

GROUP

15

INSECTICIDE

DIMILIN[®] 25% WP
Insecticide/Insect Growth Regulator

COMMERCIAL

GUARANTEE:

Diflubenzuron 25%

REGISTRATION NO. 13816
PEST CONTROL PRODUCTS ACT

READ THE LABEL BEFORE USING

NET CONTENTS:
500 g, 1Kg



Chemtura Canada Co./Cie
25 Erb Street, Elmira, ON N3B 3A3

24-Hour Emergency Phone:
(866) 744-3060

DIRECTIONS FOR USE

For control of certain soil inhabiting insects such as fungus gnats and shore flies, DIMILIN 25% WP can be applied to potting media as a coarse spray or higher water volume drench application through conventional equipment. When applied according to the recommendations below, DIMILIN 25% WP will provide control for a period of 30 to 60 days. Repeat applications can be made at 4 to 8 week intervals as necessary to maintain control. Do not make more than four applications per crop. For optimum control throughout the production area and to prevent re-infestation of crops, it is recommended breeding areas under benches and in other non-crop areas be treated at the same time that the crop is treated.

Warning: Exceeding label rates, volumes or number of applications of DIMILIN 25% WP can cause serious foliar injury to some crops. Do not apply DIMILIN 25% WP to poinsettias, hibiscus or Reiger begonia. No sensitivity has been observed with other bedding or pot crops including plugs and liners, however tests should be conducted to insure safety to any crop before extensive use.

Note: For optimum results, applications should be made to moist potting media. Do not reuse potting media that has been treated with DIMILIN 25% WP. Care should be exercised in using DIMILIN 25% WP with capillary watering mat systems. Repeat applications could cause a build up of Dimilin residue in the watering system. This could wick into the potting medium and cause phytotoxicity.

Coarse Spray Applications

For applications to ground beds, plug trays, packs and flats, DIMILIN 25% WP should be applied as a coarse spray to the soil surface. Mix 150 g of DIMILIN 25% WP in 1,000 L of water and apply to the soil surface at a volume of 5 to 15 L of final solution per 10 m².

For soil depths of less than 10 cm such as plug trays, packs and flats, do not exceed a volume of 5 litres per 10 m².

Drench Applications to Plants grown in Individual Containers

For drench applications to individual containers, DIMILIN 25% WP can be applied in water volumes higher than those recommended for the coarse spray applications as long as the higher volumes can be reliably metered into each pot and evenly distributed over the soil surface to insure uniform treatment.

Mix 18 g of DIMILIN 25% WP in 1,000 L of water and apply at the volumes recommended below:

| Pot Diameter (cm) | Drench Volume (ml/pot) | No. Pots Treated with 1,000 L |
|--------------------------|-------------------------------|--------------------------------------|
| 10 | 55 | 18,182 |
| 13 | 115 | 8,696 |
| 15 | 170 | 5,882 |
| 20 | 285 | 3,509 |
| 25 | 400 | 2,500 |
| 30 | 570 | 1,754 |

Note: The volumes recommended in the table above are based on average drench volumes used for application of commercial fungicides in the production of greenhouse ornamental crops. Based on these averages, each 1,000 L mix of DIMILIN 25% WP should treat the specified number of pots listed in the table above.

For soil drench applications which use a final volume either greater or less than those specified above, the user must alter the concentration of DIMILIN 25% WP in water in order to maintain the same amount of active ingredient applied to the given surface area of media. For example if the drench volume applied to a 15 cm pot will be 150 mL instead of 170 mL, then the amount of DIMILIN 25% WP mixed in 1,000 L will be:

$$170 \text{ mL}/150 \text{ mL} \times 18 \text{ g} = 20 \text{ g}/1000 \text{ L}$$

RESTRICTED USES

NOTICE TO USER: This control product is to be used only in accordance with the directions on the label. It is an offense under the Pest Control Products Act to use this control 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 pesticide regulatory authorities about use permits which may be required.

DIRECTIONS FOR USE

MOSQUITO CONTROL: For use only by Public Health Officials, Mosquito Abatement Officials, and other personnel trained in public mosquito programs.

For control of floodwater mosquito larvae including *Culex* and *Aedes* species in non-crop areas containing temporary pools. Examples of temporary pools are shallow, grassy depressions, flooded woodlands, industrial parks, roadway ditches, railway marshalling yards, small temporary sloughs. This product is NOT TO BE USED IN PERMANENT WATER BODIES SUCH AS LAKES, DUGOUTS OR FISHPONDS (See Precautions Statement for additional restrictions).

Use DIMILIN 25% WP at the rate of 110 to 190 g/ha of water (1 kg treats 5.5 - 9 hectares). Mix with sufficient water to give uniform distribution over the mosquito breeding surface. Application may be made by either aerial (mixing with 5 - 50 L/ha of water) or ground equipment (mixing with 200 L/ha of water).

DIMILIN 25% WP inhibits the molting process; therefore it does not provide immediate larvae mortality. From 1 - 3 days may be required before populations are reduced.

