

#### U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

5905-616	

EPA Reg. Number:

Date of Issuance:

3/22/18

# NOTICE OF PESTICIDE:

X Registration
Reregistration
(under FIFRA, as amended)

Term of Issuance:
Unconditional

Name of Pesticide Product:

Omni Brand Ethephon 6 lb

Name and Address of Registrant (include ZIP Code):

Bill Washburn Helena Chemical Company 225 Schilling Blvd, Suite 300 Collierville, TN 38017

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

- 1. Submit and/or cite all data required for registration/registration/registration review of your product when the Agency requires all registrants of similar products to submit such data.
- 2. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one year study is required to satisfy these data requirements. You have 18 months from the date of registration to provide these data.

Signature of Approving Official:	Date:		
Tomfish	3/22/18		
Tony Kish, Product Manager 22			
Fungicide Branch, Registration Division (7505P)			

- 3. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 5905-616."
- 4. Submit one copy of the revised final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 10/23/2017
- Alternate CSF 1 dated 3/4/2018

If you have any questions, please contact Lindsay Roe by phone at 703-347-0506, or via email at roe.lindsay@epa.gov.

Enclosure

# ACCEPTED

Mar 22, 2018

IVIAI 22, 2010

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the

EPA Reg. No. 5905-616

pesticide registered under

# **OMNI BRAND ETHEPHON 6 LB**

# FOR COMMERCIAL USE OR AGRICULTURAL USE ONLY NOT FOR RESIDENTIAL USE

ACTIVE INGREDIENT:	
Ethephon (2-Chloroethyl) phosphonic acid*	55.4%
INERT INGREDIENTS:	
TOTAL	100.0%

# 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 this label, find someone to explain it to you in detail.)

FIRST AID						
IF IN EYES	Hold eye open and rinse slowly and gently with water for 15-20 minutes.					
	<ul> <li>Remove contact lenses, if present after the first 5 minutes, then continue</li> </ul>					
	rinsing eye.					
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>					
IF ON SKIN OR	Take off contaminated clothing.					
CLOTHING	<ul> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>					
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>					
IF SWALLOWED	Call a poison control center or doctor immediately for treatment advice.					
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>					
	<ul> <li>Do not give anything by mouth to an unconscious person.</li> </ul>					
	<ul> <li>Do not induce vomiting unless told to by a poison control center or</li> </ul>					
	doctor.					
IF INHALED	<ul> <li>Move person to fresh air.</li> </ul>					
	<ul> <li>If person is not breathing, call 911 or an ambulance, then give artificial</li> </ul>					
	respiration, preferably mouth-to-mouth if possible.					
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>					

**NOTE TO PHYSICIAN**: Probable mucosal damage may contraindicate the use of gastric lavage. Treat symptomatically, as there is no specific antidote. Additionally, patient may have been exposed to materials other than this product. This product is an acid; therefore, it is contraindicated to attempt to neutralize it with alkaline materials. Gastric lavage should be undertaken with care to victims of overexposure by ingestion, given the potential for esophageal or stomach perforation. Due to a potential for pulmonary edema, any patients that have had severe exposure to this product should be kept under medical observation for up to 72 hours.

# **HOTLINE NUMBER**

**EMERGENCY TELEPHONE NUMBERS:** Have the product container or label with you when calling a poison control center or doctor or going for treatment. **FOR CHEMICAL EMERGENCY:** Spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300

Refer to side panel for additional precautionary statements.

EPA Reg. No.5905-ARA	AD xxxxxx
EPA Est. No	NET CONTENTS:

# Manufactured For:

Helena Chemical Company 225 Schilling Boulevard, Suite 300 Collierville, TN 38017

<sup>\*</sup>This product contains 6 pounds ethephon per gallon

# PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER:** Causes irreversible eye damage and skin burns. Harmful if swallowed. Harmful if absorbed through skin. Do not get in eyes or on 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

Applicators and other handlers must wear:

- 1. Coveralls over long-sleeved shirt and long pants.
- 2. Chemical-resistant gloves made of any waterproof material, such as polyvinyl chloride, nitrile rubber, or butyl rubber.
- 3. Chemical-resistant footwear plus socks
- 4. Protective eyewear (goggles, face, shield, or safety glasses).
- 5. Chemical-resistant headgear for overhead exposure.
- 6. Chemical-resistant apron when mixing or loading or cleaning equipment.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

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:

- 1. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- 2. Remove clothing/PPE immediately if pesticide gets inside. Then wash body thoroughly and put on clean clothing.
- 3. 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 contaminate water used for domestic purposes or irrigation.

### **USE PRECAUTIONS**

Do not plant another crop within 30 days after treatment.

