

PM 23

45639-173

2-18-99

10/23

FEB 18 1999

Dr. Bert Volger
AgrEvo USA Company
Little Falls Centre One
2711 Centerville Road,
Wilmington, DE 19808

Dear Dr. Volger:

Subject: Hoelon® 3EC Herbicide
EPA Registration No. 45639-173
Your Letter Dated February 8, 1999, Request To
add Tank Mix Claims for Hoelon 3EC Herbicide with
Harmony® GT Herbicide and with Buctril® Herbicide and
Harmony® GT Herbicide for Use In the Culture of Barley and
Wheat

The propose label amendments have been reviewed and found
acceptable amendments to the registration of the subject pesticide
product under the Fededal Insecticide, Fungicide and Rodenticide
Act, as amended, provided that you:

- o Submit one (1) copy for the final printed labeling
before you release the product for shipment under
the revised label.

If this condition is not complied with, the registration
will be subject to cancellatin in accordance with FIFRA,
section 6(e). Your release for shipment of the product
under this label constitutes acceptance of this condition.

A stamped copy of the label is enclosed for your records.

Sincerely yours,

Joanne I. Miller
Product Manager (23)
Herbicide Branch
Registration Division (7505C)

Enclosure

CONCURRENCES

SYMBOL							
SURNAME							
DATE	E:Wilson	Diskette	Fenoxprop	02-18-99			

20/23

RESTRICTED USE PESTICIDE
DUE TO ONCOGENICITY IN LABORATORY MICE*
For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

HOELON® 3EC HERBICIDE

**For Control of Wild Oats and Other Annual Grasses
in Wheat (Including Durum Wheat) and Barley**

ACTIVE INGREDIENT:

diclofop-methyl: methyl 2-[4-(2,4-dichlorophenoxy) phenoxy]propanoate **34.7%†**

INERT INGREDIENTS: **65.3%**

TOTAL 100.0%

†Equivalent to 3.0 pounds of active ingredient 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).

EPA Registration Number 45639-173

EPA Est.No:

Net contents:



**ACCEPTED
with COMMENTS
In EPA Letter Dated**

FEB 18 1999

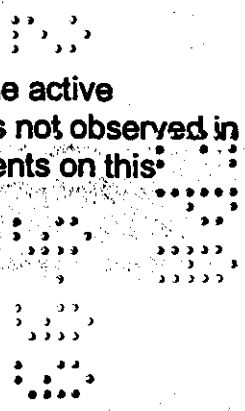
**Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.**

45639-173

AgrEvo USA Company

**Little Falls Centre One
2711 Centerville Road
Wilmington, DE 19808**

*The Environmental Protection Agency has concluded that diclofop-methyl, the active ingredient in this product, produced tumors in laboratory mice. This effect was not observed in other species tested. The user must read and follow all precautionary statements on this label. Give particular attention to protective clothing requirements.



FIRST AID

In case of skin or eye contact: Immediately flush with plenty of water for at least 15 minutes.

IF SWALLOWED: Do not induce vomiting. HOELON® 3EC Herbicide contains petroleum distillates. Call a physician. Vomiting should be supervised by a physician because of the possible pulmonary damage via aspiration of the solvent.

NOTE TO PHYSICIAN: Aspiration hazard may contraindicate the use of gastric lavage.

IN CASE OF MEDICAL, ENVIRONMENTAL, OR TRANSPORTATION EMERGENCIES OR INJURIES, CALL 1-800-471-0660 (24 HOURS/DAY).

PRECAUTIONARY STATEMENTS

DANGER

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Corrosive. Causes irreversible eye damage. Do not get in eyes or on skin or clothing. Avoid contact or inhalation of spray mist. Do not take internally.

PERSONAL PROTECTIVE EQUIPMENT

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

APPLICATORS AND OTHER HANDLERS MUST WEAR:

Coveralls over long-sleeved shirt and long pants; chemical-resistant gloves, such as barrier laminate or butyl rubber ≥14 mils, nitrile rubber ≥14 mils or Viton ≥14 mils; chemical-resistant footwear plus socks; protective eyewear; chemical-resistant headgear for overhead exposure; chemical-resistant apron when cleaning equipment, mixing or loading; for exposures in enclosed areas, a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister

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STORAGE AND DISPOSAL

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

Do not use or store near heat or open flame. Do not store below 20°F.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. 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 DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

[Or, when mini-bulk containers are used:]

Container Disposal: This is a sealed returnable container to be used only for HOELON 3EC Herbicide. When this container is empty, it must not be opened, cleaned, or discarded. Empty containers must be returned to the original filling location and must be refilled with HOELON 3EC only at an authorized bulk distribution location.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This labeling must be in the possession of the user at the time of the application. 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 (PPE), 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 24 hours.

Exception: if the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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 over long-sleeved shirt and long pants; chemical-resistant gloves, such as barrier laminate, butyl rubber \square 14 mils, nitrile rubber \square 14 mils or Viton \square 14 mils; chemical-resistant footwear plus socks; protective eyewear.

