

BASF

We create chemistry

Shepherd®



Shepherd is a protectant and systemic fungicide for use against diseases in winter and spring oilseed rape.

A suspension concentrate containing 250 g/l pyraclostrobin and 150 g/l boscalid

Contains: 1,2-benzisothiazol-3(2H)-one (CAS 2634-33-5) and methylisothiazolinone (CAS 2682-20-4), may produce an allergic reaction

Safety Information

Warning

Harmful if swallowed or inhaled.

Causes skin irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

Suspected of damaging the unborn child.

May cause damage to organs (Liver, Nasal cavity, Gastrointestinal tract) through prolonged or repeated exposure.

Very toxic to aquatic life with long lasting effects.

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

If medical advice is needed, have product container or label at hand.

Use only outdoors or in a well-ventilated area.

Call a POISON CENTRE or doctor/physician if you feel unwell.

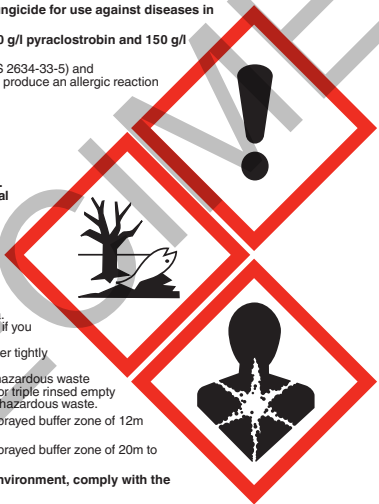
Store in a well-ventilated place. Keep container tightly closed.

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 12m to surface water bodies (UK only).

To protect aquatic organisms respect an unsprayed buffer zone of 20m to surface water bodies (Ireland only).

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



MAPP 19550
PCS No. 07165

® = Registered trademark of BASF

UFI: 6X73-PG8D-4002-MQE3

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

Authorisation holder and UK marketing company:

BASF plc, 4th and 5th Floors, 2 Stockport Exchange, Railway Road, Stockport, SK1 3GG Tel: 0161 475 3000

Irish marketing company:

BASF Ireland DAC, 4th and 5th Floors, 2 Stockport Exchange, Railway Road, Stockport, SK1 3GG
Tel: 00 44 (0) 161 475 3000

Emergency Information (24 hours freephone): 0049 180 227 3112,

Technical Enquiries: 0044 (0)845 602 2553 (office hours)

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**IMPORTANT INFORMATION
FOR USE ONLY AS A PROFESSIONAL FUNGICIDE, as directed below:**

Crop	Maximum individual dose	Maximum total dose per crop	Latest time of application
Oilseed rape (winter and spring)	0.8 litre product/ha	0.8 litre product/ha	50% of pods have reached final size (GS 75)

Aquatic buffer zone distance: 12 metres (UK Only)

Aquatic buffer zone distance: 20 metres (Ireland Only)

Other specific restrictions:

When used on crops with a greater than 5 m aquatic buffer zone, this product must not be applied via hand-held equipment.

Applications to oilseed rape (winter) must only be made between GS 14-75 – four leaves unfolded / 50% of pods have reached final size. Applications must not be made between 1 June and 31 October (UK Only).

Applications to oilseed rape (spring) must only be made between GS 25-75 – five side shoots detectable / 50% of pods have reached final size. Applications must not be made between 1 June and 31 October (UK Only).

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.

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) AND SUITABLE PROTECTIVE GLOVES 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.

IF SWALLOWED, seek medical advice immediately and show this container or label.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

WASH HANDS 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.

UK Only

To protect aquatic organisms respect an unsprayed buffer zone to surface water bodies as specified for the crop.

HORIZONTAL BOOM SPRAYERS MUST BE FITTED WITH THREE STAR DRIFT REDUCTION TECHNOLOGY.

Low drift spraying equipment must be operated according to the specific conditions stated in the official three star rating for that equipment as published on HSE Chemicals Regulation Directorate's website.

Maintain three star operating conditions until 30 m from the top of the bank of any surface water bodies.

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within the distance specified for the crop to the top of the bank of a static or flowing waterbody, or within 1m of the top of a ditch which is dry at the time of application.

