

228-525

5/17/2011

1099



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

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

Nathan P. Ehresman  
Nufarm Americas, Inc.  
150 Harvester Dr., Suite 200  
Burr Ridge, IL 60527

**MAY 17 2011**

Dear Mr. Ehresman:

Subject: Response to Submission of Emerald Ash Borer and Asian Longhorned Beetle  
Efficacy Data (MRIDs 48247701 and 48247702)  
Mallet 1.47% Concentrate  
EPA Registration No. 228-525  
Submission Date: September 30, 2010

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, is acceptable. Upon review of the registration record, it has been determined that the Emerald Ash Borer and Asian Longhorned Beetle pests/claims are supported by the data that has been submitted in connection with the product's registration. See the enclosed efficacy review dated 5/4/11 for further specifics.

Submit one copy of your final printed labeling before you release the product for shipment. A stamped copy of the labeling is enclosed for your records. If you have any questions regarding this label, please contact Jennifer Urbanski at (703) 347-0156 or [urbanski.jennifer@epa.gov](mailto:urbanski.jennifer@epa.gov).

Regards,

A handwritten signature in black ink that reads "Venus Eagle".

Venus Eagle  
Product Manager (01)  
Insecticide-Rodenticide Branch  
Registration Division (7505P)

Enclosure- Label and Agency Review (D383282)

2019

# MALLET® 1.47% CONCENTRATE

PROVIDES UP TO 12 MONTH OF SYSTEMIC PROTECTION AGAINST LISTED  
DAMAGING INSECTS INCLUDING LEAFMINERS, BEETLES AND BORERS.  
HAVING BEAUTIFUL TREES AND SHRUBS HAS NEVER BEEN EASIER.  
FOR OUTDOOR RESIDENTIAL USE

**ACTIVE INGREDIENT:**

Imidacloprid ..... 1.47%

**OTHER INGREDIENTS:** ..... 98.53%

**TOTAL:** ..... 100.00%

Not for sale, sale into, distribution and or use in Nassau, Suffolk, Kings, and Queens counties of New York.

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

SEE BACK PANEL FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300  
For Medical Emergencies Only, Call (877) 325-1840

EPA REG. NO. 228-525

EPA EST. NO.

Manufactured For  
NUFARM AMERICAS INC.

150 Harvester Drive  
Burr Ridge, IL 60527



NET CONTENTS

000228-00525.20110510.EPA E-mail

ACCEPTED  
MAY 17 2011

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

EPA. Reg. No: 228-525

3009

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

**CAUTION**

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Shoes plus socks.

<b>FIRST AID</b>	
<b>IF SWALLOWED</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<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 lenses, 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>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.	

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to aquatic invertebrates. Do not apply directly to lakes, streams rivers or ponds. Do not dump rinse water into sewers or bodies of water.

**DIRECTIONS FOR USE**

Read all directions prior to application of the product.

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

Do not apply near lakes, streams, rivers, or ponds. Do not apply to soils which are water-logged or saturated. Bucket or measuring utensils should not be used for any food or drinking water purposes after use with this product.

For use on outdoor trees and shrubs, including listed fruit and nut trees:

- |           |        |               |        |
|-----------|--------|---------------|--------|
| Apple     | Loquat | Oriental Pear | Pecan  |
| Crabapple | Mayhaw | Pear          | Quince |

**INSECTS CONTROLLED**

This product can be used to control the following insects:

- Adelgids
- Aphids
- Vine Weevil Larvae (including Black Vine Weevil)
- Borers:
  - Roundheaded Borers (including Asian Longhorned Beetle and Eucalyptus Longhorned Borer)
  - Flatheaded (including Bronze Birch Alder and Emerald Ash Borers)
- Japanese Beetles, Adult
- Lacebugs
- Leaf Beetles (including Elm Leaf Beetles and Viburnum Leaf Beetles)
- Leafhoppers (including Glassy-winged Sharpshooter)
- Leafminers (including Birch Leafminers)
- Mealybugs
- Pine Tip Moth Larvae
- Psyllids
- Royal Palm Bugs
- Sawfly Larvae
- Scales (including Armored Scale [Suppression] and Soft Scale)
- Thrips
- Whiteflies

### HOW TO USE

Determine the amount to use by measuring the distance around the tree trunk or height of the shrub. Pour the required amount into a bucket of water and empty the bucket around the base of the tree/shrub.

