

# DETACH ULTRA

## Cotton Defoliant

FOR AGRICULTURAL USE ONLY

### ACTIVE INGREDIENT:

Thidiazuron (N-phenyl-N'-1,2,3-thiadiazol-5-ylurea)\* .....42.4%

**OTHER INGREDIENTS:**.....57.6%

**TOTAL:** .....100.0%

\*Contains not less than 4.0 lbs. of thidiazuron per gallon.

## KEEP OUT OF REACH OF CHILDREN

### CAUTION – CAUCION

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

FIRST AID	
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</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 15-20 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>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 by mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"><li>• Immediately call 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 a poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>Have the product container or label with you when calling a poison control center or doctor or going for treatment.</b>	
Emergency telephone numbers: (800) 424-9300 (CHEMTREC, transportation and spills) (800) 832-HELP (4357) (Poison Control Center, human health) (800) 345-4735 (ASPCA, animal health)	

### PRECAUTIONARY STATEMENTS.

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**Caution:** Harmful if swallowed, inhaled, or absorbed through the skin. Avoid breathing spray mist. Avoid contact with skin, eyes, and clothing.

**EPA Reg. No. 83222-9**

**EPA Est. No. 53883-TX-002**

#### Manufactured for:

J. OLIVER PRODUCTS, LLC

3187 ROBERTSON GIN RD.

HERNANDO, MS 38632

## PERSONAL PROTECTIVE EQUIPMENT

### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
- Shoes plus socks

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

## ENGINEERING CONTROLS STATEMENTS

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 requirements may be reduced or modified as specified in the WPS.

## 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 washwaters. Do not apply when weather conditions favor drift from treated areas.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store product at temperature less than 100°F. Re-mix product prior to use if product is exposed to freezing conditions.

**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:** Triple rinse (or equivalent). 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.

**RETURNABLE – REFILLABLE CONTAINERS:** This material may be repackaged in refillable containers by J. Oliver Products, LLC or a registered establishment under contract to J. Oliver Products, LLC. After use, return the container to the point of purchase or designated locations. This container must only be refilled with DETACH ULTRA Cotton Defoliant. **DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE.** Prior to refilling, inspect thoroughly for damage such as cracks, punctures, abrasions and damaged or worn out threads on closure devices. Do not refill or transport damaged or leaking containers. Check for leaks after refilling and before transportation. If the container is not being refilled, return it to the point of purchase.

## GENERAL INFORMATION

DETACH ULTRA a harvest aid compound is used for leaf removal prior to cotton harvest. DETACH ULTRA can be used in aircraft or ground equipment and is easily dispersed in water. The noticeable effect of DETACH ULTRA may take several days. Low temperature and other adverse conditions may require longer times and / or higher dosages for adequate defoliation.

DETACH ULTRA reduces staining of lint during harvesting and ginning by inhibiting regrowth.

## USE PRECAUTIONS

- This product is not to be applied through any type of irrigation system.
- Effectiveness of DETACH ULTRA will be reduced if rainfall occurs within 24 hours post application.
- Foliage from treated plants or gin trash is not to be fed to livestock. Do not use immature crops for feed.

**Rotation to the following crops requires the minimum of the specified periods below after the last application of DETACH ULTRA:**

ROTATION CROP	PLANTBACK INTERVAL
Small grains, sorghum, corn, or root crops (except carrots, onions or sugar beets)	(2) weeks
Legumes (including alfalfa) or leafy vegetables (except lettuce and spinach)	(2) months
Sugar beets	(4) months
Carrots, onions and spinach	(9) months
Lettuce (ONLY when soil has been deep-plowed 12-15 inches.)	(9) months

**Prevent spray drift from contacting crops other than mature cotton, since this product may defoliate or injure other plant species.**

Mixtures with organophosphate products can increase non-target crop phytotoxicity. Additional care should be exercised when lettuce, citrus, cantaloupes or any other edible crops are adjacent to DETACH ULTRA treated fields.

