

READ THE LABEL BEFORE USE. KEEP OUT OF REACH OF CHILDREN AND ANIMALS. SHAKE THE BOTTLE WELL BEFORE USE.

SEED TREATMENT



SORENTO 600 FS

Reg. No. L 9110 Act No. 36 of 1947
N-AR 1890 / W1301420

3: 28/07/2022 - Oct2023

A systemic insecticide seed treatment for the control of pests as indicated.

ACTIVE INGREDIENT

thiamethoxam (neonicotinoid) 600 g/l

GROUP

4A

INSECTICIDE

Hazard Statements:

May be harmful if swallowed or in contact with skin.
May cause an allergic skin reaction.
Harmful if inhaled.
Suspected of damaging fertility or the unborn child.
Very toxic to aquatic life with long lasting effects.

Precautionary statements:

Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
Avoid release into the environment.



WARNING



villa 

UN Number: 3082

Registration holder: VILLA CROP PROTECTION (PTY) LTD.
Co. Reg. No. 1992/002474/07
65 Botes Road, Glen Marais, Kempton Park 1619
Tel. (011) 396 2233
Website: www.villacrop.co.za

IN CASE OF POISONING / 24 HR EMERGENCY NUMBERS:
Griffon Poison Information Centre (National): +27 82 446 8946
Poison Information Helpline (National): +27 861 555 777
24 Hr Transport / Spill emergency no: (Hazcall24) +27 86 044 4411
(Client: Villa Crop Protection)

REFER TO DETAILS AS PRINTED ON CONTAINER / BAG

DIRECTIONS FOR USE ENCLOSED

Batch Number:
Date of Manufacture:

SORENTO 600 FS

Reg. No. L 9110 / N-AR 1890 / W1301420 Act No. 36 of 1947
 IRAC INSECTICIDE GROUP CODE: 4A

ACTIVE INGREDIENT:

thiamethoxam (neonicotinoid)..... 600 g/l

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WARNINGS**Withholding period:**

Minimum time between the last application and feeding:	
Grazing of crops planted with treated seed	56 days
Sunflower (grazing / cut for stock feeding)	84 days

IN THE CASE OF CROPS INTENDED FOR EXPORT, CONFIRM WITHHOLDING PERIODS WITH THE RELEVANT EXPORT ORGANISATION. IF THIS PRODUCT IS USED ACCORDING TO THE RECOMMENDATIONS ON THIS LABEL, LOCAL MRL VALUES WILL NOT BE EXCEEDED. HOWEVER, VILLA CROP PROTECTION (PTY) LTD. CANNOT ACCEPT RESPONSIBILITY FOR EXPORTED CROPS EXCEEDING THE IMPORT TOLERANCES OF OTHER COUNTRIES.

Hazard statements:

May be harmful if swallowed or in contact with skin.
May cause an allergic skin reaction.
Harmful if inhaled.
Suspected of damaging fertility or the unborn child.
Very toxic to aquatic life with long lasting effects.

- Handle with care.
- Protect against light.
- **Treated seed may be poisonous to seed-eating birds. Treated seed must be planted properly and covered with soil totally. No seed should be left where it can be eaten by birds.**
- Use **SORENTO 600 FS** only for the treatment of high quality certified seed.
- Do not use **SORENTO 600 FS** on sweetcorn or popcorn.
- Do not treat seed of inbred parent plants of hybrids, experimental hybrids or cultivars or newly released hybrids or cultivars with **SORENTO 600 FS**. First refer to the manufacturer or seed supplier.
- The planter should be calibrated prior to planting with treated seed, to ensure that the required plant population is obtained. Calibration must also be confirmed at regular intervals thereafter.
- Emergence of seedlings may be adversely affected should planting depth exceeds 50 mm. Efficacy may also be adversely affected by planting depth.
- Only treat seed that is to be used for planting purposes. **Never use treated seed for human consumption or animal feed.**
- Do not use treated seed carried over from the previous season. Only treat seed that is to be used for planting purposes.
- Store in a cool place away from food and feedstuffs.
- Keep out of reach of children, uninformed persons and animals.

