

HELENA. OSKIE

PLANT REGULATOR

For Agricultural Use Only. Not for Residential Use.

For Minimizing Lodging in Barley and Wheat. For use on Tobacco, Walnuts and Turf. Also, for the removal of Dwarf Mistletoe in Ornamental Conifers and Leafy Mistletoe in Ornamental Deciduous Trees and for the elimination of undesirable fruit on Ornamental Apple, Carob, Crabapple, and Olive trees.

ACTIVE INGREDIENT:

Ethephon [(2-chloroethyl)phosphonic acid]*	27.0%
INERT INGREDIENTS:	73.0%
TOTAL:	100.0%

*Contains 3 pounds ethephon 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.)

FIRST AID	
IF IN EYES	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes then continue rinsing. Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"> Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact: FOR 24- HOUR EMERGENCY MEDICAL ASSISTANCE CALL: 1-866-303-6952. FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300.	
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.	

See inside booklet for additional precautionary statements

EPA Reg. No. 5905-595
EPA Est. No. 5905-GA-001

AD 080812
NET CONTENTS _____

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

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER. Causes irreversible eye damage. Do not get in eyes, on skin 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 (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance chart.

Applicators and other handlers must wear:

- Goggles, Face shield, Safety glasses with front, brow and temple protection.
- Long sleeve shirt
- Long pants
- Chemical resistant gloves
- Shoes
- Socks

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

USER SAFETY REQUIREMENTS

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

ENGINEERING CONTROL 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

Wash thoroughly with soap and water after handling. 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.

IMPORTANT: Use of **HELENA OSKIE®** other than as described on this label is prohibited. Do not exceed the rate of **HELENA OSKIE®** per acre per year specified on this label.

DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING. READ ENTIRE LABEL BEFORE USING THIS PRODUCT.

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 regulations.

Do not contaminate water used for irrigation or domestic purposes.

Detrimental changes to plant growth, reduced yields, and plant injury may result from spray drift of this product to nearby crops and thus must be avoided.

Do not plant another crop within 30 days after treatment.

Do not apply **HELENA OSKIE®** through any type of irrigation system.

SPRAY DRIFT

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 $\frac{3}{4}$ 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 must be observed.

The applicator must be familiar with and take into account the information covered in *SPRAY DRIFT MANAGEMENT* section below:

SPRAY DRIFT MANAGEMENT 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 $\frac{3}{4}$ 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 downwind edges of the field, the applicator should compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

WIND

Drift potential is lowest between wind 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 the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover 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, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves 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).

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), 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 is 72 hours in areas where average rainfall is less than 25 inches per year.

Reentry workers must wear:

- Goggles, Face shield, Safety glasses with front, brow and temple protection.
- Coveralls
- Chemical Resistant Gloves
- Shoes
- Socks

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 such as Nitrile or Butyl rubber, shoes plus socks, protective eyewear, and 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.

This Product:

Loosens WALNUTS for an earlier and more efficient harvest.

Encourages earlier, uniform coloring of mature FLUE-CURED TOBACCO.

Minimizes lodging in WHEAT and BARLEY.

Eliminates leafy mistletoe from ORNAMENTAL DECIDUOUS TREES and dwarf mistletoe from ORNAMENTAL CONIFERS.

Removes unwanted fruit on APPLE, CRABAPPLE, CAROB, and OLIVE trees.

PRODUCT INFORMATION

Contact your Extension Pomologist, Farm Advisor, Horticultural Specialist or Micro Flo Company Representative for local recommendations on product spray volume, spray equipment and rates of application for varying weather conditions.

APPLICATION VOLUMES AND SPRAY COVERAGE

For optimum product efficacy, thorough spray coverage is necessary. This can be influenced by type of spray equipment, spray boom setup, nozzle selection, plant size, canopy density and spray pressure. Depending on these choices, the necessary spray volume will vary. For applications by air in California and Arizona, more than 5 gallons per acre must be used.

