Product registration number: MAPP 16624.
Suspension concentrate containing 500 g/l (38.4% w/w) fluazinam.
An agricultural fungicide for the control of foliar blight (Phytophthora infestans) and protection against tuber blight in potatoes.
The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.
In case of toxic or transport emergency ring +44 (0)1484 538444 any time.
Syngenta UK Limited
CPC4, Capital Park, Fulbourn, Cambridge, CB21 5XE
Tel: Cambridge (01223) 883400

SAFETY PRECAUTIONS
(a) 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 or handling contaminated surfaces.
WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) during application. However engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.
TAKE OFF IMMEDIATELY all contaminated clothing.
WASH CONCENTRATE from skin and eyes immediately.
WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the insides of gloves.
WASH HANDS AND EXPOSED SKIN before meals and after work.
IF YOU FEEL UNWELL seek medical advice (show label where possible).

(b) Environmental protection
To protect aquatic organisms respect an unsprayed buffer zone to surface water bodies in line with LERAP requirements.
Do not allow direct spray from horizontal boom sprayers to fall within 7 metres of the top of the bank of a static or flowing water-body, unless a Local Environmental Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1 metre of the top of a ditch which is dry at the time of application.
Do not allow direct spray from hand-held sprayers to fall within 1 metre of the top of the bank of a static or flowing water-body. Aim spray away from water.
This product 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. Before each spraying operation from a horizontal boom sprayer, either a LERAP must be carried out in accordance with CRD published guidance or the statutory buffer zone must be maintained.
NOTE: ALL BUFFER ZONES MORE THAN 5 METRES ARE NOT REDUCIBLE. The results of the LERAP must be recorded and kept available for 3 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.

(c) Storage and disposal
KEEP 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.

This product label is compliant with the CPA Voluntary Initiative (VI) guidance.
SHIRLAN
Suspension concentrate containing 500 g/l (38.4% w/w) fluazinam.

Signal Word
Warning

Hazard Statements
May cause an allergic skin reaction.
Suspected of damaging the unborn child.
Very toxic to aquatic life with long lasting effects.

Precautions Statements
Do not handle until all safety precautions have been read and understood.
Keep out of reach of children.
Wear protective gloves/ protective clothing.
If exposed or concerned: Get medical advice/ attention.
If skin irritation or rash occurs: Get medical advice/attention.
IF ON SKIN: Wash with plenty of soap and water.
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.

Supplemental Information
To avoid risks to human health and the environment comply with the instructions for use.
When Dry: combustible

IMPORTANT INFORMATION
FOR USE ONLY AS AN FUNGICIDE.

For use on potatoes.
Maximum individual dose, Maximum total dose & Other specific restrictions:
Full details are given in Important Information on 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.

Active ingredient and formulation of Ishihara Sangyo Kaisha, Ltd
(ISK Biosciences Europe N.V.)
© Syngenta AG, 2015.
SHIRLAN is an agricultural fungicide for the control of foliar blight (Phytophthera infestans) and protection against tuber blight in potatoes. Suspension concentrate containing 500 g/l (38.4% w/w) fluazinam.

**Blight Risk Assessment**

The risk of disease is affected by crop location and climatic conditions. The Fens and other similar areas are at a high risk of disease entering the crop. Other areas that encourage disease development include the South West, the West and other coastal regions. Low risk situations include the Midlands and northern locations where conditions are less conducive to disease development.

**Timing**

SHIRLAN is a protectant fungicide and therefore the spray programme must start BEFORE blight enters the crop. The programme should ensure that foliage is covered with a spray of the fungicide at least 11 hours before the end of the period of risk. However, any period of warm, humid weather increases blight risk.

**Latest time of treatments**

For protection against Tuber Blight

- Before mixing SHIRLAN, first part fill the spray tank with clean water and commence agitation. Then, shake the SHIRLAN concentrate for 3-5 minutes and add it to the spray tank. Mix well before application.
- For protection against Tuber Blight, SHIRLAN must be applied to the crop for a minimum of 11 hours before harvest. This is to allow sufficient time for the fungicide to enter the tuber and reduce disease risk to later crops.

**Spray Pressure**

1. Application Equipment:
   - Apply SHIRLAN through tractor drawn or mounted, conventional hydraulic crop spraying equipment.

2. Rates of Use:
   - For protection against foliar blight, the recommended rate is 0.25 l/ha.
   - For protection against tuber blight, the recommended rate is 0.5 l/ha.
   - Do not apply more than a total maximum dose of 3 litres product/ha per crop.

**N.B.**

Potato blight fungicides may not give complete protection when the disease risk is severe. However, disease development will be minimised by using SHIRLAN as directed.

