LS BIX-PRO-SPIRO

GROUP 7 3 5 FUNGICIDE



FUNGICIDE

For the control of certain diseases in approved cereal crops. See detailed label text for specific information.

WINTER WHEAT, SPRING WHEAT, WINTER RYE, WINTER BARLEY, SPRING BARLEY, CATS AND TRITICALE PCS No. 07115

Bixaten 50 g/L, Prothioconazole 100 g/L, Spiroxamine 250 g/L Emulsifiable Concentrate (EC)

NET CONTENT: 5 L

FOR USE ONLY AS A PROFESSIONAL FUNGICIDE





Harmful if swallowed. Causes serious eye damage. Harmful if inhaled.

Very toxic to aquatic life with long lasting effects.

Keep out of reach of children.

Avoid breathing dust/fume/gas/mist/vapours/spray.

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 so. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Collect spillage.

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.

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

Contains Prothioconazole and Spiroxamine. May produce an allergic reaction

To avoid risks to human health and the environment, comply with the instructions for use

PCS No. 07115

UFI Code: NTFX-2K6S-J403-VHWM XXXXXXXXX V1

LS BIX-PRO-SPIRO - PCS No. 07115

Contains bixafen+ prothioconazole + spiroxamine 50.0 + 100.0 + 250.0 g/L (5.1% + 10.1% + 25.3% w/w) formulated as an emulsifiable concentrate formulation (EC).

LS BIX-PRO-SPIRO is a fungicide for selective use in winter wheat, spring wheat, winter rye, winter barley, spring barley, oats and triticale crops.

Important Information FOR USE ONLY AS A PROFESSIONAL FUNGICIDE				
Crops	Maximum individual dose (L product per hectare)	Maximum number of treatments	Latest time of application	
Wheat (winter and spring), winter rye, triticale	1.5 L/ha	2	Crop BBCH 73 (before grain milky ripe stage)	
Barley (winter and spring), oats (winter and spring)	1.5 L/ha	2	Crop BBCH 61 (up to beginning of flowering)	
DEAD ALL DESCALITIONS DESCRETES				

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

A maximum of two foliar applications of products containing SDHI fungicides can be made to any single cereal crop.



In the event of emergency, call the National Poisons Information Centre, Beaumont Hospital at 01 809 2166 or 01 837 9964.

APPROVAL HOLDER AND MARKETING COMPANY: Life Scientific Ltd (Block 4, Belfield Office Park, Beech Hill Road, Dublin 4, Ireland. Tel: +353 2832024)

PROTECT FROM FROST MADE IN EU SHAKE WELL BEFORE USE



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 (FACE SHIELD) when handling the concentrate.

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

WHEN USING DO NOT EAT, DRINK OR SMOKE.

WASH HANDS AND EXPOSED SKIN before eating and drinking 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.

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

Storage and disposal

KEEP OUT OF REACH OF CHILDREN.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS

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 time of filling and dispose of container safely.

Do not reuse container for any other purpose.

PROTECT FROM FROST.

Resistance strategy

LS BIX-PRO-SPIRO contains active substances which are in the Fungicide Resistance Action Committee mode of action Groups 3, 5 and 7; it includes Bixafen (an SDHI fungicide), Spiroxamine (an SBI fungicide) and Prothioconazole (a DMI fungicide).

Resistance against SDHI chemistry is known for several fungal species in field populations and lab mutants. A resistance management strategy is required.

Repeated applications of products with this mode of action should not be used against high-risk pathogens such as

Repeated applications of products with this mode of action should not be used against high-risk pathogens such as cereal powdery mildew, or medium risk pathogens such as Septoria.

Follow the FRAC SDHI fungicide resistance management guidelines:

- . Apply SDHI fungicides always in mixtures; LS BIX-PRO-SPIRO is such a mixture.
- Apply a maximum of 2 SDHI fungicide containing sprays per cereal crop.
- Apply the SDHI fungicide preventively or as early as possible in the disease cycle. Do not rely only on the curative potential of SDHI fungicides.
- Strongly reduced rate programmes including multiple applications must not be used. Refer to manufacturers' recommendations for rates.

Restrictions:

Ensure the sprayer is free from residues from previous applications.

For professional use only.

For use by Tractor mounted/Trailed horizontal boom sprayer only.

Avoid spray drift on to neighbouring crops and field margins.

After spraying, wash out sprayer thoroughly according to manufacturer's guidelines and dispose of washings and clean container according to local authority guidelines.

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.

LS BIX-PRO-SPIRO is a selective protective and systemic fungicide. Up to two applications may be made to any individual crop, as part of a planned disease control programme.

Diseases Controlled

The following diseases are susceptible to LS BIX-PRO-SPIRO. The susceptibility ratings in the following table refer to good spray cover and good growing conditions, with suitable application timings.