USE PRECAUTIONS

THE MIXTURE OF THIS PRODUCT WITH AMMONIUM THIOSULFATE IS PROHIBITED AS IT MAY CREATE TOXIC FUMES. Other than recommended on this label, this product must not be used with additives. Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures.

Upon mixture, this product must be applied as soon as possible; in no case should the spray solution be stored overnight.

Detrimental changes to plant growth, reduced yields, and plant injury may result from spray drift of this product to nearby crops and thus must be avoided. Do not plant another crop within 30 days after treatment.

This product is corrosive. Therefore, spills of concentrated product on the aircraft or other spray equipment must be avoided. Should such contact be made, immediately rinse with water.

EQUIPMENT CLEANING

This product is corrosive. As a result, spray deposit exposure will, over a period of time, damage metal, some paints and acrylic plastics. No more than one hour after exposure to spray deposits, these materials must be carefully rinsed with water and detergent.

TOBACCO

(Flue-Cured Only)

(Not for use in California)

A foliar spray of **HELENA OSKIE®** promotes early, uniform "yellowing" of mature tobacco. **HELENA OSKIE®** reduces curing time, allowing more efficient use of curing barn space, and increased control over harvest schedules.

HELENA OSKIE® increases the capacity of the curing barn by shortening the curing time and allows adjustments in harvest schedules.

HELENA OSKIE® can be used as a directed spray to the bottom or middle portion of the tobacco plant or as an over-the-top spray.

HELENA OSKIE® is not intended or recommended for use on immature tobacco.

Crop Situation	HELENA OSKIE® Pt/A	Specific Directions
Directed Spray Application	2 2/3	Use drop nozzles. Choose TG or OC spray tips designed to apply 50-60 gpa at 35-40 psi and at tractor speed of 2-3 mph. Use 2 nozzles per row; one on each side of the row dropped low enough to direct the spray to the leaves to be ripened and harvested. Thorough spray coverage is essential. With a directed spray, be sure to harvest all leaves with 20% or more yellowing.
Over-The-Top Application	2 2/3 to 5 1/3	Treat only when leaves remaining on the stalk are mature. To ensure remaining leaves are mature, test spray several tobacco plants as described under the section "Application Timing." Use the lower rate in a normally mature crop when experience indicates that minimum ripening inducement is required. Use the higher rate when the crop is heavy and has a tendency to be more rank or when temperatures are lower than normal. Always test spray to determine if the tobacco is mature enough to respond to treatment with HELENA OSKIE® . Apply over-the-top HELENA OSKIE® spray as a fine mist using three nozzles (one nozzle tip over the center of the plant, and one on each side) to assure all leaves are covered thoroughly, similar to the application pattern of systemic sucker control agents. Use a spray pressure of 40 to 60 psi.

RESTRICTIONS

Do not apply **HELENA OSKIE®** to immature leaves as this can result in unsatisfactory coloring, weight loss and reduced leaf quality.

Do not allow the crop to over ripen in the field after using **HELENA OSKIE®**, since this may cause some reduction in yield and quality.

Do not treat before anticipated major storm which could prevent harvest and result in crop loss.

Do not apply **HELENA OSKIE®** if rain is expected within 6 hours.

Do not harvest tobacco treated with **HELENA OSKIE®** sooner than 2 days after application.

Follow use rates listed above for labeled uses.

Do not exceed 5 1/3 pints of this product (2 lb ethephon) per acre per year.

APPLICATION TIMING

Successful results with **HELENA OSKIE®** call for treatment when leaves are mature, not overly rank green when sprayed. To easily determine the proper treatment timing and the number of leaves per stalk ready for harvest, test spray several plants in more than one location in each field and observe the response. Mature leaves will begin to yellow in 24 to 72 hours. Test leaves that fail to yellow in 72 hours are not mature and are not ready for **HELENA OSKIE®** treatment. Wait a few days to permit further natural maturing, then make another test spray or "maturity" check.