Although this remedy has been extensively 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 the pests against the remedy concerned, as well as 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 failure of the user to follow the label instructions or 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:**

Obtain, read and follow all safety instructions before use.
Avoid breathing fumes, mists, vapours or spray.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release into the environment.
Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
IF SWALLOWED, ON SKIN OR INHALED: Get medical help.
IF ON SKIN: Wash with plenty of water and non-abrasive soap.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or concerned, get medical advice.
If skin irritation or rash occurs: Get medical help.
Collect spillage.
Store locked up.
Dispose of content/container to suitable landfill in accordance with local regulations.

- Wash contaminated clothing after use.
- Do not eat, drink or smoke whilst mixing or applying, or before washing hands and face and change of clothing.
- After treatment of seed, clean applicator and all utensils. Dispose rinse water where it will not contaminate crops, grazing or water sources.
- **TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS:** Empty the container over the spray or mixing tank. Thereafter rinse the empty container three times in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler (www.croplife.co.za). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.
- Destroy the empty container by perforation and flattening and dispose of it in a safe way.
- **Never** re-use the empty container for any other purpose.
- Prevent contamination of food, feedstuffs, drinking water, irrigation water and eating utensils.
- Treated seed must be handled carefully. Label the bags which contain treated seed clearly **"HARMFUL – treated with insecticide."** Never re-use the bags for any other purpose.

Relevant hazardous components	
Thiamethoxam	600 g/l
1,2-Benzisothiazole-3-one	<5 g/l

FIRST AID TREATMENT

- Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure and if symptoms persist, consult a doctor.
- **Skin:** Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. **Obtain medical attention if irritation or rash occurs.**
- **Eyes:** Flush eyes with clean water for at least 15 – 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Obtain medical attention if irritation persists.
- **Inhalation:** Remove person from contaminated area to fresh air and assist breathing as needed. **Seek medical attention.**
- **Ingestion:** **Seek medical attention** or call a poison control centre for treatment advice. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water.

NOTE TO PHYSICIAN

For local contamination treatment should be symptomatic after decontamination. In case of skin or eye contamination, treat as documented under "First Aid". If a large amount of this product is ingested the following measures should be considered: Induction of vomiting if the patient is fully conscious and it is less than 30 minutes since ingestion. Monitor blood count, Gastric lavage, and Charcoal administration. Anticonvulsant therapy is not appropriate. There is no specific antidote available. Treat symptomatically. Check blood pressure and pulse rate frequently as brachycardia and hypotonia are possible. Provide supportive measures for respiratory and cardiac action. Give artificial respiration if signs of paralysis appear.

Additional measures to be considered involve the elimination of the substance from the body or acceleration of its excretion (gastrolavage, saline laxatives).

RESISTANCE WARNING

SORENTO 600 FS is a group code 4A insecticide. Any insect population may contain individuals naturally resistant to **SORENTO 600 FS** and other group code 4A insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **SORENTO 600 FS** or any other group code 4A insecticide.

To delay insecticide resistance:

- avoid exclusive repeated use of insecticides from the same insecticide group code. Alternate with products from different insecticide group codes,
- integrate other control methods (chemical, cultural, biological) into insect control programmes.

For specific information on resistance management contact the registration holder of this product.

Mode of action:

SORENTO 600 FS contains **Thiamethoxam**. **Thiamethoxam** is an agonist of the nicotinic acetylcholine receptor belonging to IRAC mode of action group 4A and affects the synapses in the insect's central nervous system. It is an insecticide with contact, stomach and systemic activity, which is rapidly taken up by the plant and transported acropetally in the xylem.

USE RESTRICTIONS

SORENTO 600 FS is a systemic residual insecticide, formulated as a seed dressing, which is absorbed by the germinating seed / seedling. Effective control of target pests therefore depends on the following:

- Sufficient soil moisture, to ensure uptake of the active ingredient during germination to ensure efficacy.
- Unfavourable environmental conditions during germination (e.g. cold and wet conditions, flooding and drought) may result in delayed germination.
- Flood irrigation: Fields must not be flooded after planting before all seedlings have emerged and the crop is established. This would normally take around 2 weeks after planting.
- Damage to seedlings of treated crop seed may still occur under high insect population pressure. Mild infestations of Russian wheat aphid may still occur despite treatment with **SORENTO 600 FS**.

