

PM 23

59639-3

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## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

APR 25 1996

Eric D. Bruce  
Valent U.S.A. Corporation  
1333 N. California Blvd., Ste. 600  
Walnut Creek, CA 94596

Dear Mr. Bruce:

Subject: Revised Labeling - Additional Tank Mixes;  
Additional Grasses Controlled  
Select 2EC Herbicide  
EPA Registration No. 59639-3  
Your Submission Dated September 14, 1995

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. A stamped copy is enclosed for your records. Please submit one (1) final printed copy for the above mentioned label before releasing the product for shipment.

Sincerely yours,

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

Enclosure

DK: 305-7546: FHB/PM23		CONCURRENCES						
SYMBOL ▶	7505C							
SURNAME ▶	D. KENNY							
DATE ▶	4/25/96							



ACCEPTED  
with COMMENTS  
In EPA Letter Dated  
APR 25 1996

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
59639-3

# SELECT<sup>®</sup>

2 EC HERBICIDE

Active Ingredient	By Wt.
* Clethodim .....	26.4%
Inert Ingredients .....	73.6%
Contains Petroleum Distillates	
* (E)-2[1-[(3-chloro-2-propenyl) oxy]imino]propyl]-5-[2-(ethylthio)propyl]- 3-hydroxy-2-cyclohexen-1-one	
Contains 2.0 lbs. clethodim per gal.	
U.S. Pat. No. 4,440,566	

**KEEP OUT OF REACH OF CHILDREN**

## WARNING - AVISO

SEE NEXT PAGE FOR ADDITIONAL  
PRECAUTIONARY STATEMENTS

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.)

**NET CONTENTS 1 GALLON**

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS & DOMESTIC ANIMALS

##### WARNING

Causes eye irritation. Avoid contact with  
skin. Do not get in eyes, on skin, or on  
clothing. Harmful if swallowed or  
inhaled. Avoid breathing vapors or spray  
mist.

#### STATEMENT OF PRACTICAL TREATMENT

- If in eyes:** Flush eyes immediately  
with fresh water for 15  
minutes.
- If on skin:** Wash with plenty of soap  
and water. Get medical  
attention if irritation  
persists.
- If swallowed:** Give water or milk to  
drink and telephone for  
medical advice. DO NOT  
make person vomit  
unless directed to do so  
by medical personnel. If  
medical advice cannot be  
obtained, then take  
person and product  
container to the nearest  
medical emergency  
treatment center or  
hospital.
- If inhaled:** Remove person from  
exposure area.

**Note to Physicians:** Emergency  
Information - call 1-800-892-0099. This  
product contains a light petroleum  
solvent, and an aspiration hazard may  
exist.

#### 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 G on an EPA  
chemical resistance category selection  
chart.

**Applicators and other handlers must wear:** long-sleeved shirt and long pants, chemical-resistant gloves such as barrier laminate or viton  $\geq$  14 mils, shoes plus socks, and protective eyewear.

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

#### **USER SAFETY RECOMMENDATIONS**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing 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, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply where runoff is likely to occur. Do not apply where weather conditions favor drift from areas treated. Do not contaminate water when disposing of equipment washwater or rinsate.

The use of this product may pose a hazard to the federally designated endangered species of Solano Grass and Wild Rice. Use of this product is prohibited in the following areas where the species are known to exist:

Solano Grass: Solano County, California: the vernal lakes area bounded by the Union Pacific Railroad and Hastings Road to the north, Highway 113 to the east, Highway 12 to the south, and Travis Air Force Base to the west.

Wild Rice: Hays County, Texas.

#### **PHYSICAL OR CHEMICAL HAZARDS**

Do not use or store near heat or open flame.

#### **DIRECTIONS FOR USE**

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

**READ ENTIRE LABEL AND PAMPHLET. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.**

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 interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, chemical-resistant gloves, such as barrier laminate or viton  $\geq$  14 mils, shoes plus socks, and protective eyewear.

**NON-AGRICULTURAL USE  
REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standards for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forest, nurseries, or greenhouses.

Keep all unprotected persons out of operating areas, or vicinity where there may be drift.

Do not enter treated areas without protective clothing until sprays have dried.

## GENERAL INFORMATION

**Do not apply this product through any type of irrigation system.**

**FOR USE ON:** Soybeans, Cotton, Ornamentals, Sugar beets, Onions (dry bulbs only), Garlic, Shallots (dry bulbs only), Christmas Trees, Non-Bearing Food Crops, and Non-Crop or Non-Planted Areas.

