



syngenta.

Reg. No. L6837 Act No. 36 of 1947 N-AR 1422 (Namibia) W130596 (Botswana)

A flowable concentrate systemic fungicide as a seed treatment for the control of downy mildew, black shank and damping-off diseases in the crops as indicated.

GROUP 4 SEED TREATMENT

Active Ingredients:
mefenoxam (phenylamide).....350 g/l

Product names marked ® or ™, the ALLIANCE FRAME, the SYNGENTA Logo and the PURPOSE ICON are Trademarks of a Syngenta Group Company



WARNING

Hazard statements:

Harmful if swallowed. Causes serious eye irritation. Harmful to aquatic life.

Precautionary statements:

Keep out of reach of children. **Prevention:** Wash skin thoroughly after handling. Do not eat, drink, or smoke when using this product. Wear eye protection/face protection. **Response:** If swallowed, call a POISON CENTRE/doctor if you feel unwell. Rinse mouth. If eye irritation persists, get medical advice/attention. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE/doctor. **Storage:** Protect from sunlight. Store in a well-ventilated place. **Disposal:** Dispose of contents/container to an approved waste disposal plant.

EMERGENCY TEL NO.:

+27 82 446 8946 (Griffon)

UN not classified

Registration holder
Syngenta South Africa (Pty) Ltd
Co. Reg. No. 1998/013761/07
Private Bag X 60
HALFWAY HOUSE, 1685
Tel.: +27 11 541 4000

1. WARNINGS:

Hazard statements: Harmful if swallowed. Causes serious eye irritation. Harmful to aquatic life.

Withholding periods: Minimum number of days between last application and harvest.

BEETROOT.....	28 days
BRASSICA.....	28 days
BULB VEGETABLES.....	28 days
CARROTS.....	28 days
COTTON.....	90 days
CUCURBITS.....	28 days
DRY BEANS.....	28 days
FORAGE GRASSES (forage grasses).....	60 days
FORAGE LEGUMES.....	60 days
FRUITING VEGETABLES.....	28 days
GRAIN SORGHUM.....	42 days
LEAFY VEGETABLES.....	28 days
LEGUME VEGETABLES.....	28 days
LUCERNE.....	60 days
MAIZE.....	42 days
MILLET.....	60 days
PEAS.....	28 days
SOYBEANS.....	90 days
SUNFLOWER.....	90 days
SWEETCORN.....	42 days
TOBACCO SEEDLINGS.....	42 days
VEGETABLES, ORNAMENTALS & FORESTRY SEEDLINGS.....	42 days

NOTE: Compliance with these withholding periods will ensure that residues do not exceed local maximum residue limits (MRL), but the import tolerances of other countries might possibly be exceeded. If the crop to be treated is intended for export, consult the relevant importer or exporting body regarding the use of this product, MRLs and recommended withholding periods.

- Harmful if swallowed.
- Toxic to daphnia and animals.
- Store in a cool, dry place.
- Store away from food and feed.
- Avoid storage above 35°C.
- Keep out of reach of children, uninformed persons and

animals.

- Do not use treated seed for human or animal consumption.
- **In case of poisoning:** Call a doctor and present this label.

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 disease 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 and the environment, or harm to people 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, that could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

2. PRECAUTIONS:

Precautionary statements: Keep out of reach of children. Wear protective gloves/eye protection/face protection. If eye irritation persists, get medical advice/attention. **Prevention:** Wear protective gloves/protective clothing. Wear respiratory protection. **Response:** If swallowed, call a POISON CENTRE/doctor if you feel unwell. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. **Storage:** Dispose of contents/container to an approved waste disposal plant.

- Avoid contact with skin, eyes, or clothing.
- Do not inhale concentrate or mixed product. Wash contaminated clothing after use.
- Do not eat, drink, or smoke while mixing or applying the product or before washing hands and face.
- While handling the concentrate, during treatment of the seed and while handling treated seed wear a face shield, hat or cap and rubber gloves.
- Clean applicator after use. Dispose of rinsate where it will not contaminate crops, pastures, rivers, dams and boreholes.
- Prevent contamination of food, feed, drinking water and

eating utensils.

- Destroy empty container in prescribed manner and do not use it for any other purpose.
- When treated seed is stored in containers, mark containers clearly "POISONED" and never use them for any other purpose.

First Aid and Medical Treatment:

General: Place the patient in a well-ventilated area and protect him/her from hypothermia.

In case of suspected poisoning: Immediately call a doctor.

