

2023-2927

2024-03-20

This label has been updated according to the re-evaluation decision of Nucleopolyhedrovirus RVD2023-11. While users are encouraged to follow this updated label immediately, the previously approved label is valid until 06-06-2025 in accordance with the phase out period set out in RVD2023-

11. This previously approved label will be provided upon request by emailing hc.pmra.info-arla.sc@canada.ca. In your email please include the product name and Registration number of the label you are requesting.

ABIETIV
Flowable Biological Insecticide

For use in forestry and on field-grown conifers including Christmas trees to reduce populations of balsam fir sawfly larvae (*Neodiprion abietis*)

COMMERCIAL WITH RESTRICTED USE IN FORESTRY

READ THE LABEL BEFORE USING
KEEP OUT OF REACH OF CHILDREN

CAUTION – EYE IRRITANT
POTENTIAL SENSITIZER

ACTIVE INGREDIENT : *Neodiprion abietis* Nucleopolyhedrovirus
(NeabNPV): 4×10^9 polyhedral inclusion bodies (PIBs) per millilitre

REGISTRATION NO: 28304 PEST CONTROL PRODUCTS ACT

Net Contents: 40 mL (1.6×10^{11} PIBs)
2.5 mL (1.0×10^{11} PIBs)
5.0 mL (2.0×10^{11} PIBs)
7.5 mL (3.0×10^{11} PIBs)

Natural Resources Canada
Canadian Forest Service – Atlantic Forestry Centre
P. O. Box 4000, 1350 Regent Street
Fredericton, New Brunswick, E3B 5P7
1-888-870-6444

Date of manufacture:

GENERAL DIRECTIONS FOR USE:

ABIETIV Flowable Biological Insecticide is a naturally occurring baculovirus which is selectively toxic to balsam fir sawfly larvae (*Neodiprion abietis*). To be effective, deposits of ABIETIV Flowable Biological Insecticide must be ingested by susceptible larvae. Thorough coverage of target foliage where larvae are feeding is essential. When ingested by the host larvae, ABIETIV Flowable Biological Insecticide will infect and replicate in the midgut epithelial cells of the host, resulting in larval mortality within 7 to 14 days.

Applications should coincide with sufficient foliage development (shoot elongation or leaf expansion) to ensure maximum spray deposit. To the extent possible, apply treatments after egg hatch has been completed to assure that the maximum number of larvae is present during the treatment period. Avoid application when significant rainfall is imminent. For early morning applications, foliage should not be wet with dew to the point of runoff.

RESTRICTED USES FORESTRY

NOTICE TO USER: This pest control product is to be used only in accordance with the directions on the label. It is an offence under the Pest Control Products Act to use this product in a way that is inconsistent with the directions on the label.

NATURE OF RESTRICTION: This product is to be used only in the manner authorized; consult local provincial pesticide regulatory authorities about use permits that may be required.

RESTRICTED USE: To reduce populations of balsam fir sawfly larvae (*Neodiprion abietis*) in forests.

DIRECTIONS FOR USE:

Apply after egg hatch has been completed and larvae are actively feeding. ABIETIV Flowable Biological Insecticide is applied at 0.25 – 0.75 mL product per hectare, equivalent to 1-3 billion (10^9) polyhedral inclusion bodies (PIBs) per hectare. Use the high rate under higher pest pressure. A 20% aqueous solution of molasses (1 L of molasses for every 4 L of water*) serves as the carrier for ABIETIV Flowable Biological Insecticide. Use a total spray volume of 2.5 L/ha for aerial application. Uniform spray deposit coverage of the foliage is essential for optimal efficacy. Best results are expected when ABIETIV Flowable Biological Insecticide is applied to dry foliage with well calibrated aircraft delivering a droplet size of 100 μm .

*Chlorinated or highly alkaline water should not be used. Spray mixture pH should be between 5.0 and 8.0. If only chlorinated water is available, it should be allowed to stand in a vented container for 24 hours before use.

DO NOT allow worker entry into treated areas for 4 hours or until sprays have dried unless wearing waterproof gloves, long-sleeves shirt, long pants, socks and shoes.

Aerial Application Instructions

Apply only by fixed-wing or rotary aircraft equipment that has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.

Label rates, conditions and precautions are product specific. Apply only at the approved rates on this label.

Ensure uniform application by using appropriate marking devices and/or electronic tracking equipment.

Use Precautions:

Apply only when meteorological conditions at the treatment site allow for complete and even coverage. Apply only when meteorological conditions are in compliance with local and/or provincial authorities.