Determine acres to treat by first confirming the number of leaves per plant that will color, then use barn capacity to calculate the number of acres to treat.

A test spray can be prepared by mixing 2 2/3 teaspoons of **HELENA OSKIE®** in 1 quart of water. Apply about 1 ounce to each test plant covering all leaves with a fine mist. **HELENA OSKIE®** will not color immature leaves.

To avoid quality loss and/or possible leaf drop, harvest any yellowed leaves prior to application. Use lower rates under most conditions. Limit use of higher rates to cool (below 65° F at the time of treatment) slow ripening conditions.

WHEN TO HARVEST

All mature, sprayed leaves will begin to color within 24 to 72 hours after **HELENA OSKIE®** application. The yellowing process is weather dependent: cool weather will delay, while hot, sunny weather can speed up the process. Harvest treated tobacco when leaves have reached the desired color intensity.

Harvest can commence 48 hours after **HELENA OSKIE®** application. To determine harvest timing and avoid quality loss or leaf drop, closely monitor treated crop and weather conditions.

CURING HELENA OSKIE® TREATED TOBACCO

Curing procedures are as much an art as a science and each cure must be judged on the basis of tobacco condition, interval between treatment and harvest, weather and type of curing facility before prescription temperature and ventilation schedules can be established. To obtain maximum quality, care must be taken to observe and control the curing process closely, especially during the late "coloring" and early "drying" stages of the leaf.

HELENA OSKIE® treated tobacco will have started the coloring process when harvested, reducing the time required in the coloring phase of curing. Treated tobacco should be dried faster. If tobacco leaves are green or contain some green when harvested, it may be necessary to color them for a few hours. If the leaves are completely yellow, temperature and ventilation must be adjusted in a manner to dry the tobacco as fast as possible without scalding. Once the leaf is dried (3/4 dry), you should follow normal procedures for curing. Since **HELENA OSKIE®** treated leaves cure faster, treated and untreated leaves should not be cured together in the same barn.

WALNUTS[**]

THIS USE IS FOR WALNUTS IN CALIFORNIA ONLY. This product, when applied as a foliar spray, will help to loosen walnuts, thereby decreasing the mechanical shaking force needed during harvest. This contributes to better hull removal, yield size (from a once-over harvest), harvest efficiency, and earlier harvest.

Crop	HELENA OSKIE® (Pt/A)	Instructions	Comments
USE IN CALIFORNIA	2 to 3 1/3	<p>For spray concentration recommendations, see the chart below. Optimal results will occur when spray concentrations are between 200-900 ppm. Higher rates should be used during low humidity or temperatures. Pre-harvest intervals will decrease when using higher rates.</p> <p>Application should be made at temperatures between 60-95° F for optimal results. Applications at temperatures above 90° F and low humidity may be less effective due to spray evaporation.</p> <p>This product should be applied using equipment giving the highest spray penetration to provide thorough uniform coverage of walnut hulls. This is necessary to achieve optimal nut loosening and hull split. When the size of the tree inhibits optimal spray penetration, use of large air carrier sprayers or volume sprayer attachments is recommended.</p>	<p>Walnuts are mature when the packing tissue between kernel halves completes browning. Collect nut samples from throughout the tree canopy when determining percent nut maturity.</p> <p>Advancing Harvest: This product should be applied when maturity has been achieved by 95-100% of the nuts. Harvest should be made as soon as sufficient hullability occurs. Depending on weather conditions and variety of walnut, this usually happens approximately 10-16 days following application. Inspect regularly. Second shake should occur 10-12 days following the first.</p> <p>Once Over Harvest: Maturity and the chance for a once over harvest will be influenced by weather and growing conditions, as well as the variety of nut. Local fieldmen or Farm Advisors should be consulted to determine whether a once over harvest will be available. Treatments to mature walnuts should begin 10 days prior to the normal harvest time and 7-12 days prior to preferred harvest time.</p>

RESTRICTIONS

Quality may be diminished if application is made prior to the packing tissue brown (mature) stage.