- **Eye contact:** Rinse eyes with a light stream of clean water for 10 - 15 minutes.
- **Ingestion:** Repeatedly administer medical charcoal in large quantities of water.
- **Skin contact:** Remove contaminated clothing and thoroughly wash the affected parts of the body with soap and water.
- **Inhalation:** Immediately move patient to fresh air.

NOTE: Never give anything by mouth to an unconscious person. Do not induce vomiting.

Antidote: No specific antidote is known. Apply symptomatic therapy.

3. RELEVANT SUBSTANCES:

Chemical name	
metalaxyl-M (ISO)	
Classification	Concentration (% w/w)
Acute Tox. 4; H302 Eye Dam. 1; H318	≥ 30 - < 50

4. RESISTANCE MANAGEMENT:

APRON XL is a group code 4 fungicide. Any fungus population may contain individuals naturally resistant to **APRON XL** and other group code 4 fungicides. The resistant individuals can eventually dominate the fungus population if these fungicides are used repeatedly and exclusively in programs. These resistant fungi may not be controlled by **APRON XL** or any other group code 4 fungicides.

To delay fungicide resistance:

- Avoid exclusive repeated use of fungicides from the same fungicide group code. Alternate or tank mix with products from different fungicide group codes.
- Refer to individual product labels when alternating products or when using tank mixtures with products in fungicide group codes 7, 27, 28, 29, 30 and M.
- Integrate other control methods (chemical, cultural, biological) into disease control programs.

For specific information on resistance management, contact the registration holder of this product (Syngenta South Africa) or visit the FRAC website at <http://www.frac.info/frac/index.html>.

5. PRODUCT PROPERTIES:

APRON XL contains mefenoxam, a systemic fungicide with

protective and curative properties.

6. DIRECTIONS FOR USE: Use only as indicated.

6.1 Compatibility

APRON XL is compatible with CELEST 100 FS, CELEST XL, CELEST XL WHITE and CRUISER WHITE. The compatibility of **APRON XL** may be influenced by the quality of the dilution water. Since the quality of water may vary from farm to farm, a physical compatibility test should always be carried out prior to application.

6.2 Application onto Seed

6.2.1 Mechanical seed dressing equipment

It is generally recommended to apply **APRON XL** as a slurry. The amount of water required will depend on the seed type (300 - 500 ml/100 kg seed).

- Fill the slurry tank to the required volume with water.
- Add the required volume of **APRON XL** to the water.
- Commence the stirring or agitation process.

6.2.2 Small seed lot treatment

APRON XL can be applied as a slurry similar to that described.

IMPORTANT: Do not treat seed more than six (6) months before sowing. Dilute **APRON XL** with clean water prior to seed treatment. For all seed treatments, do only one (1) application unless otherwise indicated in the RECOMMENDATIONS as a drench application. Follow the RECOMMENDATIONS table for specifications.

7. RECOMMENDATIONS:

Disease	Dosage
BEETROOT	
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none">• Apply 100 ml APRON XL per 100 kg seed, OR• Apply 33 - 35 ml APRON XL together with 100 - 200 ml CELEST XL per 100 kg seed.
BRASSICA	
Leafy vegetables: Broccoli, brussels sprouts, cabbage, cauliflower, kale, mustard greens and mustard spinach	
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none">• Apply 20 - 40 ml APRON XL per 100 kg seed.
Remarks <ul style="list-style-type: none">• For a low disease pressure, use the lower rate and the higher rate for the higher disease pressure.	
BULB VEGETABLES	
Garlic, leek, onion dry bulb, onion greens and shallot	
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none">• Apply 20 - 40 ml APRON XL as a seed treatment per 100 kg seed.
Remarks <ul style="list-style-type: none">• For a low disease pressure, use the lower rate and the higher rate for the higher disease pressure.	
CARROTS	
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none">• Apply 200 ml APRON XL per 100 kg, OR• Apply 14 - 35 ml APRON XL together with 100 - 200 ml CELEST XL per 100 kg seed.

