

# ZULU™

GROUP 7 FUNGICIDE

## PCS 05026

A fungicide for the control of brown rust, moderate control of *Ramularia collo-cyni* and net blotch and reduction of *Rhynchosporium secalis* on winter and spring barley.

An emulsifiable concentrate containing 125 g/l (13.1% w/w) isopyrazam. Also contains 2-ethylhexan-1-ol.

FOR PROFESSIONAL USE ONLY



ADAMA



Scan for Safety Data Sheet or use weblink:  
<https://bit.ly/2uR593G>

FR R3.0.1 APR22



### SAFETY INFORMATION

#### Warning

**Harmful if swallowed.**  
**Harmful if inhaled.**  
**Suspected of causing cancer.**  
**Suspected of damaging fertility or the unborn child.**  
**Very toxic to aquatic life with long lasting effects.**  
**Contains isopyrazam. May produce an allergic reaction.**  
Obtain special instructions before use.  
Avoid breathing vapours/spray.  
Wear protective gloves, eye protection and face protection.  
IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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 protect aquatic organisms respect a 5 m unsprayed buffer zone to surface water bodies.  
Direct spray away from water.  
**To avoid risks to human health and the environment comply with the instructions for use.**

PCS 05026

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# ZULU™

## PCS 05026

**SHAKE WELL BEFORE USE**  
**PROTECT FROM FROST**

**DIRECTIONS FOR USE:**  
full instructions in this leaflet.

**Adama Agricultural Solutions UK Ltd**

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**www.adama.com | ukenquiries@adama.com**

**For advice on medical emergencies, fires or major spills telephone the UK National Chemical Emergency Centre on +44 (0)1865 407333**

Batch No.: see packaging

OPEN HERE ►

## ADDITIONAL SAFETY INFORMATION

### Operator protection

WEAR SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when handling the concentrate.

IF YOU FEEL UNWELL, seek medical advice immediately (show the label where possible).

WHEN USING DO NOT EAT, DRINK OR SMOKE.

WASH SPLASHES from skin immediately.

WASH HANDS AND EXPOSED SKIN before meals and after work.

### 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.

### Storage and disposal

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.

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 AN AGRICULTURAL FUNGICIDE

Crop	Maximum individual dose (litres/hectare)	Maximum number of applications	Maximum total dose (litres/hectare/crop)	Latest time of application
Winter barley and spring barley	1.0	2 per crop	2.0	Before beginning of flowering: first anthers visible (GS 61)

### Other specific restrictions:

A maximum of two foliar applications of product(s) containing SDHIs can be applied to any cereal crop.

Apply SDHI fungicides always in mixtures.

The mixture partner:

- Should provide satisfactory disease control when used alone on the target disease.
- Must have a different mode of action.

A minimum interval of 14 days must be observed between applications.

Earliest timing of application is GS 30, second application must be after GS 40.

BK R3.0.1 APR22

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**Causes serious eye irritation.**

**Harmful if inhaled.**

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**PCS 50526**

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# 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 benzenobornenes.

Isopyrazam is a 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.

ZULU™ shows good crop safety and disease control which can result in significant yield benefits.

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

## RESISTANCE

ZULU must always be tank-mixed with another fungicide(s) from different cross resistance group(s)/ different modes of action, which when used alone, gives effective control of the same target disease(s). Products should be applied at robust rates. In any tank-mix the SDHI should be applied in a balanced mixture. ZULU should be used in accordance with the instructions for use for the target diseases at the specific growth stages indicated.

Use ZULU 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.

Mixtures of two or more SDHI fungicides do not provide an anti-resistance strategy. Each application of such a mixture counts as one SDHI application. For further advice on resistance management contact your agronomist or specialist advisor and visit the FRAG-UK website.

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

## DISEASES CONTROLLED

### Winter and spring barley

Brown rust (*Puccinia hordei*)

Net blotch (*Pyrenophora hordei*) – moderate control

*Ramularia collo-cygni* – moderate control

Leaf blotch (*Rhynchosporium secalis*) – reduction

## CROP SPECIFIC INFORMATION

### Crops and growing conditions

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

### Time of application

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.

ZULU is accepted by BBPA (British Beer and Pub 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 ZULU at 1.0 litres per hectare.

## FOLLOWING CROPS

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

## MIXING AND SPRAYING

### Mixing Procedure

For use by tractor mounted/trailed sprayer only.

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 ZULU 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 ZULU using a conventional fan nozzle producing a medium spray quality. A spray pressure of 2-3 bar is recommended.

### Spray Volume

Apply ZULU 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 manufacturer's guidelines and dispose of washings and clean containers according to local water authority guidelines.

Crops should not be re-entered until spray residues are dry.

## COMPATIBILITY

For further information on the approval status for use in tank-mixtures consult Adama Agricultural Solutions UK Ltd.

## 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.

### Authorised to and marketed by:

Adama Agricultural Solutions UK Ltd  
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