

# POTATOES

## General Information

### USE INFORMATION

CruiserMaxx Potato Extreme seed treatment contains thiamethoxam insecticide and fludioxonil and difenoconazole fungicides.

Thiamethoxam is a systemic seed treatment insecticide belonging to the neonicotinoid class of chemistry. Thiamethoxam protects against certain chewing and sucking insects through contact and ingestion. These insects include: green peach aphids, Colorado potato beetles, flea beetles, leafhoppers, leaf miners, psyllids and whiteflies.

Fludioxonil protects against damage from certain soil-borne and seed-borne diseases of crop plants. Fludioxonil is active against Fusarium dry rot seed decay, seed-borne Rhizoctonia that causes stem canker and tuber black scurf and seed-borne Helminthosporium solani, the causal agent of silver scurf diseases on potato tubers.

Difenoconazole is a triazole fungicide added to CruiserMaxx Potato Extreme to eliminate or reduce development of fungicide resistance.

CruiserMaxx Potato Extreme does not control bacterial disease or diseases present within the seed or protect against bacteria that may infect and decay the seed after planting.

Use CruiserMaxx Potato Extreme as an integral part of a potato pest management strategy.

This strategy includes the use of high quality certified seed, good sanitation, proper crop rotation, insect population thresholds, appropriate control measures, optimal harvest time for tubers and proper handling of tubers without bruising. Consult your local agricultural extension agent for more detailed information on insect management practices.

The expected length of protection against the labeled pests depends on the

accuracy of application of the products to ensure the seed tubers receive the target rate of the active ingredients and also the prevailing weather and other extraneous factors that can impact pest pressure. Consult your local University Extensions Centers or Syngenta representative or dealer for information relative to your area.

## APPLICATION PROCEDURES

If inert dust (fir bark, talc, etc.) or a dust-based fungicide is to be applied, apply the CruiserMaxx Potato Extreme seed treatment before applying the dust.

Registered dust based fungicides can be applied as a supplemental treatment after the CruiserMaxx Potato Extreme application. Follow label instructions for these products and ensure that the maximum allowable rates for an active ingredient are not exceeded.

Apply CruiserMaxx Potato Extreme seed treatment only in well ventilated areas.

Ensure that spray nozzles are properly hooded and shielded to prevent spray from moving off target.

Apply the mixture as a fine spray over the cut or whole seed tubers.

## CROP USE PRECAUTIONS

### Resistance Management

CruiserMaxx Potato Extreme contains thiamethoxam, a Group 4A insecticide; fludioxonil, a Group 12 fungicide; and difenoconazole, a Group 3 fungicide.

Some insect pests are known to develop resistance to products after repeated use. Because resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies established for the crop and use area. Syngenta encourages responsible product stewardship to ensure effective long-term control of the insects on the label.

If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local

company representative or agricultural advisor for the best alternative method of control for your area.

CruiserMaxx Potato Extreme contains a Group 4A insecticide (thiamethoxam, belonging to the neonicotinoid class of chemistry). Insect biotypes with acquired or inherent resistance to Group 4A insecticides may eventually dominate the insect population if Group 4A insecticides are used repeatedly as the predominant method of control for targeted species. This may result in partial or total loss of control of those species by CruiserMaxx Potato Extreme or other Group 4A insecticides.

In order to maintain susceptibility to this class of chemistry:

- Avoid using Group 4A insecticides, rotate to a treatment window of effective products with a different mode of action before making additional applications of Group 4A insecticides.
- A treatment window rotation, along with other IPM practices for the crop and use area, is considered an effective strategy for preventing or delaying a pest's ability to develop resistance to this class of chemistry.
- If resistance is suspected, do not reapply CruiserMaxx Potato Extreme or any other Group 4A insecticides.

Other Insect Resistance Management (IRM) practices include:

- Incorporating IPM techniques into your insect control program.
- Monitoring treated insect populations for loss of field efficacy.
- Using tank-mixtures or premixes with insecticides from a different target site of action group as long as the involved products are all registered for the same crop and effective rates are applied.