### HOW MUCH TO APPLY

**Trees:** 1 ounce per inch of distance around trunk.

**Shrubs:** 3 ounces per foot of height.

#### Tree with one trunk

Measure distance (in inches) around tree trunk at chest height. A flexible tape measure is the recommended method [tool]. This is the number of ounces of this product to apply.

#### Tree with two or more trunks

Measure the distance (in inches) around each tree trunk and add together. Multiply this total by 0.75 to get the required number of ounces of this product to apply. Example: A tree has 4 trunks. They measure 20, 10, 5 and 5 [inches] or a total of 40 [inches].  $40 \times 0.75 = 30$  ounces.

#### Shrubs

Measure the height of the shrub to the nearest foot. Round any inches down to the nearest foot if less than 6" and up to the nearest foot if greater than 6". Multiply the number of feet by 3 - this is the number of ounces of this product to apply.

Do not apply more than 0.4 lb a.i. Imidacloprid (410 oz or 3.2 gallons of product) per acre per year.

### HOW TO APPLY

- Fill a bucket or watering can with 1 gallon of water. [For trees with circumference greater than 50", use 2 gallons of water.]
- Shake Well.
- Carefully measure required amount of product into bucket.
- Slowly pour the solution evenly around the tree. For best results, pour as close to the trunk/main stem of the tree/shrub as possible.
- Fill the bucket with clean water and pour it around the trunk as well.

For best results, use this product as part of an overall tree and shrub health care program before problems start. This product can be applied anytime except when the ground is waterlogged or frozen. These conditions inhibit the movement of the product down into the root zone. During prolonged dry periods [spells], water the tree/shrub well the night before making an application.

For severe infestations, treat with a foliar insecticide such as Menace 2.4% ME, then use this product as part of routine care program.

The insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the tree or shrub providing up to year-long insect protection. This product even moves into new growth after application, thus protecting it, too! To get complete protection, the insecticide must distribute completely through the tree/shrub. Depending on the size and health of the plant, this may take one week to three months (for very large trees). Rain or water cannot wash off this internal protection.

**NOTE:** Application to trees heavily infested may not prevent their eventual loss due to existing pest damage and tree stress.

Children and pets may re-enter the treated area after it has dried.

## STORAGE AND DISPOSAL

### [Residential]

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

**PESTICIDE STORAGE:** Keep out of reach of children and animals. Store in original container only. Store in a cool, dry place and avoid excess heat.

**PESTICIDE DISPOSAL AND CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse or refill this container.

If empty: Place in trash or offer for recycling if available. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor (including toilet) or outdoor (including sewer) drain.

## STORAGE AND DISPOSAL

### [Commercial]

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

**PESTICIDE STORAGE:** Keep out of reach of children and animals. Store in original container only. Store in a cool, dry place and avoid excess heat.

**PESTICIDE DISPOSAL AND CONTAINER DISPOSAL:**

**Nonrefillable Containers 5 Gallons or Less:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or 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. Then offer for recycling if

available or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

**Nonrefillable containers larger than 5 gallons:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. If recycling or reconditioning is not available, puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or 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. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**Refillable containers larger than 5 gallons:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

**WARRANTY DISCLAIMER**

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

**LIMITATION OF LIABILITY**

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR ARISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

**If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.**

(RV051011)

Mallet is a registered trademark of Nufarm Americas Inc.