When preparing a spray solution of this product, do not mix any more spray solution than is needed for applications to be made that day. When applications are finished for the day, dispose of any remaining spray solution in a manner as directed by this label.

Do not apply Omni Brand Ethephon 6 lb through any type of irrigation system.

Avoid spray drift to nearby crops, as this product will cause modifications in plant growth. Plant injury or reduced yields will result.

# AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR.

The interaction of many equipment-and-weather-related factors determines 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 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.

- 1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

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.

# **AERIAL DRIFT REDUCTION ADVISORY**

# 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 manufacturer'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 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**

Applications should not be made at a height greater than 10 feet above the top of the target 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 crosswind, the swath will be displaced downwind. Therefore, on the up and

down edges of the field, the applicator should compensate for the displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with the increasing drift potential (higher wind, smaller drops, etc.).

#### WIND

Drift potential is lowest between wind speeds 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 spray 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 both hot and dry.

# **TEMPERATURE INVERSIONS**

Applications should not occur 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 light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and 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, the movement of smoke from a ground source or an aircraft smoke generator can also identify inversions. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

# **SENSITIVE AREAS**

The pesticide should only be applied 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).

# **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.

# **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, notification to workers, and restricted-entry intervals. 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 48 hours.

The REI increases to 72 hours in outdoor areas where average rainfall is less than 25 inches a year.

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:

- 1. Coveralls over long-sleeved shirt and long pants.
- 2. Chemical-resistant gloves made of any waterproof material, such as polyvinyl chloride, nitrile rubber, or butyl rubber.
- 3. Chemical-resistant footwear plus socks.
- 4. Protective eyewear.

5. Chemical-resistant headgear for overhead exposure.

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

# STORAGE AND DISPOSAL

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

# **PESTICIDE STORAGE**

Store in a cool, dry place and away from food, feed and other pesticides.

# TO CONTAIN A SPILL

Be sure to wear the following when dealing with a spill of this product: Goggles or face shield, long-sleeved shirt, protective gloves, and full-length trousers. Surround the spill with a barrier and then absorb liquid by covering it with cat litter, sand or a commercial clay. If the product container is damaged, place the entire container along with the product in a secure receptacle and clearly label the contents. For any type of product spill, avoid contact with the spilled product and evacuate the area, keeping all unprotected persons and animals at a safe distance.

# PESTICIDE DISPOSAL

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

# **CONTAINER HANDLING**

# Rigid, Non-Refillable containers small enough to shake (i.e., with capacities equal to or less than 5 gallons)

Nonrefillable container. Do not reuse or refill this container. 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. Offer for recycling, if available or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If container is burned, stay out of smoke.

# Rigid, Non-Refillable containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs.)

Non-refillable container. Do not reuse or refill this container. 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 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. Offer for recycling, if available or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If container is burned, stay out of smoke.

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. Offer for recycling, if available or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If container is burned, stay out of smoke.

# PRODUCT INFORMATION

# COTTON

Omni Brand Ethephon 6 lb used as a foliar spray will improve boll opening of mature bolls that are unopened and assist in overall defoliation, which can result in improved yields and earlier harvesting. Foliar sprays of Omni Brand Ethephon 6 lb promote once-over harvesting that can increase efficiency.

# **TOBACCO (FLUE-CURED)**

A foliar spray of Omni Brand Ethephon 6 lb promotes early and uniform maturing of tobacco. Omni Brand Ethephon 6 lb reduces curing time, allowing more efficient use of curing barn space, and increased control over harvest schedules.

# **SPRAY PREPARATION**

Begin by filling the spray tank with 1/2 to 3/4 of the necessary spray volume and begin agitation. The required amount of Omni Brand Ethephon 6 lb and remaining amount of water can then be added. Prepare only as much spray solution as can be used on the day the product and water are mixed. Do not allow spray solution to stand overnight. Prevent spillage of concentrated product onto airplane parts or spray equipment.

# ANY SPILLS SHOULD BE RINSED IMMEDIATELY WITH PLENTY OF WATER.

This product is corrosive. Therefore, spills of concentrated product on the aircraft or other spray equipment should be avoided. Should such contact be made, immediately rinse with water. Use of a nurse tank is highly recommended for avoiding possible spills of concentrated formulation on spray equipment or any airplane parts.

# TANK MIXTURES WITH DEFOLIANTS AND INSECTICIDES

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

When tank-mixing or applying products in conjunction with Omni Brand Ethephon 6 lb, you must observe all applicable use precautions and recommended application rates on each product's label. This product, when tank-mixed with defoliants, may slightly inhibit boll-opening response.

Adequate agitation is essential in the spray tank. Tank mixtures need continuous agitation; do not allow to stand more than 5 to 10 minutes without agitation. Appropriate label use directions and precautions concerning defoliants and insecticides must be carefully read and observed.

