(Container)

Group 18 Insecticide

MIMIC* 240 LV Forestry Insecticide

Suspension

For control of Spruce Budworm, Western Spruce Budworm, Jack Pine Budworm, Hemlock Looper, Douglas-fir Tussock Moth, Whitemarked Tussock Moth, Forest Tent Caterpillar and Gypsy Moth in forests and woodlands.

RESTRICTED

READ THE LABEL AND BOOKLET BEFORE USING KEEP OUT OF REACH OF CHILDREN

REGISTRATION NO. 24502 PEST CONTROL PRODUCTS ACT

CAUTION: EYE AND SKIN IRRITANT

NET CONTENTS: 10 - 1000 Litres, Bulk

Registrant: JP Tower 10th Floor, 7-2 Marunouchi 2-chome, Chiyoda-ku Tokyo, Japan 100-7010 USA Contact Number: (212) 490-0350

Canadian Agent: Nailor Regulatory Consulting Inc. 935 Rosinke Drive Kincardine, ON N2Z 2X3 519-829-5422

Distributed by: Valent Canada Inc. 201-230 Hanlon Creek Blvd. Guelph, Ontario, Canada N1C 0A1

*Trademark of Nippon Soda Co., Ltd.

PRECAUTIONS KEEP OUT OF REACH OF CHILDREN

May irritate eyes and skin. Avoid contact with eyes and skin. Wear long-sleeved shirt, long pants, chemical-resistant gloves, protective eyewear (goggles or face shield), socks and footwear during mixing/loading, application, clean-up and repair. Wear a respirator with a NIOSH-approved organic-vapour-removing cartridge with a prefilter approved for pesticides, or a NIOSH-approved canister approved for pesticides during ground-based applications. Chemical-resistant gloves and protective eyewear are not required during application within a closed cab and/or cockpit. Do not allow the pilot to handle and/or mix pesticide chemicals to be loaded onto the aircraft. Loading with a closed handling system is preferred. Protective clothing should be washed before re-use. Do not enter or allow entry into treated areas until sprays have dried. Chemical-resistant gloves and protective eyewear are not required during application.

FIRST AID

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

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.

TOXICOLOGICAL INFORMATION

No specific antidote. Employ supportive care. Treatment should be based on judgment of the physician in response to reactions of the patient.

AGRICULTURAL CHEMICAL

Do not ship or store with food, feeds, drugs or clothing.

ENVIRONMENTAL PRECAUTIONS

TOXIC to non-target aquatic organisms. Observe buffer zones specified under DIRECTIONS FOR USE.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

Do not apply this product to permanent natural water bodies such as lakes, rivers, streams,

creeks, dugout, or ponds (except those found under a forest canopy when MIMIC 240 LV is aerially applied to control forest pests) as they may contain sensitive aquatic invertebrates.

STORAGE

Store in a cool and dry area. To prevent contamination store this product away from food or feed. Do not contaminate water by storage or disposal. Do not contaminate streams, lakes and ponds. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is prohibited.

DISPOSAL

Do not reuse this container for any purpose. This is a recyclable container and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.

2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, 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 information regarding the clean-up of spills.

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.

(Booklet)

Group 18 Insecticide

MIMIC* 240 LV Forestry Insecticide

Suspension

For control of Spruce Budworm, Western Spruce Budworm, Jack Pine Budworm, Hemlock Looper, Douglas-fir Tussock Moth, Whitemarked Tussock Moth, Forest Tent Caterpillar and Gypsy Moth in forests and woodlands.

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NET CONTENTS: 10-1000 L, bulk

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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. Contact local pesticide regulatory authorities about use permits that may be required.

RESTRICTED USES

FOREST MANAGEMENT: Ground/aerial application for sites greater than 500 ha. **WOODLANDS MANAGEMENT:** Aerial application for sites 500 ha or less.

NON-RESTRICTED USES WOODLANDS MANAGEMENT: Ground application for sites 500 ha or less.

