

Broadband[®]

Reg. No. L8270

Act No. 36 of 1947

READ ATTACHED PACKAGE OR LEAFLET BEFORE USE KEEP OUT OF REACH OF CHILDREN AND ANIMALS

For full particulars see enclosed pamphlet

An emusifiable spore concentrate of *Beauveria bassiana*. A fungal contact insecticide for the population reduction of target pests on crops as specified in the instruction pamphlet.

'n Emulgeerbare-spoorkonsentraat van *Beauveria bassiana.* 'n Swamkontakinsekdoder, vir die populasie verlaging van geteikende plae op gewasse, soos gespesifiseer in die toedieningspamflet.

Contains live biological components. Store product out of direct sunlight

DO NOT ALLOW TO FREEZE

Store between 40° – 77° F (4° – 25° C)

Precautionary statements:

If medical advice is needed, have product container or label at hand. Read carefully and follow all instructions.

Active ingredients / Aktiewe bestanddele: Beauveria bassiana strain PPRI 5339 (Minimum 4 x 10° Viable spores per ml)

Registered by:

BASF South Africa (Pty) Ltd Co. Reg. No. 66/10235/07 852 Sixteenth Road P.O. Box 2801 Halfway House 1685 +27 11 203 2400

Geregistreer deur:

BASF Suid-Afrika (Edms) Bpk Mpy Reg. Nr 66/10235/07 852 Sestiende Laan Posbus 2801 Halfweghuis 1685 +27 11 203 2400

Batch No. & Date manufactured: Refer to details printed on container Lotnommer & Datum vervaardig: Verwys na besonderhede gedruk op houer

EMERGENCY NUMBER / NOODNOMMER: +27 82 446 8946

Product suitable for use in Organic Farming in accordance with EU Regulations 2018/848 and 2021/1165

Controlled by ECOCERT F-32600





ENGLISH

WARNINGS

- · Keep out of reach of children, uninformed persons and animals.
- The active ingredient of **Broadband**[®], contains fungal spores.
- May cause skin and eye irritation.
- With time and excessive high temperatures, these fungal spores, like most biological
 organisms, become less viable, leading to reduced efficacy.
- During storage, and when in transit, it is important to keep the cold chain intact.
- Broadband[®] remains viable for a minimum of twenty months, if stored in a cold room, at 4°C.
- Do not leave the product or mixture, standing in the sun.

Although this remedy has been tested under a large variety of conditions the registration holder does not warrant that it will be efficacious under all conditions because the action and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label, and the occurrence of resistance of a pest against the remedy concerned as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal or for lack of performance of the remedy concerned due to the occurrence of conditions which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

PRECAUTIONS

Precautionary Statements

- · If medical advice is needed, have product container or label at hand
- Keep out of reach of children.
- · Read carefully and follow all instructions.
- · Avoid direct contact with eyes.
- Wear protective clothing, rubber gloves and face mask when mixing.
- Avoid contact with skin. Wash exposed hands before consuming food, drinking or smoking.
- Do not inhale spray mist.
- Do not eat, drink or smoke whilst mixing or applying.
- Wash hands with soap and cold water, after application.
- Prevent the contamination of food, foodstuffs, drinking water and eating utensils.

- Clean applicator before and after use. Do not contaminate other crops, grazing, rivers, dams and areas not under treatment, with wash water.
- Store in original container in a dry area, away from food and feed stuffs.
- Rinse empty container three times, with a volume of water equal to a minimum of 10% of that of the container. Add the rinsing water to the contents of the spray- or mixing tank.
- Destroy the container, and do not use empty container for any other purpose.
- Use as soon as possible, after sealed bottle is opened.
- Use the product before the expiry date, indicated on label.

FIRST AID TREATMENT

Remove contaminated clothing.

ON CONTACT WITH EYES:	Wash affected eyes for at least 15 minutes under running water with eyelids held open.
ON INGESTION:	Rinse mouth and then drink 200-300 ml of water.
ON SKIN CONTACT:	Wash thoroughly with soap and water
IF INHALED:	Keep patient calm, remove to fresh air.

Indication of any immediate medical attention and special treatment needed Treatment: Symptomatic treatment (decontamination, vital functions

HOW DOES IT WORK?

Once the spores of the fungus come into contact with the cuticle of the host insect, they germinate, secreting enzymes which are specific in their ability to weaken the insect cuticle. This leads to water loss and death of the insect. The fungus then invades the host directly through the cuticle. Once inside the body of the insect, the fungus continues to grow, feeding on the internal organs. Unlike bacterial and viral pathogens of insects, the fungus does not have to be consumed, but merely has to be positioned where the insect will come into contact with the spores.

THERE IS NO WITHHOLDING PERIOD AFTER TREATMENT AND CROPS CAN BE HARVESTED OR USED AT ANY STAGE AFTER TREATMENT.