# IF COTTON IS TO BE SPINDLE PICKED DO NOT MIX WITH DESICCANTS.

OMNI BRAND ETHEPHON 6 LB, WHEN TANK MIXED WITH SODIUM CHLORATE DEFOLIANTS. FORMS HYPOCHLOROUS ACIDS THAT UPON HEATING EMIT TOXIC CHLORINE FUMES. TANK MIXTURE OF THIS PRODUCT WITH SODIUM CHLORATE DEFOLIANTS IS PROHIBITED. EQUIPMENT CLEANING

OMNI BRAND ETHEPHON 6 LB is an acid based product and prolonged exposure to deposits will cause damage to metals, acrylic plastics and certain paints.

Within an hour of any contact with spray deposits, you should carefully rinse all exposed acrylic plastic-type materials, like aircraft windshields, and painted surfaces with detergent and water.

When applications are complete for the day, you should carefully rinse any and all metal parts of the aircraft and any spray equipment that has been in contact with spray deposits with a detergent and water solution.

# COTTON

PRODUCTS USED	WEATHER CONDITIONS	RATE OF APPLICATION				ME	TIMING	
		PT/A	LB Al	ACRES	GROUND	AIR**		
OMNI BRAND ETHEPHON 6 LB*	80°F or higher, hot and dry	1 1/3	1.0	6			Test for boll maturity* and when sufficient mature bolls for desired yield are present make	
	75° to 80° F and Dry	2	1.5	4	10-50 2 - 5 application. Bol 7 to 14 days ea	2 - 5	10-50 2 - 5	application. Bolls open 7 to 14 days earlier when treated.
	Above 65° F but cool or	2 2/3	2	3				
	Rank cotton							
OMNI BRAND ETHEPHON 6 LB + FOLEX Defoliant Tank Mix	Orton that is rank Or Has excess Fertility or Soil moisture	1/3	0.25	24	10 - 50	5 - 10	As a sequential treatment apply 5 to 7 days prior to Omni Brand Ethephon 6 lb boll opening application but NOT instead of the Omni Brand Ethephon 6 lb boll opening treatment	
OMNI BRAND ETHEPHON 6 LB + Thidiazuron	Cotton that is rank Or Has excess Fertility or Soil moisture	1/3	0.25	24	10 - 50	3 - 10	As a sequential treatment apply 5 to 7 days prior to Omni Brand Ethephon 6 lb boll opening application but NOT instead of the Omni Brand Ethephon 6 lb boll opening treatment.	

For Use as a Pre-Conditioner for Defoliation	WEATHER CONDITIONS	RATE OF APPLICATION		ONE GALLON TREATS	SPRAY VOLUME Gallons/Acre		TIMING
		PT/A	LB A.I.	ACRES	GROUND	AIR	
	Above 80° F, Hot and Dry	2/3	0.5	12	15-50	2-5	Omni Brand Ethephon 6 lb should be used 5 to 7 days before use of
	Above 65°F and Cool or	1 1/3	1.0	6			a defoliant. Used to promote top crop defoliation to prevent bottom crop deterioration and allow earlier harvest.
	Rank cotton						Carlier Harvest.

A pretreatment with a defoliant will enhance spray coverage when using Omni Brand Ethephon 6 lb in a boll opening treatment on cotton that has excessive vegetative growth or otherwise is spread across the middles. Use boll opening rates of Omni Brand Ethephon 6 lb as recommended. Observe label recommendations for the defoliant used and follow all label directions and precautions.

**\*\*NOTE:** For aerial applications in Arizona and California, use an application rate of at least 5 gallons of water per acre.

# **Boll Maturity**

A boll is mature when it is difficult to make a crosswise cut with a sharp knife, and when the outer seed coat has changed from white to a tan or light brown color. In addition, when squeezed between the thumb and fingers, a mature boll will not dent.

# **Use Limitations**

- Maximum labeled rate of Omni Brand Ethephon 6 lb is 2.0 lb ai for combined uses of Omni Brand Ethephon 6 lb (or other ethephon containing products) per acre per year. Do not exceed 2.0 lb ai/A/year.
- Boll Opening: If cotton is to be spindle picked do not mix with desiccants.
- Pre-Condition for Defoliation: Omni Brand Ethephon 6 lb and desiccants should not be tank mixed unless desiccation is desired. The use of a defoliant before there are sufficient mature unopened bolls can reduce expected yield.

# When to Harvest

Allow 7 days after a treatment with Omni Brand Ethephon 6 lb before harvesting. Harvest may commence at the point of optimum boll opening; however, please note that premature harvesting could reduce the boll opening advantage of the treatment and a delayed harvest could reduce quality and affect total yield due to lint dropping from the plant.