PRECAUTIONS KEEP OUT OF REACH OF CHILDREN

May irritate eyes and skin. Avoid contact with eyes and skin. Wear long-sleeved shirt, long pants, chemical-resistant gloves, protective eyewear (goggles or face shield), socks and footwear during mixing/loading, application, clean-up and repair. Wear a respirator with a NIOSH-approved organic-vapour-removing cartridge with a prefilter approved for pesticides, or a NIOSH-approved canister approved for pesticides during ground-based applications. Chemical-resistant gloves and protective eyewear are not required during application within a closed cab and/or cockpit. Do not allow the pilot to handle and/or mix pesticide chemicals to be loaded onto the aircraft. Loading with a closed handling system is preferred. Protective clothing should be washed before re-use. Do not enter or allow entry into treated areas until sprays have dried. Chemical-resistant gloves and protective eyewear are not required during application.

FIRST AID

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

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.

TOXICOLOGICAL INFORMATION

No specific antidote. Employ supportive care. Treatment should be based on judgment of the physician in response to reactions of the patient.

ENVIRONMENTAL PRECAUTIONS

TOXIC to non-target aquatic organisms. Observe buffer zones specified under DIRECTIONS FOR USE.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

Do not apply this product to permanent natural water bodies such as lakes, rivers, streams, creeks, dugout, or ponds (except those found under a forest canopy when MIMIC 240 LV is aerially applied to control forest pests) as they may contain sensitive aquatic invertebrates.

GENERAL INFORMATION

Mimic 240 LV Forestry Insecticide is effective against larval Lepidoptera and has a novel mode of action in that it mimics the action of the insect molting hormone, ecdysone, in larval Lepidoptera (caterpillars). Larvae stop feeding almost immediately following ingestion of a toxic dose of Mimic 240 LV Forestry Insecticide and soon thereafter begin to undergo an unsuccessful (lethal) molt. Actual mean time to mortality is somewhat dependent on the physiology of the target species and on the local environmental conditions, but is generally three to seven days following application. Even though Mimic 240 LV spray deposit is relatively resistant to wash-off, foliage should not be wet with dew or rain to the point of run-off before application. Avoid application when significant rainfall in imminent. As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

Product Specific Precautions

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-212-490-0350 or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

Volume: Apply the recommended rate in a minimum spray volume of 1.5 litres per hectare.

READ ALL DIRECTIONS CAREFULLY BEFORE APPLYING. FAILURE TO FOLLOW LABEL INSTRUCTIONS MAY RESULT IN ERRATIC INSECT CONTROL.

DIRECTIONS FOR USE, RESTRICTED USES:

FOREST MANAGEMENT: Ground/aerial application for sites greater than 500 ha. **WOODLANDS MANAGEMENT**: Aerial application for sites 500 ha or less.

Apply Mimic 240 LV Forestry Insecticide for the control of Spruce Budworm, Western Spruce Budworm, Jack Pine Budworm, Hemlock Looper, Douglas-fir Tussock Moth, Whitemarked Tussock Moth, Forest Tent Caterpillar and Gypsy Moth in forests and woodlots. This product may be applied by air or by ground equipment. Do not apply more than one application of MIMIC 240 LV per hectare per year (290 mL of MIMIC 240 LV/ha/year). Pest populations

should be monitored post- application to help determine the need for future treatment in subsequent years.

Apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wide speed, wind direction, temperature inversions, application equipment and sprayer settings.

PEST	RATE of MIMIC 240 LV PER HA	COMMENTS
Spruce Budworm	290 mL	Apply when the insect larvae are between the third and sixth instar (at bud flush for spruce and/or balsam fir).
Western Spruce Budworm	290 mL	Apply when the insect larvae are between the third and sixth instar, when larvae are actively feeding.
Jack Pine Budworm	290 mL	Apply to early instars, when the shoots or candles have elongated and the needles have started to separate.
Hemlock Looper	290 mL	Apply to early instars, when the majority of buds have flushed and the bud caps have been shed. Wait until egg hatch has essentially completed.
Douglas-fir Tussock Moth	290 mL	Apply at late egg hatch when larvae are starting to feed.
Whitemarked Tussock Moth	290 mL	Apply at late egg hatch when larvae are starting to feed.
Forest Tent Caterpillar	290 mL	Apply when the insect larvae are in their early instars, 1 to 2 cm in length, and actively feeding.
Gypsy Moth	290 mL	Apply when the insect larvae are in their early instars and actively feeding.

