



syngenta.

Reg. No. **L6353** Act No. 36 of 1947 **N-AR 1434** (Namibia) **W130349** (Botswana)

A flowable concentrate seed treatment fungicide with contact and systemic properties for control of seed decay and seedling damping-off in crops as indicated.



Hazard statements:

May cause an allergic skin reaction. Toxic to aquatic life with long-lasting effects.

Precautionary statements:

Keep out of reach of children. Read label before use.

Prevention: Avoid breathing dust/fume/gas/mist/vapours/spray. Wear protective gloves. Avoid release to the environment. **Disposal:** Dispose of contents/container to an approved waste disposal plant.

Response: If skin irritation or rash occurs, get medical advice/attention. Take off contaminated clothing and wash it before re-use. Collect spillage. **Storage:** Store locked up.

NOOD TEL NO.:
+27 82 446 8946 (Griffon)

UN NOT CLASSIFIED

GROUP	12	SEED TREATMENT
	4	

Active Ingredients:

Fludioxonil (phenylpyrrole)..... 25 g/ℓ
Mefenoxam (phenylamide)..... 10 g/ℓ



WARNING

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Registration holder
Syngenta South Africa (Pty) Ltd
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1. WARNINGS:

Hazard Statements: May cause an allergic skin reaction. Toxic to aquatic life with long-lasting effects.

Withholding periods: Minimum number of days between last application and harvest. The following refers to treated seed from planting to grazing or harvest.

CANOLA	50 days
DRY BEANS	56 days
MAIZE	35 days
SUNFLOWER	127 days
SORGHUM	35 days
SOYBEANS	175 days
SWEETCORN	35 days

- Harmful if swallowed.
- Toxic to fish and other aquatic organisms.
- 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.

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 weed 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: **Prevention:** Avoid breathing dust/fumes/gas/mist/vapours/spray. Wear protective gloves. Avoid release to the environment. **Disposal:** Dispose of contents/container to an approved waste disposal plant. **Response:** If skin irritation or rash occurs, get medical advice/attention. Take off contaminated clothing and wash it before re-use. Collect spillage. **Storage:** Store locked-up.

- Avoid contact with skin, eyes, or clothing.
- Wash contaminated clothing after use.
- Do not eat, drink, or smoke whilst mixing or applying the product or before washing hands and face.
- While handling the concentrate, during treatment of seed, and while handling treated seed, wear overalls, a face shield, hat or cap, gloves and solid footwear.
- 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 the prescribed manner and do not use it for any other purpose.
- When treated seed is stored in seed bags, mark bags clearly and never use for any other purpose.

3. RELEVANT SUBSTANCES:

Chemical name	
1,2-benzisothiazol-3(2H)-one	
Classification	Concentration (% w/w)
Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 2; H411	≥ 0,05 - < 0,1
M-Factor (Acute aquatic toxicity): 1	

4. RESISTANCE MANAGEMENT:

CELEST XL is a group code 4 and 12 fungicide. Any fungus

population may contain individuals naturally resistant to **CELEST XL** and other group code 4 and 12 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 **CELEST XL** or any other group code 4 and 12 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 or M.
- Integrate other control methods (chemical, cultural, biological) into disease control programs.
- Development of resistance to fungicides by seed and soil-borne pathogens has been documented.

Consult your agricultural advisor or Syngenta representative immediately should resistance be suspected and for guidance and strategies for disease management.

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:

CELEST XL contains fludioxonil which is a broad spectrum contact fungicide with residual activity. Fludioxonil has limited uptake by the seed and little translocation within the seedling. **CELEST XL** also contains mefenoxam, a systemic fungicide, with protective and curative properties. Mefenoxam is systemically translocated to all parts of the seedling during germination. When applied as recommended, **CELEST XL** controls seed and soil-borne diseases of various crops.

6. DIRECTIONS FOR USE: Use only as indicated.

6.1 Compatibility

CELEST XL is not compatible with solvent-based formulations. **CELEST XL** is compatible with film coating products and with FS/WS formulations of other seed treatment compounds with neutral reaction.