GENERAL INFORMATION

HOELON 3EC Herbicide is a highly effective herbicide for the control of a broad spectrum of annual grassy weeds in wheat (including durum wheat) and barley. HOELON 3EC is a 3-pound-active-ingredient-per-gallon emulsifiable concentrate. Depending on the crop and the grass species being controlled, HOELON 3EC may be applied preplant-incorporated (to wheat only), preemergence or postemergence. Read and carefully follow all label directions specified in this labeling.

APPLICATION EQUIPMENT NOTES

GROUND

Whether applying HOELON 3EC Herbicide preplant-incorporated, preemergence or postemergence, thorough uniform coverage of the soil or target weeds is critical to achieving satisfactory results. The use of flat fan nozzles, spaced 10 or 20 inches apart across the boom is recommended for optimum coverage with ground equipment.

Ground applications should be in at least 10 gallons of water carrier per acre, using a minimum of 40 psi. Ground speed for application should not exceed 10 mph.

AERIAL

Aerial applications must be applied in at least 5 gallons of water carrier per acre. Use spray nozzle tips and sufficient pressure to provide a uniform pattern and a median droplet size of 200 to 350 microns. DO NOT wide swath the application; HOELON 3EC Herbicide is a contact material when used postemergence and highly immobile in the soil when applied preplant incorporated or preemergence. Avoid applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. DO NOT make aerial applications within 100 feet of a lake, stream, drainage basin, tidal marsh, or estuary.

Only clean water, free of suspended matter or other contaminants, should be used when applying HOELON 3EC Herbicide.

USE PRECAUTIONS

1. HOELON 3EC Herbicide does not control broadleaf weeds or perennial grassy weeds.
2. DO NOT allow livestock to graze treated fields.
DO NOT harvest forage, hay or straw from treated fields prior to grain harvest.
3. DO NOT apply more than 1 application of HOELON 3EC Herbicide per growing season to wheat or barley.
4. HOELON 3EC Herbicide can be tank mixed with the broadleaf herbicides listed on this label for broad spectrum weed control. When tank mixing, do not exceed labeled application rates of the tank mix partner and use in accordance with the restrictions and use precautions of the partner's label.
5. Applications of MCPA (ester) herbicide may be applied at a rate of 1.5 ounces per acre as a tank mix with HOELON 3EC Herbicide and Buctril® Herbicide. DO NOT apply any other phenoxy, phenoxy-type, or Banvel® Herbicide within 5 days of a HOELON 3EC application, or reduced grassy weed control will occur.
6. DO NOT apply HOELON 3EC Herbicide through any type of irrigation system.
7. When controlling mixed infestations of grassy weeds, always use the rate that will control the least susceptible species.
8. In-furrow application of organophosphate type insecticides prior to HOELON 3EC Herbicide application may result in crop injury.

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INFORMATION ON HERBICIDE TOLERANT WEEDS

Repeated use of the same herbicide, or herbicide with the same mode of action, may result in tolerant weeds that will multiply to economic infestations if such herbicides are used year after year on the same fields. If such weed infestations appear, herbicides of a different mode of action should be considered or the field should be planted to a different crop that involves the use of a herbicide with a different mode of action. For further information, contact an AgrEvo USA Company representative or your State Weed Science Specialist.

DIRECTIONS FOR THE PREPLANT INCORPORATED USE OF HOELON 3EC HERBICIDE ON WINTER WHEAT

This product is registered for the preplant incorporated use to control downy brome, ripgut brome, Japanese brome, windgrass and bulbous bluegrass in the States of:

Colorado	Montana	South Dakota
Idaho	Nebraska	Utah
Kansas	Oregon	Washington

(The General Information section must also be read for complete use instructions.)

APPLICATION RATE INFORMATION

The use rate of HOELON 3EC Herbicide to control downy brome (*Bromus tectorum*), ripgut brome (*Bromus rigidus*), Japanese brome (*Bromus japonicus*), windgrass (*Apera interrupta*), and bulbous bluegrass (*Poa bulbosa*) will vary, depending on soil texture, soil organic matter content, soil moisture, and density of grass populations.

HOELON 3EC HERBICIDE APPLICATION RATES

Broadcast Rate in Pints/A		
% Organic Matter 1/2-2%	% Organic Matter 2-3%	% Organic Matter >3%
2-2 2/3	2 2/3	*

*On soils with greater than 3% organic matter, the 2 2/3 pints rate may provide only suppression of the grassy weeds listed on the preplant incorporated section of this label.

Use the highest recommended rate, according to the chart above, when heavy populations of annual grass (more than 25 plants per square foot) are anticipated (based on field history) and/or if soils are dry at the time of application.

INCORPORATION DIRECTIONS

HOELON 3EC Herbicide is highly immobile on the soil and must be mechanically incorporated into the annual grass germination zone to help insure satisfactory control.