## PROCEDURES TO LOWER SPRAY DRIFT POTENTIAL ONTO NON-TARGET CROPS

Under windy conditions applications of DETACH ULTRA may drift to non-target crops. The following guidelines may help reduce drift potential:

- When wind speeds exceed (10) miles per hour at time of application do not apply DETACH ULTRA either by air or ground equipment.
- Use a nozzle pressure of (20-30 psi).

- When a temperature inversion is present and / or conditions favor an inversion to develop prior to completing application(s) do not apply DETACH ULTRA.
- In addition, do not apply DETACH ULTRA by air within one-half (1/2) mile of lettuce. If using ground equipment do not apply DETACH ULTRA within 100 ft. of lettuce.

### **RIO GRANDE VALLEY OF TEXAS PROCEDURES TO LOWER SPRAY DRIFT POTENTIAL**

The following procedures can help reduce the potential for drift:

- If wind speeds exceed ten (10) miles per hour do not apply DETACH ULTRA either by ground or air. If wind speeds are less than ten (10) miles per hour, follow local recommendations from your State Extension Cotton Specialist.
- Use a nozzle pressure of (20-30 psi).
- When a temperature inversion is present and/or conditions favor an inversion to develop prior to completing application(s) do not apply DETACH ULTRA.
- The maximum nozzle orifice size that provides appropriate coverage and deposition of this product should be used.
- In Citrus areas do not apply DETACH ULTRA by air within (5) miles downwind of the point of application of citrus in flush. If by ground equipment do not make DETACH ULTRA within one-half (1/2) mile of citrus.

### **DIRECTIONS FOR USE**

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

Do not make applications of this product that may contact workers or other persons, either directly or by drift. Protected handlers only are allowed in the area during application. Consult your State or Tribe agency responsible for pesticide regulations for any specific recommendation.

### **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 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 worn over long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate or butyl rubber gloves
- Chemical-resistant footwear plus socks
- Protective eyewear

### **TIME OF APPLICATION**

DETACH ULTRA defoliant applications are to be made only on mature cotton plants when the uppermost harvestable boll is mature. Boll maturity is defined as: 1) when boll is too hard to be dented when squeezed between thumb and finger; 2) when cutting a cross section with a sharp knife is difficult; 3) when seeds in cross section lack liquid within the seed coat or outer edges of seed coat are light brown; 4) when fully developed cotyledons are present.

Make applications of DETACH ULTRA at least five (5) days before the expected harvest date.

**Note:** The following conditions will determine adequate defoliation with DETACH ULTRA:

- Cotton is actively growing.
- High relative humidity.
- Cotton plant leaves are turgid and not desiccated.

### **CONDITIONS**

DETACH ULTRA when used alone under low nighttime temperatures (below 60°F) can provide less than expected defoliation and / or re-growth suppression.

DETACH ULTRA performance under low temperature is variable. Temperature should be above 60°F for 2-3 days prior to and following application or reduced defoliation and re-growth suppression exhibited.

DETACH ULTRA on heat- and/or drought-stressed cotton having non-turgid leaves and extremely waxy leaf surfaces may have reduced defoliation and re-growth suppression exhibited.

### **DETACH ULTRA AS A FOLLOW UP DEFOLIATION TREATMENT**

Reduced or unsatisfactory defoliation may occur when DETACH ULTRA is used as a second or follow up treatment, except when following a prior DETACH ULTRA or THIDIAZURON 50 WP stand-alone or tank mixed application with other defoliant. Also, see CONDITIONS.

### **CROP OIL / ADJUVANTS USAGE**

Crop oil concentrates (COC's) or penetrating oils approved for agricultural crops have shown to improve performance under low nighttime temperature (60°-65°F) and heat or drought conditions. Follow adjuvant label directions for proper rates.

Adjuvant usage in the desert Southwest (i.e. Arizona and California) is recommended when applying DETACH ULTRA.

**PRECAUTION: During periods of high temperature adjuvants can cause leaf desiccation and / or leaf freezing. Compounds that promote desiccation of leaf tissue are not recommended.**

## **MIXING INSTRUCTIONS**

1. Fill spray applicator tank at least one half full.
2. Start Agitation.
3. Add listed rate of DETACH ULTRA.
4. Continue agitation and fill tank with remainder of water.
5. Agitation should continue throughout the application.