SELECT 2 EC Herbicide is a selective postemergence herbicide for control of annual and perennial grasses. SELECT 2 EC Herbicide does not control sedges or broadleaf weeds.

Repeated use of SELECT 2 EC Herbicide (or similar postemergence grass herbicides with the same mode of action) may lead to the selection of naturally occurring biotypes that are resistant to these products in some grass species.

If poor performance occurs and cannot be attributed to adverse weather or applications conditions, a resistant biotype may be present. This is most likely to occur in fields where other control strategies such as crop rotation, mechanical removal, and other classes of herbicides are not used from year to year.

Do not allow SELECT 2 EC Herbicide to come in contact with desirable grass crops such as corn, rice, sorghum, small grains, or turf; as these and other grass crops will be injured or killed. Minor leaf spotting may occur on treated plants under certain environmental conditions. New foliage is not affected.

## Control Symptoms

Treated grass weeds show a reduction in vigor and growth. Early chlorosis/necrosis of younger plant tissue is followed by a progressive collapse of the remaining foliage. Symptoms will generally be observed in 7 to 14 days depending on grass species treated and environmental conditions.

## APPLICATION INFORMATION

### Timing of Applications

Apply SELECT 2 EC Herbicide postemergence to actively growing grasses according to rate table recommendations. Applications made to grass plants stressed by insufficient moisture or cold temperatures, or to grass plants exceeding recommended growth stages may result in unsatisfactory control. Do not apply under these conditions.

In arid regions where irrigation is used to supplement limited rainfall, SELECT 2 EC Herbicide should be applied as soon as possible after an irrigation (within 7 days). In arid regions, a second application of SELECT 2 EC Herbicide will generally provide more effective control of perennial grass weeds than a single application. Make second application to actively growing grass 2 to 3 weeks after emergence of new growth.

Cultivation of treated grasses 7 days prior to or within 7 days after application of SELECT 2 EC Herbicide may reduce weed control. **DO NOT APPLY SELECT 2 EC Herbicide** if rainfall is expected within one hour, since control may be reduced.

# ADDITION OF ADJUVANT OR CROP OIL CONCENTRATE

CROP	ADJUVANT RECOMMENDATIONS
Cotton	<p>Always use a crop oil concentrate containing at least 15% emulsifier at 1% v/v (but not less than 1 pt. per acre) in the finished spray volume.</p> <p><del>The addition of 1 to 2 qts/A of liquid fertilizer (10-34-0, 28%N or 32%N) may enhance SELECT 2 EC Herbicide activity.</del></p>
Soybeans	<p>Always use a crop oil concentrate containing at least 15% emulsifier at 1% v/v (but not less than 1 pt. per acre) in the finished spray volume.</p> <p>1 to 2 qts./A of liquid fertilizer (10-34-0, 28%N or 32%N) may be added to SELECT 2 EC Herbicide applications.</p>
Sugar beets, Onions (dry bulbs only), Garlic, and Shallots (dry bulbs only)	Always use a crop oil concentrate containing at least 15% emulsifier at 1% v/v in the finished spray volume.
Ornamental Plants	Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v). Use of crop oil concentrate is not recommended since it may injure flowers and foliage.
Christmas Trees, Non-Bearing Food Crops, and Non-Crop or Non-Planted Areas	Always use a crop oil concentrate containing at least 15% emulsifier at 1% v/v (but not less than 1 pt. per acre) in the finished spray volume.

## Ground Application

Use of sufficient spray volumes and pressure is essential to ensure complete coverage. Use a minimum of 5 gals. and a maximum of 40 gals. of spray solution per acre. Spray pressures should reflect a minimum of 30 psi and a maximum of 60 psi at the nozzle. Do not use flood nozzles.

## Air Application

Use a minimum of 3 gals. of spray solution per acre. Increase spray volumes up to 10 gals. as grass or crop foliage becomes dense.

## Spot Treatment

When using hand sprayers or high volume sprayers utilizing hand guns, mix ¼% to ½% (0.33 oz. to 0.65 oz. per gal.) SELECT 2 EC Herbicide and treat to wet vegetation, while not allowing runoff of spray solution. For uses requiring crop oil concentrate, include crop oil concentrate at 1% (1.3 oz. per gal.) by volume. For uses requiring non-ionic surfactant, include non-ionic surfactant at ¼% (0.33 oz. per gal.) by volume.

## RESTRICTIONS AND LIMITATIONS

### GENERAL

Do not apply if rain is expected within 1 hour of application as control may be unsatisfactory.

Do not apply a postemergence broadleaf herbicide within one day following application of SELECT 2 EC Herbicide or reduced grass control may result.

