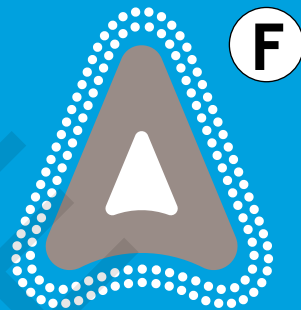


KEYSTONE®

MAPP 18565

A fungicide for the control of *Zymoseptoria tritici*, *Septoria nodorum*, brown rust and yellow rust in winter wheat, net blotch (moderate control), *Rhynchosporium secalis* (reduction), *Ramularia collo-cygni* and brown rust on winter and spring barley, brown rust and *Rhynchosporium secalis* (reduction) on rye and brown rust and *Septoria* spp on triticale.

A suspension concentrate containing 99 g/l (9.2% w/w) epoxiconazole and 125 g/l (11.6% w/w) isopyrazam. Also contains poly(oxy-1,2-ethanediyl), alpha-butyl-omega-hydroxy-, C16-18 and C18-unsatd. alkyl ethers.



ADAMA



Scan for Safety Data Sheet or use weblink:
<https://bit.ly/2uB8Xpx>

FR R3.0.1 JUN19



Warning

May cause an allergic skin reaction.

Causes serious eye irritation.

Harmful if inhaled.

Suspected of causing cancer.

May damage fertility. Suspected of damaging the unborn child.

Very toxic to aquatic life with long lasting effects.

Keep out of reach of children.

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

Use personal protective equipment as required.

IF ON SKIN: Wash with plenty of soap and water.

If exposed or concerned. Get medical advice/attention.

CALL A POISON CENTRE or doctor/physician if you feel unwell.

Collect spillage.

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.

5Le

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KEYSTONE®

MAPP 18565

SHAKE WELL BEFORE USE PROTECT FROM FROST

DIRECTIONS FOR USE:

full instructions in this leaflet.

Batch No.: see packaging

Marketed by: Adama Agricultural Solutions UK Ltd

Third Floor East, 1410 Arlington Business Park, Theale, Reading RG7 4SA

Telephone: 01635 860555 | Technical Helpline: 01635 876622

www.adama.com | ukenquiries@adama.com

Authorisation Holder: Syngenta UK Limited

CPC4, Capital Park, Fulbourn, Cambridge CB21 5XE

For advice on medical emergencies, fires or major spills telephone
the National Chemical Emergency Centre on 01865 407333

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

OPEN HERE ►

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 CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when handling the concentrate.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) when applying the product.

However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.

WASH SPLASHES from skin immediately.

WASH HANDS AND EXPOSED SKIN before meals and after work.

Environmental protection

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

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 6 metres of the top of the bank of a static or flowing waterbody, or within 1 metre of the top of a ditch which is dry at the time of application. Aim spray away from water. THIS CROP IS NOT ELIGIBLE FOR BUFFER ZONE REDUCTION UNDER THE LERAP HORIZONTAL BOOM SPRAYERS SCHEME.



This product qualifies for inclusion within the Local Environmental Risk Assessment for Pesticides (LERAP) Scheme. The statutory buffer zone must be maintained and the distance recorded in the LERAP record form. The LERAP record form must be kept available for three years.

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.

Storage and disposal

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 safely. KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place. EMPTY CONTAINER COMPLETELY and dispose of safely.

IMPORTANT INFORMATION

FOR PROFESSIONAL USE ONLY AS A AGRICULTURAL FUNGICIDE

Crops: Winter wheat, winter & spring barley, rye and triticale.

Maximum individual dose (litres/ha)

Maximum number of applications (per crop)

Latest time of application

Aquatic buffer zone distance (metres)

Other specific restrictions

Full details are given in the information box within this 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.

BK.R3.0.1.JUN19

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This leaflet is part of the approved label.

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Collect spillage.

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.

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IMPORTANT INFORMATION

FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL FUNGICIDE

Crop	Maximum individual dose (litres/hectare)	Maximum number of applications (per crop)	Latest time of application
Winter wheat, rye and triticale	1.0	2	Before grain watery ripe stage (GS 71)
Winter barley and spring barley	1.0	2	Before beginning of flowering: first anthers visible (GS 61)

The following Aquatic Buffer Zones must be observed:

Crops/situations	Aquatic buffer zone distance (metres)	Comment
Winter wheat, barley, rye and triticale.	6	See Environmental Protection Phrase 1

Other specific restrictions:

This product must not be applied via hand-held equipment.

No more than 2 applications of products containing a SDHI must be applied to any cereal crop.

A minimum of 21 days must be observed between applications.

The earliest time of application is GS 30.

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SAFETY PRECAUTIONS

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

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THIS CROP IS NOT ELIGIBLE FOR BUFFER ZONE REDUCTION UNDER THE LERAP HORIZONTAL BOOM SPRAYERS SCHEME.

