



Bioinsecticide
for use in corn



ACTIVE INGREDIENT:

Methylobacterium extorquens strain NLS0042*2.0%

OTHER INGREDIENTS:98.0%

TOTAL:100.0%

*Contains not less than 1×10^9 CFU/g of product.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See inside attached booklet for additional precautionary information, directions for use, storage and disposal and Limited Warranty and Disclaimer.

Net Weight: 0.39 lb (0.17 kg)

Expiration Date: 08/31/2027

EPA Reg. No.: 95699-2-95552

Distributed by:

Meristem Crop Performance® Group, LLC
489 Village Park Drive Powell, OH 43065

EPA Est. No.: 95552-OH-1 ☐

EPA Est. No.: 103816-IL-1 ☐

EPA Est. No.: 93689-WI-6 ☒

FIRST AID

IF INHALED

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.
- Call a poison control center or doctor for treatment advice.

IF IN EYES

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this product (including general health concerns or pesticide incidents), call the National Pesticide Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8:00 AM to 12:00 PM Pacific Time (NPIC Website: www.npic.orst.edu). For emergencies, call your local poison control center at 1-800-222-1222.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION:

Harmful if inhaled. Avoid breathing dust or spray mist. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Mixers/loaders and applicators must wear a minimum of NIOSH-approved particulate filtering facepiece respirator with an N99, R99, or P99 filter; OR a NIOSH-approved elastomeric particulate respirator with any N99, R99, or P99 filter; OR a NIOSH-approved powered air-purifying respirator with HE filters. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables are available, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS: When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.607(d) and (e)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for “applicators and other handlers” and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

USER SAFETY RECOMMENDATIONS

Users should:

- Remove clothing/ PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS: *For terrestrial uses:* Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.

EXCEPTION: If the product is soil-incorporated or soil-injected, 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.

PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water) is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

BASIC USE INFORMATION

Guard X is a product for the mitigation of corn rootworm larval feeding damage. Apply Guard X alone or in tank mixes with other registered crop protection products or with a seed lubricant. When conditions are conducive to high corn rootworm pressure, use Guard X in combination or in a rotational program with other registered insecticides effective against corn rootworm. Apply Guard X with equipment commonly used for making ground applications. Heavy rainfall or irrigation shortly after application may require retreatment.

INSECTICIDE RESISTANCE MANAGEMENT AND INTEGRATED PEST MANAGEMENT (IPM)

- Use tank mixtures with insecticides/acaricides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
 - o Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
 - o Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
 - o When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).

- o Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
- o The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact company representatives at 833-637-4783.

PRE-HARVEST INTERVAL

Guard X can be applied up to and on the day of harvest

FOR PLANTER BOX (ONSITE) APPLICATIONS:

MIXING INSTRUCTIONS

Guard X may be applied mixed with seed flow lubricants and/or other products labeled for planter box use, but has not been evaluated with all of these products. This product cannot be mixed with any product with prohibition against such mixing. When mixing Guard X with other products, including registered pesticides, always read and follow all use directions, restrictions, and precautions of both Guard X and the partner(s). Use of the resulting mix must be in accordance with the more restrictive label limitations and precautions. Do not exceed label application rates.

COMPATIBILITY: Do not combine Guard X in the planter box with pesticides, surfactants, or fertilizers if there has been no previous experience or use of the combination to show it is physically compatible, effective and non-injurious under your use conditions.

To ensure Guard X efficacy, seed should be planted within six months of mixing Guard X with seed flow lubricants and corn seed in the planter box. If sold as a co-pack with Revline® Hopper Throttle™ Corn Planter Box Treatment, TuneUp+ Corn, other Brand Names with the same label directions for use, push down button labeled Guard X to release contents into the base. Seal package and shake aggressively. Allow product to settle before reopening package for application to seed.

For mitigation of corn rootworm larval feeding, apply according to application rates in table. Measure a full level scoop (provided in package) of the combined products for the amount of seed to be treated.

APPLICATION INSTRUCTIONS

Apply product by dispersing the powder evenly onto seed. Mix well and ensure that seed is uniformly coated. For application rates, see application rates table. Use higher rates if the field has a history of moderate to heavy corn rootworm pressure, or if minimum/low till programs are in place. Guard X can be mixed with a seed flow lubricant and other products labeled for onsite planter box applications, see mixing instructions for details.

APPLICATION RATES

For improved performance under moderate to severe insect pressure increase rates or use Guard X in a tank-mix or rotational program with other registered insecticides.