All stages of mosquito larvae are susceptible to DIMILIN 25% WP, but application must be made before pupation. For optimum results, it is recommended that application be made during the early instars, (1st - 3rd), when higher larval mortality will result. In case of application to 4th instar larvae, emergence from the pupal stage will be prevented.

This insect growth regulator has no effect when applied to pupal or adult mosquitoes.

Repeat application in 7 - 9 days or as inspection indicates increase in number of 4th instar larvae or reappearance of pupae.

FOREST INSECT CONTROL: For use only by Plant Protection Division, Agriculture and Agri-Food Canada.

GYPSY MOTH: To protect hardwood forests from defoliation, to control larvae and to reduce indirectly, egg mass deposition, apply 150 - 275 g/ha of DIMILIN 25% WP. A standard spreader-sticker may be used (follow label instructions). Application should be made prior to full leaf expansion when larvae are in the 1st, 2nd or 3rd instar.

AERIAL APPLICATION: Aerial use must be limited to helicopters only.

Apply the recommended amount of DIMILIN 25% WP in sufficient volume of water (5 to 20 L/ha of water) to achieve uniform coverage of foliage. **DO NOT** apply more than 2 applications per season. A minimum interval of 7 days between applications is required.

When using this product to control gypsy moths:

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 of 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. **DO NOT** apply with spray droplets smaller than ASAE fine to medium classification.

GROUND APPLICATION: For mist blower equipment, apply the recommended amount in sufficient water volume (10 - 100 L/ha of water) to achieve uniform coverage of foliage. Larval kill, using DIMILIN 25% WP is slower than with conventional contact insecticides. In most instances several days may be needed before the full effect can be seen.

BUFFER ZONES: The buffer zones specified in Table 1 are required between the point of direct application and the closest downwind edge of sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, and wetlands) and estuarine/marine habitats.

For aerial applications to forests, sensitive aquatic habitats include all rivers designated as double-sided and all lentic (standing) and lotic (running) water bodies, including impoundments, beaver ponds and bog ponds, that appear on the most recent 1:50 000 topographic map of the area to be treated, or as identified by more up-to-date data (e.g. GPS systems) in the particular jurisdiction and approved by provincial regulatory authorities. Lentic and lotic water bodies that do not appear on a 1:50 000 topographic map of the treatment area or a more up-to-date system, but are visible from the air during pretreatment reconnaissance flights, must also be considered sensitive aquatic habitats.

| Method of application | Buffer zone (metres) required for the protection of: | | | | | |
|--------------------------|--|----------|------------------|--|----------|------------------|
| | Freshwater habitat of water depths | | | Estuarine / marine habitat of water depths | | |
| | Less than 1 m | 1 to 3 m | Greater than 3 m | Less than 1 m | 1 to 3 m | Greater than 3 m |
| Mist blower | 10 | 2 | 0 | 15 | 3 | 1 |
| Aerial (helicopter only) | 125 | 0 | 0 | 275 | 30 | 0 |

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, please note that DIMILIN 25% WP contains a Group 15 insecticide. Any insect population may contain individuals naturally resistant to DIMILIN 25% WP and other Group 15 insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but are specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance:

- Where possible, rotate the use of DIMILIN 25% WP or other Group 15 insecticides with different groups that control the same pests in a field.
- Use tank mixtures with insecticides from a different group when such use is permitted.
- Insecticide use should be based on an IPM program that includes scouting, record keeping, and considers cultural, biological and other chemical control practices.
- Monitor treated pest populations for resistance development.
- 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 and to report suspected resistance, contact Chemtura Canada Co./Cie at 1-800-350-1745 or at www.chemtura.com.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN.

- Keep all unprotected persons and livestock out of spraying area during application. Do not apply on crops or in livestock areas used for food, feed, hay or pasture. Do not treat areas used for potable water, livestock watering or for crop irrigation. Do not use fish or shellfish from treated areas for feed or food purposes. **NOT** to be applied on greenhouse crops used for food.
- All handlers must wear a long sleeve shirt and long pants. In addition, wear chemical-resistant gloves and a NIOSH-approved dust/mist respirator during mixing/loading activities. Wear chemical resistant gloves during application using hand-held equipment.
- 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.

- Apply only when the potential for drift to areas of human habitation or areas of human activity is minimal. Take into consideration meteorological conditions (e.g. wind speed wind direction, temperature) and application equipment and sprayer settings used for application.
- When used in **greenhouses**: Do not re-enter treated areas until 12 hours after application.
- Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Users should remove clothing immediately if pesticide comes in contact with skin through soaked clothing or spills. Then wash skin thoroughly and put on clean clothing. Wash contaminated clothing before reuse.
- Users should remove protective equipment 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

TOXIC TO AQUATIC ORGANISMS. DO NOT contaminate irrigation / drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

For gypsy moth control, observe buffer zones specified under Directions for Use in the Restricted Uses box

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 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.

IF ON SKIN OR ON 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.

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

TOXICOLOGICAL INFORMATION

In case of prolonged contact with eyes or skin, treat symptomatically

DISPOSAL

1. Follow provincial instruction for any required additional cleaning of the container prior to its disposal.
2. Make the empty container unsuitable for further use.
3. Dispose of the container in accordance with provincial requirements.
4. 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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