Incorporate HOELON 3EC Herbicide into the soil to a maximum depth of 2 inches (do not set incorporation equipment to cut more than 4 inches deep). Incorporate one time within 48 hours after application, followed by a second incorporation, in a different direction from the first, prior to seeding.

INCORPORATION EQUIPMENT

If the seedbed is free of trash and clods at the time of application, the use of a spiketooth, springtooth or flextine harrow, operated at 3 to 6 mph, is recommended. If the seedbed is trashy at the time of application, use an implement that is capable of incorporating the trash in the top 2 inches of the soil. A skew treader operated at 4 to 6 mph is recommended. Chisel plows may be used for first pass incorporation only. Operate at a 3 to 4 inch depth at 4 to 6 mph. A chisel plow is defined as having 3 rows of up to 18 inch sweeps on no greater than 12 inch centers. Sweeps should be staggered so that no soil is left unturned. Field cultivators should be set to cut 3 to 4 inches deep and operated at a speed of at least 5 mph. A field cultivator used to incorporate HOELON 3EC Herbicide should have 3 to 4 rows of sweeps with "C" or "S" shaped shanks, spaced 7 inches or less and staggered so that no soil is left unturned. Conventional, deep furrow, or semi-deep furrow drills may be used for seeding.

PREPLANT INCORPORATED SPECIAL NOTES

1. DO NOT apply HOELON 3EC Herbicide preplant incorporated to barley, as barley damage will occur.
2. HOELON 3EC Herbicide may be tank mixed with liquid fertilizers. Follow label recommendations concerning rates and incorporation. Before mixing HOELON 3EC with fertilizer, perform a compatibility test in a quart jar. If the materials do not readily mix, do not tank mix HOELON 3EC with the fertilizer.

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**DIRECTIONS FOR THE PREEMERGENCE USE OF HOELON 3EC
HERBICIDE ON WINTER WHEAT**

This product is registered for preemergence use on winter wheat to control annual ryegrass in the States of:

- | | | |
|-----------|----------------|----------------|
| Alabama | Maryland | South Carolina |
| Arkansas | Mississippi | Tennessee |
| Delaware | Missouri | Texas |
| Georgia | North Carolina | Virginia |
| Indiana | Oklahoma | Washington |
| Kentucky | Oregon | West Virginia |
| Louisiana | Pennsylvania | |

(The General Information section must also be read for complete use instructions.)

HOELON 3EC HERBICIDE APPLICATION RATES

Soil Texture	Broadcast Rate in Pints/A	
	% Organic Matter 1/2-2%	% Organic Matter >2%
Coarse (sandy loam, loamy sand)	2	2 2/3
Fine (loam, silt loam, silt)	2 2/3	2 2/3

Use the 2 2/3 pints/acre rate of HOELON 3EC Herbicide in fields that have a history of heavy annual ryegrass pressure. If rainfall does not occur within 7 days after application, reduced control may occur.

PREEMERGENCE SPECIAL INSTRUCTIONS

- DO NOT apply HOELON 3EC Herbicide preemergence to barley as barley damage will occur.
- HOELON 3EC Herbicide may be mixed with liquid fertilizers when making preemergence applications. Follow label recommendations concerning HOELON 3EC rates. Before tank mixing HOELON 3EC with fertilizer, perform a compatibility test in a quart jar. If the materials do not readily mix, do not tank mix HOELON 3EC with the fertilizer.
- HOELON 3EC Herbicide applied preemergence surface will not provide adequate brome control or control wild oats.

DIRECTIONS FOR THE POSTEMERGENCE USE OF HOELON 3EC HERBICIDE ON WINTER WHEAT AND SPRING WHEAT (INCLUDING DURUM WHEAT)

This product is registered for postemergence use on wheat (including durum wheat) in the following States:

- | | | | | | |
|----------|-----------|-------------|----------------|--------------|-------------|
| Alabama | Idaho | Maryland | Nevada | Oregon | Texas |
| Arizona | Illinois | Minnesota | New Mexico | Pennsylvania | Utah |
| Arkansas | Indiana | Mississippi | North Carolina | S. Carolina | Virginia |
| Colorado | Kansas | Missouri | North Dakota | S. Dakota | Washington |
| Delaware | Kentucky | Montana | Oklahoma | Tennessee | W. Virginia |
| Georgia | Louisiana | Nebraska | | | |

(The General Information section must also be read for complete use instructions.)