Hazardous ingredients According to UN GHS criteria	CAS number	Concentration (W/W)
Castor oil, ethoxylated	61791-12-6	< 5 %
Sunflower oil	8001-21-6	< 95 %

DIRECTIONS FOR USE: USE ONLY AS DIRECTED

Compatibility:

Broadband[®] contains fungal spores. It is therefore not advisable to mix it in the same tank with commercially used chemical pesticides, unless recommended.

Mixing instructions:

- Shake container well before use.
- · Premix 1 part Broadband® with 2 parts water and shake well.
- Fill the spray tank with half the required water volume and start agitator mechanism.
- Add the correct amount of product / premix to the water in the tank, at the recommended dose rate, as specified in the instruction pamphlet, and top up to the final volume.
- · Keep mixed volumes agitated while spraying.

Important points to remember

- Apply, as a full cover film spray, using conventional spray equipment. Good coverage is essential, **BUT not to the point of run off.**
- Due to UV sensitivity, it is recommended that Broadband[®] is applied during the afternoon, or evenings.
- Mixed volumes must be applied as soon as possible and not left overnight, or standing in the sun.
- · Do not apply incompatible pesticides with Broadband®.
- Broadband[®] does not impose any risk of residues in harvested crops.
- **Broadband**[®] is a contact insecticide and it is essential that the spores make contact with all the insects, to be treated.
- Heavy rain or overhead irrigation, within one day of treatment, could wash spores off and reduce efficacy – repeat treatment.
- It is preferable that **Broadband**[®] is applied as soon as the target pest is first observed in the target crop.
- Broadband[®] should be applied between 3 7 day intervals, depending on the crop, pest pressure and pest life cycle.
- For improved efficacy, it is recommended that Broadband[®] is used with an approved adjuvant.

MIXING PICTOGRAMS





Apply product late afternoon or evening

Shake premix water volume to ensure all spores are in



& start

agitator



Add required dose to water







Fill with water to final spray volume

Spray needs to make contact with pest

NOT to the point of run off

PEST / CROP	DOSAGE	DIRECTIONS FOR APPLICATIONS
DIAMOND BACK MOTH Broccoli Brussels sprouts Cabbage Canola	Low pest pressure: Apply a minimum of 500 ml Broadband ^e /ha at the first sign of diamond back moth presence.	Apply at the first sign of diamond back moth pest presence.
		Low pest pressure: Apply the lower rate (500 ml/ha), at
Cauliflower	High pest pressure: Apply a minimum of 1000 ml Broadband®/ha	the first sign of the pest presence and apply at $5 - 7$ day intervals.
	Spray sufficient Broadband ®/water mixture to obtain full crop coverage,	High pest pressure: Apply the higher rate (1000 ml/ha) and at 3 – 5 day intervals.
	but not to the point of run off. (Add an approved adjuvant, for optimum efficacy).	Up to 80% reduction can be expected after three applications in cabbage.
FALSE CODLING MOTH	Low pest pressure: Apply a minimum of 500 ml	Apply at the first sign of false codling moth pest presence.
Peppers	Broadband [®] /ha at the first sign of false codling moth presence.	Low pest pressure: Apply the lower rate (500 ml/ha) at
	High pest pressure: Apply a minimum of 1000 ml Broadband®/ha	the first sign of pest presence and apply at 5 – 7 day intervals.
	Spray sufficient Broadband ®/water	High pest pressure: Apply the higher rate (1000 ml/ha)
	mixture to obtain full crop coverage, but not to the point of run off.	and at 3 – 5 day intervals.
	(Add an approved adjuvant for optimum efficacy).	

PEST / CROP	DOSAGE	DIRECTIONS FOR APPLICATIONS
FALSE CODLING MOTH Apricots Citrus Guavas Litchi's Macadamias Mandarins Nectarines Olives Peaches Pecan nuts Persimmons Pomegranates Plums Prickly Pears Tangerines Tea Walnuts	Apply 50 ml Broadband [®] /100 l water. Apply a minimum of 1000 ml Broadband [®] /ha. Spray sufficient Broadband [®] /water mixture to obtain full crop coverage, but not to the point of run off. (Add an approved adjuvant for optimum efficacy)	Apply at the first sign of false codling moth pest presence. Apply a minimum of three applications throughout the season, in an integrated programme. Use appropriate spraying equipment, to get good coverage, to optimize efficacy. Up to 90% reduction can be expected after three applications in citrus.
RED SCALE Citrus	Apply 50 ml Broadband [®] /100 l water. Apply a minimum of 1000 ml Broadband [®] /ha. Spray sufficient Broadband [®] /water mixture to obtain full crop coverage, but not to the point of run off. (Add an approved adjuvant for optimum efficacy).	Apply as a full cover spray, as soon as the first crawler movement is noticed, normally at bud burst. Apply a minimum of three applications throughout the season, in an integrated programme. Use appropriate spraying equipment, to get good coverage, to optimize efficacy. Up to 90% reduction can be expected after four applications.
RED SPIDER MITE Aubergines Blackberries Blueberries Capsicums Passion Fruit Peppers Peas Raspberries Strawberries Tomato's Watermelons	Low pest pressure: Apply at a minimum of 500 ml Broadband®/ha at the first sign of mite presence. High pest pressure: Apply at a minimum of 1000 ml Broadband"/ha. Spray sufficient Broadband®/water mixture, to obtain full crop coverage, but not to the point of run off. (Add an approved adjuvant for optimum efficacy).	Apply at the first sign of red spider mite pest presence. Low pest pressure: Apply the lower rate (500 ml/ha), at the first sign of pest presence and apply at $5 - 7$ day intervals. High pest pressure: Apply the higher rate (1000 ml/ha) and at $3 - 5$ day intervals. Up to 75% reduction can be expected after three applications in tomatoes

