GROUP 3 FUNGICIDE

# DIFENOSTAR® FUNGICIDE

For the control of certain diseases in a range of crops. See detailed label text for specific crop approval information.

# WINTER/SPRING OILSEED RAPE BRUSSELS SPROUTS BROCCOLI/CALABRESE CABBAGE/CAULIFLOWERS COLLARDS/KALE

# **MAPP 19118**

250 g/L difenoconazole Emulsifiable concentrate

**NET CONTENTS:** 



FOR USE ONLY AS A PROFESSIONAL FUNGICIDE



# DIFENOSTAR® - MAPP 19118

CONTAINS 250 G/L (24% W/W) DIFENOCONAZOLE AS AN EMULSIFIABLE CONCENTRATE. DIFENOSTAR IS A CONTACT AND SYSTEMIC DMI FUNGICIDE THAT CAN BE USED FOR CONTROL OF CERTAIN DISEASES IN WINTER AND SPRING OILSEED RAPE, BRUSSELS SPROUTS, BROCCOL/CALABRESE, CABBAGE, CAULIFLOWERS, COLLARDS AND KALE.

DANGER

MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. CAUSES SERIOUS EYE IRRITATION.

VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS. Keep out of reach of children.

Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED Immediately call a POISON CENTRE or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

Do NOT induce vomiting.

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.

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

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).

#### IMPORTANT INFORMATION: FOR USE ONLY AS A PROFESSIONAL FUNGICIDE

Crops/situations:	Maximum individual dose: (L product / ha)	Maximum total dose: L product / ha / crop)	Maximum number of treatments:	Latest time of application:
Oilseed rape	0.5	1	e.	End of flowering
Broccoli/calabrese, Brussels sprouts, cabbage, cauliflower, collard, kale	0.5	1	×	21 days before harvest

#### Other specific restrictions:

An interval of at least 14 days must be observed between applications to brassica crops. Applications to brassicae must only be made to developed canopy and not before growth stage BBCH 41 as described below:

Cabbage: heads begin to form, the 2 youngest leaves do not unfold. Kale & collard: 10% of the leaf mass typical for the variety reached.

Brussels sprouts: lateral buds begin to develop.

Cauliflower, broccoli, calabrese: heads begin to develop.

READTHE LABEL BEFORE USE. USINGTHIS PRODUCT IN A MANNERTHAT IS INCONSISTENTWITHTHE LABEL MAY BE AN OFFENCE.

FOLLOWTHE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.

APPROVAL HOLDER AND MARKETING COMPANY: Life Scientific Limited, Block 4, Belfield Office Park, Beech Hill Road, Dublin 4, Ireland - Tel: +353 1 2832024

THE (COSHH) CONTROL OF SUBSTANCES HAZARDOUS TO HEALTHREGULATIONS MAY APPLY TO THE USE OF THIS PRODUCT AT WORK.

FOR 24 HOUR EMERGENCY INFORMATION CONTACT NHS 111

PROTECT FROM FROST MADE IN EU SHAKE WELL BEFORE USE BATCH NO. SEE PACKAGING



## 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 GLOVES when handling the concentrate or handling contaminated surfaces.

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

IF SWALLOWED, call a poison centre, doctor or physician immediately.

DO NOT induce vomiting.

IF IN EYES, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

WASH SPLASHES from skin or eyes immediately.

WASH HANDS AND EXPOSED SKIN before meals and after work.

#### **Environmental Protection**

To protect aquatic organisms, respect an unsprayed buffer zone distance to water bodies in line with LERAP requirements.

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. DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5 m of the top of the bank of a static or flowing waterbody, unless a Local Environment Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1m 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 m of the top of the bank of a static or flowing water body. Aim spray away from water.

This product qualifies for inclusion within the Local Environment Risk Assessment for Pesticides (LERAP) scheme. Before each application from a horizontal boom sprayer, either a LERAP must be carried out in accordance with the CRD's published guidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available

for inspection for three years.

# Storage and Disposal

KEEP IN ORIGINAL CONTAINER tightly closed in a safe place. STORE IN A COOL DRY PLACE

RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or by manually rinsing three times. Add washings to sprayer at time of filling and dispose of safely.

# DIRECTIONS FOR USE

IMPORTANT: This information is authorised 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.

