

400-476

6/4/2012

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

JUN 04 2012

Mr. Allen R. Blem  
Chemtura Corporation  
199 Benson Road  
Middlebury, Connecticut 06749

Subject: Amended to Make Use Site Active Ingredient Rates Consistent With Other Labels  
(Oranges, Grapefruit, Tangerines, and Update Precautionary Statement  
Micromite® 4L  
EPA Reg. No. 400-476  
Your submission date: April 24, 2012

Dear Mr. Blem:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act as amended is acceptable. A stamped copy is enclosed for your records. Submit one copy of your final printed labeling before you release the product for shipment. If there are questions call Dani Daniel at 703 305-5409 or electronically at [daniel.dani@epa.gov](mailto:daniel.dani@epa.gov).

Sincerely,

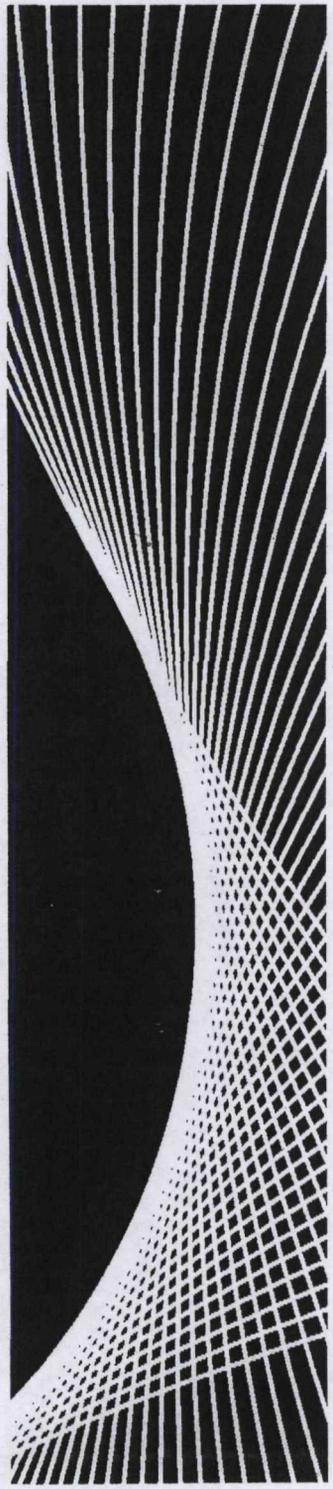
A handwritten signature in black ink, appearing to read "John Hebert".

John Hebert  
Product Manger (07)  
Insecticide/Rodenticide Branch  
Registration Division (7504P)

**Restricted Use Pesticide.** Due to toxicity to aquatic invertebrate animals. For retail sale to and use only by Certified Applicators, or persons under their direct supervision, and only for those uses covered by the Certified Applicator's certification.

**GROUP 15 INSECTICIDE**

# Micromite® 4L



**Insect Growth Regulator**  
For Use on Oranges, Grapefruit, Tangerines, Pummelos/Pomelos and their hybrids

Net Contents:

**Active Ingredient:** (% by weight)  
Diflubenzuron\*  
N-[[[4-Chlorophenyl)amino]carbonyl]-2,6-difluorobenzamide..... 40.4%  
Other Ingredients:..... 59.6%  
Total:..... 100.0%

Contains 4 lbs. diflubenzuron per gallon.

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

FIRST AID	
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lens if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration; preferably mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>EMERGENCY ASSISTANCE:</b> Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>MEDICAL EMERGENCY</b>	<b>800-292-5898</b>
<b>TRANSPORTATION EMERGENCY (CHEMTREC)</b>	<b>800-424-9300</b>
<b>PRODUCT SAFETY DATA (MSDS)</b>	<b>866-430-2775</b>
FOR PRODUCT USE INFORMATION: CALL 800-243-2850	

ACCEPTED

JUN 04 2012  
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under:

EPA. Reg. No: 400-476

EPA REG. NO. 400-476  
EPA EST. NO.  
008/

Manufactured for:  
Chemtura Corporation  
199 Benson Road  
Middlebury, CT 06749



www.chemtura.com

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
CAUTION**

Harmful if absorbed through skin or inhaled. Avoid contact with eyes, skin or clothing. Avoid breathing spray mist.

**PERSONAL PROTECTIVE EQUIPMENT**

**Applicators and Other Handlers Must Wear:** Long-sleeved shirt and long pants; shoes plus socks; chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber or viton when mixing and loading and also using hand-held equipment.

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

**USER SAFETY REQUIREMENTS**

Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

**ENGINEERING CONTROLS**

When handlers use closed systems (including water soluble bags), enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6), 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 with 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 REQUIREMENTS**

- Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should 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**

This pesticide is toxic to aquatic invertebrates. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff from treated areas may be hazardous to aquatic invertebrate organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwaters.