Aim spray away from water.

NOTE: BUFFER ZONES OF MORE THAN 5 M CANNOT BE REDUCED UNDER THE LOCAL ENVIRONMENT RISK ASSESSMENT FOR PESTICIDES (LERAP) SCHEME.

The statutory buffer zone must be maintained and the distance recorded in Section A of the LERAP record form. The LERAP record form must be kept available for three years.

Ireland Only

To protect aquatic organisms respect an unsprayed buffer zone of 20m to surface water bodies.

Storage And Disposal

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

KEEP OUT OF REACH OF CHILDREN.

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

DO NOT RE-USE CONTAINER FOR ANY PURPOSE.

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.

Store in a suitable pesticide store. Keep dry and protect from frost.

This label is compliant with the CPA Voluntary Initiative Guidance (UK only).



**The
Voluntary
Initiative**

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.

Shepherd is a protectant and systemic fungicide for use in winter and spring oilseed rape for the control of *Phoma lingam*/stem canker, Light leaf spot, *Sclerotinia* stem rot, and *Alternaria* dark leaf and pod spot.

Restrictions/Warnings

For professional use only.

Avoid spray drift on to neighbouring crops and plants outside the target area.

Shepherd represents minimal hazard to bees when used as directed. Consideration should be given to informing bee-keepers when you intend spraying crops in flower.

A reduction in *Sclerotinia* control may be observed when high-risk infection conditions occur after flowering, leading to secondary spread of the disease through plant-to-plant contact, which may be more severe in lodged crops.

Crops

Shepherd can be used on all varieties of winter and spring oilseed rape.

Disease control

Shepherd controls *Phoma* leaf spot and Stem canker, *Sclerotinia* stem rot, *Alternaria* dark leaf and pod spot and controls moderate infections of Light leaf spot in oilseed rape.

Disease	Susceptibility ratings
<i>Phoma</i> leaf spot #	Control
Stem canker #	Control
Light leaf spot #	Moderate control
<i>Sclerotinia</i> stem rot	Control
<i>Alternaria</i> dark leaf and pod spot	Moderate Control

Optimum control of *Phoma* leaf spot/stem canker and Light leaf spot will be achieved where Shepherd is applied in the autumn/late winter or in the spring in sequence with an approved fungicide having activity on these diseases.

Time of application

Inspect crops to assess disease development prior to spraying. Apply Shepherd protectively or when disease thresholds have been reached according to appropriate disease support systems.

Phoma leaf spot, Stem canker

Apply Shepherd in the autumn at the first sign of disease. Optimum control will be achieved where Shepherd is applied in sequence with an approved fungicide having activity on these diseases.

Light leaf spot

Apply Shepherd protectively in the late autumn or at first sign of disease in early spring. Optimum control will be achieved where Shepherd is applied in sequence with an approved fungicide having activity on these diseases.

Sclerotinia stem rot

Apply Shepherd in high disease risk situations at early to full flower to coincide with or just before first petal fall, and before disease symptoms are visible. Applications made after the end of flowering (GS 69 BBCH) may result in reduced levels of *Sclerotinia* control.

Alternaria dark leaf and pod spot

Apply Shepherd from full flowering up to and including when 50% of pods have reached final size. Applications made after the end of flowering may result in reduced levels of control.

Rate of application

Apply Shepherd at 0.8 l/ha in a recommended water volume of 150-300 litres of water per hectare.

Resistance Management

GROUP	7	11	FUNGICIDES
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Shepherd contains boscalid, which belongs to the SDHI (carboxamide) group of fungicides and pyraclostrobin, which belongs to the strobilurin QoI group of fungicides. The two active ingredients possess different modes of action, which form part of a resistance management strategy.

The key to resistance management strategies is the reduction of selection pressure. This can be achieved by good agricultural practice which leads to less infection pressure (e.g. crop and stubble hygiene, use of less susceptible varieties, crop rotation, use of healthy seeds etc.).

Risk assessments for the target diseases on oilseed rape indicate a low or medium risk of resistance development. To minimize any possible risk of resistance occurring, Shepherd should be applied in a preventative manner, following the recommendations on the label, and as an integral part of a spray program which includes fungicides with different modes of action.