DIFENOSTAR<sup>®</sup> is a contact and systemic DMI fungicide that can be used for control of certain diseases in winter and spring oilseed rape, Brussels sprouts, broccoli/calabrese, cabbage, cauliflowers, collards and kale. It is best applied before the target disease becomes established in the crop.

### RESTRICTIONS

Consult processor before application to crops grown for processing.

# **CROP SPECIFIC INFORMATION**

DIFENOSTAR® will control the following diseases

Сгор	Disease	
Winter & spring oilseed rape	Light Leaf Spot Stem canker <i>(Phoma lingam)</i> Leaf & pod spot <i>(Altenaria spp.)</i>	
Brussels sprouts, Broccoli/ calabrese, Cabbage, Cauliflowers, Collards, Kale	Leaf spot <i>(Altenaria spp.)</i> Ring spot	

# 1. Winter & spring oilseed rape:

**Optimum activity against Light Leaf Spot:** Where the risk of Light Leaf Spot is known to be high an application of 0.5 L/ha DIFENOSTAR® should be made once the rape acquires 4 true leaves, with a second application of 0.5 L/ha at stem extension in the spring if visual symptoms of the disease are seen. Application of just two applications of 0.25 L/ha in the autumn will only achieve moderate control of Light Leaf Spot. Full control requires the follow-up application of 0.5 L/ha.

Where disease risk is perceived to be low, application can be delayed until symptoms are seen in the spring but treatment must be applied at the first signs of the disease.

**Optimum activity against Leaf and Pod Spot (***Altenaria spp.)***: This disease is best controlled by an application of 0.5 L/ha DIFENOSTAR® at the end of flowering.** 

**Optimum activity against Stem canker** (*Phoma lingam*): An application of 0.5 L/ha DIFENOSTAR<sup>®</sup> should be made when disease symptoms are first seen and the crop has at least 4 expanded true leaves.

If fresh symptoms are seen in late winter or early spring, a second application of 0.5 L/ha should be made.

An alternative spray programme is to apply two treatments of 0.25 L/ha in the autumn separated by an interval of 4 - 6 weeks, with a top-up dose of a further 0.5 L/ha in early spring if fresh disease development is seen in the crop.

**NOTE:** In all cases, total dose must not exceed 1.0 L/ha/crop and final applications must be complete by the end of flowering.

#### 2. Brussels sprouts, broccoli/calabrese, cabbage, cauliflowers, collards and kale:

DIFENOSTAR® will control Leaf Spot (*Altenaria spp*) and Ring Spot in these crops if two applications of 0.5 L/ha are made, starting before the disease is established in the crop and with an interval of at least 14 days between the two applications. The start of the programme should be when the canopy has achieved growth stage BBCH 41 which is detailed in the table below:

Сгор	Disease
Brussels sprouts:	Lateral buds beginning to develop
Broccoli/calabrese and Cauliflowers:	Heads begin to form; width of growing tip > 1 cm
Cabbage:	Heads begin to form: the two youngest leaves do not unfold
Kale & collards:	10% of the leaf mass typical for the variety reached

Final application must be at least 21 days before harvest.

#### PROCESSING

Consult processor before using on crops intended for processing.

#### **MIXING and SPRAYING**

Before spraying it is important to check all hoses, filters and nozzles, and to ensure that the sprayer is clean and correctly set to give an even application at the correct volume. Half fill the spray tank with clean water.

Begin agitation, shake the container well and add the required quantity of DIFENOSTAR<sup>®</sup> directly to the tank. Add the remainder of the water and agitate the mixture thoroughly before and during spraying.

Application should be made using a MEDIUM quality spray as defined by BCPC in a minimum water volume of 200 L/ha to oilseed rape but the water volume should be increased to 400 L/ha when treating the vegetable brassica crops to ensure good coverage of the leaves.

#### A spray pressure of 2-3 bars is preferred.

Wash out containers with an integrated pressure rinsing device or manually rinsing three times and add the washings to the spray tank. Do not leave the diluted spray in the tank for extended periods such as meal breaks or overnight.

Thoroughly wash all spray equipment with water immediately after use.

## **RESISTANCE MANAGEMENT**

DIFENOSTAR<sup>®</sup> belongs to the DMI class of fungicides. Strains of Light Leaf Spot resistant to DMI fungicides are known to exist. To avoid development of resistance, apply product protectively in response to disease forecasts.

Where possible, when Light Leaf Spot is present, avoid the use of DMI based fungicides when targeting other diseases such as Sclerotinia at mid flowering.

#### 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.

