# LALSIOP CONTANS WG



MAPP No. 19974 PCS No. 05956

# **Fungicide**

# FOR PROFESSIONAL USE ONLY

LALSTOP Contans WG is a water dispersible granule for the control of sclerotia of *Sclerotinia sclerotiorum* and *Sclerotinia minor* when used as a soil treatment prior to planting any edible and non-edible crop.

LALSTOP Contans WG contains 1x10<sup>12</sup> CFU/kg *Coniothyrium minitans* strain CON/M/91-08.

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

## IMPORTANT INFORMATION

Crops/situations: All edible and non-edible crops

Maximum individual dose:

4 kg product/ha (for incorporation up to a 10 cm soil depth) OR 8 kg, product/ha (for incorporation up to a 20 cm soil depth)

Maximum number of treatments: One per crop

Latest time of application:

Pre-planting of the crop

Other Specific Restrictions:

Non-returnable containers must not be re-used for any purpose. LALSTOR Contans WG must only be applied to Sclerotinia susceptible crops.

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.

Approval holder and marketing company: DANSTAR FERMENT AG Poststrasse 30 CH-6300 ZUG SWITZFBI AND

Batch number and date of manufacture:

see printing on the bag.



# SAFETY INFORMATION

A water dispersible granule containing 1x10<sup>12</sup> CFU/kg *Coniothyrium minitans* strain CON/W/91-08.

Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site, except for triple rinsed 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 (EUH401).

Micro-organisms may have the potential to provoke sensitising reactions.

MAPP No. 19974 PCS No. 05956

# SAFETY PRECAUTIONS

In the event of emergency, call the National Poisons Information Centre:

• National Poisons Information Service (24h) at +44 (0)844 892 0111 (UK)

• Beaumont Hospital at 01 809 2168 or 01 837 9964 (Ireland).

## Operator protection

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

Operators must wear suitable protective clothing (coveralls), suitable protective gloves and suitable respiratory protective equipment when handling or applying the product. "Disposable filtering facepiece respirator to at least EN149 FFP3 or equivalent."

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

IFFEELING UNWELL, seek medical advice immediately (show the label where possible).

# Environmental protection

Oo not contaminate water with the product or its container.

Do not clean application equipment near surface water.

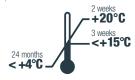
Avoid contamination via drains from farmyards and roads.

# Storage and disposal

The product will keep unopened for two years if stored in cool, dry conditions below  $+4^{\circ}\text{C}$  (temperature range between -18°C and  $+4^{\circ}\text{C}$ ).

After opening, the product should be stored for a maximum of four weeks at  $+4^{\circ}$ C. DO NOT RE USE container for any purpose.

Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site, except for triple rinsed empty clean containers (which can be disposed of as non-hazardous waste).



**NET WEIGHT: 4 kg** 





# **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.

## **Restrictions and Warnings**

Contains *Coniothyrium minitans* strain CON/M/91-08. Microorganisms may have the potential to provoke sensitising reactions.

## **General Information**

- LALSTOP Contans WG is a water dispersible granule for the control of sclerotia of Sclerotinia sclerotiorum and Sclerotinia minor in the soil.
- LALSTOP Contans WG is a biological fungicide with a specific action against the resting survival structures (sclerotia) of the plant pathogens *Sclerotinia sclerotiorum* and *Sclerotinia minor*.
- LALSTOP Contans WG is a soil treatment product against mentioned Sclerotinia species, regardless of the crop, grown in the greenhouse or outdoors.

#### Mode of action

The spores of *C. minitans* germinate in moist soil. The mycelium of *C. minitans* attacks the resting survival structures soil, (sclerotia) of the pathogens *Sclerotinia sclerotiorum* and *Sclerotinia minor* in the soil and destroys them within three months.

## **Environmental Conditions**

For optimum efficacy, the soil should be moist and the temperature should be between  $+12^{\circ}\text{C}$  and  $+20^{\circ}\text{C}$ .

If the soil temperature falls below 0°C or rises above +27°C, *C. minitans* suspends its activity and rests in the soil, but the fungus will not die. Once the temperature returns between +1°C and +27°C, *C. minitans* will continue to attack the sclerotia.

LALSTOP Contans WG can be used in the soil for <u>all crops</u> susceptible to *Sclerotinia* sclerotiorum and *Sclerotinia minor* infection.

