

# BOTECTOR®

MAPP 19443

A water dispersible granule formulation containing  $2.5 \times 10^9$  CFU/g (500 g/kg) *Aureobasidium pullulans* strain DSM 14940 and  $2.5 \times 10^9$  CFU/g (500 g/kg) *Aureobasidium pullulans* strain DSM 14941 for the reduction of *Botrytis cinerea* in wine grapes, table grapes and strawberries.

**Classification according Fungicide Resistance Action Committee (FRAC):** FRAC Code: NC.

**Pack size:** 0.4 kg ,1 kg, 1.2 kg

Batch number/date of manufacture: please refer to package

## Storage and handling:

From date of manufacture, 18 months at room temperature ( $\leq 20^\circ\text{C}$ ), 30 months at cold storage ( $\leq 8^\circ\text{C}$ ).

Distribution only in original container.

Store in tightly closed containers in a cool and dry place.

Maintain agitation throughout application.

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

### Authorisation Holder:

bio-ferm Biotechnologische Entwicklung und  
Produktion GmbH  
Erber Campus 1  
A – 3131 Getzersdorf  
Tel: +43 2782 8030

### Marketing Company:

Nufarm UK Limited  
Wyke Lane, Wyke, Bradford  
Westyorkshire BD12 9EJ  
United Kingdom  
Tel: 07887 715516

<b>IMPORTANT INFORMATION</b> FOR USE ONLY AS A PROFESSIONAL FUNGICIDE.		
<b>Crop</b>	<b>Wine Grapes / Table grapes</b>	<b>Strawberries</b>
<b>Maximum individual dose</b>	1 kg/ha	1 kg/ha
<b>Max. no. of applications</b>	4 (2 day interval between each application)	6 (2 day interval between each application)
<b>Maximum total dose</b>	4 kg/ha	6 kg/ha
<b>Latest time of application</b>	1 day before harvest	
<b>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.</b>		

If medical advice is needed, have product container or label at hand.  
Avoid breathing dust.  
Do not eat, drink, or smoke when using this product.  
Wear protective gloves, protective clothing.

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

## SAFETY PRECAUTIONS

Contains *Aureobasidium pullulans* [strains DSM 14940 und DSM 14941]. May produce an allergic reaction. Microorganisms may have the potential to provoke sensitizing reactions

### Operator protection

Avoid contact with eyes

Avoid needless contact with the product. Misuse can lead to injury of health.

First-Aid-Measures:

**After inhalation:** Supply fresh air.

**After skin contact:** Remove contaminated clothes, wash the affected skin with water and soap.

**After swallowing:** If symptoms of indisposition persist, seek medical advice.

**After eye contact:** Rinse opened eyes immediately with plenty of water for at least 10 minutes. If irritation persists, seek medical advice.

### 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.

To protect aquatic organisms and non-target plants do not apply on impermeable surfaces such as asphalt, concrete, cobblestones, railway tracks and other situations with a high risk of run-off.

### Storage and disposal

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDSTUFFS.

KEEP OUT OF REACH OF CHILDREN.

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

EMPTY CONTAINER THOROUGHLY and dispose of safely.

## 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.

### Warnings

CONSULT PROCESSOR BEFORE USING ON CROPS FOR PROCESSING

Thorough and even coverage of the fruits is crucial.

The spraying suspension should be **agitated** during application.

## PRODUCT BENEFITS

Product suitable for organic farming according to REG n° 834/2007.

No development of pathogen resistance. Harmless to bees. For Integrated Pest Management (IPM) and organic farming.

### Pests Controlled

**BOTECTOR**® is a fungicide which provides reduction of grey mold (*Botrytis cinerea*) in fielded grown table and wine grapes, strawberries.

## Resistance management

**BOTECTOR**<sup>®</sup> contains *Aureobasidium pullulans*, which is FRAC Code: NC. The mode of action of the active substance is based on its antagonistic activity by competing successfully with pathogens for nutrients and space, therefore the risk of resistance or cross-resistance development can be expected to be low. Used in integrated pest management strategies **BOTECTOR**<sup>®</sup> is a useful tool to help minimize the development of resistance development

## Crop specific information

Crop	Wine Grapes / Table grapes	Strawberries
Disease to be controlled	grey mould ( <i>Botrytis cinerea</i> )	
Application rate	1kg/ha	1kg/ha
Application timing	Preventive applications during the ripening period between BBCH 68 (80% of flowerhoods fallen) and BBCH 89 (Berries ripe for harvest)	Preventive applications during the ripening period between BBCH 61 (Beginning of flowering: about 10% of flowers open) and BBCH 89 (Second harvest: more fruits coloured)
Application Volume	400 – 1000 L	400 - 2000 L
Max. number of applications per year	4	6
Pre-harvest interval	1 day	1 day

## Compatibility

**BOTECTOR**<sup>®</sup> contains a living organism which may be sensitive to some pesticides; tank mix applications (particularly with fungicides not compatible) should be avoided.

All indications	Incompatible products: No application 3 days before/after
-----------------	---

Further information, the material safety data sheet and a detailed compatibility list are provided at: [www.bio-ferm.com](http://www.bio-ferm.com).

## Mixing

1. Clean the tank before using.
2. Do not prepare highly concentrated premixtures.
3. Add water to the tank. Do not use hot water.
4. Add **BOTECTOR**<sup>®</sup> to the water while agitating.

The spraying suspension should be agitated during application. Use spray suspension within 8 hours. Do not leave leftovers in the tank.

On emptying the container, rinse thoroughly three times. Add washings to the spray tank while filling. Wash out sprayer thoroughly immediately after use. Dispose of container safely.

## COMPANY ADVISORY INFORMATION

This section is not part of the product label under the Plant Protection Products Regulations 2011, but provides additional advice on the use of the product.

## WARNING

The recommendations and information we have provided are a result of extensive and thorough tests and studies. However, there are many factors during application that remain beyond our control (mixture preparation, usage, weather conditions, etc.). Thus, we shall only accept liability for ensuring the consistent quality in line with the product specification. The risk of possible damage (inefficacy, toxicity, tank mixes, etc.) resulting from inappropriate or improper usage or caused by factors beyond our control (such as inappropriate storage) shall be solely borne by the user. We also exclude – to the extent permitted by law – liability for any direct or indirect consequences or damage.