Apply HOELON 3EC Herbicide as a broadcast postemergence spray at the rates listed below:

Amount of HOELON 3EC Herbicide Per Acre (Pints) ¹ Relative to Growth Stage of Annual Grassy Weeds			
Susceptible Annual Grassy Weeds	1-3 Leaf	3-4 Leaf	5 Leaf-2 Tillers
Annual ryegrass (Italian) ² Lolium multiflorum	1 1/3	1 1/3-2	2-2 2/3
Broadleaf signalgrass (suppression) Brachiaria platyphylla	2 2/3	DO NOT APPLY*	
Crabgrass ³ Digitaria sanguinalis	2 2/3	* Reduced Grassy	
Persian darnel Lolium persicum	2 2/3	Weed Control	
Fall panicum Panicum dichotomiflorum		Will Occur	
Barnyardgrass watergrass Echinochloa crus-galli			
Giant foxtail Setaria faberii			
Green foxtail pigeongrass Setaria viridis	2 to 2 2/3	2 2/3	
Yellow foxtail pigeongrass ³ Setaria lutescens			
Wild oat Avena fatua			
Itchgrass Raouigrass Rottboellia exaltata			
Volunteer corn Zea mays			
Witchgrass (suppression) Panicum capillare			
Smallseed canarygrass (suppression) ⁴ Phalaris minor			
Spring milletgrass Millium vernale			
Hooded canarygrass ⁴ Phalaris paradoxa			

¹ When controlling mixed populations of grassy weeds, always use the rate that will control the least susceptible species.

2 Annual ryegrass may also be controlled pre-emergence in winter wheat. See appropriate recommendation section in this labeling.

3 For best control of crabgrass and yellow foxtail, application should be made before the second leaf fully emerges.

4 See specific control recommendations for smallseed and hooded canarygrass in that section of the labeling.

POSTEMERGENCE SPECIAL INSTRUCTIONS

When using HOELON 3EC Herbicide postemergence in wheat to control annual grassy weed(s), and the weeds do not include annual ryegrass, broadleaf signalgrass, crabgrass, Persian dandelion or yellow foxtail, apply the 2 pints per acre rate when the annual grassy weeds are in the 1 to 3 leaf stage of growth, and growing conditions are optimal. In the north central region of the United States (east of the Rocky Mountains) in spring wheat and durum under normal growing conditions, the 1 to 3 leaf stage of wild oat plants generally occurs 16 to 26 days after planting. In the northwest region of the United States in spring wheat and durum (west of the Rocky Mountains) under normal growing conditions the 1 to 3 leaf stage of wild oat plants generally occurs 18 to 28 days after planting. In either region, under normal growing conditions, wild oat plants will add an additional leaf every 4 days. In either region, begin checking your fields 10 to 12 days after planting to assure correct application timing. Higher application water volumes and use rates of HOELON 3EC should be used when the majority of annual grassy weeds are not clearly in the specified stage of growth, if growth is retarded due to adverse growing conditions, or under heavy weed infestations. Apply HOELON 3EC before the first node (jointing) develops in the wheat plant.

Do not apply HOELON 3EC less than 77 days before harvesting wheat.

CROP OIL CONCENTRATE

In spring wheat (including durum wheat) and winter wheat, it may be helpful to add 1 pint to 1 quart per acre of crop oil concentrate approved for use on growing crops. Use a crop oil concentrate containing a blend of 80 percent (minimum) petroleum or vegetable base oil and the remaining composed of a tolerance-exempt surfactant. Do not use crop oil concentrate with HOELON 3EC in winter wheat when conditions are cool and wet. Some slight wheat yellowing may be noted when crop oil concentrates are added to HOELON 3EC Herbicide.

FUNGICIDE TANK MIXES FOR POSTEMERGENCE APPLICATIONS IN WHEAT

HOELON 3EC Herbicide can be tank mixed with mancozeb, Tilt®, Topsin®, Mertect® DF or Benlate® fungicides when application timing is correct for both products. All fungicides should be used in accordance with the label limitations and precautions for each product. No label dosage rates should be exceeded.

BROADLEAF TANK MIXES FOR POSTEMERGENCE APPLICATIONS IN WHEAT

All broadleaf herbicides should be used in accordance with the label limitations and precautions for each product. No label dosage rates should be exceeded. For best results, tank mixes should be used when growing conditions (air temperature and soil moisture) are optimum and grasses are in the 1 to 3 leaf stage of growth with light to moderate infestations.

HOELON 3EC Herbicide + Buctril® Herbicide

HOELON 3EC Herbicide may be tank mixed with Buctril Herbicide for broadleaf weed control in spring wheat (including durum wheat) and winter wheat. HOELON 3EC Herbicide should be used at a rate of 2 to 2 2/3 pints per acre (depending on size of annual grasses) as specified on this label. Buctril Herbicide should be mixed at a rate of 1 to 1 1/2 pints per acre, according to the directions specified on the respective label.

HOELON 3EC Herbicide + Buctril Herbicide+ MCPA (ester) 4EC

Low rates of MCPA (ester) 4EC may be added to a tank mix of HOELON 3EC Herbicide + Buctril Herbicide. HOELON 3EC should be used at a rate of 2 2/3 pints per acre. When using Buctril Herbicide, 1 pint per acre should be tank mixed with MCPA (ester) 4EC at 1 1/2 ounces per acre. MCPA (ester) 4EC rates in excess of 1 1/2 ounces per acre may reduce the grassy weed control provided by HOELON 3EC. No other formulations of MCPA should be substituted for the 4 pound active ingredient ester formulation. Do not add crop oil concentrate to HOELON 3EC when tank mixing with Buctril and MCPA (ester) 4EC.