Operator Precautions:

Do not allow the pilot to mix product to be loaded onto the aircraft. Loading of premixed product with a closed system is permitted. It is desirable that the pilot has communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders must wear the personal protective equipment described in the PRECAUTIONS section of this label. All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

Product Precautions:

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-888-870-6444 or obtain technical advice from the distributor or from your provincial agricultural or forestry representative. Application of this specific product must meet and/or conform to the aerial uses and rates on this product.

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN.

MAY CAUSE SENSITIZATION. CAUTION-EYE IRRITANT.

PREVENT ACCESS BY UNAUTHORIZED PERSONNEL.

Wear a long-sleeved shirt, long pants, protective eyewear (goggles), waterproof gloves, socks and shoes and a NIOSH-approved particulate filtering facepiece respirator with any N, R or P filter when handling, mixing/loading or applying the product and during all clean-up/repair activities. When applicators use a closed system (e.g., enclosed cab and/or cockpit), the applicator requirement for waterproof gloves, protective eyewear (goggles) and a NIOSH-approved particulate filtering respirator with any N, R, or P filter may be waived. When reduced personal protective equipment is worn, waterproof gloves and the facepiece respirator must be immediately available for use in an emergency such as a spill or equipment breakdown. Wash thoroughly with soap and water after handling.

Remove contaminated clothing and wash before reuse.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

Apply only when the potential for drift to areas of human habitation or other areas of human activity such as parks, school grounds, and playing fields is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

GROUND APPLICATION TO FIELD-GROWN CONIFERS

To reduce populations of balsam fir sawfly larvae (*Neodiprion abietis*) in field-grown conifers including Christmas trees.

DIRECTIONS FOR USE:

Apply when larvae are first or second instars and actively feeding. ABIETIV Flowable Biological Insecticide is applied at 0.25 – 0.75 mL product per hectare, equivalent to 1-3 billion (10^9) polyhedral inclusion bodies (PIBs) per hectare. Use the high rate under higher pest pressure. A 20% aqueous solution of molasses (1 L of molasses for every 4 L of water*) serves as the carrier for ABIETIV Flowable Biological Insecticide. Use a total spray volume of 30 L/ha for ground application. Uniform spray deposit coverage of the foliage is essential for optimal efficacy. A second application may be required after 7-10 days if monitoring indicates that a damaging population of larvae remains.

*Chlorinated or highly alkaline water should not be used. Spray mixture pH should be between 5.0 and 8.0. If only chlorinated water is available, it should be allowed to stand in a vented container for 24 hours before use.

DO NOT allow worker entry into treated areas for 4 hours or until sprays have dried unless wearing waterproof gloves, long-sleeves shirt, long pants, socks and shoes.

Ground Application Instructions:

ABIETIV Flowable Biological Insecticide can be applied using conventional ground application equipment, including airblast sprayers, calibrated for the atmospheric conditions of the area and the application rates and conditions of this label. Agitate thoroughly and maintain agitation during spraying. The spray mixture should be used as soon as possible after mixing.

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN.

MAY CAUSE SENSITIZATION. CAUTION-EYE IRRITANT.

PREVENT ACCESS BY UNAUTHORIZED PERSONNEL.

Wear a long-sleeved shirt, long pants, protective eyewear (goggles), waterproof gloves, socks and shoes and a NIOSH-approved particulate filtering facepiece respirator with any N, R or P filter when handling, mixing/loading or applying the product and during all clean-up/repair activities. When applicators use a closed system (e.g., enclosed cab and/or cockpit), the applicator requirement for waterproof gloves, protective eyewear (goggles) and a NIOSH-approved particulate filtering respirator with any N, R, or P filter may be waived. When reduced personal protective equipment is worn, waterproof gloves and the facepiece respirator must be immediately available for use in an emergency such as a spill or equipment breakdown. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

Apply only when the potential for drift to areas of human habitation or other areas of human activity such as parks, school grounds, and playing fields is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

FIRST AID:

If swallowed: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

If on skin/clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

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 centre or doctor for further 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 centre or doctor for treatment advice.

General: Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION: Treat symptomatically.

STORAGE: Store in the refrigerator at 4°C for up to 2.5 years. Store container upright and keep tightly closed when not in use. Shake vigorously to resuspend contents immediately prior to addition to molasses solution.

DISPOSAL: Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank. Follow provincial instruction for any required additional cleaning of the container prior to its disposal. Make the empty container unsuitable for further use. Dispose of the container in accordance with provincial requirements. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

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