**OPTIONAL MARKETING CLAIMS**

**OPTIONAL FRONT PANEL CLAIMS:**

- Prevents damage from listed pests
  - Insects eating is reduced when they feed on the plant
  - Protects new growth.
  - Controls insects that damage trees and shrubs
  - Up to Year-long insect protection for trees and shrubs
  - Treats up to X average size trees or Y shrubs
  - Systemic insecticide is absorbed through the roots, carried up into the plant and won't wash off
  - Will not harm trees and shrubs
  - For use on all ornamental trees, listed fruit & nut trees, and shrubs
  - Kills listed insects & prevents new infestations
  - One application protects up to 12 months
  - Provides up to 12 Month Insect Protection
  - Rainproof Protection
  - Easy to use - Mix in water and pour around Tree/Shrub
  - Tree Protection - Roots to Leaves!
  - Bark Protection
  - Protects down to the Roots!
  - Protects from the Roots to the Leaves
  - (Up to 12-Month) (Up to 1 Year) Bark Protection (Defense)
  - (Up to 12-Month) (Up to 1 Year) Tree Protection (Defense)
  - Up to Year Long (Protection) (Defense)
  - Rain-Proof Formula
  - (Just) Apply Around Plant Base
  - Guaranteed†
- †THE ORTHO GUARANTEE If for any reason you are not satisfied with this product, mail us proof of purchase to obtain a full refund of your purchase price."
- Low-Pressure Shower Applicator

**OPTIONAL DIRECTIONS FOR USE:**

**Alternate Re-entry Statement**

[icon] People and pets may re-enter treated areas after spray has dried.

**Product Facts:**

<b>PRODUCT FACTS</b>	
Kills Insects	Kills and prevents Adelgids, Aphids, Emerald Ash Borer, Japanese Beetles and other listed insects
Where to Use (Apply)	For use on outdoor trees and shrubs, including listed fruit and nut trees
Amount to Use	Apply for 60 seconds around plant base to treat average tree (12-inch round trunk) or shrub (4 feet tall)
People & Pets	People and pets may re-enter treated areas after spray has dried

OPTIONAL LANGUAGE CONTINUED ( SEE BELOW )

**OPTIONAL DIRECTIONS FOR USE: (continued)**

<b>HOW TO USE</b>	
<p>Determine the amount of product needed according to chart below. Pour the required amount into a bucket of water and empty the bucket around the base of the tree/shrub.</p>	
<b>HOW MUCH TO APPLY</b>	
<b>Tree with 1 trunk</b>	<ul style="list-style-type: none"> <li>• Measure distance (in inches) around tree trunk at chest height (a flexible tape measure is recommended).</li> <li>• This is the number of ounces of this product to apply.</li> </ul>
<b>Tree with 2 or more trunks</b>	<ul style="list-style-type: none"> <li>• Measure distance (in inches) around each tree trunk and add together.</li> <li>• Multiply this total by 0.75 to get the required number of ounces of this product to apply.</li> </ul> <p>Example: A tree has 4 trunks. They measure 20, 10, 5 and 5 [inches] or a total of 40 inches.  <math>40 \times 0.75 = 30</math> ounces.</p>
<b>Shrubs</b>	<ul style="list-style-type: none"> <li>• Measure the height of the shrub to the nearest foot.</li> <li>• Multiply the number of feet by 3. This will be the number of ounces of this product to apply.</li> </ul> <p>Do not apply more than 0.4 lb a.i. Imidacloprid (410 oz or 3.2 gallons of product) per acre per year.</p>
<b>HOW TO APPLY</b>	
<ul style="list-style-type: none"> <li>• Fill a bucket or watering can with 1 gallon of water (for large trees with circumference greater than 50 inches, use 2 gallons of water).</li> <li>• Shake bottle well.</li> <li>• Carefully measure required amount of product into bucket.</li> <li>• Slowly pour the solution evenly around the tree. For best results, pour as close to the trunk/main stem of the tree/shrub as possible.</li> <li>• Fill the bucket with clean water and pour it around the trunk as well.</li> </ul>	