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

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.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE** — Store in a dry location.

**PESTICIDE DISPOSAL** — Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER HANDLING** —

**Plastic containers:** Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse (or equivalent) promptly after emptying.

**Triple rinse** as follows: For containers small enough to shake: Empty the remaining contents into a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and then recap. Shake for 10 seconds. Pour rinsate into 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.

For containers too large to shake: Empty remaining contents into a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into a mix tank or store for later use or disposal. Repeat this procedure two more times.

**Pressure rinse** as follows: Empty the remaining contents into a mix tank and continue to drain for 10 seconds after the flow continues to drip. Hold container upside down over mix tank to collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**Then** offer container for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by incineration or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**Recycling:** Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer or contact the Ag Container Recycling Council (ACRC) at 1-877-952-2272 (toll free) or [www.acrecycle.org](http://www.acrecycle.org).

**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 12 hours.

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 over long-sleeved shirt and long pants
- chemical-resistant footwear and chemical-resistant gloves (such as Nitrile, Butyl, Neoprene, Barrier Laminate or Viton)
- shoes plus socks.

**INSTRUCTIONS AND INFORMATION**

Restriction: Do not apply this product through any type of irrigation system.

Do not apply this product where swimming is likely.

**SPRAY DRIFT LABELING**

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

**Information on Droplet Size**

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

**Controlling Droplet Size**

Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

- Pressure - Do not exceed the nozzle manufacture's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

- Number of nozzles - Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

**Boom Length**

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

**Application Height**

Do not make applications at a height greater than 10 feet above the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

**Swath Adjustment**

When applications are made with a cross-wind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for the displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

**Wind**

Drift potential is lowest between wind speed of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect drift.

**Temperature and Humidity**

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are hot and dry.

**Temperature Inversions**

Do not make applications during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards and rapidly dissipates indicates good vertical air mixing.

**Sensitive Areas**

Only apply the pesticide when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

**INFORMATION**

Consult local agricultural authorities such as county and university extension specialists on current recommendations and refer to the Florida Citrus Pest Management Guide.

MICROMITE 4L is compatible with many commonly used citrus pesticides, crop oils, and nutritional sprays. However, because of the large number of possible tank mixes, pre-test to assure that there is physical and non-phytotoxic compatibility of any proposed mixtures with MICROMITE 4L.

**APPLICATION INSTRUCTIONS**

USE AND MIXING DIRECTIONS IF USE WITH WATER:

1. Fill tank with half of the required amount of water.
2. Begin agitation and add required amount of Micromite 4L
3. Continue agitation while adding remainder of water.
4. If permitted for the use site, add proper quantity of oil slowly. to avoid formation of an invert emulsion, use at least 2 parts of water for each part of oil.

**RESISTANCE MANAGEMENT**

When used as directed MICROMITE 4L provides control of a number of important insect pests. MICROMITE 4L must be part of an IPM program that follows good management practices that include:

- Scouting regularly and use MICROMITE 4L against early immature stages for best results
- Always follow the label rate and timing directions
- Use chemical alternatives such as oil and preserve beneficial arthropods as part of an IPM program
- Maintain good coverage of all leaf surfaces with adequate water volume

- Alternate treatments to classes of insecticides with different modes of action

**RESTRICTIONS**

Do not apply more than 30 fluid ounces of MICROMITE 4L per acre per year. Do not apply more than 10 fluid ounces per acre in any 90 day period. For full rate applications (10 fluid ounces per acre), repeat sprays no closer than 90 days from last application. For 1/2 rate split applications (5 + 5 fluid ounces per acre), repeat sprays no closer than 90 days after the second application of 5 fluid ounces per acre. Do not apply within 21 days of harvest. Do not harvest cover crops for animal feed or graze livestock in treated groves.

**Ground Application:** Do not apply within 25 feet of bodies of water such as lakes, reservoirs, rivers, permanent streams, natural ponds, marshes or estuaries. **In the State of Florida**, do not apply within 100 feet of estuarine/marine bodies of water. Spray last three rows windward of surface water using nozzles on one side only, with spray directed away from surface water. Avoid spray going over tops of trees by adjusting or turning off top nozzles. Shut off nozzles on the side away from the grove when spraying the outside row. Shut off nozzles when turning at ends of rows and passing tree gaps in rows.

**Aerial Application:** Do not apply within 150 feet of bodies of water such as lakes, reservoirs, rivers, permanent streams, natural ponds, marshes or estuaries. **In the State of Florida**, do not apply within 1000 feet of estuarine/marine bodies of water.

**DIRECTIONS FOR USE**

**Spray Volumes:** Use sufficient spray volume for thorough coverage of leaf surfaces (ground = 50 to 1,000 gallons per acre; aerial = 5 to 20 gallons per acre).