Application Rates for Listed Pests

The application rate is 290 millilitres of Mimic 240 LV Forestry Insecticide per hectare. Dilute Mimic 240 LV with enough water to provide a uniform spray deposit. Uniform coverage of the foliage is essential to maximize efficacy and to minimize defoliation.

Before using this product, consult with local forest health officials or the manufacturer regarding timing and method of application.

Use Precautions

Apply only when meteorological conditions at the treatment site allow for complete and even canopy coverage.

Field sprayer application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply with spray droplets smaller than American Society of Agricultural Engineers (ASAE S572.1) fine classification. Boom height must be 60 cm or less above the crop or ground..

Airblast application: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT direct spray above plants to be treated. Turn off outward pointing nozzles at row ends and outer rows. DO NOT apply when wind speed is greater than 16 km/h at the application site as measured outside of the treatment area on the upwind side.

Aerial application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply when wind speed is greater than 16 km/h at flying height at the site of application. Apply with rotary atomizers only. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) very fine classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing- or rotorspan. Apply only when meteorological conditions at the treatment site allow for complete and adequate canopy coverage. Apply only under conditions of good practice specific to aerial application as outlined in the *National Aerial Pesticide Application Manual* developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.

Consult the manufacturer for proper atomizer settings to ensure complete and even coverage. Tested and approved rotary atomizers such as the Micronair are preferred. Other rotary atomization systems may be used if local forest health officials support their use. Consult with the manufacturer's representative regarding atomizer selection and equipment set up. Droplet sizes in the range of 100-150 microns are preferred.

Apply only by fixed-wing or rotary aircraft equipment which 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. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Do not contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

Operator Precautions

- 1. Do not allow the pilot to handle and/or mix pesticide chemicals to be loaded onto the aircraft.
- 2. It is desirable that the pilot have communication capabilities at each treatment site at the time of application.
- 3. The pesticide mixer/loaders must wear protective clothing (chemical resistant gloves, coveralls or long trousers and long-sleeved shirts, and goggles or face shield) during mixing/loading, cleanup and repair. Loading with a closed handling system is preferred.

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.

BEFORE AERIAL APPLICATION TO FORESTS - Consult the most recent provincially approved topographic maps of the area to be treated (1: 50 000) or more up-to-date information (e.g., GPS Systems) to identify sensitive aquatic habitats.

Sensitive aquatic habitats include:

- a) All running (lotic) and standing (lentic) water bodies, including impoundments, beaver ponds and bog ponds, that appear on the map or GPS system;
- b) Running (lotic) and standing (lentic) water bodies that do not appear on the map or GPS system but are visible from the air.

DIRECTIONS FOR USE, NON RESTRICTED USES: WOODLANDS MANAGEMENT

Ground application for sites 500 ha or less

For use in Recreation Areas, Cottage and Urban areas, Municipal Parks, Shelter Belts, Rights-of-Way, Farm Woodlots, Christmas Tree Plantations, Tree Nurseries and Ornamental Trees.

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Only pesticide handlers (mixers/loaders and applicators) wearing personal protective equipment may be in the area being treated during application.

PEST	RATE OF MIMIC 240 LV	COMMENTS
	PER HA	

Spruce Budworm	290 mL	Apply when the insect larvae are between the third and sixth instar (at bud flush for spruce and/or balsam fir).
Western Spruce Budworm	290 mL	Apply when the insect larvae are between the third and sixth instar, when larvae are actively feeding.
Jack Pine Budworm	290 mL	Apply to early instars, when the shoots or candles have elongated and the needles have started to separate.
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Gypsy Moth	290 mL	Apply when the insect larvae are in their early instars and actively feeding.

Application Rates for Listed Pests

The application rate is 290 millilitres of Mimic 240 LV Forestry Insecticide per hectare. Use a spray volume with enough water as the carrier to provide uniform coverage. Uniform coverage of the foliage is essential to provide maximum protection from defoliation.

Before using this product, consult your local forest health officials and the manufacturer for further information on timing and method of application.

STORAGE

Store in a cool and dry area. To prevent contamination store this product away from food or feed. Do not contaminate water by storage or disposal. Do not contaminate streams, lakes and ponds. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited.

DISPOSAL Recyclable Containers:

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.

2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

Returnable Containers:

Do not reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

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.

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.