For additional information on Insect Resistance Management:

- Contact your local extension specialist, certified crop advisor and/or product manufacturer for additional insect resistance management recommendations.
- Visit the Insecticide Resistance Action Committee (IRAC) on the web at: <http://www.irac-online.org/>.

Difenoconazole is in the Group 3 class fungicides. The mode of action of difenoconazole is as a demethylation inhibitor of sterol biosynthesis (DMI) which disrupts membrane synthesis by blocking demethylation. Fungal pathogens can develop resistance to products with the same mode of action when used repeatedly. Because resistance development cannot be predicted, use of this product should conform to resistance management strategies established for the crop and use area.

Consult your local pest control advisor or extension office for additional methods for preventing resistance development. Syngenta encourages responsible product stewardship to ensure effective long term control of the insect pests and fungal diseases on the label.

Limitations, Restrictions, and Exceptions

#### CROP USE DIRECTIONS

Apply CruiserMaxx Potato Extreme at the rate of 0.31 fluid ounces per 100 pounds of potato seed. Where necessary, Maxim 4FS, Dynasty or Cruiser 5FS can be tank mixed with the products within the maximum rates for each active ingredient listed below.

Always follow label procedures.

Restrictions:

- Regardless of type of application (seed treatment, soil or foliar), do not apply more than 0.125 lb thiamethoxam per acre (56.7 grams ai/A) per year.
- Regardless of type of application (seed treatment, soil or foliar), do not apply more than 0.46 lb difenoconazole per acre (208.7 grams ai/A) per year.
- Do not use at a seed treatment rate that will result in more than 0.188 lb fludioxonil per acre (85.3 grams ai/A) per year. Regardless of type of application (seed treatment, soil or foliar), do not apply more than 0.9 lb fludioxonil per acre (408.2 grams ai/A) per year.

Application of CruiserMaxx Potato Extreme

Apply CruiserMaxx Potato Extreme utilizing Syngenta- approved seed treating

systems designed to apply liquid seed treatments of potatoes. Uneven or incomplete seed coverage may not give the desired level of insect control. For slurry treatment, thoroughly mix the labeled rate of CruiserMaxx Potato Extreme into the required amount of water for the slurry treater and dilution rate to be used. Maintain constant agitation of the slurry during the seed treatment process. Follow the manufacturer's application instructions for the seed treatment equipment being used with appropriate set-up and calibration.

To achieve best results the equipment must be calibrated so that every potato seed tuber is uniformly coated with a fine layer of the slurry mix without any excess dripping out of the treated seed.

**DO NOT BAG POTATO SEED THAT IS TREATED WITH ANY LIQUID SEED TREATMENTS.**

### Treated Seed Storage

If the treated seed needs to be stored or held for few days then make sure that the seed is stored in well ventilated areas that would allow air to move through and out the treated seed. An ideal air temperature is 60 degrees Fahrenheit at a relative humidity of 85 to 90 percent. Avoid free moisture to form within or around the treated seed during the storage time.

Note: Best results are obtained if treated potatoes are allowed to dry during transit and planted the same day of treatment.

If an inert dust (fir bark or talc etc.) or a dust-based fungicide is applied, apply CruiserMaxx Potato Extreme prior to applying the dust treatments.

Treatment of highly damaged or bruised potato seed, or seed known to be of low vigor and poor quality, or potato seed that is deemed "physiologically old" may result in reduced germination and/or reduction of seed and seedling vigor and multiple stems from germination of the seed. When in doubt, or if the status/condition of the potato seed tubers is unknown, then treat a small sample batch of the same potato seed load with CruiserMaxx Potato Extreme using specified rates, equipment and application procedures; before treating the total seed lot. Conduct this test on a small batch of the potato seed and observe the germination, emergence, stem count from the germinating seed. Consult the data with local experts in the region or conduct the test with University or area experts. Only if the data confirms that the seed treated with Cruise- Maxx Potato Extreme is acceptable then proceed treating the rest of the seed load from which the sample

was taken.

Method

[Seed Treatment](#)

Rates

[field rates 0](#)

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Restricted Entry Interval

12 hours

Exception: If the seed is treated with the product and the treated seed is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

Timings

[N.A.](#)