

Product registration number: MAPP 16458

INSTRATA is a suspo-emulsion formulation containing 362 g/l chlorothalonil, 56.9 g/l propiconazole and 14.5 g/l fludioxonil.

A broad spectrum foliar fungicide with both contact and systemic properties for control of Fusarium Patch (Microdochium nivale), Dollar Spot (Sclerotinia homoeocarpa), Brown patch (Rhizoctonia solari) and reduction of Anthracnose (Colletotrichum graminicola) on bowling greens, golf greens, golf tees and patch treatment on golf fairways.

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

Syngenta UK Limited CPC4, Capital Park, Fulbourn, Cambridge, CB21 5XE Tel: Cambridge (01223) 883400

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In case of toxic or transport emergency ring (01484) 538444 anytime

PROTECT FROM FROST SHAKE WELL BEFORE USE



This product label is compliant with the CPA Voluntary Initiative (VI) guidance (UK only).



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INSTRATA	$\succ$			
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Signal Word	Warning			
Hazard Statements	H315 H317 H318 H332 H351 H410	Causes skin irritation. May cause allergic skin reaction. Causes serious eye damage. Harmful if inhaled. Suspected of causing cancer. Very toxic to aquatic life with long lasting effects.		
Precautionary Statements	P102 P270 P280 P302/352	Keep out of reach of children. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.		
	P391 P501	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.		
Supplemental Information	EUH401	To avoid risks to human health and the environment comply with the instructions for use. MAPP 16458		

#### IMPORTANT INFORMATION

FOR USE ONLY AS A HORTICULTURAL FUNGICIDE.

User: Professional

Crops/situations		Maximum number of treatments
Amenity grassland and managed amenity turf	9 L	1 per year

Other specific restrictions:

This product must only be applied to bowling greens, golf greens, golf tees and patch treatment of golf fairways.

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

#### (a) Operator protection

Engineering controls 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 (FACESHIELD) when handling the concentrate.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE

PROTECTIVE GLOVES when handling contaminated surfaces.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) when applying the product by vehicle mounted or trailed equipment.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND RESPIRATORY EQUIPMENT\* when applying by hand-held equipment (disposable filtering facepiece respirator to at least EN149 FFP2, or equivalent). WASH ALL PROTECTIVE CLOTHING AFTER USE.

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

WHEN USING DO NOT EAT, DRINK OR SMOKE.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

KEEP OUT OF THE REACH OF CHILDREN.

DO NOT BREATHE SPRAY.

WASH ALL PROTECTIVE CLOTHING thoroughly after use especially the insides of gloves. WASH SPLASHES from skin or eyes immediately.

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

### (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 10m of the top of the bank of a static or flowing water body or within 1m from the top of a ditch which is dry at the time of application. Aim spray away from water. ALL CROPS WITH A BUFFER ZONE GREATER THAN 5M ARE NOT ELIGIBLE FOR BUFFER ZONE REDUCTION UNDER THE LERAP HORIZONTAL BOOM SPRAYER 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's published guidance or the statutory buffer zone must be maintained. NOTE ALL BUFFER ZONES MORE THAN 5M ARE NOT REDUCIBLE. The results from the LERAP recorded and kept available for three years.

Do not contaminate water with the product or its container. Do not clean application equipment near surface water. Avoid contamination via drains from golf courses and other amenity areas.

# (c) Storage and disposal

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 safely. DO NOT RE-USE CONTAINER for any purpose. This leaflet is part of the approved Product Label.

## 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

INSTRATA is a suspo-emulsion formulation containing 362 g/l chlorothalonil, 56.9 g/l propiconazole and 14.5 g/l fludioxonil.

#### Propiconazole

Propiconazole has protective, curative and eradicant activity. It is rapidly absorbed by the assimilating parts of the plant, mostly within one hour of treatment. It is transported acropetally (upwards) in the xylem. This systemic translocation contributes to good distribution of the active ingredient within the plant tissue.

Propiconazole is a member of the DMI-fungicides group (demethylation inhibitors) These materials act on the fungal pathogen inside the plant at the stage of first haustoria formation and stop disease development by interfering with sterol biosynthesis in fungal cell membranes.

## **Chlorothalonil**

Chlorothalonil a unique multi site contact fungicide belonging to the chloronitrile chemistry group. It has broad spectrum activity against a number of turf diseases, it is believed that it deactivates several fungal enzymes (multiple-site action), therefore creating less resistance risk. Its unique activity makes it ideal for use in fungicide programs.