EXPECTED PERIOD OF CONTROL

<i>Pest</i>	<i>Expected period of control after planting</i>
Maize <u>Soil insects:</u> Black maize beetle (adults); False wireworm; Ground weevil (adults); Spotted maize beetle (larvae)	42 days
<u>Foliar feeding insects:</u> Maize leafhopper**	
Sunflower Ground Weevils	
Wheat Russian wheat aphid	

Period of control - important notes:

- Despite using this product, some damage / streak virus symptoms may still occur on maize seedlings. It is recommended to plant treated seed at a depth of 30 to 50 millimetres.
- Period of control depends on various factors such as temperature, soil moisture, etc. which may prolong or shorten above mentioned period of control.

DIRECTIONS FOR USE: Use only as directed.

Compatibility:

- **SORENTO 600 FS** can be used with seed previously treated with a fungicide (e.g. **Captab**). In such cases, first treat the seed with the fungicide, and then with **SORENTO 600 FS**. Refer to the “**DIRECTIONS FOR USE**” and “**USE RESTRICTIONS**” as listed on the label of the fungicide.
- Do not use **SORENTO 600 FS** together with **Teprosyn Mo/P** as this may adversely affect proper coverage of **SORENTO 600 FS**.

Mixing instructions:

- Mix the required volume of **SORENTO 600 FS** with a small volume of water to form a smooth cream before adding the balance of the water. Mix thoroughly before adding to the seed.
- Large quantities of seed are conveniently treated in automatic seed-dressing machines. **SORENTO 600 FS** is to be used as a slurry seed-dressing. The machines should be checked at intervals, to ensure that the correct quantity of **SORENTO 600 FS** is used.
- Treat enough seed for immediate use immediately before planting. Do not allow treated seed to stand over for prolonged period of time.

APPLICATION RATES**IMPORTANT**

Refer to “USE RESTRICTIONS” above.

1. MAIZE

<i>Pest</i>	<i>Dosage</i>
Spotted maize beetle (<i>Astylus atromaculatus</i>) larvae, Black maize beetle (<i>Heteronychus arator</i>), False wire worms (<i>Tenebrionidae spp.</i>), Ground weevils (<i>Protostrophus spp.</i>)	0.5 mg active ingredient per kernel. Use 2 parts water to one part SORENTO 600 FS
Maize leafhopper (<i>Cicadulina mbila</i>) Vector of streak disease	0.85 mg active ingredient per kernel. The volume of water to be added must be such that a final mixture volume of 1.5 litres are used per 100 kg seed.
<u>DETERMINATION OF DOSAGE RATES FOR TREATMENT OF MAIZE SEED:</u>	
<u>Instructions for maize seed packed as number of kernels per bag:</u>	
<u>Pack size in number of kernels / bag</u>	<u>Dosage: ml SORENTO 600 FS / bag</u>
60 000	50
70 000	58
80 000	67
90 000	75
<u>Instructions for maize seed packed per weight with the Thousand Grain Weight (TGW) known for each batch:</u>	
The following 2 formulas must be applied to determine the amount of SORENTO 600 FS to treat 100 kg seed.	
<ul style="list-style-type: none"> • $(1000 \div \text{TGW}) \times 100\,000 = n \text{ kernels} / 100\text{kg}$ • $\frac{(n \times 0.5)}{1000} \div 0.6 = \text{ml product} / 100 \text{ kg seed}$ 	
<u>Instructions for maize seed packed per weight with the TGW unknown for each batch:</u>	
Maize leafhopper	595 ml SORENTO 600 FS plus 905 ml water / 100 kg seed
Other maize soil insects	292 ml SORENTO 600 FS plus 1200 ml water / 100 kg seed

2. SUNFLOWERS

<i>Pest</i>	<i>Dosage</i>
Ground Weevils (<i>Protostrophus spp.</i>)	583 ml SORENTO 600 FS plus 920 ml water / 100 kg seed. Ground weevils need to feed on treated plants to be killed therefore, initial leaf damage may occur.

3. WHEAT

<i>Pest</i>	<i>Dosage</i>
Russian wheat aphid (<i>Diuraphis noxia</i>)	200 mL / 1300 mL water / 100 kg seed. Refer to “ USE RESTRICTIONS ”.