

Contans[®]WG

Version and date : Version 2 Autumn 2007

Changes since last version: Updated to incorporate new PSD label guidelines



This label is compliant with the CPA Voluntary Initiative Guidance

FORMULATION AND ACTIVE INGREDIENT : 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

PACK SIZE : Various



MAPP No. 12616

Storage temperature; below +4 °C (temperature range: minus 18 °C to plus 4 °C)

IMPORTANT INFORMATION			
FOR USE ONLY AS AN AGRICULTURAL/HORTICULTURAL FUNGICIDE			
Crops/situations	Maximum individual dose	Maximum number of treatments	Latest time of application
All edible and non-edible crops	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)	One per crop	Pre-planting of the crop
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.			

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

	Contans® WG	Active ingredient: <i>Coniothyrium minitans</i> , strain CON/M/91-08 Concentration: 1 x 10 ¹² active spores/kg
	Xn-HARMFUL	<p>R42: May cause sensitisation by inhalation. S2: Keep out of the reach of children. S13: Keep away from food, drink and animal feeding stuffs. S20/21: When using do not eat, drink or smoke. S22: Do not breathe dust. S35: This material and its container must be disposed of in a safe way. S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.</p>
		To avoid risk to man and the environment, comply with the instructions for use.

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 RESPIRATORY PROTECTIVE EQUIPMENT when handling the concentrate.
- *However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.
- IF YOU FEEL UNWELL, seek medical advice immediately (show the label where possible).

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.

Storage and disposal

- *DO NOT RE-USE CONTAINER for any purpose.

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.

General Information

- Contans®WG is a water dispersible granule for the control of sclerotia of *Sclerotinia sclerotiorum* and *Sclerotinia minor* in the soil.
- Contans®WG contains 1 x 10¹² active spores / kilogram of the soil fungus *Coniothyrium minitans*, dried on glucose.
- 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*.
- 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 (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 12-20 °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 and 27°C *C. minitans* will continue to attack the sclerotia.

Contans®WG can be used in the soil for **all crops susceptible to *Sclerotinia sclerotiorum* and *Sclerotinia minor*** infection. 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 Contans WG.

Application Directions

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 Contans®WG on the soil. 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 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 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. 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 Contans WG or prior to planting the crop following a Contans application. Any cultivations or planting operations must not disturb the soil below the depth to which Contans WG was incorporated, to avoid bringing up sclerotia from untreated soil lower in the profile.

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 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 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 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 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 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°C. Keep from overheating. At 4°C Contans®WG degrades slowly over time and has a shelf-life of at least six months.

Warranty

Seller makes no warranty, expressed or implied, with regard to the use of the product other than indicated on the label. The purchaser and user shall assume all risk associated with use and/or handling and/or storage are carried out contrary to the instructions on the label.

Damages

Buyer's or user's exclusive remedy for damages, breach of warranty, or negligence, shall be limited to the direct damage, and shall not exceed the purchase price of the product, and shall not include any incidental or consequential damages.

TECHNICAL ENQUIRIES:	01480 403333
24 HOUR EMERGENCY NUMBER:	0032 1458 4545

Always read the label. Use pesticides safely.

BELCHIM Crop Protection Limited
1b Fenice Court, Phoenix Park, Eaton Socon, St. Neots, Cambridgeshire PE19 8EP

Tel : 01480 403333	Fax : 01480 403444
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