HOELON 3EC Herbicide + Harmony® GT Herbicide

A tank mix of HOELON 3EC Herbicide + Harmony GT Herbicide can be applied for annual ryegrass (in the Pacific Northwest only), wild oat and broadleaf weed control in winter and spring wheat. The HOELON 3EC Herbicide rate should be 2 2/3 pints per acre with up to 0.5 ounce per acre Harmony GT Herbicide in spring and winter wheat. This tank mixture should only be used under good soil moisture conditions when wild oats are in the 1-4 leaf stage. Reduced control of foxtail is likely when tank mixing with Harmony GT Herbicide. When foxtail is the major grassy weed in the field, DO NOT tank mix HOELON 3EC Herbicide + Harmony GT Herbicide. Use sequential treatments. Refer to the Harmony GT Herbicide label for crop rotation restrictions.

HOELON 3EC Herbicide + Buctril Herbicide + Harmony® GT Herbicide

A three-way tank mix of HOELON 3EC Herbicide + Buctril Herbicide + Harmony GT Herbicide can be applied for annual ryegrass (in the Pacific Northwest only), wild oat and broadleaf weed control in winter and spring wheat. The HOELON 3EC Herbicide rate should be 2 2/3 pints per acre with up to 0.5 ounce per acre Harmony GT Herbicide in winter wheat (up to 0.4 ounce per acre in spring wheat). Buctril Herbicide should be used at 1 pint per acre. This tank mixture should only be used under good soil moisture conditions when wild oats are in the 1-4 leaf stage. Reduced control of foxtail is likely when tank mixing with Harmony GT Herbicide. When foxtail is the major grassy weed in the field, DO NOT tank mix HOELON 3EC

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Herbicide + Harmony GT Herbicide. Use sequential treatments. Refer to the Harmony GT Herbicide label for crop rotation restrictions.

HOELON 3EC Herbicide + Peak® Herbicide

HOELON 3EC Herbicide may be tank mixed with Peak Herbicide for broadleaf weed control in *spring wheat (including durum wheat) and winter wheat*. Use HOELON 3EC at rates between 2 and 2 2/3 pints per acre in accordance with the growth stage of the weed grass/grasses listed on this label. Peak Herbicide should be mixed at a rate of 0.38 to 0.5 oz. per acre, according to the directions specified on the respective label.

HOELON 3EC Herbicide + Buctril Herbicide+ Glean® Herbicide —Winter Wheat Only

A three-way tank mix of HOELON 3EC Herbicide + Buctril Herbicide + Glean Herbicide can be applied for annual ryegrass (in the Pacific Northwest only), wild oat and broadleaf weed control in *winter wheat*. The use rate of HOELON 3EC Herbicide should be 2 2/3 pints per acre with a maximum of 1/4 ounce Glean Herbicide. Buctril Herbicide should be used at 1 to 1 1/2 pints per acre. This tank mixture should only be used when soil moisture is good, and wild oats are in the 1 to 4 leaf stage. Reduced control of foxtail is likely when tank mixing with Glean. When foxtail is the major grassy weed in the field, DO NOT tank mix HOELON 3EC + Glean. Use sequential treatments. Refer to the Glean label for crop rotation restrictions.

HOELON 3EC Herbicide + Buctril Herbicide + Harmony® Extra Herbicide—Winter Wheat Only

A three-way tank mix of HOELON 3EC Herbicide + Buctril Herbicide + Harmony Extra Herbicide can be applied for annual ryegrass (in the Pacific Northwest only), wild oat and broadleaf weed control in winter wheat. The HOELON 3EC rate should be 2 2/3 pints per acre with a maximum of 0.4 ounce per acre Harmony Extra. Buctril should be used at 1 to 1 1/2 pints per acre. This tank mixture should only be used under good soil moisture conditions when wild oats are in the 1 to 4 leaf stage. Reduced control of foxtail is likely when tank mixing with Harmony Extra. When foxtail is the major grassy weed in the field, DO NOT tank mix HOELON 3EC + Harmony Extra. Use sequential treatments. Refer to the Harmony Extra label for crop rotation restrictions.

HOELON 3EC Herbicide + Buctril Herbicide +Amber® Herbicide—Winter Wheat Only

A three-way tank mix of HOELON 3EC Herbicide + Buctril Herbicide + Amber Herbicide can be applied for annual ryegrass (in the Pacific Northwest only), wild oat and broadleaf weed control in winter wheat. The Amber Herbicide rate should not exceed 0.28 ounce per acre when used in this tank mix. The HOELON 3EC rate must be 2 2/3 pints per acre. Buctril Herbicide should be used at 1 to 1 1/2 pints per acre. To utilize this tank mix, good soil moisture and wild oat in the 1 to 4 leaf stage are required. Reduced control of foxtail is likely when tank mixing with Amber Herbicide. When foxtail is the major grassy weed in the field, DO NOT tank mix HOELON 3EC + Amber. Use sequential treatments. Refer to the Amber label for crop rotation restrictions.