Application of this product may cause some leaf drop.

Trees which are moisture-stressed, diseased, or have low vigor should not be treated as excessive leaf drop may result.

Twig dieback, extreme defoliation, diminished catkin formation or other tree injuries may occur if higher-than-recommended rates are applied. Be sure to measure accurately.

Pre-harvest interval is five (5) days.

Per year, do not apply more than 3 1/3 pt (1.25 lb ethephon) of this product per acre.

Spray Preparation Chart

Application Rate		Spray Volume (Gallons/A)				
		100	200	300	400	500
Pt/A	Lb/A	Concentration (ppm)				
2	0.75	900	450	300	---	---
2 2/3	1.00		600	400	300	---
3 1/3	1.25		750	500	375	300

WHEAT AND BARLEY

(NOT REGISTERED FOR USE IN CALIFORNIA)

This product can be applied as a preventative measure in a tank-mix with certain cereal insecticides and fungicides approved for such use. Such a tank mix should not be applied to plants stressed by cold, disease, heat, insect or moisture as a decrease in yield or injury to crops may occur. Application of a tank mix of this product with Tilt® may cause a decrease in yield or flag leaf burn.

Assessment of economics and plant conditions should guide treatments of insecticides and fungicides, which may or may not match with treatment timing of this product.

RESTRICTIONS

HELENA OSKIE® does not require the supplemental use of adjuvants, surfactants or wetting agents in most cases.

HELENA OSKIE® should not be mixed with herbicides or liquid nitrogen solutions such as UAN 28% or 32%.

This product should not be supplemented with adjuvants, surfactants or wetting agents or tank mixed with nitrogen solutions or herbicides.

Do not apply through any type of irrigation system.

Failure to observe label instructions may result in decreased product quality or yield.

Lodging reduction effects may not occur for up to seven days following treatment. Once crops are lodged, this product is not effective.

This product may affect certain disease infestations, such as mildew, rust and Septoria, and should be used in conjunction with a fungicide control program if necessary.

Yield loss may occur if, during or after application, plants are subject to disease, moisture or temperature stress.

Yield loss may occur if this product is applied under non-lodging conditions.

Always follow label temperature restrictions.

Harvest maturity may be delayed 1-4 days and heading by 1-2 days following use of this product. Additional harvest maturity delay may occur if crops are subject to extreme temperatures within five days following treatment. Extreme temperatures are any under 35° F or above 85° F for non-irrigated crops, or over 90° F in irrigated crops.

Because of the potential for maturity delay and, therefore, harvest delays, this product should not be used on late-seeded crops in short-season growing areas.

Secondary tillers may increase following application of this product to certain spring barleys. This may particularly occur if crop is subject to temperature or moisture stress.

Use of this product on Azure barley or Tyler wheat is prohibited.

This product should not be applied when rain will likely occur within six hours.

Grazing or foraging by livestock or cutting for hay or silage are prohibited. Mature straw at normal harvest may be consumed by animals.

A 30-day plant-back interval is required.

TREATMENT DECISION GUIDE

Shortly before application of this product, the fields to be treated should be checked to determine the chance lodging will occur. This product should only be applied under these circumstances:

Lodging is anticipated and likely will result in a considerable decrease in grain quality, harvest efficiency, and recoverable yield.

There is no disease stress or insect pressure on the crop.

There is little to no chance of crop stress following application because of adequate irrigation or soil moisture.

Extreme temperature fluctuations (as described above) are not anticipated to occur within five days following application.

Crop is at the proper growth stage: Feekes 8 to 10.

APPLICATION TIMING

This product should be applied at the point the flag leaf is slightly visible to the boot stage. Apply prior to awn emergence or sheath split. **These visual cues correspond to Feekes-Large Scale 8-10 and Zadok's Code 37-45.** Crop damage and decreased yields may occur if application contacts exposed heads.