# TOBACCO (Flue-Cured Only)

APPLICATION TYPE	RATE OF OMNI BRAND ETHEPHON 6 LB (PT/A)	SPRAY VOLUME (GAL/A)	REMARKS
Directed Spray	1 1/3	50-60	Drop nozzles recommended. When selecting spray tips, use types TG or OC built to dispense 50-60 gallons of spray solution per acre at a tractor speed of 2-3 mph and a pressure of 35-40 psi. Place one nozzle on each side of the row and point the sprays at the leaves that are to be ripened and harvested, so as to ensure coverage. After this kind of application, it is essential to harvest any and all leaves showing yellowing of 20% or more.
Over-The-Top	1 1/3-2 2/3	40-60	Once the rest of the leaves on the stalk have reached maturity, you may make an Over-the-Top application. Follow directions as described under the section "Application Timing" to ensure that leaves are mature. When it appears that a normally mature crop requires some slight inducement in ripening, you may use the low usage rate. The high usage rate is advised under cooler than normal temperatures, and when plants have a predisposition to be rank and heavy. Test spray to verify maturity before spraying as outlined in "Application Timing".  Use three nozzles (one nozzle on each side of the row and one over the center of the row). Select nozzles that produce a fine mist and provide thorough coverage of all leaves, calibrated to apply appropriate volume at 40 to 60 psi.

# **USE LIMITATIONS**

- Applications of Omni Brand Ethephon 6 lb to immature leaves can result in loss of weight, reduced leaf quality and substandard coloring.
- Reduction in quality and yield may result from letting the crop over-ripen in the field following an application of this product.
- Treatment with Omni Brand Ethephon 6 lb should be delayed if inclement weather is expected that

- could prevent harvest.
- Applications of Omni Brand Ethephon 6 lb should not be made if rain is anticipated within 6 hours. Rainfall within this time period may reduce desired benefits.

# **APPLICATION TIMING**

For the best results Omni Brand Ethephon 6 lb should be applied when leaves have reached maturity and are not overly rank and green. Treatment timing and the number of leaves per stalk ready for harvest can be determined by test spraying several plants in various portions of the field and observing the response. Yellowing of a mature leaf will begin in 24 to 72 hours. If within 72 hours treated leaves fail to yellow this is an indication that they are not mature and will not respond to Omni Brand Ethephon 6 lb. Repeat above procedure after several days of natural maturing to verify proper application timing.

Determine the number of acres to be treated for available curing barn space by calculating the number of leaves per plant that will color.

**TEST SPRAY MIXTURE DIRECTIONS:** (1) Mix one tsp of this product into 1 qt of water. (2) Apply approximately 1 oz of this solution to every test plant. Be sure to cover each entire plant with a light mist. (3) If treated leaves do not color, then they are immature.

# WHEN TO HARVEST

Coloring of all mature leaves will begin within 24 to 72 hours post application of Omni Brand Ethephon 6 lb. Weather conditions such as, hot and sunny conditions can speed up the process while cool weather will delay the yellowing process. Treated leaves can be harvested when desired color intensity has been achieved.

Do not allow tobacco to become over ripe before starting harvest. Leaf drop can occur when tobacco is over ripe and left on the stalk. If a number of the bottom leaves have yellowed at the time of treatment, they should be harvested prior to spraying with Omni Brand Ethephon 6 lb.

With an over-the-top application, harvesting can begin 48 hours after Omni Brand Ethephon 6 lb application depending on weather conditions or to avoid over ripe tobacco. Tobacco harvested 48 hours after treatment may require more time in the coloring phase of the curing process.

# **CURING OMNI BRAND ETHEPHON 6 LB TREATED TOBACCO**

Experience in the curing procedures can be helpful in assessing tobacco condition and the time interval between treatment and harvest. Curing facilities vary greatly and along with weather conditions must be included before prescription temperature and ventilations schedules can be implemented. During the stages of late coloring and early drying of the leaves, great care must be observed.

The coloring process of Omni Brand Ethephon 6 lb treated tobacco will have begun when harvested, which can reduce the coloring phase time of curing. Drying treated tobacco faster should be considered. Additional coloring time of a few hours may be required if tobacco leaves are green or contain some green when harvested. Temperature and ventilation should be adjusted to dry tobacco as fast as possible without scalding if the leaves were completely yellow at harvest.

CONDITIONS OF SALE - LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES Read the Conditions of Sale - Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.

The directions on this label are believed to be reliable and must be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application

practices, all of which are beyond the control of Helena Chemical Company (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. To the extent consistent with applicable law, The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product shall be limited to, at Helena Chemical Company's election, one of the following:

- 1. Refund of the purchase price paid by buyer or user for product bought, or
- 2. Replacement of the product used

To the extent consistent with applicable law, the Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.