CROPS	INSECT	RATE FOR PLANTER BOX APPLICATION
Corn Sweet Corn Popcorn Seed Corn Silage Corn Field Corn	Mexican Corn Rootworm	0.25 – 0.5 oz per 100 lb of seed
	Northern Corn Rootworm	
	Southern Corn Rootworm	0.125-0.25 oz per unit ¹ of seed
	Western Corn Rootworm	

¹ One unit is 80,000 corn seeds

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Store in a dry area inaccessible to children. Store in original container only. Keep container closed when not in use. Do not store at temperatures above 78°F (25°C).

Pesticide Disposal: To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

CONTAINER HANDLING:

For plastic containers with a capacity equal to or less than 50 pounds—

Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration if allowed by State and local authorities. If burned, stay out of smoke.

CONDITIONS FOR SALE AND WARRANTY

IMPORTANT: READ BEFORE USE

Read the Directions for Use, the Conditions, Disclaimer of Warranties, Limitation of Liability, and License set forth below. If the following terms are not acceptable, please return the product immediately for a refund of the purchase price. Otherwise, use by buyer or any other user constitutes acceptance of the following terms.

Conditions: The directions for use of this product are believed to be adequate and must be followed carefully. It is impossible, however, to eliminate all risks inherently associated with the use of this product. Weather or crop conditions; the presence of other materials; the manner of use or application; any use, storage or handling that is contrary to the Directions for Use; and other such factors that are beyond the control of Meristem Crop Performance Group, LLC ("Meristem") may cause ineffectiveness or other unintended consequences. User assumes all such risks.

Disclaimer of Warranties: Meristem warrants that this product conforms to the biological or chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, Meristem MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR GUARANTY, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY OR NONINFRINGEMENT.

Limitation of Liability: To the extent consistent with applicable law, Meristem or the seller disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product, and the buyer and user waive any right that they may have to such damages. Except to the extent prohibited by applicable law, Meristem or seller's exclusive liability and the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or, at Meristem's election, the replacement of product.

License and Prohibition of Re-Sale: Meristem hereby grants buyer or user the right under the patents listed on the label to use this product solely in accordance with the label Directions for Use for applications to plants, including plant parts such as seed, or to soil, where the treated plants or the plants grown in treated soil are intended for sale, in whole or in part, or are intended for public or personal use. The buyer or user does not have the right to de-formulate this product or to isolate and/or culture its active ingredient for any purpose. Unless specifically granted in writing, the buyer or user does not have the right to re-sell this product in any form; e.g., this product may not be re-sold in combination with other products or other active ingredients or in a diluted form, unless combinations are prepared and delivered to the end-user for immediate application to plants, plant parts or soil solely in accordance with the label Directions for Use.

Meristem and Seller offer this Product and buyer and user accept it subject to the foregoing Conditions, Disclaimer of Warranties, Limitation of Liability and License, which may only be modified by a written document signed by a duly authorized representative of Meristem.

Meristem®, Revline®, and Hopper Throttle™ are trademarks of Meristem Crop Performance® Group, LLC. All other trademarks are the property of their respective owners.

© Copyright MERISTEM 2025



©Meristem Crop Performance® Group, LLC 2025

GUARDXTM

CRW MANAGEMENT + ROOT REGEN

ACTIVE INGREDIENT:

Methylorubrum extorquens strain NLS0042* 2.0%

OTHER INGREDIENTS: 98.0%

TOTAL: 100.0%

*Contains not less than 1×10^9 CFU/g of product.

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID: IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice. **IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. **HOTLINE NUMBER:** Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this product (including general health concerns or pesticide incidents), call the National Pesticide Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8:00 AM to 12:00 PM Pacific Time (NPIC Website: www.npic.orst.edu). For emergencies, call your local poison control center at 1-800-222-1222.

See inside attached booklet for additional precautionary information, directions for use, storage and disposal and Limited Warranty and Disclaimer.

Distributed by:

Meristem Crop Performance® Group, LLC
489 Village Park Drive Powell, OH 43065

Expiration Date: 08/31/2027

EPA Reg. No.: 95699-2-95552

Net Weight: 0.39 lb (0.17 kg)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION: Harmful if inhaled. Avoid breathing dust or spray mist. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Store in a dry area inaccessible to children. Store in original container only. Keep container closed when not in use. Do not store at temperatures above 78°F (25°C).

Pesticide Disposal: To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry). **CONTAINER HANDLING:** For plastic containers with a capacity equal to or less than 50 pounds—Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration if allowed by State and local authorities. If burned, stay out of smoke.

EPA Est. No.: 95552-OH-1 ☐

EPA Est. No.: 103816-IL-1 ☐

EPA Est. No.: 93689-WI-6 ☒