



**APRON STAR**

**Fungicide/Insecticide Seed Treatment for use in maize and legumes.**  
 Kiukuvu/kiuadudu cha kuchanganya na mbegu za mahindi na jamii ya maharagwe.

**Water Dispersible Powder for Slurry seed Treatment**  
 Unga mdolevu wa kuchanganya na mbegu

**Hazard Classification/Kiwango cha SUMU:**  
 WHO Class III  
 "FOR USE IN SEED TREATMENT ONLY"  
 "ITUMIKE TU KWA KUCHANGANYA NA MBEGU"

**Approved by TPRI, Arusha**  
 Imethibitishwa na TPRI, Arusha

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**Manufactured by/metengenezwa na:**  
 Syngenta Crop Protection AG, Basle, Switzerland

**Country representative Office:**  
 Syngenta Agro Services AG, Tanzania  
 P.O. Box 1777  
 Dar es Salaam, Tanzania  
 Tel: 022 2110967  
 Fax: 022 2112339

**Active ingredient content/Kiambato amalifu:** 20% thiamethoxam + 20% metalaxyl-M + 2% difenoconazole

**Antidote:** No specific antidote. Apply symptomatic therapy

**Makata:** Hakuna makata maalum. Tiba itolewe kufuatana na dalili zilizojitokeza.

**Storage:** Store in a cool place away from sun and damp, out of reach of children, animals, food and feed.

**Hifadhi:** Hifadhi dawa mahali pakavu penye kivuli, mbali na watoto, wanyama na vyakula

**Shelf life:** At least two years from date of manufacturing, in original sealed containers.

**Maisha rafuni:** Si chini ya miaka miwili au zaidi tangu siku ya kutengenezwa, ikiwa imehifadhiwa katika viwekeo vyake asilia vilivyofunikwa.

**READ THE ATTACHED LEAFLET BEFORE USING THE PRODUCT**

**SOMA KWA UANGALIFU MAELEZO YALIYOMBATANISHWA KABLA HUJANZA KUTUMIA DAWA HI**

**syngenta**  
 Colour band: BLUE

#### Mode of Action

Thiamethoxam, metalaxyl-M and difenoconazole act systemically in seeds and young plants. They are taken up from the treated seed coat and translocated to all parts of the plant during germination.

#### Spectrum of Activity

Metalaxyl-M controls all economically important diseases caused by fungi in the order Peronosporales. Difenoconazole is a broad spectrum fungicide controlling fungi of the class of Aschomycetes, Basidiomycetes and Deuteromycetes. Thiamethoxam is a targeted broad-spectrum insecticide with residual action. It displays root-systemic activity. In the targeted insects it shows quick stomach and contact action. Thiamethoxam is considered to act by interfering with the nicotinic acetyl choline receptor of the nervous systems of the insects.

#### Limitations

##### Resistance

To avoid aparition of of resistance, the first foliar application should not be of metalaxyl-M, thiamethoxam or difenoconazole on the crop after use of APRON STAR 42 WS as a seed treatment.

#### Recommendations for use

To avoid risks to man and the environment, comply with the instructions for use.

Crop	Product g/100kg seed	Insect pests	Typical diseases
Maize	250	Agriotes spp Rhopalosiphum spp.	Downy mildew Pythium damping off
Beans (Legumes)	250 g	Cicadulina spp	Thrips tabaci Termites

#### Crop tolerance

When used as recommended, APRON STAR 42 WS is well tolerated by all recommended crops. In case of doubt, check crop tolerance first.

#### Application technique / parameters

##### Equipment

APRON STAR 42 WS can be applied as a dust on dry seeds or as a dust on pre-wetted seeds or as a water based slurry, with on-farm equipment like concrete mixers, tins, gourds, plastic bags or closed drums.

##### Treatment procedure

##### Application as a slurry

To prepare the slurry, follow the following procedure:

- Fill mixing tank with required amount of water.
- Pour gradually the necessary quantity of APRON STAR 42 WS into the water while stirring.
- Maintain agitation of the slurry during the whole time of use.
- The slurry should be used within 48 hours after preparation.

##### Application on the seeds

To apply the slurry on the seeds, a conventional seed treatment machine can be used, but they have to be properly calibrated with APRON STAR 42 WS slurry. On-farm equipment, such as rotating drums or concrete mixers can be used.