Disease	Dosage
COTTON	
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none"> Apply 25 ml APRON XL per 100 kg seed.
CUCURBITS	
Cucumber, gherkin, melon, musk melon, pumpkin and squash	
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none"> Apply 20 - 40 ml APRON XL per 100 kg seed.
Remarks	
<ul style="list-style-type: none"> For a low disease pressure, use the lower rate and the higher rate for the higher disease pressure. 	
DRY BEANS	
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none"> Apply 15 ml APRON XL per 100 kg, OR Apply 11 ml APRON XL together with 125 ml CELEST XL per 100 kg seed.
FORAGE GRASSES	
All grasses, Gramineae family, cereal fed to or, grazed by livestock, pastures, range grasses, grasses grown for silage or hay	
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none"> Apply 40 - 50 ml APRON XL seed treatment per 100 kg seed, OR Apply 33 - 35 ml APRON XL together with 100 - 200 ml CELEST XL per 100 kg seed.
Remarks	
<ul style="list-style-type: none"> For a low disease pressure, use the lower rate and the higher rate for the higher disease pressure. 	
FORAGE LEGUMES	
For forage purposes: Alfalfa, clover, beans, soybeans, soybean hay, peas, pea vine hay, cowpeas	
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none"> Apply 40 ml APRON XL as a seed treatment per 100 kg seed, OR Apply 33 - 35 ml APRON XL together with 100 - 200 ml CELEST XL per 100 kg seed.
Phytophthora root rot <i>Phytophthora</i> spp. (early season protection)	
Downy mildew [suppression] (early season for alfalfa or soybean) <i>Peronospora manshurica</i>	
FRUITING VEGETABLES	
Eggplant, groundcherry, pepino, pepper (bell, cooking, chilli, pimento, sweet), tomatillo and tomato	
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none"> Apply 20 - 40 ml APRON XL per 100 kg seed.
Remarks	
<ul style="list-style-type: none"> Seeds sown for transplant: DO NOT apply a preplant or at-plant application of mefenoxam or metalaxyl containing products to seed treated with APRON XL. 	

Disease	Dosage
GRAIN SORGHUM	
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none"> Apply 25 ml APRON XL as a seed treatment per 100 kg seed, OR Apply 16.5 - 35.5 ml APRON XL together with 100 ml CELEST XL per 100 kg seed, OR Apply 20 - 40 ml APRON XL together with 5 - 10 ml CELEST 100 FS per 100 kg seed.
Downy mildew <i>Peronosclerospora sorghi</i>	<ul style="list-style-type: none"> Apply 25 - 40 ml APRON XL as a seed treatment per 100 kg seed, OR Apply 40 - 75 ml APRON XL together with 5 - 10 ml CELEST 100 FS per 100 kg seed.
Remarks	
<ul style="list-style-type: none"> Seed treated with APRON XL per 100 kg seed should be planted and not carried over to the next year. Only high quality seed (90% germination and above) should be treated with APRON XL. 	
LEAFY VEGETABLES	
Amaranth, celery, chrysanthemum, corn salad, cress, oranch, parsley, purlane, radicchio, rubarb, spinach and Swiss chard	
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none"> Apply 20 - 40 ml APRON XL as a seed treatment per 100 kg seed, OR Apply 33 - 35 ml APRON XL together with 100 - 200 ml CELEST XL per 100 kg seed.
Remarks	
<ul style="list-style-type: none"> DO NOT apply APRON XL to spinach that is destined to be grown in greenhouses or closed environmentally-controlled rooms. Containers or bags containing APRON XL treated spinach seed must be labeled with the restriction, "DO NOT use seed for spinach destined to be grown in greenhouses or inside environmentally-controlled rooms". 	
LEGUME VEGETABLES	
Cowpeas, okra, lentils, lupins and beans	
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none"> Apply 40 ml APRON XL as a seed treatment per 100 kg seed, OR Apply 33 - 35 ml APRON XL together with 100 - 200 ml CELEST XL per 100 kg seed.
Phytophthora root rot <i>Phytophthora</i> spp. (early season protection)	
LUCERNE	
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none"> Apply 50 ml APRON XL per 100 kg seed.
MAIZE	
Downy mildew <i>Peronosclerospora sorghi</i>	<ul style="list-style-type: none"> Apply 30 ml APRON XL per 100 kg seed.
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none"> Apply 30 ml APRON XL as a seed treatment per 100 kg seed, OR Apply 16.5 - 35.5 ml APRON XL

