

66222-137

6/3/2010



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

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

P. Leanne Pruett  
Makhteshim-Agan of North America Inc.  
4515 Falls of Neuse Road, Suite 300  
Raleigh, NC 27609

JUN -3 2010

Dear Ms. Pruett:

Subject: Revised Labeling  
Redi-Pik 1.5EC Cotton Defoliant  
EPA Registration No. 66222-137  
Your Submission Dated March 9, 2010

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable provided that you:

1. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:

- On page 5 change the cotton retreatment interval from 7 to 21 days. We have rechecked our records and 21 days is the correct interval as specified in the Diuron RED.

2. Submit one (1) copy of your final printed labeling before you release the product for shipment.

A stamped copy of the labeling is enclosed for your records. The amended labeling supersedes all previously accepted ones.

If you have any questions concerning this letter please contact Mr. James Stone at 703-305-7391.

Sincerely yours,

A handwritten signature in black ink that reads "Kathryn V. Montague".

Kathryn V. Montague  
Product Manager 23  
Herbicide Branch  
Registration Division (7505P)

Enclosure

ACCEPTED  
with COMMENTS  
In EPA Letter Dated:  
JUN - 3 2010

# Redi-Pik<sup>®</sup> 1.5EC Cotton Defoliant

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

66222-137

For Agricultural Use Only

|  |                     |
|--|---------------------|
| <b>ACTIVE INGREDIENTS:</b>                               | <b>% BY WT.</b>     |
| Thidiazuron: N-phenyl-N'-1,2,3-thiadiazol-5-ylurea ..... | 12.0%               |
| Diuron: 3-(3,4-dichlorophenyl)-1,1-dimethylurea .....    | 6.0%                |
| <b>INERT INGREDIENTS:</b> .....                          | <b>82.0%</b>        |
|  | <b>TOTAL 100.0%</b> |

Contains 1 lb Thidiazuron per gallon and .5 lb Diuron per gallon.

**KEEP OUT OF REACH OF CHILDREN**  
**DANGER - PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Manufactured for:  
Makhteshim Agan of North America, Inc.  
4515 Falls of Neuse Rd., Suite 300  
Raleigh, NC 27609

EPA Reg. No. 66222-137

EPA Est. No. \_\_\_\_\_

**NET CONTENTS: \_\_\_\_\_ GALS**

| FIRST AID   |  |
|---|--|
| <b>IF IN EYES:</b>  | <ul style="list-style-type: none"> <li>• Hold eye open and rinse gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing</li> <li>• Call a poison control center or doctor for treatment advice</li> </ul>   |
| <b>IF ON SKIN OR CLOTHING:</b>  | <ul style="list-style-type: none"> <li>• Take off contaminated clothing</li> <li>• Rinse skin immediately with water for 15-20 minutes</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>  |
| <b>IF SWALLOWED:</b>  | <ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor for treatment advice</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Have a person sip a glass of water if able to swallow</li> <li>• Do not give anything by mouth to an unconscious person.</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 further treatment advice.</li> </ul>   |
| <p><b>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</b><br/>You may also contact Prostar at 1-877-250-9291 for emergency medical treatment information.</p> <p><b>NOTE TO PHYSICIAN:</b> Probable mucosal damage may contraindicate the use of gastric lavage.</p> |  |

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

Corrosive. Causes irreversible eye damage. Causes skin burns. Harmful if swallowed. Harmful if absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Some materials that are chemical resistant to this product are made of any waterproof material. If you want more options, follow the instructions for Category A on an EPA chemical-resistance category selection chart.

**All pilots and flaggers must wear:**

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

**All mixers, loaders, other applicators, and other handlers must wear:**

- Coveralls over long sleeved shirt and long pants,
- Socks and chemical-resistant footwear,
- Chemical resistant gloves,
- Goggles or face shield,
- Chemical-resistant apron when mixing/loading or cleaning equipment or spills, and
- Except for groundboom applicators, a NIOSH approved particulate filtering respirator equipped with N, R or P class filter media. The respirator should have a NIOSH approval number prefix TC 84S. It is recommended that you require that respirator wearer be fit tested and trained in the use, maintenance, and limitations of the respirator.

See engineering controls for additional requirements.

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

**ENGINEERING CONTROLS:**

When handlers use closed systems, 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 requirement may be reduced or modified as specified in the WPS.