Crops	Pests	Application Rate (fl oz/acre)	DIRECTIONS FOR USE
Oranges Grapefruit Tangerine Pummelos/ Pomelos and their hybrids	Asian Citrus Psyllid ( <i>Diaphorina Citri</i> )	10	Apply MICROMITE 4L at 10 fluid ounces per acre to immature citrus leaf flushes when psyllids are first observed in trees. The addition of a spray oil, such as FC435-66, enhances coverage and may enhance control of Asian citrus psyllid nymphs. MICROMITE 4L will not kill adult stages of Asian citrus psyllid. MICROMITE 4L has activity on immature forms.  <b>Split Application:</b> Spray 5 fluid ounces per acre when very early-feather leaf flush is present, or oviposition by ACP is expected or seen, or leaf distortion is evident. Apply the second application of MICROMITE 4L at 5 fluid ounces per acre as needed to protect new flushes of growth.
	Citrus Rust Mite	10	Apply MICROMITE 4L at 10 fluid ounces per acre in sufficient water to ensure thorough coverage (50 - 1,000 gallons per acre by ground application; 5 to 20 gallons per acre by aerial application). Micromite has activity on eggs and nymphal stages of citrus rust mites. Adults that have passed all molting stages are not susceptible to MICROMITE. The full effect of MICROMITE 4L may not be apparent for 3 - 10 days after application.
	Lepidopterous Miners: Citrus Leafminer ( <i>Phyllocnistis citrella</i> )	10	Apply MICROMITE 4L at 10 fluid ounces per acre when oviposition begins on new growth flush. The addition of a spray oil, such as FC435-66, enhances coverage and may enhance control of citrus leafminers. MICROMITE 4L will not kill adult stages of leafminers. MICROMITE 4L has activity on eggs, larval and pupal stages.  <b>Split Application:</b> Spray 5 fluid ounces per acre when leaf flush is present and the oldest leaf is approximately one-quarter expanded, or when oviposition by CLM is expected or seen, or leaf mining is evident. Apply the second application of MICROMITE 4L at 5 fluid ounces per acre as needed to protect new flushes of growth.
	Lepidopterous Miners: Citrus Peelminer ( <i>Marmara spp.</i> )	10	Apply MICROMITE 4L at 10 fluid ounces per acre when oviposition begins on peel surface. The addition of a spray oil, such as FC435-66, enhances coverage and may enhance control of peelminers. MICROMITE 4L prevents development of peelminer eggs laid on protected fruit tissues. Protection may last only a few weeks when new tissue is exposed on rapidly expanding fruit.

Crops	Pests	Application Rate (fl oz/acre)	DIRECTIONS FOR USE
Oranges Grapefruit Tangerine Pummelos/ Pomelos and their hybrids	Citrus Root Weevil Complex	10	<p>Apply MICROMITE 4L at 10 fluid ounces per acre to control citrus root weevil species, which include the West Indian sugarcane rootstock borer weevil (<i>Diaprepes abbreviatus</i>), the southern blue-green citrus root weevil (<i>Pachnaeus litus</i>), the blue-green citrus weevil (<i>Pachnaeus opalus</i>), the Fuller rose beetle (<i>Asynonychus godmani</i>), and the little leaf notcher (<i>Artipus floridanus</i>). Apply MICROMITE 4L to newly expanded flush on citrus and/or when adult weevils are present.</p> <p>The addition of a spray oil, such as FC435-66, enhances coverage and penetration of MICROMITE 4L into the adult weevils and eggs. Also, oil will deter attachment of weevil egg masses to leaf surfaces.</p> <p>MICROMITE 4L will not kill adult weevils. The activity of MICROMITE 4L is through ingestion or contact and will result in reduction of the reproductive potential of weevils, it prevents eggs from hatching, thus preventing larvae from entering soil and feeding on citrus tree roots. Also, the grubs from eggs laid on treated leaves are reduced in number.</p>
	Katydid Grasshoppers	10	<p>MICROMITE 4L applied at 10 fl oz/A when katydids and/or grasshoppers are first observed can significantly reduce nymphal populations and egg hatch. It has direct activity on eggs and nymphs by preventing eggs from hatching and nymphs from molting. Adult grasshoppers and katydids that feed on or contact treated surfaces produce fewer eggs that hatch, reducing pest populations. The performance of MICROMITE 4L is highly dependent upon the timeliness of its application as well as overall spray coverage.</p> <p>The addition of petroleum spray oil, such as FC435-66, enhances spray coverage and penetration of MICROMITE 4L into katydid or grasshopper eggs, nymphs and adults, improving activity on each life stage.</p>

**IMPORTANT NOTICE**—Seller warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with the directions and instructions specified on the label under normal conditions of use, **but neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of this product, contrary to label instructions, or under conditions not reasonably foreseeable to seller, and to the extent consistent with applicable law, the buyer assumes the risk of any such use.**

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