## **TANK MIX ADJUVANTS**

Use of a surfactant or compatibility agent is recommended when using tank mixes of DETACH ULTRA and organophosphate defoliant to improve overall defoliation and aid in tank clean-out. Always perform a small jar test for compatibility prior to mixing in the spray tank.

Use only products which are exempt from tolerance under 40 CRF 180.001.

Follow manufacturers label instructions of the appropriate adjuvant.

## **APPLICATION**

Use a sufficient amount of water with specified dosage of DETACH ULTRA defoliant to give complete and uniform coverage of leaf surfaces. For ground equipment apply 10-25 gallon per acre and by air use 3-10 gallons per acre. Maintain agitation during application.

Do not allow mixed spray solution to stand overnight.

## **DOSAGE**

Use 0.1-0.2 lb. active ingredient/acre, (3.2-6.4 fl. oz./acre product). One gallon of DETACH ULTRA will treat 20 - 40 acres. The higher rate should be used under low temperature conditions (60°-65°F).

When defoliating rank cotton, two applications are sometimes required for adequate defoliation, do not make more than two applications, do not exceed a total of 9.6 fl. oz. (0.3 lb. AI/acre) per season.

## **ARIZONA ONLY - BOTTOM DEFOLIATION**

DETACH ULTRA can be used to help reduce boll rot and hard lock caused by moisture retained in the canopy, by aiding improved air circulation within the cotton canopy. Base product application timing upon the latest date when application equipment will not cause significant crop damage when driving applicator through the cotton crop.

Apply 0.05 lb. active ingredient / acre of DETACH ULTRA (1.6 fluid ounces / Ac).

Apply DETACH ULTRA only to the bottom 1/3 of the plant.

## **ARIZONA AND CALIFORNIA ONLY: PRECONDITIONING**

DETACH ULTRA can be used to enhance the activity of a defoliant application by acting as a pre-conditioner. Apply DETACH ULTRA 7-14 days prior to the use of other defoliant compounds. Observe all product label directions, restrictions and prohibitions.

Apply DETACH ULTRA at 0.05 -0.1 lb. active ingredient / acre (1.6-3.2 fluid ounces/acre).

## **TANK MIX OF DETACH ULTRA AND ETHEPHON CONTAINING COMPOUNDS**

Improved defoliation and improved opening of mature bolls can be achieved by tank mixing DETACH ULTRA and Ethephon® 6 or its equivalents. For best results to be obtained apply to mature cotton plants (See Time of Application section of this label). Wait until unopened bolls have reached adequate maturity not to affect the desired cotton yield. Certified cottonseed producers should consult seed companies as to proper boll and seed maturity requirements for their varieties. Low nighttime temperatures (if expected to be below 60°F) can reduce defoliation and decrease re-growth suppression.

Apply DETACH ULTRA at 0.5-0.2 lb. active ingredient / acre (1.6-6.4 fluid ounces / acre) plus Ethephon® 6 at 1-2 lbs. active ingredient acre (32-64 ounces / acre).

Under conditions of excessive re-growth potential or expected low temperatures use the higher rates of DETACH ULTRA.

## **TANK MIX OF DETACH ULTRA PLUS ETHEPHON FOR DEFOLIATION ENHANCEMENT:**

Lower rates of Ethephon® 6 or its equivalents (not high enough to promote boll opening) can be tank mixed with DETACH ULTRA to improve defoliation. Ethephon® 6 can still be used in subsequent applications to promote boll opening following tank mix enhancement applications of DETACH ULTRA and Ethephon® 6. Follow Ethephon® 6 label instructions and do not exceed the maximum usage rate of 2.0 lb. a.i./acre for combined applications.

Apply DETACH ULTRA 0.05 – 0.2 lb. active ingredient/acre (1.6-6.4 fluid ounces/acre) plus Ethephon® 6 at 0.25 lbs. active ingredient/acre (1/3 pint per acre). If excessive re-growth is anticipated or low temperatures are expected, use the higher rates of DETACH ULTRA.