For further advice on resistance management in oilseed rape contact your agronomist or specialist advisor and visit the Fungicide Resistance Action Committee (FRAC) and UK Fungicide Resistance Action Group (FRAG) websites.

Following crops

Any crop can follow normally harvested or failed crops treated with Shepherd.

Mixing and Application

Mixing procedure

Never prepare more spray solution than is required.

Three quarters fill the tank with clean water and start the agitation. To ensure thorough mixing of the product, invert the container several times before opening. Add the required quantity of Shepherd to the spray tank while re-circulating. Add the remainder of the water and continue agitation until spraying is complete.

When tank mixes are to be used, take due note of any instructions given as to the order of mixing. Each product should be added separately to the spray tank and fully dispersed before the addition of any further product(s).

Rinse empty containers thoroughly, using an integrated pressure rinsing device or by manually rinsing three times. Add washings to tank at time of filling and dispose of container safely.

Application

Apply 0.8 l/ha Shepherd in a recommended water volume of 150-300 litres of water per hectare as a MEDIUM spray, as defined by the BCPC. In dense crops, using the increased water volume will help achieve adequate penetration and good coverage of the crop.

Effectiveness using three star drift reduction technology may be reduced.

Where possible use narrow-wheeled high clearance application equipment. To ensure optimum spray coverage and minimize spray drift, adjust the spray boom to the appropriate height above the crop, according to guidance provided by the sprayer and/or nozzle manufacture.

Tank cleaning

After spraying, thoroughly clean and flush out application machinery with a minimum of three rinses.

Compatibility

For details of compatibilities contact your distributor, local BASF representative, the BASF Technical Services Hotline: 0845 602 2553 or visit our website on: www.agricentre.basf.co.uk or www.agricentre.basf.ie

The following does not form part of the product label under Irish S.I. No. 159 of 2012 or under the Plant Protection Product Regulations 1107/2009

With many products there is a general risk of resistance developing to the active ingredients. For this reason a change in activity cannot be ruled out. It is generally impossible to predict with certainty how resistance may develop because there are so many crop and use connected ways of influencing this. We therefore have to exclude liability for damage or loss attributable to any such resistance that may develop. To help minimise any loss in activity the BASF recommended rate should in all events be adhered to.

Numerous, particularly regional or regionally attributable, factors can influence the activity of the product. Examples include weather and soil conditions, crop plant varieties, crop rotation, treatment times, application amounts, admixture with other products, appearance of organisms resistant to active ingredients and spraying techniques. Under particular conditions a change in activity or damage to plants cannot be ruled out. The manufacturer or supplier is therefore unable to accept any liability in such circumstances. All goods supplied by us are of high grade and we believe them to be suitable, but as we cannot exercise control over their mixing or use or the weather conditions during and after application, which may affect the performance of the material, 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 for any damage or injury whatsoever arising from their storage, handling, application or use; but nothing should be deemed to exclude or restrict any liability upon us which cannot be excluded or restricted under the provisions of any applicable law.

Additional Product Safety Information

The information on this label is based on the best available information including data from test results.

Ireland Safety Data Sheet

To access the Safety Data Sheet for this product scan the QR code or use the weblink below:



agricentre.basf.ie/Shepherd-IE/MSDS

Alternatively, contact your supplier.

Great Britain Safety Data Sheet

To access the Safety Data Sheet for this product scan the QR code or use the weblink below:



agricentre.basf.co.uk/Shepherd/MSDS

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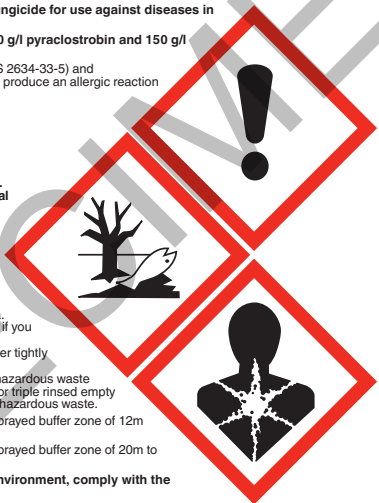
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