LALSTOP Contans WG has shown effective control in the following susceptible crops and ornamentals: oilseed rape, beans, lettuce, cucumbers, gerbera, chrysanthemums and sunflowers. Other crops also known to be susceptible to *Sclerotinia sclerotiorum* and *Sclerotinia minor* infection include, but are not limited to: asparagus, cabbage, carrots, celery, chickpeas, lentils, peas, peppers, potatoes, tomatoes, and watermelon. There are no rotational crop restrictions following the use of LALSTOP Contans WG.

## **Application Directions**

LALSTOP Contans WG is applied by spraying the soil surface (or crop debris following harvest of the previous crop) and then incorporating the sprayed soil and/or debris into the upper soil layer. Thorough spray coverage is needed to provide a uniform deposit of LALSTOP Contans WG on the soil. LALSTOP Contans WG may be applied in conventional spray equipment. Maintain agitation continuously while spraying. For tractor-mounted sprayers, use of a spray boom equipped with fan nozzles provides enhanced coverage.

The entire soil surface should be treated as sclerotia germinating in untreated soil will produce spores which can infect the crop. In glasshouses, untreated areas such as margins can be covered by a film to minimise spread of spores.

# **Pre-plant Application**

Apply LALSTOP Contans WG at a rate of 2 to 8 kg per hectare (see table below), three months prior to the onset of disease development, to allow for the active ingredient to reduce the inoculum load of sclerotia in the soil. For example, apply LALSTOP Contans WG in the Autumn for a spring planting. Once the product has been applied onto the soil, the treated soil surface must immediately be incorporated using a rotavator or rotary harrow. LALSTOP Contans WG should be incorporated as thoroughly and uniformly as possible, to a depth of 10 to 20 cm.

Treated soils should not be ploughed, either to incorporate LALSTOP Contans WG or prior to planting the crop following a LALSTOP Contans WG application.

Any cultivations or planting operations must not disturb the soil below the depth to which LALSTOP Contans WG was incorporated, to avoid bringing up sclerotia from untreated soil lower in the profile.

LALSTOP Contans WG should be applied at least three months prior to an anticipated Sclerotinia outbreak.

This means on crops that are infested directly by mycelium, the application should take place at least 3 months prior to planting (e.g. lettuce, endive, parsley, chicory).

On crops where infection occurs from ascospores (e.g. cucumber, beans, oilseed rape etc.), the soil can be treated just before planting, provided that the earliest occurrence of infection is likely to be 3 months or more after planting or sowing of the crop.

This allows the active ingredient to destroy the sclerotia in the soil, before they are able to produce fruiting bodies (apothecia), which ultimately eject ascospores.

## Rate of application

The rate of application depends on the depth of incorporation:

Depth of incorporation	0-10 cm	0-20 cm
Greenhouses	4 kg per ha	8 kg per ha
Open field	2-4 kg per ha	4-8 kg per ha

## Post-harvest Application

Apply LALSTOP Contans WG at a rate of 2 kg per hectare to harvested crop debris. Once the product has been applied, the treated debris must immediately be incorporated into the upper soil layer to a depth of 10 cm. A post harvest treatment of the soil and harvest debris with LALSTOP Contans WG prevents a new contamination of the soil with sclerotia produced by the previous crop infection and reduces the contamination of the soil step by step.

# **Mixing Directions**

Determine the volume of water needed to provide thorough coverage of the soil in the treatment area. Typically, 200 to 1000 litres of water per hectare is sufficient. The amount of water needed will depend on the weather, spray equipment and local experience. Partially fill the spray tank with clean water and begin agitation. Add the specified amount of LALSTOP Contans WG to the tank (consult application directions below). Finish filling the tank to the desired volume that provides maximum coverage. Maintain agitation. Do not allow spray mixture to stand overnight or for prolonged periods.

Do not tank mix LALSTOP Contans WG with pesticides, acids, alkalines or any product that attacks organic material.

# Spraying Equipment

Conventional spraying equipment can be used for spraying. Application equipment must be free of residues of pesticides and fungicides, acids, alkalines or any product that attacks organic material.

# Equipment to incorporate LALSTOP Contans WG

A rotavator or rotary harrow.

## Following crops

There are no restrictions on following crops and no waiting period is required.

## Storage

Store in a dry, cool place out of direct sunlight and away from heat sources at approximately  $+4^{\circ}$ C. Keep from overheating. At  $+4^{\circ}$ C LALSTOP Contans WG degrades slowly over time and has a shelf-life of up to two years.

® LALSTOP and Contans WG are registered trademarks of LALLEMAND.