



FRONT LABEL

**REDIGO DETER**

Seed treatment for winter crops of barley, wheat, oats, durum wheat, rye and triticale for the control of the principal seed-borne diseases and soil-borne bunt and to control virus vector aphids to prevent the spread of Barley Yellow Dwarf Virus infection. Also to improve crop establishment by reducing damage caused by wireworms and slugs and suppresses the activity of leafhoppers in early spring.

MAPP 12423  
PCS 03303

A flowable concentrate formulation for seed treatment containing 50 g/l (4.3% w/w) prothioconazole and 250 g/l (21.4% w/w) clothianidin.

(20 – 200 litres and batch number)

This container must be handled with the assistance of mechanical means.

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## **SAFETY PRECAUTIONS**

### **Operator Protection**

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

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 treated seed during the seed treatment process and when cleaning/calibrating machinery or dealing with spillages.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) when bagging treated seed.

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

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 SURFACE WATERS OR DITCHES with chemical or used container. HARMFUL TO GAME AND WILDLIFE. Treated seed should not be left on soil surface. Bury spillages.

### **Storage and Disposal**

KEEP IN ORIGINAL CONTAINER tightly closed in a safe place.

EMPTY CONTAINER COMPLETELY and dispose of safely

DO NOT RE-USE CONTAINER for any other purpose.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS

KEEP OUT OF REACH OF CHILDREN

### **PRECAUTIONS for treated seed**

WEAR SUITABLE PROTECTIVE GLOVES when handling treated seed.

DO NOT HANDLE seed unnecessarily.

DO NOT USE TREATED SEED as food or feed.

KEEP TREATED SEED SECURE from people, domestic stock/pets and wildlife at all times during storage and use.

HARMFUL TO GAME AND WILDLIFE. Treated seed should not be left on the soil surface.

Bury spillages.

DO NOT RE-USE SACKS OR CONTAINERS THAT HAVE BEEN USED FOR TREATED SEED for food or feed.

WASH HANDS AND EXPOSED SKIN before eating and drinking and after work.

DO NOT APPLY TREATED SEED FROM THE AIR.

TREATED SEED MUST NOT BE BROADCAST

BURY OR REMOVE SPILLAGES

Seed should be drilled to a depth of 40 mm into a well prepared and firm seedbed. If seed is present on the soil surface, or spills have occurred, then, if conditions are appropriate, the field should be harrowed then rolled to ensure good incorporation.

### **BACK LABEL**

Risk and Safety information

**REDIGO DETER**

Contains 50 g/l (4.3% w/w) prothioconazole and 250 g/l (21.4% w/w) clothianidin.



**IRRITANT**

**May cause sensitisation by skin contact**

**Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment**

Avoid contact with skin

Wear suitable gloves

Do not breathe dust

This material and its container must be disposed of in a safe way.

Use appropriate containment to avoid environmental contamination.

To avoid risks to man and the environment comply with the instructions for use

MAPP 12423

PCS 03303

**IMPORTANT INFORMATION**

**FOR USE ONLY AS AN AGRICULTURAL SEED TREATMENT**

Crops: winter barley (seed), winter wheat (seed) , winter oats (seed), durum wheat (seed), rye (seed) and triticale (seed).

Maximum individual dose: 200 ml product per 100 kg of seed

Maximum number of treatments: One per batch

Latest time of application: Before planting

**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**

PROTECT FROM FROST

## INSIDE LEAFLET

### **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.

### **CROPS**

Redigo Deter may be used on winter crops of barley, wheat, oats, durum wheat, rye and triticale.

### **DISEASES CONTROLLED**

#### **Winter crops of wheat, oats, durum wheat, rye and triticale**

##### **Fusarium seedling blight / stem base browning**

Redigo Deter improves crop establishment and the health of stem bases by reducing the symptoms of seedling blight and stem base browning caused by *Microdochium nivale* and *Fusarium culmorum*.

##### **Bunt**

Redigo Deter controls bunt caused by seed- or soil-borne infections of *Tilletia caries*.

##### **Loose smut**

Redigo Deter controls loose smut caused by *Ustilago nuda* and *U. avenae*.

#### **Winter Barley**

##### **Fusarium seedling blight / stem base browning**

Redigo Deter improves crop establishment and the health of stem bases by reducing the symptoms of seedling blight and stem base browning caused by *Microdochium nivale*.

##### **Loose smut**

Redigo Deter controls loose smut caused by *Ustilago nuda fsp. hordei*.

##### **Covered Smut (winter barley and winter oats)**

Redigo Deter controls covered smut caused by *Ustilago hordei* and *U. kollerii* (covered smut is rare in the UK).

##### **Leaf Stripe**

Redigo Deter controls leaf stripe caused by seed-borne infections of *Pyrenophora graminea*.