**Mixing and Spraying**

- Do not leave the spray liquid in the sprayer for long periods (such as during meal-breaks or overnight).
- Do not allow drift from the application equipment. Do not apply in a manner that is inconsistent or less than recommended.
- When the weather is likely to change within 48 hours of application, an extra application should be made if necessary.
- Do not apply this product in the presence of conditions of wind and humidity which could cause drift, or when spraying near water bodies and wetland features.
- For the full text of the H-Statements mentioned in this Section, see Section 16.
SHIRLAN may cause transient skin reaction in a small number of sensitive individuals.

The risk of disease is affected by (during the crop life) and on the leaves or stem bases.

Disease prevention programmes require regular and season long fungicide use to limit foliar blight development. However, as an effect reduce disease risk to later crops.

4. Use generous soil ridges to protect tubers.

3. Plant disease free seed.

2. Destroy all groundkeepers.

SHIRLAN is an agricultural fungicide for the control of foliar blight (Phytophthera infestans) and protection against tuber blight in potatoes.

Suspension concentrate containing 500 g/l (38.4% w/w) fluazinam.

RESTRICTIONS

READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE

FOR USE ONLY AS AN FUNGICIDE

In severe risk” situations the disease, Irrespective of crop growth stage, commence spraying at the first blight warning or when local weather conditions are favourable for determination what frequency of fungicide treatment is appropriate and fungicide type required.

Weather Conditions

1. Areas of the country where extensive main crop or early production takes place e.g. East Anglia, the south west or the west.

2. Areas where climatic conditions that encourage disease development occur on a frequent basis e.g. The South West, The West and minimum temperature is 10°C or more and the relative humidity exceeds 90% for at least 11 hours during the first 24 hours and for at least 2 bar.

Note: Blight forecasting has often been based on the occurrence of “Smith periods”. A “Smith period” is a 48 hour period in which the
determine what frequency of fungicide treatment is appropriate and fungicide type required.

Timing

SECTION 2. HAZARDS IDENTIFIC
DANGEROUS FOR DISEASES CONTROLLED

RESTRICTIONS

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be carefully read in order. This leaflet is part of the approved Product Label.

Blight Risk Assessment

AT ALL

1. Prevent re-growth on potato dumps.
2. Areas where climatic conditions that encourage disease development occur on a frequent basis e.g. The South West, The West and N, Xn, Zn.
3. Late blight (Phytophthora infestans) is potentially a devastating disease of potatoes. In commercial production, a season long active fungicide programme will preserve leaf area there may be more risk of infecting tubers at harvest, particularly during "heavy" blight situations.
4. Following two warm, humid days or in irrigated crops - APPLY AT 7-10 DAY INTERVALS.
5. Have occurred - APPLY AT 14 DAY INTERVALS.
6. APPLICATION DETAILS
   - Locations with the highest probability of blight problems are:
     - Following the code of practice for using plant protection products.

Application Details

1. Mixing:
   - Use appropriate container, size sufficient to hold all of the top of a ditch which is dry at the time of application.
   - Allow 3.8 litre of water per litre of concentrate.
   - Do not use more than 6 litres of water per litre of concentrate.
   - Do not add more than 0.5 per cent v/v of the concentrate to the spray tank.
   - Do not mix with any other products.
   - Do not add to the tank directly, but mix the concentrate with the water and then add the mixture to the tank.
   - Do not add directly to the spray tank.
   - Do not add to the spray tank directly.

2. Spray Atomiser
   - Use a high pressure (300 bar) atomiser.
   - Use a high volume atomiser.

3. Rate
   - Increasing the volume as haulm growth progresses, particularly in dense crops and under high or severe blight risk conditions.

   IN THE ROWS

   EARLY DISEASE

   - Applying 400 ml at 5-7 day intervals or 400 ml at 7 day intervals as appropriate, according to blight warnings

   - following two warm, humid days or in irrigated crops - APPLY AT 7-10 DAY INTERVALS.

4. Safety Precautions
   - Wear suitable protective clothing, gloves and eye/face protection.
   - Avoid contact between contaminated sprayer parts and unprotected skin.
   - Ensure sprayer is washed down daily.
   - WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially manually rinse the container three times. DO NOT RE-USE CONTAINER FOR ANY PURPOSE.
   - Wash out empty container thoroughly and add washings to the sprayer. Preferably use an integrated pressure rinsing device, otherwise manually rinse the container three times. DO NOT RE-USE CONTAINER FOR ANY PURPOSE.

5. Buffer Zone
   - This product is not eligible for buffer zone reduction under the LERAP horizontal boom sprayers scheme.
   - This product is not eligible for buffer zone reduction under the LERAP horizontal boom sprayers scheme.