APPLICATION

For best results, post-treatment temperatures should be no less than 60° F. Overlapping sprays should be avoided as yield and rate loss may be exaggerated.

Ground application: Application with conventional ground equipment should be made in at least 7 gals/A of water. Use of flat fan nozzles is suggested. Application with air foil-type equipment or by controlled droplet application (CDA) should be made in at least 5 gals/A of water. Spray boom should be adjusted to drive at moderate speed and at the height of the plant canopy to avoid an uneven application.

Aerial application should be made in at least 3 gals/A of water.

USE RATES

The application rate will be determined by environmental conditions and lodging pressure. Contact your state extension specialist for local recommendations on rates of application for varying conditions. The 1 pint/A rate should be used on more responsive varieties. Per year, do not apply more than 1 1/3 pints (0.5 lb ethephon) of this product per acre. Pre-harvest interval is forty (40) days.

BARLEY AND WHEAT APPLICATION RATES

CROP CONDITION	ANTICIPATED LODGING PRESSURE			COMMENTS
	MODERATE	HEAVY	SEVERE	
	APPLICATION RATE (Pt/A)			
Barley (Spring and Winter Seasons)	2/3	2/3 to 1	1 to 1 1/3*	A 2 pt/A rate may be necessary for use on certain vigorously growing tall varieties.
Winter Wheat	2/3	2/3 to 1	1 to 1 1/3*	For certain tall straw varieties (e.g., "Roughrider" and "Agassiz"), the listed rates may be unable to control lodging under severe lodging conditions.
Most Spring Wheats	2/3	2/3	1	For certain tall durum wheats (e.g., "Vic"), the listed rates may be unable to control lodging under severe lodging conditions.
Sensitive Variety or High Temperature **	2/3	2/3	2/3	
RESTRICTIONS				
* Application with the 2-pint rate should be restricted to the following anticipated yield-decreasing conditions: 1) very tall varieties that are lodging-prone, 2) cereal types like durum notorious for severe lodging, or 3) irrigated crops that are subject to abnormally severe lodging.				
** This product should not be applied if it is anticipated that anytime during the five days following treatment, temperatures are to go above 85° F for non-irrigated crops or 90° F for irrigated crops.				

NON-IRRIGATED WHEAT AND BARLEY

Application of this product to non-irrigated wheat and barley in states West of the Mississippi River is prohibited except West of the Cascade Range in the States of Oregon and Washington.

IRRIGATED WHEAT AND BARLEY

To prevent stress on the crop, it is recommended to irrigate prior to and after twenty-four (24) hours following application. Irrigation should continue through the period of grain head filling if weather remains hot and dry. Please note that considerable decreases in yield and plant quality may occur if crop is subject to heat stress and moisture during grain fill and antithesis. As a result, it is imperative to avoid plant stress during these periods when treating with this product.

GROWTH STAGE CHART

Growth Class	2 nd Node Detect able	Flag leaf Barely Visible	Flag Leaf Ligule Visible	Swollen Boot	First Spikelet Visible	Inflorescence 3/4 complete
Feekes-Large Scale	7	8	9	10	10.1	10.4
Zadok's Code	32	37	39	45	50	57

Treatment time advice	Too Early		Too late	
-----------------------	-----------	--	----------	--

MISTLETOE REMOVAL[]**

DWARF AND LEAFY MISTLETOE REMOVAL: A foliar spray of **HELENA OSKIE®** will remove dwarf mistletoe shoots in ornamental conifers and leafy mistletoe from ornamental deciduous trees.

