14 and BBCH19.
- For use on oilseed rape a maximum total dose of 1.0 litre of product/ha can be applied between growth stages BBCH 20 and BBCH 69.
- 7. For use on oilseed rape if an application is made before BBCH 19 then no further applications are allowed on the crop.
- 8. A minimum interval of 14 days applies between applications.

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).

To protect aquatic organisms respect an unsprayed buffer zone to surface water.



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 FEFDINGSTUFES.

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.

JACKAL 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 JACKAL 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 JACKAL cannot be excluded or predicted. Where such resistant strains occur, JACKAL is unlikely to give satisfactory control.

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

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. For further advice on resistance management in DMI's contact your agronomist or specialist advisor, and visit the FRAGUK website: https://ahdb.org.uk/knowledge-library/frag

DISFASES 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 and 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

JACKAL 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 litre per hectare.

Maximum number of applications

1 per crop.

Earliest time of application

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

Latest time of application

End of flowering (BBCH 69).

Water Volume

Most crops 100-200 litres/hectare.

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 but only one application of JACKAL may be applied per crop.

Septoria Glume Blotch (S. nodorum)

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

Yellow Rust and Brown Rust

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

Ear Disease Complex

JACKAL 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

JACKAL should be applied at first signs of disease. When disease pressure remains high repeat applications with an alternative effective product – see 'Resistance Management'.

Rhynchosporium (leaf blotch)

Application of JACKAL will provide a moderate reduction in *Rhynchosporium secalis*. Apply JACKAL 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 JACKAL with other products may improve control (contact Gemini Agriculture for details).

Net Blotch

Application of JACKAL will provide a moderate reduction in net blotch. Apply JACKAL 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 JACKAL will generally provide moderate protection.

Crown Rust

JACKAL applied to control mildew on oats will also reduce crown rust infections occurring around this time.

Alternatively, apply JACKAL on first appearance of crown rust. Occasionally, after the application of JACKAL, 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.

OIL SEED BAPE

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

Maximum individual dose

1.0 litre per hectare.

Maximum number of applications

1 per crop.

Earliest time of application

For oilseed rape application must be made after BBCH 20.

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

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

Diseases Controlled

Light Leaf Spot

Autumn/Winter: JACKAL 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 JACKAL 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 JACKAL 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 JACKAL either pre- or post-flowering will generally control late development of light leaf spot on pods and leaves.

Phoma Leaf Spot/Stem Canker 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 JACKAL 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 JACKAL 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 JACKAL applied at early to full flower will give some reduction of *Sclerotinia* stem rot.

Ringspot (Mycosphaerella brassicicola)

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

FIELD BEANS

Maximum individual dose

1.0 litre per hectare.

Maximum number of applications

1 per crop

Earliest time of application

Do not apply before GS 40.

JACKAL must not be applied less than 35 days before harvest.

Diseases Controlled - Application Timing

Chocolate Spot and Bean Rust

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

LINSEED

Maximum individual dose

1.0 litre per hectare

Maximum number of applications

1 per crop

Earliest time of application

For linseed application must be made after BBCH 20.

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

JACKAL may be applied at any time before brown capsule stage or 35 days before harvest whichever is sooner.

Diseases Controlled - Application Timing Powdery Mildew

JACKAL applied at first signs of disease will give control.

Botrytis

JACKAL 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 JACKAL 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 JACKAL should be added to the spray tank last, after first dispersing the other product(s).

TERMS AND CONDITIONS OF SUPPLY, SALE OR USE

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To access the Safety Data Sheet for this product scan the QR code:



or visit the weblink:

http://geminiag.com/products.php

Alternatively, contact your supplier.