### **PESTS CONTROLLED**

#### **Winter crops of barley, wheat, oats, durum wheat, rye and triticale**

##### **Aphids/BYDV**

Redigo Deter controls autumn infestations of aphid vectors of Barley Yellow Dwarf Virus (BYDV) and thereby prevents the spread of this disease within the crop.

##### **Wireworms and Slugs**

Redigo Deter improves crop establishment by reducing damage caused by wireworms and slugs. In situations where very high populations of wireworms are present e.g. in excess of 1.25 million per hectare, additional control measures should be taken as the level of protection of seedlings given by Redigo Deter alone may be inadequate. Redigo Deter will only give

Redigo Deter A4 ( 20-200L), Dual label - created from UK version A3c. Approved in Ireland by PCS 7 April 2008, DSH 20/7/08

protection from slugs to germinating seeds and not to aerial plant parts after crop emergence. If the slug population is very high, then additional control measures may be necessary.

### **Leafhoppers**

When used to control BYDV vectors, Redigo Deter may give incidental suppression of leafhoppers in the early spring (March/April). For large populations or later attacks of this minor pest additional control measures should be taken.

### **RATE OF USE**

200 ml of Redigo Deter per 100 kg of seed. (2.0 litres per tonne of seed).

### **APPLICATION**

Redigo Deter must only be used in conjunction with Bayer CropScience approved seed treatment application equipment by following the procedures given in the operating instructions. ALWAYS follow the operating instructions.

Ensure that Redigo Deter is homogeneous before use. The product should be fully re-dispersed using a re-circulating pump or mechanical agitator. For further advice on re-dispersing Redigo Deter please contact the local Seed Treatment Engineer of Bayer CropScience Ltd.

Warning: containers of greater than 20 litres capacity should only be handled with mechanical assistance.

Redigo Deter should be evenly applied using a Bayer CropScience recommended seed treatment machine, which has been accurately calibrated to obtain the correct dose rate.

Redigo Deter should be co-applied with a minimum of 2 – 4 litres of water per tonne of seed to improve the evenness of coverage of treated seed. The amount of water used will depend on the type of seed treater used and processing conditions.

For further details please contact the local Seed Treatment Engineer of Bayer CropScience Ltd.

After use the product application equipment should be thoroughly cleaned using clean water.

### **SEED QUALITY**

Redigo Deter seed treatment should not be used on seed with more than 16% moisture content, or on sprouted, cracked, skinned or otherwise damaged seed.

All seed batches should be tested to ensure they are viable and suitable for treatment with Redigo Deter.

### **LABELLING OF TREATED SEED**

LABEL TREATED SEED with the appropriate precautions using printed sacks, labels or bag tags.

### **STORAGE OF TREATED SEED**

Winter wheat: Seed treated with Redigo Deter should preferably be drilled in the season of treatment. Although Redigo Deter is not known to have any effect on the storage life of treated seed, the subsequent germination and performance of such seed may be adversely affected by physical storage conditions. No liability can therefore be accepted for the performance of stored, treated seed.

Winter crops of barley, oats, rye, triticale and durum wheat: treated seed must be used within the season of treatment.

### **DRILLING OF TREATED SEED**

It is essential to check drill calibration before use and again for each seed lot drilled to ensure an accurate seed rate. Redigo Deter treated seed should be drilled at a depth of 4 cm (1.5") or

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greater into a well prepared and firm seedbed providing optimal conditions for crop emergence and establishment, using a minimum drilling rate of 125 kg/ha for wheat.

Adverse seedbed conditions such as very dry, fluffy, cloddy or capped seedbeds, water-logging, drilling too deep or too shallow, the use of seed with low germination capacity/vigour and residual herbicides, can reduce the field emergence of cereals. This may be accentuated by Redigo Deter.

#### **FOLLOW-UP SPRAY TREATMENTS**

##### **Fungal diseases of aerial plant parts**

To give protection against air-borne and splash-borne diseases later in the season appropriate follow-up fungicide sprays should be used.

##### **Aphids/BYDV**

When aphid activity is unusually late, or in areas of particularly high risk where aphid activity is heavy and prolonged, and mild weather predominates, a follow-up aphicide treatment may be required.

In such situations, crops treated with Redigo Deter should be monitored for the presence of aphids and a foliar aphicide applied if necessary.

##### **Leafhoppers**

Leafhopper activity can be suppressed in early spring (March/April) but for later or heavy attacks of this pest, an additional foliar applied insecticide is recommended.

**CAUTION:** The possible development of disease or pest strains resistant to Redigo Deter, as with other products containing DMI fungicides or neonicotinoid insecticides, cannot be excluded or predicted. If such resistant strains occur, Redigo Deter is unlikely to give satisfactory control.

(Acknowledgements & Trademarks etc)