##### Plastic bag application

For small quantities of seeds, the product can be applied by plastic bag method:

Use a strong plastic bag of 5 to 10 lt volume.

- Pour 5 g APRON STAR 42 WS in the bag.
- Pour 20 ml of water in the bag and mix the product and the water together.
- Add 2 kg of seeds in the bag, and shake the bag for 1 minute.
- Let the seeds dry. The treated seeds are ready to be planted. The plastic bag must be destroyed after treatment.

##### Application as dust

##### Pre-wetted seeds

- Wet seeds by applying 1 to 2 lt water per 100 kg seeds, and shaking.
- Apply APRON STAR 42 WS as a dust, with any conventional or on-farm made equipment.

##### Dry seeds

Application of APRON STAR 42 WS as a dust on dry seeds is possible but it gives uneven distribution and poor adhesion of the product on the seeds. It is therefore not recommended.

##### Please note

APRON STAR 42 WS can reduce the flow of seeds in a seed drill. The seed drill should therefore be calibrated with seeds treated with APRON STAR 42 WS.

Clean equipment thoroughly after use.

#### Compatibility

APRON STAR 42 WS has a broad spectrum activity and is not expected to be mixed with other products.

#### Safety Aspects

##### Precautionary measures

KEEP LOCKED UP OUT OF REACH OF CHILDREN and other unauthorised persons, and animals.

##### Operator safety

Avoid getting product in contact with skin, eyes or clothing. DO NOT inhale dust or spray mist. DO NOT eat, drink or smoke during work. Wash hands and face before eating, drinking or smoking. Wear protective clothing, during preparation and application of the product. After work change clothing and thoroughly clean protective equipment and clothing before re-use. Seed treatment should be done in a well ventilated area.

##### First Aid

If poisoning is suspected or any indisposition occurs, stop work immediately, apply fist aid measures and call a physician. Show label to the physician. In case of contact with the skin, remove all contaminated clothing, wash affected body parts immediately with plenty of water and soap. Rinse splashes from eyes with plenty of fresh and clean water for several minutes. If inhaled, move to clean air. If swallowed, repeatedly administer medicinal charcoal in plenty of water. Seek medical advice immediately if a large volume of concentrate was ingested. Note: Never give anything by mouth to an unconscious patient and never induce vomiting.

**Environment and wildlife.**

Toxic to aquatic organisms. DO NOT contaminate water used for irrigation or domestic purposes. DO NOT dispose of product wastes in water areas such as ponds, ditches, lakes, or in drainage systems .

**Spillage and leakage**

Remove heavily contaminated soil layer and bury in a safe place away from water supplies. Collect up spilt material thoroughly and bury in a safe place or put in a waste bin or in a plastic bag and dispose of on a landfill-site approved for pesticides. Rinse spill area with plenty of water. Note: Spilt product must not be re-used.

**Product and Container disposal**

Dispose of surplus product on a landfill-site approved for pesticides or bury in a safe place away from water sources. Dilute surplus application mixture, pour it broadcast on fallow land. Dispose of containers made of cardboard, paper or plastic by burning in a safe place. Stay away from the smoke and make sure that the smoke or fumes will not damage nearby crops, plants or animals. DO NOT re-use empty containers for any purpose. **Note:** Always comply with local legal requirements on disposal of pesticides.

**Storage conditions**

Store away from sun and damp, in a well ventilated area apart from food and feed, under lock and key. DO NOT contaminate food, feed or water. AVOID storage above +35<sup>0</sup>C. DO NOT stack containers higher than 2 metres, in order to avoid product compaction or damage.

**Shelf life**

At least two years from date of manufacturing, in unopened original containers.

**User's risk**

The user bears the risk for damage resulting from factors beyond the control of the manufacturer.

Resistant strains of fungal diseases or pests may develop or may exist against which fungicides may not be effective resulting in crop loss. Since the occurrence of such strains cannot be forecast, neither the manufacturer nor its distributor can accept responsibility for any loss or damage caused by failure of fungicides to control resistant strains.

All recommendations for use of the product are based on the current state of the manufacturer's knowledge. Since the manufacturer can not control the application, use, storage or processing of the product, the manufacturer cannot accept responsibility thereof.

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**Emergency Call:** Syngenta Alarm Centre,  
Huddersfield, UK; Phone: + 44 1484 538 444  
Fax: + 44 1484 433 197