This product qualifies for inclusion within the Local Environmental Risk Assessment for Pesticides (LERAP) Scheme. The statutory buffer zone must be maintained and the distance recorded in the LERAP record form. The LERAP record form must be kept available for three years.



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Storage and disposal

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

EMPTY CONTAINER COMPLETELY and dispose of safely.

DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be carefully read in order to obtain safe and successful use of this product.

GENERAL INFORMATION

Isopyrazam is an orthosubstituted pyrazole carboxamide fungicide belonging to the sub-class of the benzonorbornenes.

Isopyrazam is an SDH inhibitor (FRAC group #7 carboxamides). Isopyrazam is predominantly protectant but has significant biochemical potency and can deliver disease control away from the point of application. No cross resistance to any compound of a different fungicide class is expected.

Epoxiconazole is a triazole (DMI) fungicide.

Epoxiconazole is a systemic fungicide with protectant and curative properties.

KEYSTONE® shows good crop safety and disease control which can result in significant yield benefits. Wheat crops may show some transient bleaching after treatment but this is unlikely to have an effect on yield.

KEYSTONE is best used as a protectant treatment or in the earliest stages of disease development.

RESISTANCE MANAGEMENT

Use KEYSTONE as part of an Integrated Crop Management (ICM) strategy incorporating other methods of control, including, where appropriate, other fungicides with a different mode of action.

You must not apply more than two foliar applications of products containing SDH inhibitors to any cereal crop. Users should refer to current FRAG-UK guidelines for SDHI compounds.

KEYSTONE contains a DMI fungicide. Resistance to some DMI fungicides has been identified in *Septoria* leaf blotch (*Zymoseptoria tritici*) which may seriously affect the performance of some products. For further advice on resistance management in DMIs, contact your agronomist or specialist advisor, and visit the FRAG-UK website.

Disease control may be reduced if strains of pathogens less sensitive to KEYSTONE develop.

DISEASES CONTROLLED

Winter Wheat

Leaf spot (*Zymoseptoria tritici*)

Glume blotch (*Septoria nodorum*)

Yellow rust (*Puccinia striiformis*)

Brown rust (*Puccinia triticina*)

Winter and Spring Barley

Net blotch (*Pyrenophora teres*) – moderate control

Brown rust (*Puccinia hordei*)

Ramularia collo-cygni

Leaf blotch (*Rhynchosporium secalis*) – reduction

Winter Rye

Brown rust (*Puccinia recondita*)

Leaf blotch (*Rhynchosporium secalis*) – reduction

Triticale

Brown rust (*Puccinia recondita*)

Leaf spot (*Septoria* spp)

CROP SPECIFIC INFORMATION

Crops and growing conditions

KEYSTONE can be used on all varieties of winter wheat, winter and spring barley, rye and triticale. Apply KEYSTONE under good growing conditions with adequate soil moisture. Avoid poor growing conditions which may give less reliable results.

Timing

Always inspect crops to assess disease development immediately before spraying. Best results will be achieved from applications made as a protectant treatment or in the earliest stages of disease development following a disease risk assessment or the use of appropriate decision support systems. KEYSTONE is accepted by the BBFA (British Beer and Pubs Association) for use on malting barley provided application is made before the start of ear emergence.

Latest timing in malting barley is therefore up to and including awn emergence.

RATE OF USE

Apply KEYSTONE at 1.0 litre per hectare.

FOLLOWING CROPS

There are no restrictions on succeeding crops in a normal rotation.

MIXING AND SPRAYING

Mixing procedure

Make sure the sprayer is set to give an even application at the correct volume. Fill the spray tank with half the required volume of water and begin agitation. Add the required amount of KEYSTONE to the spray tank and allow to disperse **before** adding any other product. Add the rest of the water and continue to agitate the mixture thoroughly. Always agitate during spraying.

Spray quality

Apply KEYSTONE using a conventional fan nozzle producing a medium spray quality as defined by the British Crop Protection Council. A spray pressure of 2-3 bar is recommended.

Spray volume

Apply KEYSTONE in a recommended 100-400 litres of water per hectare through conventional crop spraying equipment. 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.

After spraying

Thoroughly wash out sprayer according to the manufacturer's guidelines and dispose of washings and clean containers according to the DEFRA Code of Practice and local water authority guidelines. Crops should not be re-entered until spray residues are dry.

DISCLAIMER/CONDITIONS OF SUPPLY

The specified properties of our products and the mode of application stated on this label have been established on the basis of research and experience. Products conform to specification at the time of delivery but, as we exercise no control over their subsequent storage, handling, mixing or use or the weather conditions before, during and after application, all of which may affect the performance of the products, no responsibility or liability will be accepted by us or our re-sellers for any failure in performance, damage or injury to person or property whatsoever arising from the storage, handling, application or use of the products. These conditions cannot be varied by our staff or agents whether or not they supervise or assist in or make recommendations concerning the use of such products. We recommend you contact your dealer to request advice on the suitability of this product for any new and/or unusual growing methods or for new varieties not listed on this label.

Marketed by

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