OPTIONAL LANGUAGE CONTINUED (SEE BELOW )

**OPTIONAL DIRECTIONS FOR USE: (continued)**

<b>HOW TO USE</b>	
Determine the amount of product needed to treat your tree or shrub by following the steps below. Apply the required amount of product around the base of the tree or shrub.	
<b>STEP 1 - DETERMINE AMOUNT OF PRODUCT NEEDED</b>	
[icon] <b>Tree with 1 trunk</b>	<ul style="list-style-type: none"> <li>• Measure distance (in inches) around tree trunk at chest height (a flexible tape measure is recommended).</li> <li>• This is the number of ounces of this product to apply.</li> </ul>
[icon] <b>Tree with 2 or more trunks</b>	<ul style="list-style-type: none"> <li>• Measure distance (in inches) around each tree trunk and add together.</li> <li>• Multiply this total by 0.75 to get the required number of ounces of this product to apply.</li> </ul> <p>Example: A tree has 4 trunks. They measure 20, 10, 5 and 5 [inches] or a total of 40 inches.  <math>40 \times 0.75 = 30</math> ounces.</p>
[icon] <b>Shrubs</b>	<ul style="list-style-type: none"> <li>• Measure the height of the shrub to the nearest foot.</li> <li>• Multiply the number of feet by 3. This will be the number of ounces of this product to apply.</li> </ul> <p>Do not apply more than 0.4 lb a.i. Imidacloprid (410 oz or 3.2 gallons of product) per acre per year.</p>
<b>STEP 2 - DETERMINE TOTAL SPRAY TIME</b>	
The low-pressure shower applicator applies approximately 1 ounce of product every 5 seconds.	
$\text{Number Ounces (Step 1)} \times 5 \text{ Seconds} = \text{Total Time to Apply}$	
<p>Example - 12 ounces are needed (from Step 1).  <math>12 \text{ ounces} \times 5 \text{ seconds} = 60 \text{ Total Seconds}</math>            Apply for approximately 60 seconds to plant base.</p>	
<b>HOW TO APPLY</b>	
<b>Connect</b>	<ul style="list-style-type: none"> <li>• Shake bottle well.</li> <li>• Connect sprayer to hose.</li> <li>• Turn on water.</li> </ul>
<b>Spray</b>	<ul style="list-style-type: none"> <li>• To begin spraying, point nozzle at the base of the tree/shrub you want to treat. Bend small plastic tab down and turn knob to ON position.</li> <li>• Apply evenly around the tree/shrub as close to the trunk/main stem as possible.</li> <li>• Spray for as long as calculated in the "HOW TO USE" section.</li> </ul>
<b>Finish</b>	<ul style="list-style-type: none"> <li>• Stop spraying, turn knob to OFF position.</li> <li>• Turn off water.</li> <li>• Relieve water pressure by bending the plastic tab down and turning knob to ON position until water slows to a drip. Then, turn knob back to OFF position.</li> <li>• Disconnect sprayer from hose.</li> </ul>

OPTIONAL LANGUAGE CONTINUED (SEE BELOW)



**Optional Language:**

**THE ORTHO® GUARANTEE:** If for any reason you are not satisfied with this product, mail us proof of purchase to obtain a full refund of you purchase price.

**Designed for Independent Retailers**

Notice: To the extent consistent with applicable law, buyer assumes all risks of use, storage or handling of this product not in accordance with directions.

Questions, Comments, Medical Information Call 877-332-0748

HYPERLINK "http://www.ortho.com" [www.ortho.com](http://www.ortho.com)

Alternate "Amount to Use" section for the concentrate product:

Amount to Use	Tree: 1 ounce per inch of distance around trunk Shrub: 3 ounces per foot of plant height
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