6. Aquatic Buffer Zone
   - Aquatic buffer zone (See Special Precautions).
   - Do not contaminate water with the product or its container. Do not pollute surface water directly, or through run-off, oreria or drainage systems. Do not contaminate water sources either intentionally or accidentally.
   - Do not contaminate water with the product or its container. Do not pollute surface water directly, or through run-off, or leaching from "undisturbed" areas. Do not contaminate water sources either intentionally or accidentally.
   - Do not contaminate water with the product or its container. Do not pollute surface water directly, or through run-off, or leaching from "disturbed" areas. Do not contaminate water sources either intentionally or accidentally.

7. Further Information
   - For further information, contact: Syngenta UK Ltd, CPC4, Capital Park, Fulbourn, Cambridge, CB21 5XE. Tel: Cambridge (01223) 883400.

8. Contact Information
   - Website: Syngenta UK Ltd
   - Phone: Cambridge (01223) 883400

9. Identification
   - Identify the substance/mixture by its chemical name CAS No. EC No.

Hazardous Component(s)

- Hazardous component(s) which must be listed on the label:

Hazard Category

- Category 1
- Category 2
- Category 1

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Hazard Statements

- H201 INHIBITS RESPIRATION
- H318 Eye Dam.
- H410 HARMFUL IF SWALLOWED
- H361d May cause an allergic skin reaction.
- H318 Eye Dam.
- H410 HARMFUL IF SWALLOWED
- H361d May cause an allergic skin reaction.
- H361d May cause an allergic skin reaction.

Precautionary Statements

- P200 Protect against contact with the skin and eyes.
- P250 Avoid contact with the skin.
- P261 Avoid inhalation. Wash Affected Part thoroughly after handling.
- P301+P312 IF SWALLOWED: CALL 117-1797777649. IF ON CONTACT WITH EYES: FLUSH WITH WATER FOR 15 MINUTES OR MORE, CALL 117-1797777649.
- P302+P304+P305 IMMEDIATELY PROTECT SKIN (INCLUDING AREAS WHICH MAY BE IN CONTACT WITH CONTAMINATED CLOTHING) AND EYES WITH APPROPRIATE SAFETY EQUIPMENT.
- P308+P309 CLEAN UP CONTAMINATED CLOTHING IMMEDIATELY. CALL 117-1797777649.
- P317 DO NOT DISSOLVE IN WATER. USE ALCOHOL-RESISTANT FOAM OR WATER SPRAY.
- P318 USE WATER FOR CLEAN UP.
- P338 TAKE OFF ALL PROTECTIVE CLOTHING AND EYEWEAR IMMEDIATELY AFTER USE.
- P339 DISPOSE OF USED PROTECTIVE CLOTHING AND EQUIPMENT ACCORDING TO LOCAL WASTE DISPOSAL REQUIREMENTS.
- P353 PROVIDE EXHAUST VENTILATION WHOEVER POSSIBLE.
- P373 KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE.
- P381 CONTACT FOR MEDICAL ADVICE IF FEELING UNCOMFORTABLE.
- P391 DO NOT CONTAMINATE WATER, SOIL OR SEWAGE SYSTEMS.
- P401 KEEP OUT OF REACH OF CHILDREN.
- P403 USE PROTECTIVE CLOTHING AND EQUIPMENT.
- P405 DO NOT TRANSFER TO OTHER CONTAINERS EXCEPT WITH THE EXPRESSED AUTHORITY OF THE MANUFACTURER.
- P406 DO NOT RE-USE CONTAINER FOR ANY PURPOSE.
- P411 PREVENT DISPERSAL OF SPILLS.
- P430 DO NOT DISPOSE OF INTO THE ATMOSPHERE.
- P451 KEEP AWAY FROM HEAT, NO OPEN FLAME, SPARKS OR UNCONTROLLED HEAT.
- P473 STAY AWAY FROM UNPROTECTED SKIN AND EYES.
- P480 h KEEP CONTAINER IN A COOL,well ventilated place.
- P490 AVOID CONTACT WITH THE SKIN, EYES OR CLOTHING.
- P501 TAKE CARE NOT TO INHALE DUST, VAPOR OR SPRAY.
- P502 KEEP OUT OF REACH OF CHILDREN.
- P503 USE ONLY FOR INDUSTRIAL USE.
- P504 USE ONLY IN A WORKPLACE WITH EFFECTIVE VENTILATION.
- P506 KEEP OUT OF THE REACH OF CHILDREN.
- P507 USE ONLY IN A WELL VENTILATED SPACE.
- P508 DISPOSE OF CONTAMINATED SPARING IN ACCORDANCE WITH LOCAL WASTE DISPOSAL REQUIREMENTS.
- P510 KEEP AWAY FROM FOODSTUFFS, DRINK, AND OR MAJOR RAW MATERIALS.