Crop	HELENA OSKIE® (Pt/A)	Instructions	Comments
DWARF MISTLETOE ON ORNAMENTAL CONIFERS	1 1/3 pt per 20 gal	Apply as a foliar spray to dwarf mistletoe shoots before mistletoe seed dispersal. For effective removal, all mistletoe shoots must be sprayed to wet.	Applications made in conjunction with silvicultural mistletoe management will prevent spread of the mistletoe parasite to other parts of the tree and other trees.
DOUGLAS FIR, ORNAMENTALS	2/3 pt per 20 gal	Use of a nonionic surfactant at recommended rates may increase effectiveness. Treat any mistletoe regrowth before seed dispersal.	Mature needle drop, that normally occurs in the fall, may be hastened by the use of HELENA OSKIE® . Applications of higher rates on Douglas fir may result in excessive needle drop.
LEAFY MISTLETOE ON ORNAMENTAL DECIDUOUS TREES	2 2/3 pt per 20 gal	Make applications after fall leaf drop through mid-winter. For effective removal, all mistletoe shoots must be sprayed to wet. Use of a nonionic surfactant at recommended rates may increase effectiveness. Any mistletoe regrowth should be treated during the labeled application window.	Large mistletoe infections and mistletoe found in mesquite may be difficult to control with a single application and retreatment may be necessary.

[** Not currently registered for use in California.]

FRUIT ELIMINATION[]**

(Ornamental Use Only)

UNDESIRABLE FRUIT ELIMINATION: A foliar spray of **HELENA OSKIE®** will reduce or eliminate undesirable fruit development on apple, crabapple, carob and olive trees.

Crop	HELENA OSKIE® (Pt/A)	Instructions	Comments
APPLES, CRABAPPLES	0.33 (5 1/3 fl oz) to 0.5 (8 fl oz)	Apply as a foliar spray at the flower bud to full bloom stage, prior to fruit set. Wet foliage thoroughly. Over application of HELENA OSKIE® can result in excessive leaf drop and/or tree defoliation. Use higher rates when temperatures are cool.	Application must be made before fruit set for best results. Do not treat weak trees or trees under stress (drought, insect or disease damaged trees) as excessive leaf drop or twig drop can result.
CAROB (<i>Certonia siliqua</i>)	0.25 (4 fl oz)	Apply as a foliar spray. Wet all foliage thoroughly.	Some leaf drop or temporary leaf yellowing may occur after treatment. Do not use on small red fruited varieties of crabapple as fruit elimination will not be satisfactory.
OLIVE (<i>Olea europaea</i>)	0.5 (8 fl oz)	Amount of spray will depend on tree size.	

[** Not currently registered for use in California.]

TURF

(Do not use in California for Seedhead Suppression)

HELENA OSKIE® is a plant growth regulator that may be used to suppress the formation of seedheads of various plants including *Poa annua* and white clover. It may also be used to suppress the growth of certain cool season grasses. HELENA OSKIE® is foliarly absorbed and is most effective on actively growing healthy turf. For best results, apply in sufficient volume of water to provide uniform coverage. Use of spreader/sticker with an application of HELENA OSKIE® is not necessary.

HELENA OSKIE® is rainfast within 2 hours. Do not allow entry into treated area until HELENA OSKIE® has dried. For maximum performance, delay mowing until the day after application.

Precautions and Restrictions:

- Do not treat turfgrass with poor root systems or growing under stress due to poor soil conditions, drought, disease, or insect damage.
- Do not use HELENA OSKIE® in areas where excessive thatch has accumulated.
- Scalping may occur on creeping bentgrass cultivars after more than 2 applications of HELENA OSKIE® for *Poa* seedhead suppression.
- HELENA OSKIE® has been used successfully on many bentgrass cultivars. Tolerance testing should be done in new cultivars before extensive use.
- Do not exceed a maximum of 20 fl oz of HELENA OSKIE® per 1,000 sq ft per year.
- Do not mix with ammonium thiosulfate. This tank mix may result in the formation of toxic fumes.

Seedhead Suppression: Foliar application of HELENA OSKIE® will provide suppression of *Poa annua* and white clover seedheads. Make the initial application prior to the emergence of new seedheads. A period of 2-3 weeks after application is required for maximum performance. Repeat applications may be made to predominately *Poa annua* or white clover sites as needed, but not less than two weeks after the previous application.