SPECIAL NOTE: DO NOT tank mix HOELON 3EC Herbicide with any broadleaf herbicides in the States of Alabama, Delaware, Georgia, Maryland, North Carolina, South Carolina, and Virginia, as reduced annual ryegrass control may occur.

FERTILIZER TANK MIXES POSTEMERGENCE IN WHEAT

HOELON 3EC Herbicide applied postemergence in wheat may only be tank mixed with liquid nitrogen fertilizer (28–32%) if the timing for use is compatible. The concentration of liquid nitrogen fertilizer to water should not exceed 50% of the total carrier in the spray tank. When mixing with liquid nitrogen fertilizer as a partial carrier, crop burn may occur. This condition is intensified under higher temperatures (greater than 75°F daytime) and/or low soil moisture. This mixture should not be used when these environmental conditions are present.

DO NOT use less than 2 pints per acre HOELON 3EC when tank mixing with liquid nitrogen.

DO NOT tank mix HOELON 3EC and liquid fertilizer in the States of Alabama, Arkansas, Delaware, Georgia, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia. Reduced annual grass control may occur from this tank mix.

In all of the above-labeled tank mix options, ground applications should be made with a minimum of 10 gallons of carrier per acre, and air applications with a minimum of 5 gallons of

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carrier per acre. If other broadleaf herbicides are applied within 5 days, reduced grassy weed control may occur.

DIRECTIONS FOR THE POSTEMERGENCE CONTROL OF SMALLSEED CANARYGRASS AND WILD OAT IN WHEAT IN ARIZONA ONLY

Apply HOELON 3EC Herbicide as a broadcast postemer-gence spray at the rates listed below.

Amount of HOELON 3EC Herbicide Per Acre (Pints) Relative to Growth Stage of Annual Grassy Weeds		
Susceptible Annual Grassy Weeds	Stage of Growth	Pints/Acre Rate
Wild oat ¹	1-3 leaves	2-2 2/3
	4 leaves	2 2/3
Smallseed canarygrass suppression) ¹	1-2 leaves	2 2/3

¹Under dry conditions add 1 pint to 1 quart per acre of crop oil concentrate.

DIRECTIONS FOR THE POSTEMERGENCE CONTROL OF ANNUAL RYEGRASS, WILD OAT, Smallseed CANARYGRASS, and hooded CANARYGRASS IN WHEAT IN CALIFORNIA ONLY

HOELON 3EC HERBICIDE APPLICATION RATES

Grasses	Broadcast Rate in Pints per Acre			
	1-3 Leaf ¹	4 Leaf	4-5 Leaf	5 Leaf -2 Tillers
Annual ryegrass	1 1/3	1 1/3	2	2 2/3
Wild oat	2-2 2/3	2 2/3	DO NOT APPLY	DO NOT APPLY
Hooded canarygrass	2 2/3	DO NOT APPLY	DO NOT APPLY	DO NOT APPLY
Smallseed canarygrass	2 2/3	DO NOT APPLY	DO NOT APPLY	DO NOT APPLY

WEATHER CONSIDERATIONS

In fall-seeded winter or spring wheat varieties, do not apply if one or a combination of the following environmental conditions are present or prolonged preceding a HOELON 3EC Herbicide application; crop injury may occur.

- Cold Temperatures** - Anytime during the 72 hours (3 days) preceding a HOELON 3EC Herbicide application the temperature drops below 35°F
- Moisture Conditions**
 - Waterlogged or poorly drained fields
 - Moisture content is at field capacity

If the above adverse environmental conditions are present, the wheat is already under severe environmental stress; do not compound the stress with chemical applications. With respect to

the foregoing statement, buyer specifically assumes all risks should cold and/or wet weather conditions occur prior to or during the HOELON 3EC Herbicide application.

If freezing temperatures are predicted within three days after application, HOELON 3EC Herbicide use should be delayed.

Notes:

- 1. In California, HOELON 3EC Herbicide may only be tank mixed with Buctril Herbicide. Follow the label limitations and precautions on each label. No label dosage rates should be exceeded.
- 2. In California, HOELON 3EC Herbicide should be applied postemergence only to wheat.

**DIRECTIONS FOR THE POSTEMERGENCE USE OF HOELON 3EC
HERBICIDE ON BARLEY**

This product is registered for postemergence use on all spring barley varieties in the following States:

Arizona	Maryland	New Mexico	Pennsylvania	Virginia
Colorado	Minnesota	North Carolina	South Carolina	Washington
Delaware	Montana	North Dakota	South Dakota	West Virginia
Idaho	Nebraska	Oklahoma	Texas	Wyoming
Kansas	Nevada	Oregon	Utah	

(The General Information section must also be read for complete use instructions.)