6.2 Application Information

6.2.1 Mechanical seed dressing equipment

- **CELEST XL** can be applied with any continuous flow seed treatment equipment if the formulation is sprayed onto the seed through spinning discs in a liquid mist chamber.
- Rotating drums or fluidised bed systems for film coating procedures are also recommended.
- It is essential that any continuous flow seed treatment equipment should be calibrated with **CELEST XL**, as flow characteristics may not be the same as for other seed treatments.

6.2.2 Preparation of the slurry

When used diluted, the following procedures should be followed for preparing the slurry:

- Fill the mixing tank with the correct amount of water.
- Shake the product container before use.
- Add the required quantity of **CELEST XL** while stirring continuously.
- Maintain agitation of the slurry during the whole time of use.
- The slurry has to be used within 24 hours after preparation.

6.2.3 Treatment procedure

- The slurry preparation will depend on the type of seed treater used.
- Use the higher slurry dosage on smaller seed.

Note

- Clean equipment with water after use. **CELEST XL** may reduce the flow of seed in a seed drill or planter.
- Recalibrate seed drill or planter with treated seed before use.

7. RECOMMENDATIONS:

CANOLA

Disease	Dosage
Seed decay and damping-off (<i>Pythium</i> spp.) (<i>Rhizoctonia solani</i>)	200 - 400 ml CELEST XL /100 kg seed.
Seedling blackleg suppression	400 ml CELEST XL /100 kg seed.
Remarks	
<ul style="list-style-type: none"> • Apply diluted with water to clean seed before sowing. • If stored under dry, cool, ventilated conditions, treated seed can be retained for up to 24 months following treatment. • DO NOT graze or cut for stock food for six (6) weeks after sowing treated seed. 	

CARROTS, COTTON, FORAGE GRASSES, GARDEN BEETS, PEANUTS, LEAFY VEGETABLES AND SPINACH

Disease	Dosage
Low to moderate infestation of Pythium damping-off	100 - 200 ml CELEST XL together with 14 - 16 ml APRON XL/100 kg seed.
High level infestation of Pythium damping-off	100 - 200 ml CELEST XL together with 33 - 35 ml APRON XL/100 kg seed.

CEREAL GRAINS

(Rye, oats, buckwheat and tricale)

Disease	Dosage
Damping-off (<i>Fusarium</i> spp.) (<i>Rhizoctonia</i> spp.) (<i>Pythium</i> spp.)	100 - 200 ml CELEST XL /100 kg seed.

CEREAL GRAINS cont.

Disease	Dosage
Seed rots (<i>Aspergillus</i> spp.)	100 - 200 ml CELEST XL /100 kg seed.

CEREAL GRAINS

(Millet)

Disease	Dosage
Low to moderate infestation of <i>Pythium damping-off</i>	100 - 200 ml CELEST XL /100 kg seed together with 5 - 16.5 ml APRON XL/100 kg seed.
High level infestation of <i>Pythium damping-off</i>	100 - 200 ml CELEST XL together with 33 - 35 ml APRON XL/100 kg seed.

DRY BEANS

Disease	Dosage
Seed decay and damping-off (<i>Fusarium</i> spp.) (<i>Pythium</i> spp.)	125 ml CELEST XL /100 kg seed.
Seed decay and damping-off complex (<i>Fusarium</i> spp.) (<i>Pythium</i> spp.)	125 ml CELEST XL together with 11 ml APRON XL/100 kg seed.

FORAGE LEGUMES

(For forage only alfalfa, clover, beans and peas).

Disease	Dosage
<i>Pythium damping-off</i> and early season <i>Phytophthora</i> protection	100 - 200 ml CELEST XL together with 4.5 - 7 ml APRON XL/100 kg seed.
Suppression of early season downy mildew in alfalfa and soybean	100 - 200 ml CELEST XL together with 33 - 35.5 ml APRON XL/100 kg seed.

LEGUME VEGETABLES

(Black-eyed peas, cowpeas, field beans, field peas, kidney beans, peas, lentils and lupines)

Disease	Dosage
Low to high level of infestation of <i>Pythium damping-off</i>	100 - 200 ml CELEST XL together with 2.5 - 35.5 ml APRON XL/100 kg seed.
Early season <i>Phytophthora</i> protection	100 - 200 ml CELEST XL together with 33 - 35.5 ml APRON XL/100 kg seed.
Systemic downy mildew protection in peas	100 - 200 ml CELEST XL together with 70 - 73 ml APRON XL/100 kg seed.