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

Flaggers supporting aerial application must use an enclosed cab that meets the definition in the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(5)] for dermal protection. In addition, flaggers must wear long-sleeved shirt, long pants, shoes and socks.

**USER SAFETY RECOMMENDATIONS**

**Users should:**

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

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate

This product may contaminate water through drift of spray in wind. This product has a high potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

This chemical has properties and characteristics associated with chemicals detected in ground water. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

**PHYSICAL OR CHEMICAL HAZARDS**

Do not use or store near heat or open flame. In case of spillage, cover with an absorbent such as soda ash, lime, clay, or sawdust. Sweep up and bury. Wash area thoroughly with detergent and water.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in 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 you State or Tribe, consult the agency responsible for pesticide regulation.

**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, an 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.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 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,
- Chemical-resistant gloves made of any waterproof material,
- Shoes plus socks.

**INFORMATION**

Redi-Pik 1.5EC is a defoliant to be used as a pre-harvest aid for cotton. Redi-Pik 1.5EC Cotton Defoliant performs well under both cool and warm weather conditions.

**Use Precautions**

- Do not apply this product through any type of irrigation system.
- Rainfall within 12 hours after application can reduce effectiveness of Redi-Pik 1.5EC Cotton Defoliant.
- Do not feed foliage from treated cotton plants or gin trash to livestock
- Do not plant the following crops earlier than the specified periods after application of Redi-Pik 1.5EC Cotton Defoliant.

|   |                  |
|---|------------------|
| Small grains, sorghum, corn, or root crops (except carrots, onions) | Two (2) months   |
| Legumes (including alfalfa) or leafy vegetables (except lettuce)    | Two (2) months   |
| Cole crops, garlic, safflower, tomatoes, and watermelons            | Two (2) months   |
| Carrots   | Three (3) months |
| Onions  | Four (4) months  |
| Cantaloupe, honeydew melon/casaba melon, muskmelon, or peppers      | Five (5) months  |
| Lettuce   |                  |
| With deep-plowing of soil (12-15 inches)                            | Two (2) months   |
| When soil is only disced (4-6 inches)                               | Nine (9) months  |

**Cover Crops:** small grains and / or legumes intercropped within the cotton crop to which Redi-Pik 1.5EC Cotton Defoliant will be applied may **only** be used as cover crops and may not be harvested for food or feed. Small grains and/or legumes planted earlier than two (2) months following Redi-Pik 1.5EC application may **only** be used as cover crops and may not be harvested for food or feed.

Do not plant any other rotational crops (except those specified above) within one year of application of Redi-Pik 1.5EC.

Do not use immature crops for food or feed.

**Do not allow spray drift to contact trees or crops other than the target crop of mature cotton, or cotton you desire to defoliate, as this product may injure or defoliate other crops.**

Particular care should be taken when applying Redi-Pik 1.5EC adjacent to lettuce, citrus, or cantaloupe.

**Spray Drift Management:**

Use best practices to avoid drift to all other crops and non-target areas. Do not apply when conditions favor drift from target areas. The interaction of many equipment and weather related factors determine the potential for spray drift. Avoiding spray drift at the application site is the responsibility of the applicator. The applicator must follow the most restrictive precautions to avoid drift, including those found in this labeling as well as applicable state and local regulations and ordinances. A drift control agent may reduce drift, however, it may also decrease weed control.

Apply with medium or coarser spray (according to ASAE standard 572) for standard nozzles.

Additional requirements for ground applications: When applying to crops, apply with nozzle height no more than 2 feet above the ground or crop canopy. When applying to noncrop areas, use lowest nozzle height consistent with safety and efficacy. Direct spray into target vegetation.

Additional requirements for aerial applications: The spray boom must be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The boom length must not exceed 75% of the wing span or 90% of rotor blade diameter. Use upwind swath displacement. When applying to crops, do not release spray at a height greater than 6 to 10 feet above the

ground or crop canopy. Do not apply by air if sensitive nontarget crops are within 100 feet of the application site, except as noted for lettuce and citrus.