PEST / CROP	DOSAGE	DIRECTIONS FOR APPLICATIONS
RED SPIDER MITE Cherries Figs Papaya's Peaches Pomegranates	Apply 50 ml Broadband ®/100 l water. Apply a minimum of 1000 ml Broadband ®/ha	Apply at the first sign of red spider mite pest presence.
	Spray sufficient Broadband [®] /water mixture to obtain full crop coverage, but not to the point of run off. (Add an approved adjuvant for optimum efficacy).	Apply a minimum of three applications throughout the season, in an Integrated Programme.
		Use appropriate spraying equipment, to get good coverage, to optimize efficacy.
POTATO TUBER MOTH Potatoes	Apply a minimum of 1000 ml Broadband ®/ha. Spray sufficient Broadband®/ water	Apply at the first sign of potato tuber moth pest presence. Apply at $5 - 7$ day intervals.
	mixture to obtain full crop coverage, but not to the point of run off.	Up to 90% reduction can be expected after six applications.
	(Add an approved adjuvant for optimum efficacy).	
STINKBUG Macadamias	Apply a minimum of 1000 ml Broadband®/ha in 2500 I water. If water volumes exceed 2500 I water, use 2000 ml Broadband®/ha.	Apply at the first sign of stinkbug pest presence.
		Apply a minimum of three applications over the growing season.
	Spray sufficient Broadband [®] /water mixture to obtain full crop coverage, but not to the point of run off.	Apply in the late afternoon, early evening.
	(Add an approved adjuvant for optimum efficacy).	Increased efficacy is achieved when combined with a suitable, registered pyrethroid.
THRIPS Asparagus Broccoli Carrots Cauliflower Garlic Leeks Onions Peas Turnips	Low pest pressure: Apply a minimum of 500 ml Broadband®/ha at the first sign of thrips presence.	Apply at the first sign of thrips pest presence.
		Low pest pressure: Apply the lower rate (500 ml/ha) at
	High pest pressure: Apply a minimum of 1000 ml Broadband®/ha.	the first sign of pest presence and apply at 5 – 7 day intervals.
	Spray sufficient Broadband [®] / water mixture to obtain full crop coverage,	High pest pressure: Apply the higher rate (1000 ml/ha) and at 3 – 5 day intervals.
	but not to the point of run off. (Add an approved adjuvant with good spreading capability, for optimum efficacy).	Up to 60% reduction can be expected after three applications in onions.

PEST / CROP	DOSAGE	DIRECTIONS FOR APPLICATIONS
WHITEFLY Blackberries Blueberries Broccoli Cauliflower Lettuce Okra Passion Fruit Peas Peppers Radish Raspberries Strawberries Tomato's Watermelons	Low pest pressure: Apply a minimum of 500 ml Broadband®/ha at the first sign of whitefly presence. High pest pressure: Apply a minimum of 1000 ml Broadband®/ha. Spray sufficient Broadband®/water mixture to obtain full crop coverage, but not to the point of run off. (Add an approved adjuvant for optimum efficacy).	Apply at the first sign of whitefly pest presence. Low pest pressure: Apply the lower rate (500 ml/ha) at the first sign of pest presence and apply at $3 - 5$ day intervals. High pest pressure: Apply the higher rate (1000 ml/ha) and at $3 - 5$ day intervals. Up to 90% reduction can be expected, after three applications in tomato's.
WHITEFLY Citrus Figs Guavas Papayas Pomegranates	Apply 50 ml Broadband ®/100 l water. Apply a minimum of 1000 ml Broadband ®/ha. Spray sufficient Broadband ®/water mixture to obtain full crop coverage, but not to the point of run off. (Add an approved adjuvant for optimum efficacy).	Apply at the first sign of whitefly pest presence. Apply a minimum of three applications throughout the season, in an integrated programme. Use appropriate spraying equipment to get good coverage, to optimize efficacy. Up to 90% reduction in citrus woolly whitefly can be expected, after three applications in citrus.



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