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Apply HOELON 3EC Herbicide as a broadcast postemergence spray at the rates listed below:

Amount of HOELON 3EC Herbicide Per Acre (Pints) ¹ Relative to Growth Stage of Annual Grassy Weeds				
Susceptible Annual Grassy Weeds	1-3 Leaf	4 Leaf	5 Leaf	5 Leaf- 2 Tillers
Annual ryegrass (Italian) ² Lolium multiflorum	1 1/3	1 1/3	2	2 2/3
Broadleaf signalgrass suppression Brachiaria platyphylla	2 2/3	DO	NOT	APPLY
Crabgrass ³ Digitaria sanguinalis	2 2/3	DO	NOT	APPLY
Persian damel Lolium persicum	2 2/3	DO	NOT	APPLY
Smallseed canarygrass ³ Phalaris minor	2 2/3	DO	NOT	APPLY
Fall panicum Panicum dichotomiflorum				
Barnyardgrass watergrass Echinochloa crus-galli				
Giant foxtail Setaria faberii			DO NOT APPLY	
Green foxtail pigeongrass Setaria viridis	2 to	2 2/3		
Yellow foxtail pigeongrass ³ Setaria lutescens	2 2/3			
Wild oat Avena fatua				Reduced Grassy Weed Control Will Occur
Itchgrass Raoulgrass Rottboellia exaltata				
Volunteer corn Zea mays				
Witchgrass suppression Panicum capillare				

1 When controlling mixed populations of grassy weeds, always use the rate that will control the least susceptible species.

2 Annual ryegrass may also be controlled pre-emergence in winter wheat. See appropriate recommendation section in this labeling.

3 For best control of crabgrass, smallseed canarygrass and yellow foxtail, application should be made before the second leaf fully emerges.

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HOELON 3EC HERBICIDE RECOMMENDATIONS FOR SPRING BARLEY IN THE NORTH CENTRAL, SOUTHWEST, AND WESTERN REGIONS OF THE UNITED STATES EXCEPT CALIFORNIA

When using HOELON 3EC Herbicide to control annual grassy weeds and the weeds do not include annual ryegrass, broadleaf signalgrass, crabgrass, smallseed canarygrass or Persian dandel, apply the 2 pints per acre rate when the annual grassy weeds are in the 1 to 4 leaf stage of growth and growing conditions are optimal. The higher rate of 2 2/3 pints per acre and higher application water volumes should be used (see chart) when the majority of grassy weeds is not clearly in the specified stage of growth, if grassy weed infestations are high or if growth is retarded due to a lack of moisture. Thorough spray coverage is essential.

WEATHER CONSIDERATIONS

In spring-seeded barley, DO NOT apply if one or a combination of the following environmental conditions are present the day before or predicted within three days after a HOELON 3EC Herbicide application, as crop injury may occur.

1. **Cold Temperatures:** Cold or freezing temperatures (below 35°F)
2. **Moisture Conditions:** When soils are either waterlogged or poorly drained

If the above adverse environmental conditions are present, barley is already under severe environmental stress; do not compound the stress with any chemical applications. With respect to the foregoing statement, buyer specifically assumes all risks should cold and/or wet weather conditions occur prior to or after the HOELON 3EC Herbicide application.

BROADLEAF TANK MIXES FOR POSTEMERGENCE APPLICATIONS IN SPRING BARLEY

All broadleaf herbicides should be used in accordance with the label limitations and precautions for each product. No label dosage rates should be exceeded. For best results, tank mixes should be used when growing conditions (air temperature and soil moisture) are optimum and grasses are in the 1 to 3 leaf stage of growth with light to moderate infestations (less than 25 wild oat plants per square foot).

HOELON 3EC Herbicide + Buctril Herbicide

HOELON 3EC Herbicide may be tank mixed with Buctril Herbicide for broadleaf weed control in spring barley.

HOELON 3EC Herbicide should be used at a rate of 2 to 2 2/3 pints per acre (depending on the size of the annual grasses, environmental conditions, and density of grass populations) as specified on this label. Buctril Herbicide should be mixed at a rate of 1 to 1 1/2 pints per acre, according to the directions specified on the respective label.

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HOELON 3EC Herbicide + Buctril Herbicide + MCPA (ester) 4EC

Low rates of MCPA (ester) 4EC may be added to a tank mix of HOELON 3EC Herbicide + Buctril Herbicide. HOELON 3EC should be used at a rate of 2 2/3 pints per acre. When using Buctril, 1 pint per acre should be tank mixed with MCPA (ester) 4EC at 1 1/2 ounces per acre. MCPA (ester) 4EC rates in excess of 1 1/2 ounces per acre may reduce the grassy weed control provided by HOELON 3EC. No other formulations of MCPA should be substituted for the 4 pound active ingredient ester formulation. Do not add crop oil concentrate to HOELON 3EC when tank mixing with Buctril and MCPA (ester) 4EC.