APPLICATION	SITES	RATE	SPRAY VOLUME
<i>Poa annua</i> and White Clover Seedhead Suppression Reapplication interval: 2 weeks or greater for all labeled grasses	Golf course turf including Greens, Tees, Fairways, and Roughs Commercial Turfgrasses including Bentgrass, Kentucky Bluegrass, Perennial Ryegrass, Tall and Fine Fescue, and Bermudagrass	3 1/3 fl oz/1,000 sq ft	1.0-2.0 gal/1,000 sq ft

Tank Mixture with Products containing the active ingredient Trinexapac-Ethyl:

Tank mixtures of HELENA OSKIE® at 3 1/3 fl oz/1,000 sq ft and trinexapac-ethyl-containing products at 0.125 or 0.25 fl oz/1,000 sq ft can be used to promote seedhead suppression as well as turfgrass quality. Multiple applications of the tank mix combination may be needed. The number of applications must not exceed labelled rates or timings for either product applied once. Follow the recommendation on each product label for the most restrictive application interval for each turfgrass. Application of this tank mixture during frost periods may cause temporary turf discoloration.

Growth Suppression: An application of HELENA OSKIE® slows the growth of turfgrasses, thus reducing the required frequency of mowing and the volume of clippings collected. For best turfgrass growth regulation, apply HELENA OSKIE® when daytime air temperatures are 65°F and rising. HELENA OSKIE® should only be applied once turfgrass mowing heights have been established for the season. Avoid multiple applications of HELENA OSKIE® in areas where excessive thatch has accumulated.

APPLICATION	SITES	RATE	SPRAY VOLUME
Turfgrass Growth Regulation Reapplication intervals: • Kentucky Bluegrass - 7 weeks • Perennial Ryegrass - 7 weeks • Tall/Fine Fescue - 4 weeks • Bentgrass -	Golf course turf including Greens*, Tees*, Fairways, and Roughs Commercial Turfgrasses Including Bentgrass, Kentucky Bluegrass, Perennial Ryegrass, Tall and Fine Fescue	3 1/3 fl oz/1,000 sq ft	1.0 to 2.0 gal/1,000 sq ft

4 weeks			
---------	--	--	--

*Do not use in California on greens or tees unless accompanied by supplemental labeling.

NOTE: Since HELENA OSKIE® is an acidic product, prolonged exposure to spray deposits will damage acrylic plastics, certain paints and metals. Thoroughly rinse all exposed acrylic-plastic materials and painted surfaces with a detergent and water within one hour after exposure to spray deposits.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store pesticide in original container. If container is broken or contents have spilled, follow all precautions as outlined above and clean up immediately. Before starting clean up, put on the appropriate protective clothing such as long pants or coveralls, long-sleeved shirt, appropriate footwear and gloves, and face shield or goggles if needed. Soak up spilled product with an appropriate media such as sand, earth, or clay cat litter and dispose of waste at an approved waste disposal facility.

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:

Containers 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 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. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other processes allowed by state and local authorities.

Containers greater 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. 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 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 other processes allowed by state and local authorities..

REFILLABLE CONTAINERS: 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 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. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other processes allowed by state and local authorities.

Warranty and Disclaimer Statement

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. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Helena Chemical Company and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. All such risks shall be assumed by the user or buyer. Helena Chemical Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions. This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Helena Chemical Company, and is subject to the inherent risks described above.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, HELENA CHEMICAL COMPANY DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, HELENA CHEMICAL COMPANY, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF HELENA CHEMICAL COMPANY IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF HELENA CHEMICAL COMPANY, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT HELENA CHEMICAL COMPANY'S ELECTION, THE REPLACEMENT OF THE PRODUCT.

HELENA OSKIE® is a trademark of Helena Holding Company.