(In general, a decrease in droplet size or increase in wind speed at the time of application will result in risk to non-target organisms. Alternatively, if droplet size is coarser or wind speeds are lower, exposures due to drift would be reduced)

**PRACTICES TO LOWER POTENTIAL FOR DRIFT ONTO NONTARGET CROPS**

During applications, particularly under windy conditions, Redi-Pik 1.5EC Cotton Defoliant may drift to nontarget crops. To help reduce the drift potential, use the following practices:

- Do not apply Redi-Pik 1.5EC by ground or air when wind speeds exceed ten (10) miles per hour at the time of application. Follow local recommendations if wind speeds of less than ten (10) miles per hour are specified in those recommendations
- Use of low nozzle pressure (20-30 psi) is recommended
- Do not apply Redi-Pik 1.5EC when a temperature inversion is present or when conditions favor an inversion prior to completing application(s).
- Additionally, do not apply Redi-Pik 1.5EC by air within one-half (1/2) mile of lettuce. Do not apply Redi-Pik 1.5EC by ground equipment within 100 feet of lettuce.

**PRACTICES TO LOWER DRIFT POTENTIAL ONTO NONTARGET CROPS IN THE RIO GRANDE VALLEY OF TEXAS**

To help reduce the drift potential, use the following practices:

- Do not apply Redi-Pik 1.5EC Cotton Defoliant by ground or air when wind speeds exceed ten (10) miles per hour at a time of application. Follow local recommendations if wind speeds of less than ten (10) mile per hour are specified in those recommendations.
- Use of low nozzle pressure (20-30 psi) is recommended.
- Do not apply Redi-Pik 1.5EC when a temperature inversion is present or when conditions favor an inversion prior to completing applications.
- Use the largest nozzle orifice possible which permits proper deposition and coverage of product.
- In addition, for citrus crops, do not apply Redi-Pik 1.5EC by air when citrus in flush (burst of new growth, as in springtime) is within five (5) miles downwind of the point of application. Do not apply Redi-Pik 1.5EC by ground when citrus in flush is within one-half (1/2) mile downwind of the point of application.

**APPLICATION DIRECTIONS**

**TIME OF APPLICATION**

Apply Redi-Pik 1.5EC only to mature cotton plants when the last boll you expect to harvest is mature. A boll can be described as "mature" when it is too hard to be dented when squeezed between them and fingers, is difficult to slice with a sharp knife, and/or when seeds cut in cross sections have fully developed cotyledons, as evidenced by an absence of jelly within the seed. Apply Redi-Pik 1.5EC at least 5 days prior to anticipated harvest.

**PRECAUTION:** The addition of adjuvant can cause desiccation and/or leaf freezing during periods of high temperature. The use of compounds that desiccate leaf tissues is not recommended.

Use of Redi-Pik 1.5EC Cotton Defoliant under extremely cool or adverse condition can result in less than desirable defoliation and/or growth inhibition.

**APPLICATION:** Redi-Pik 1.5EC Cotton Defoliant may be applied by air or ground equipment. Apply specified dosages in 10-25 gallons of spray per acre with ground equipment or 2-10 gallons per acre by aircraft.

**DOSAGE:** Apply Redi-Pik 1.5EC Cotton Defoliant at a rate of 0.4 to 1.0 pint of formulated product per acre prior to harvest (see *Application Rate Table*). At some locations, following the initial Redi-Pik 1.5EC application, it may be necessary to make a second application of Redi-Pik 1.5EC (**DO NOT** exceed 1.0 pint/acre per season), or an application of a standard defoliant.

**MIXING INSTRUCTIONS:** Fill the spray tank with one-half of the required amount of water. Add the proper amount of Redi-Pik 1.5EC Cotton Defoliant and start the spray tank agitator. Finish filling the tank with the balance of water needed. Maintain sufficient agitation during both mixing and application to ensure uniformity of the spray mixture.

**PRECONDITIONG (FOR USE IN CALIFORNIA ONLY):** Redi-Pik 1.5EC may by used as a pre-conditioner to enhance the activity of a defoliant application. Apply Redi-Pik 1.5EC at 4-6 oz. formulated product per acre. Apply in 10-25 gallons of water per acre by ground or 2-10 gallons of water per acre by aerial application. Timing of application is 7-10 days prior to a defoliation application of Redi-Pik 1.5EC (see *Application Rate Table*) or the use of another defoliant. Refer to the second product label prior to use for complete directions.