MAIZE

Disease	Dosage
Seed decay and damping-off (<i>Fusarium</i> spp.)	100 ml CELEST XL /100 kg seed.

MAIZE cont.

Disease	Dosage
(<i>Pythium</i> spp.)	100 ml CELEST XL /100 kg seed.
Remarks	<ul style="list-style-type: none"> Apply diluted with water to clean seed before sowing. Thorough mixing is required to ensure complete coverage of all seed. Allow seed to dry before bagging. DO NOT graze or cut for stock food for four (4) weeks after sowing treated seed.

SORGHUM

Disease	Dosage
Damping-off and root rot (<i>Pythium</i> spp.) (<i>Fusarium</i> spp.)	100 - 200 ml CELEST XL /100 kg seed.
Decay, damping-off, seedling blight and downy mildew (cultivars WITH downy mildew resistance)	100 ml CELEST XL tank mixed with 16.5 - 35.5 ml APRON XL/100 kg seed.
High disease pressure (cultivars WITH downy mildew resistance)	200 ml CELEST XL tank mixed with 14 - 33 ml APRON XL/100 kg seed
Decay, damping-off, seedling blight and downy mildew suppression (cultivars with NO downy mildew resistance)	100 ml CELEST XL tank mixed with 75 ml APRON XL/100 kg seed.
High disease pressure (cultivars with NO downy mildew resistance)	200 ml CELEST XL tank mixed with 70 ml APRON XL/100 kg seed.
Remarks	<ul style="list-style-type: none"> Apply diluted with water to clean seed before sowing. Thorough mixing is required to ensure complete coverage of all seed. Allow seed to dry before bagging. Use the higher rate in paddocks where soil conditions are expected to be very wet following sowing for improved control. DO NOT graze or cut for stock food for four (4) weeks after sowing treated seed. Sorghum seed treated with the additional APRON XL should be planted and not stored or carried over to the following year. Only high quality sorghum (> 90% germination of seed) should be treated with APRON XL.

SOYBEANS

Disease	Dosage
Seed decay and damping-off (<i>Pythium</i> spp.) (<i>Fusarium</i> spp.)	125 ml CELEST XL /100 kg seed.
Low to moderate infestation of <i>Pythium damping-off</i>	100 - 200 ml CELEST XL together with 4.5 - 7 ml APRON XL/100 kg seed.

SOYBEANS cont.

Disease	Dosage
High level infestation of Pythium damping-off	100 - 200 mℓ CELEST XL together with 33 - 35.5 mℓ APRON XL/100 kg seed.

SUNFLOWER

Disease	Dosage
Seed decay and damping-off (<i>Pythium</i> spp.) (<i>Fusarium</i> spp.)	125 mℓ CELEST XL /100 kg seed.
Downy mildew (<i>Plasmopara halstedii</i>)	125 mℓ CELEST XL together with 282 mℓ APRON XL/100 kg seed.

SWEET CORN

Disease	Dosage
Seed decay and damping-off (<i>Fusarium</i> spp.) (<i>Pythium</i> spp.)	100 - 200 mℓ CELEST XL /100 kg seed.
Seed decay and damping-off complex (<i>Fusarium</i> spp.) (<i>Pythium</i> spp.)	100 mℓ CELEST XL together with 30 mℓ APRON XL/100 kg seed.
Remarks	<ul style="list-style-type: none"> • Apply diluted with water to clean seed before sowing. • Thorough mixing is required to ensure complete coverage of all seed. • Allow seed to dry before bagging. • Use the higher rate in paddocks where soil conditions are expected to be very wet following sowing for improved control. • DO NOT graze or cut for stock food for four (4) weeks after sowing treated seed.

TURF GRASSES

Disease	Dosage
Low to moderate infestation of Pythium damping-off	100 - 200 mℓ CELEST XL together with 33 - 35.5 mℓ APRON XL/ 100 kg seed.
High level infestation of Pythium damping-off	100 - 200 mℓ CELEST XL together with 70 - 73 mℓ APRON XL/100 kg seed.
Remarks	<ul style="list-style-type: none"> • Apply CELEST XL as a pre-plant seed treatment. • Follow the application information under point 6.2 for correct treatment of seed.

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

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SA Reg.: 2014-09-26