HOELON 3EC Herbicide + Harmony® GT Herbicide

A tank mix of HOELON 3EC Herbicide + Harmony GT Herbicide can be applied for annual ryegrass (in the Pacific Northwest only), wild oat and broadleaf weed control in spring barley. The HOELON 3EC Herbicide rate should be 2 2/3 pints per acre with up to 0.5 ounce per acre Harmony GT Herbicide. This tank mixture should only be used under good soil moisture conditions when wild oats are in the 1-4 leaf stage. Reduced control of foxtail is likely when tank mixing with Harmony GT Herbicide. When foxtail is the major grassy weed in the field, DO NOT tank mix HOELON 3EC Herbicide + Harmony GT Herbicide. Use sequential treatments. Refer to the Harmony GT Herbicide label for crop rotation restrictions.

HOELON 3EC Herbicide + Buctril Herbicide + Harmony® GT Herbicide

A three-way tank mix of HOELON 3EC Herbicide + Buctril Herbicide + Harmony GT Herbicide can be applied for annual ryegrass (in the Pacific Northwest only), wild oat and broadleaf weed control in spring barley. The HOELON 3EC Herbicide rate should be 2 2/3 pints per acre with up to 0.4 ounce per acre Harmony GT. Buctril Herbicide should be used at 1 pint per acre. This tank mixture should only be used under good soil moisture conditions when wild oats are in the 1-4 leaf stage. Reduced control of foxtail is likely when tank mixing with Harmony GT Herbicide. When foxtail is the major grassy weed in the field, DO NOT tank mix HOELON 3EC Herbicide + Harmony GT Herbicide. Use sequential treatments. Refer to the Harmony GT Herbicide label for crop rotation restrictions.

HOELON 3 EC Herbicide + Peak® Herbicide

HOELON 3EC Herbicide may be tank mixed with Peak Herbicide for broadleaf weed control in spring barley. HOELON 3EC Herbicide should be used at a rate of 2 to 2 2/3 pints per acre (depending on size of annual grasses) as specified on this label. Peak Herbicide should be mixed at a rate of 0.38 to 0.5 oz. per acre, according to the directions specified on the respective label.

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SPECIAL NOTES FOR SPRING BARLEY

1. DO NOT tank mix HOELON 3EC Herbicide with Glean Herbicide.
2. DO NOT tank mix HOELON 3EC Herbicide with crop oil concentrate.
3. DO NOT tank mix HOELON 3EC Herbicide with liquid fertilizers.
4. HOELON 3EC Herbicide is registered for use on all varieties of spring-seeded barley.
5. HOELON 3EC Herbicide should be applied to 1 to 4 leaf barley. Applications made to tillered barley during cold temperatures and/or wet soil conditions may result in crop damage.
6. DO NOT apply pre-emergence to barley.
7. Do not apply HOELON 3EC Herbicide less than 66 days before harvesting.

HOELON 3EC HERBICIDE RECOMMENDATIONS FOR WINTER BARLEY IN THE MIDATLANTIC AND SOUTHEAST REGIONS OF THE UNITED STATES

When using HOELON 3EC Herbicide to control annual ryegrass in fall-seeded barley, use the 1 1/3 pints per acre rate when the ryegrass is in the 1 to 4 leaf stage of growth. The low rate of 1 1/3 pints per acre should only be used under optimum growing conditions. If the crop and annual rye-grass is under drought stress, increase the rate of HOELON 3EC from 2 to 2 2/3 pints per acre, depending on the severity of infestation and size of annual ryegrass. For mixed grass infestations, refer to the rate and timing chart for grasses controlled in barley.

Broadleaf Tank mixes for Postemergence Applications in Winter Barley

See broadleaf tank mixes approved for use on spring barley.

Fertilizer Tank mixes Postemergence in Winter Barley

DO NOT tank mix HOELON 3EC Herbicide with liquid fertilizers in winter barley as reduced annual ryegrass control may occur.

SPECIAL NOTES FOR WINTER BARLEY

1. DO NOT tank mix HOELON 3EC Herbicide with Glean Herbicide.
2. DO NOT tank mix HOELON 3EC Herbicide with crop oil concentrate.

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3. Use only on the following winter barley varieties: Milton, Boone, Molly Bloom, Wysor, Pennco, Nomini, Anson, Mulligan, Henry, Callio, Starling, and Sussex.
4. Apply HOELON 3EC Herbicide after tiller initiation but prior to jointing of the winter barley.
5. DO NOT apply preemergence to winter barley.
6. Do not apply HOELON 3EC Herbicide less than 66 days before harvesting.

IMPORTANT: READ BEFORE USE

By using this product, user or buyer accepts the following conditions, warranty, disclaimer of warranties and limitations of liability.

CONDITIONS: The directions for use of this product are believed to be adequate and should be followed carefully. However, because of extreme weather and soil conditions, manner of use and other factors beyond AgrEvo USA Company's control, it is impossible for AgrEvo USA Company to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. All such risks shall be assumed by the user or buyer.

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