**REDI-PIK 1.5EC COTTON DEFOLIANT APPLICATION RATE TABLE**

| To Achieve an Application Rate of: | Use This Amount of Redi-Pik 1.5EC | At the Indicated Rate, One Gallon of Redi-Pik 1.5EC Will Treat: |
|------------------------------------|-----------------------------------|---|
| 0.075 lbs ai/ Acre                 | 0.4 pts/A (6.4 oz/A)              | 20 Acres  |
| 0.10 lbs ai/Acre                   | 0.55 pts/A (8.8 oz/A)             | 15 Acres  |
| 0.15 lbs ai/Acre                   | 0.8 pts/A (12. 8 oz. /A)          | 10 Acres  |
| 0.1875 lbs ai/Acre                 | 1.0 pts/A (16.0 oz /A)            | 8 Acres   |

**DO NOT APPLY MORE THAN 1.0 PINT OF REDI-PIK 1.5EC PER ACRE PER SEASON.**

**APPLICATION RESTRICTIONS**

Use Rate Information (under normal conditions) for Cotton:

A maximum of 2 applications per year may be applied, but not to exceed 1 pt /A/year of Redi-Pik 1.5 EC.

A minimum retreatment interval of 7 days must be observed when making 2 applications of Redi-Pik 1.5 EC

**TANK MIX OF REDI-PIK 1.5EC Cotton Defoliant plus other cotton defoliant products:**

The tank mix of Redi-Pik 1.5EC plus other cotton defoliant products is recommended to improve overall defoliation, and as an aid in accelerating the opening of mature, unopened cotton bolls. Best activity will be obtained where the tank mix is applied to mature cotton plants. Do not apply tank mix before sufficient unopened bolls have matured to produce the desired cotton yield.

For cotton produced in non-arid conditions, apply Redi-Pik 1.5EC at a rate of 3.2 to 6.4 fluid ounces per acre plus other cotton defoliant products at a rate of 21 to 42 fluid ounces per acre.

For cotton produced in arid conditions, apply Redi-Pik 1.5EC at a rate of 6.4 to 16 fluid ounces per acre plus other cotton defoliant products at a rate of 21 to 42 fluid ounces per acre.

**CLEANOUT INSTRUCTIONS:** Do not allow the spray solution to dry in the application equipment. Immediately following application, clean all equipment (mix tanks, pumps, transfer lines, application tanks, sumps, booms, nozzles and all related equipment) thoroughly with cleaner and water. Contact Makhteshim Agan of North America, Inc. for additional information regarding tank cleaners which may be helpful in removing fresh residues.

Should small quantities of Redi-Pik 1.5EC Cotton Defoliant remain in inadequately cleaned equipment, they may be released during subsequent applications and may cause damage to crops. Makhteshim Agan of North America, Inc. accepts no liability for damage to crops due to inadequately cleaned equipment.

**IMPORTANT:** Read the information below using this product. If the terms are not acceptable, you should return the unopened product container immediately for a complete refund.

Use of this product in certain portions of California, Oregon, and Washington is subject to the January 22, 2004 Order for injunctive relief in Washington Toxic Coalition, et. al. v. EPA, C01-0132C, (W.D.WA). For further information, please refer to <http://www.epa.gov/espp/wtc>.

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Store at temperatures below 100°F. If allowed to freeze, remix before using.

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

**CONTAINER DISPOSAL:**

**Nonrefillable Container (five gallons or less):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container 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 ¼ 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 or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Nonrefillable Container (greater than five gallons):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ 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.

**Refillable Container:** Refillable container. Refill this container with thidiazuron 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 mix tank. Fill the container about 10 percent full with water. Agitate vigorously

or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.  
**FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK, OR FIRE), CALL INFOTRAC AT 1-800-535-5053.**

**LIMITATION OF WARRANTY AND LIABILITY**

Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following **CONDITIONS, DISCLAIMER OF WARRANTIES and LIMITATIONS OF LIABILITY.**

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Makhteshim Agan of North America, Inc. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, Makhteshim Agan of North America, Inc. makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of Makhteshim Agan of North America, Inc. is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Makhteshim Agan of North America, Inc. disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

**LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at Makhteshim Agan of North America, Inc.'s election, the replacement of product.

Redi-Pik® is a registered trademark of Makhteshim Agan of North America, Inc.

Redi-Pik 1.5EC Cotton Defoliant (66222-137)(EPA PROPOSED 3-9-2010)