## **Fludioxonil**

Fludioxonil is a new long lasting contact fungicide belonging to the phenylpyrrole chemistry group, that provides broad-spectrum activity against a wide range of turf diseases. It is believed to inhibit transport-associated phosphorylation of glucose, which subsequently results in the inhibition of fungal mycelial growth.

## RESTRICTIONS

Prevent spray drift on to surrounding areas DO NOT apply to turf under heat or moisture stress For all applications, avoid spraying within 10m of unmanaged land (including rough grassland) to reduce effects on non-target insects or other arthropods.

#### DISEASES CONTROLLED

INSTRATA is a contact and systemic fungicide for the control of the following diseases:

Fusarium Patch (*Microdochium nivale*) Anthracnose (*Colletotrichum graminicola*) [Reduction may be achieved] Dollar Spot (*Sclerotinia homoeocarpa*)\* Brown patch (*Hhizoctonia solan*)\*

One application of INSTRATA may not give season long control of turf diseases where severe infection pressure persists.

\* As a QUALIFIED MINOR USE RECOMMENDATION, evidence of effectiveness of Dollar Spot (Sclerotinia homeocarpa) and Brown patch (Rhizoctonia solani) is limited.

For optimum turf quality and disease control, use INSTRATA in conjunction with turf management practices that promote good plant health.

Correct identification of the disease(s) is essential in selecting the most appropriate control measures.

#### CROP SPECIFIC INFORMATION

Begin applications when conditions are favourable for disease infection, at the very beginning of disease symptom expression.

#### **Crop Tolerance**

When used as recommended, INSTRATA is well tolerated by all common turf grass species but safety to newly sown turf has not been established.

#### Rates of Use

Apply 9 litres INSTRATA per hectare in 500-1000 litres water per hectare.

### Timing

Apply as a preventative spray when conditions become favourable to disease development.

#### RESISTANCE MANAGEMENT

In order to minimise the likelihood of the development of resistance, it is recommended that INSTRATA should be used in a programme with products of different chemical groups.

Use INSTRATA in a disease control programme, alternating treatments with other fungicides having different modes of action.

INSTRATA contains propiconazole, chlorothalonil, and fludioxonil and applications should be made in accordance with the FRAG-UK guidelines.

Apply INSTRATA at full recommended rates. Utilize management practices, which encourage healthy turf and reduce turf stress.

# APPLICATION

# VOLUME OF WATER AND SPRAYING

This product may be applied through pedestrian controlled sprayers or vehicle mounted/drawn equipment and hand-held knapsack sprayers. Application equipment should be calibrated before use.

INSTRATA is recommended to be applied in 500-1000 litres water/ha using vehicle mounted/trailed sprayers. Use 1000 litres water/ha (10 litres water/100 m<sup>2</sup>) for spot treatments using a hand-held knapsack sprayer.

## MIXING AND SPRAYING

### Tractor-mounted/trailed sprayers

Make sure the sprayer is set to give an even application at the correct volume and an even deposit. Half fill the spray tank with the required volume of clean water and start agitation. Add the required amount of INSTRATA to the spray tank. Agitate the mixture thoroughly before use and continue agitation during spraying. Thoroughly wash all spray equipment with water immediately after use.

#### Hand-held knapsack sprayers

Half fill the spray tank with clean water and add the required quantity of INSTRATA to the tank. Complete filling, mix thoroughly and use immediately.

Thoroughly wash all spraying equipment immediately after use.

Wash out containers thoroughly, preferably using an integrated pressure rinsing device, or manually rinse three times. Add washings to the sprayer at the time of filling. Complete filling to the required volume and continue to agitate throughout the spraying operation.

Do not leave the spray liquid in the sprayer for long periods (such as during meal breaks or overnight). Make up only the amount of spray required for immediate use.

#### AFTER SPRAYING

Thoroughly wash out sprayer according to manufacturer's guidelines and dispose of washings and clean containers according to DEFRA Code of Practice and local water authority guidelines.

## OTHER INFORMATION

 Some diseases can quickly damage turf. Treatment at a late stage of disease development will be more difficult and can leave bare soil patches needing renovation.

2. Use preventative sprays, especially against diseases which occur in winter and early spring.

If diseases recur regularly, check management practices, especially fertilizer treatment as this can affect disease occurrence if either in excess or deficient.

This product is to be used only in accordance with the recommendations and instructions given on the labels provided with this pack.

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