## **TANK MIX OF DETACH ULTRA WITH TRIBUFOS PRODUCTS (DEF®/FOLEX®)**

Under less favorable conditions apply tank mixes of DETACH ULTRA and DEF® 6/ FOLEX® 6EC to improve defoliation and re-growth suppression. Conditions such as nighttime temperatures on day of application of less than 60°F and for three consecutive days following application are considered to be less than favorable.

Make tank mix application to mature cotton with at least 60% open bolls to achieve best activity.

## **RATE OF APPLICATION FOR DETACH ULTRA – TRIBUFOS TANK MIXES**

DETACH ULTRA at 1.6 to 6.4 fl. oz. /A + DEF® 6 at 0.5- 2.0 pints per acre.

DETACH ULTRA at 1.6 to 6.4 fl. oz. /A + FOLEX® 6 EC at 0.5-2.0 pints per acre.

Always use higher rates of DETACH ULTRA when excessive re-growth is expected.

Organophosphate defoliant and maximum rates of DETACH ULTRA when tank mixed during very high air temperatures can cause desiccation.

Use higher rate of DEF® 6/FOLEX® 6EC when nighttime temperatures are between 60° F - 65°F.

Tank mix of DETACH ULTRA/ DEF®6 / FOLEX® 6EC instructions:

Follow MIXING INSTRUCTIONS and after DETACH ULTRA is completely dispersed THEN add the required amount of DEF®6 / FOLEX® 6EC to spray tank.

Do not exceed a total of 0.3 lb. active ingredient (9.6 fluid ounces) of DETACH ULTRA per acre per season if a second application of the labeled tank mix is required.

Refer to DEF®6/FOLEX®6EC labels for use directions and cautions concerning those products and tank mixing compatibility with DETACH ULTRA.

**DO NOT USE TANK MIX OF DETACH ULTRA WITH DEF®6 OR FOLEX®6EC IN STARR, HIDALGO, WILLACY, AND CAMERON COUNTIES OF TEXAS.**

#### **IMPORTANT CLEANOUT INSTRUCTIONS**

When tank mixing organophosphate defoliant with DETACH ULTRA a residue may form in application equipment. This residue can best be flushed out of the spraying system by using a commercial tank cleaner when done while residue is still fresh and moist. **DO NOT ALLOW EQUIPMENT TO DRY BEFORE CLEANOUT.** Consult your State Extension Cotton Specialist for recommended tank cleaners and cleaning procedures.

Tank cleaner and water should be used immediately after application. The entire system including nozzles, booms, application tanks, sumps, pumps, and transfer lines, should be flushed. Allowing the spray solution to dry in the application equipment can result in residues that are more difficult to remove. **Dried residues are extremely difficult to remove and require commercial tank cleaner to remain in equipment filled to capacity, for 7 days and then thoroughly flushed and rinsed.**

Spray application equipment that has been inadequately cleaned will contain residue of DETACH ULTRA. The residue may be released during subsequent applications that could cause damage to subsequent crops.

**To the extent consistent with applicable law, J. OLIVER PRODUCTS, LLC assumes no liability for crop damage due to spray equipment that has not been properly cleaned.**

#### **CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with 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 use of the product in a manner inconsistent with its labeling, all of which are beyond the control of J. Oliver Products, LLC or the seller. To the extent consistent with applicable law, all such risks shall be assumed by the buyer. J. Oliver Products, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use, subject to the inherent risks, referred to above. To the extent consistent with applicable law, J. OLIVER PRODUCTS LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. To the extent consistent with applicable law, IN NO CASE SHALL J. OLIVER PRODUCTS LLC OR THE SELLER BE LAIBEL FOR CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES RESULTING FORM THE USE OR HANDLING OF THIS PRODUCT. J. Oliver Products, LLC and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing Conditions of Sale and Warranty which may be varied only by writing signed by a duly authorized representative of J. Oliver Products, LLC

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Ethepon 6® is a registered trademark of Micro Flo Company.  
FOLEX® is a registered trademark of AMVAC Chemical Corporation.