Disease	Dosage
MAIZE cont.	
together with 100 ml CELEST XL per 100 kg seed.	
Remarks	
<ul style="list-style-type: none"> Seed treated with APRON XL should be planted and not carried over to the next year. Only high quality seed (90% germination and above) should be treated with APRON XL. Allow seed to dry before bagging. DO NOT graze or cut for stock food for at least four (4) weeks after sowing treated seed. 	
MILLET	
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none"> Apply 20 - 40 ml APRON XL as a seed treatment per 100 kg seed, OR Apply 33 - 35 ml APRON XL together with 100 - 200 ml CELEST XL per 100 kg seed.
Downy mildew <i>Sclerospora graminicola</i>	<ul style="list-style-type: none"> Apply 80 ml APRON XL as a seed treatment per 100 kg seed.
Remarks	
<ul style="list-style-type: none"> For a low disease pressure, use the lower rate and the higher rate for the higher disease pressure. 	
PEAS	
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none"> Apply 25 - 100 ml APRON XL per 100 kg seed.
Downy mildew <i>Peronospora viciae</i>	<ul style="list-style-type: none"> Apply 100 ml APRON XL per 100 kg seed.
Remarks	
<ul style="list-style-type: none"> For a low disease pressure, use the lower rate and the higher rate for the higher disease pressure. 	
SOYBEANS	
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none"> Apply 15 ml APRON XL per 100 kg seed, OR Apply 11 - 35 ml APRON XL together with 125 ml CELEST XL per 100 kg seed.
Remarks	
Varieties of high susceptibility to the disease may become infected after 3 - 4 weeks if conditions favour disease development.	
SUNFLOWER	
Downy mildew <i>Plasmopara halstedii</i>	<ul style="list-style-type: none"> Apply 285 ml APRON XL per 100 kg seed, OR Apply 282 ml APRON XL together with 125 ml CELEST XL per 100 kg seed.
SWEETCORN	
Damping-off and seed decay <i>Pythium</i> spp.	<ul style="list-style-type: none"> Apply 30 ml APRON XL per 100 kg seed.
Downy mildew <i>Peronosclerospora sorghi</i>	

Disease	Dosage
SWEETCORN cont.	
Damping-off and seed decay <i>Fusarium</i> spp. <i>Pythium</i> spp.	<ul style="list-style-type: none"> 20 ml APRON XL together with 100 ml CELEST XL per 100 kg seed.
Remarks	
<ul style="list-style-type: none"> Seed treated with APRON XL per 100 kg seed should be planted and not carried over to the next year. Only high quality seed (90% germination and above) should be treated with APRON XL. Allow seed to dry before bagging. 	
TURF GRASSES	
Golf courses, home lawns, reclamation and erosion control	
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none"> Apply 40 - 80 ml APRON XL as a seed treatment per 100 kg seed, OR Apply 33 - 35.5 ml APRON XL together with 100 - 200 ml CELEST XL per 100 kg seed.
Remarks	
<ul style="list-style-type: none"> For a low disease pressure, use the lower rate and the higher rate for the higher disease pressure. 	
TOBACCO SEEDLINGS	
Black shank <i>Phytophthora nicotianae</i>	<ul style="list-style-type: none"> Apply 35 ml APRON XL per 100 l water.
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none"> Apply as a soil drench using 15 l mixture per 10 m² on tobacco seedlings.
Remarks	
Applications of APRON XL should commence three (3) weeks post-emergence, or alternatively apply a split application, with maximum two (2) applications, as follows:	
Severe disease pressure:	
Use APRON XL initially at 35 ml per 100 l water, three (3) weeks post-emergence. Repeat at 17,5 ml per 100 l water approximately five (5) days before transplanting.	
Low disease pressure:	
Use APRON XL initially at 17,5 ml per 100 l water, three (3) weeks post-emergence. Repeat at 17,5 ml per 100 l water approximately five (5) days before transplanting. It is advisable to wash the product into the soil after application using 15 l clean water per 10 m ² .	
The second application should coincide with irrigation to soften the soil for seedling pulling.	
NB: These treatments will not protect the tobacco plant once transplanted. Drenching tobacco seedbeds with suitable registered broad spectrum fungicides at 7 - 14-day intervals is also recommended.	
VEGETABLE, ORNAMENTAL AND FORESTRY SEEDLINGS	
Damping-off <i>Pythium</i> spp.	<ul style="list-style-type: none"> Apply 5.3 ml APRON XL per 15 l water. Apply as a drench to seedling trays using 1.5 l of the mixture per m² or for two (2) seedling trays.
Remarks	
<ul style="list-style-type: none"> Applications of APRON XL should commence when 	

Disease	Dosage
VEGETABLE, ORNAMENTAL AND FORESTRY SEEDLINGS cont.	
<p>seedlings are at the 3 - 4-leaf stage and repeated every 14 days until transplant.</p> <ul style="list-style-type: none"> No more than three (3) applications per seedling cycle may be done. 	

APRON®, **CELEST®** and **CRUISER®** are registered trade marks of a Syngenta Group Company. **MEFENOXAM™** is the tradename of metalaxyl-M (ISO common name).

© **SYNGENTA AG, 2000**. Copyright of this document is reserved. All unauthorized reproduction is forbidden.

SA Reg.: 2017-01-31