Disease controlled	Common name	Crops	Control level achieved
Puccinia recondita	Brown rust	Winter wheat, spring wheat, winter rye, triticale, winter barley, spring barley	Control
Puccinia coronata	Crown rust	Oats	Control
Oculimacula yallundae, O. acuformis	Eyespot	Winter wheat, spring wheat, triticale, winter rye	Reduction
Fusarium spp.	Fusarium ear blight	Winter wheat, spring wheat, triticale	Moderate control
Parastagonospora nodorum	Glume blotch	Winter wheat, spring wheat, rye	Moderate Control
Pyrenophora teres	Net blotch	Winter barley, spring barley	Moderate control
Blumeria graminis	Powdery mildew	Winter wheat, spring wheat, winter rye, triticale, winter barley, spring barley, winter rye	Control
Rhynchosporium secalis	Rhynchosporium leaf blotch	Winter barley, spring barley	Moderate control
Rhynchosporium secalis	Rhynchosporium leaf blotch	Winter rye, triticale	Control
Zymoseptoria tritici	Septoria leaf blotch	Winter wheat, spring wheat, triticale, rye	Moderate Control
Cladosporium spp., Botrytis spp.	Sooty moulds	Winter wheat, spring wheat, triticale	Reduction
Pyrenophora tritici-repentis	Tan spot	Winter wheat, spring wheat	Control
Puccinia striiformis	Yellow rust	Winter wheat, spring wheat, triticale, winter barley, spring barley	Control

Control of some diseases may be enhanced by the use of suitable spray programmes and mixtures.

Application timings

In general, application of LS BIX-PRO-SPIRO should be made at the first signs of disease, in the spring or early summer. Applications to established disease infection will be less effective.

Where disease pressure remains high after application, a second spray may be made 14-21 days after the first.

Common name	Crops	Optimum application timing	
Brown rust	Winter wheat, spring wheat, winter rye, triticale, winter barley, spring barley	Apply at the first sign of disease.	
Crown rust	Oats	Apply at the first sign of disease.	
Eyespot	Winter wheat, spring wheat	Apply in spring, at the first sign of disease, crop BBCH 30-32.	
Fusarium ear blight	Winter wheat, spring wheat	Apply between ear emergence and the end of flowering (crop BBCH 59-69).	
Glume blotch	Winter wheat, spring wheat, rye	Apply before disease is established in the crop. Best protectant activity comes from applications between crop BBCH 37 and 65 (flag leaf emergence to mid-flowering). Applications to upper leaves already displaying symptoms are likely to give lower levels of control.	
Net blotch	Winter barley, spring barley	Apply at the first sign of disease.	
Powdery mildew	Winter wheat, spring wheat, winter rye, triticale, winter barley, spring barley	Apply at the first sign of disease.	
Rhynchosporium leaf blotch	Winter barley, spring barley	Apply at the first sign of disease.	
Rhynchosporium leaf blotch	Winter rye	Apply at the first sign of disease.	
Septoria leaf blotch	Winter wheat, spring wheat, triticale, rye	Apply before disease is established in the crop. Best protectant activity comes from applications between crop BBCH 37 and 65 (flag leaf emergence to mid-flowering). Applications to upper leaves already displaying symptoms are likely to give lower levels of control.	
Sooty moulds	Winter wheat, spring wheat, triticale	Apply between ear emergence and the end of flowering (crop BBCH 59-69).	
Tan spot	Winter wheat, spring wheat	Apply at the first sign of disease.	
Yellow rust	Winter wheat, spring wheat, triticale, winter barley, spring barley	Apply at the first sign of disease.	

PREPARATION OF THE SPRAY SOLUTION AND APPLICATION

LS BIX-PRO-SPIRO is not to be applied through backpack or hand-held sprayers.

Shake the container before use.

Half-fill the spray tank with clean water, add the necessary amount of LS BIX-PRO-SPIRO and agitate while filling the tank.

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 container safely.

Do not leave spray solution in the tank overnight.

Good spray solution is necessary for effective control.

Apply at medium spray quality, through properly calibrated equipment.

Water volume

Apply LS BIX-PRO-SPIRO in 100-300 L/ha of water. Good crop coverage and crop penetration are required for good disease control, therefore higher spray volumes aid crop penetration and plant coverage. Control may be reduced with lower water volumes.

COMPATIBILITY

LS BIX-PRO-SPIRO is a fully optimised formulation; no additional surfactant is required. Please contact your distributor for further information regarding tank-mix partners.

SPRAY TANK CLEANING

Wash all equipment immediately after use, using clean water and a suitable cleaning agent, according to the manufacturer's instructions.

CONDITIONS OF SUPPLY

All goods supplied by the company are of good quality and we believe them to be fit for purpose. However, 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.