

**ABIETIV**  
**Flowable Biological Insecticide**

For Use in Forestry to Reduce Populations of Balsam Fir Sawfly Larvae (*Neodiprion abietis*)

RESTRICTED

**READ THE LABEL BEFORE USING**  
**KEEP OUT OF REACH OF CHILDREN**

**CAUTION – EYE IRRITANT**  
**POTENTIAL SENSITIZER**

GUARANTEE: *Neodiprion abietis* Nucleopolyhedrovirus, NeabNPV:  
4 x 10<sup>9</sup> polyhedral inclusion bodies (PIBs) per milliliter.

**REGISTRATION NO: 28304 PEST CONTROL PRODUCTS ACT**

Net Contents: 40 mL (1.6 x 10<sup>11</sup> 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 within the genus *Nucleopolyhedrovirus* 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. **ABIETIV Flowable Biological Insecticide** when ingested by the host larvae will infect and replicate in the midgut epithelial cells of a single host species, 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 are 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. The user assumes the risk to persons or property that arises from any such use of this product.

**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:** For use against balsam fir sawfly larvae (*Neodiprion abietis*) in forests.

Apply at the rate recommended. 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.

**DIRECTIONS FOR USE:** A 20% aqueous solution of molasses serves as the carrier for **ABIETIV Flowable Biological Insecticide**. For preparation of spray solution add between 1 and 3 mL of **ABIETIV Flowable Biological Insecticide** in each 10 L of the molasses solution. Use the higher rate under higher pest pressure. The spray solution will yield a rate of 1 to 3 billion ( $10^9$ ) polyhedral inclusion bodies (PIBs) of NeabNPV when applied at a rate of 2.5 L per hectare. For example, 40 mL of **ABIETIV Flowable Biological Insecticide** mixed with 400 L of 20% aqueous molasses and applied at a rate of 2.5 L per hectare will yield a rate of 1 billion PIBs NeabNPV per hectare. **Note:** To be effective, larvae must ingest foliage with deposits of **ABIETIV Flowable Biological Insecticide**. Uniform spray deposit coverage of the foliage is essential for optimal efficacy.

**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. Avoid contact with skin, eyes or clothing. Wear a long-sleeved shirt, long pants, water-proof gloves, shoes, socks and eye goggles when handling, or mixing/loading the product and during all clean-up/repair activities. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

**ENVIRONMENTAL PRECAUTIONS**

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

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

**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 OR 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 – Seek medical attention immediately if irritation or signs of toxicity occur and persist or are severe. 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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