Do not apply more than 32 fl. oz. of SELECT 2 EC Herbicide (0.5 lb. ai) per acre per season. Application on Long Island, New York, is restricted to no more than 16 fl. oz. of SELECT 2 EC Herbicide (0.25 lb. ai) per acre per season.

Do not apply under conditions of stress. Applying SELECT 2 EC under conditions that do not promote active grass growth will reduce herbicide effectiveness. These conditions include drought, excessive water, extremes in temperature, and low humidity. Grasses

under these kinds of stressful conditions will not absorb and translocate SELECT 2 EC effectively, and will be less susceptible to herbicide activity.

Best perennial grass control can be obtained if rhizomes or stolons are cut up by preplant tillage practices (discing, plowing, etc.) to stimulate maximum emergence of grass shoots. Cultural practices such as continuous no-tillage in which the perennial grass rhizomes or stolons are not cut up results in a very staggered, non-uniform plant emergence. Due to this non-uniform weed emergence, no fewer than two SELECT 2 EC Herbicide applications per season per year are recommended at the appropriate weed-growth stage rate under continuous no-till conditions.

Grass crops such as corn, sorghum, wheat, rice, etc. are highly sensitive to SELECT 2 EC Herbicide.

Always read and follow the restrictions and limitations for all products whether used alone or in a tank mix. The most restrictive labeling of any product used applies in tank mixtures, including all crop rotational and other crop restrictions.

Tank mixes of SELECT 2 EC Herbicide and broadleaf herbicides may result in reduced grass control. If grass regrowth occurs, an additional application of SELECT 2 EC Herbicide may be necessary.

## AVOID SPRAY DRIFT

Do not allow spray from ground or aerial equipment to drift onto adjacent land or crops. When drift may be a problem, do everything possible to reduce spray drift, including:

- Do not spray if wind speeds are or become excessive. Do not spray if wind speed is 10 MPH or greater. If sensitive crops or plants are downwind, extreme caution must be used under all conditions. Do not spray if winds are gusty.
- Use extreme caution when conditions are favorable for drift (high temperatures, drought, low relative humidity), especially when sensitive plants are located nearby.
- Do not apply when a temperature inversion exists. If inversion conditions are suspected, consult with local weather services before making an application.
- Further reductions in drift can be obtained by:
  1. Using large droplet size sprays. Do not use nozzles that produce small droplets. Orient nozzles downward and slightly backward as needed to reduce drift for ground applications.
  2. Orienting nozzles straight back with the windstream, using straight stream orifices for aerial applications. Use the lowest number of nozzles practical with the largest possible orifice size to obtain the minimum 3 GPA volume. Application height and boom length should be set according to manufacturer's instructions to minimize drift.

3. Increasing the volume of spray mixture (for example a minimum of 10 GPA for ground applications) by using higher flow rate nozzles. Using lower pressure with the appropriate nozzle to obtain higher volumes will also reduce drift.
4. Apply as close to target plants as practical while maintaining a good spray pattern for adequate coverage.

**Do not apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crops thereof rendered unfit for sale, use or consumption.**

## COTTON AND SOYBEANS

Do not graze treated fields or feed treated forage or hay to livestock.

Do not apply SELECT 2 EC Herbicide within 60 days of harvest.

## SUGAR BEETS

Do not apply SELECT 2 EC Herbicide within 100 days of sugar beets harvest.

## ONIONS (DRY BULBS ONLY), GARLIC, AND SHALLOTS (DRY BULBS ONLY)

Do not apply SELECT 2 EC Herbicide within 45 days of onion (dry bulbs only), garlic, or shallot (dry bulbs only) harvest.

## ORNAMENTALS

Sugar maples cannot be tapped for syrup within one year of SELECT 2 EC Herbicide application.



**DIRECTIONS FOR USE IN  
SOYBEANS, COTTON, SUGAR  
BEETS, ONIONS (DRY BULBS  
ONLY), GARLIC, SHALLOTS (DRY  
BULBS ONLY), CHRISTMAS TREES,  
NON-BEARING FOOD CROPS, AND  
NON-CROP OR NON-PLANTED  
AREAS**

**IMPORTANT**

Plant tolerance to SELECT 2 EC Herbicide at labeled rates has been found to be acceptable for the indicated genera and species listed below. Due to variability within species, crop growth stage, environmental conditions, and application techniques, it is recommended that the user determine if herbicide can be used safely on a few plants prior to widespread application. Neither the seller nor the manufacturer of SELECT 2 EC Herbicide have investigated the safety factor to plants not listed on the label.

The following plants have shown a tolerance for SELECT 2 EC Herbicide applications:

**NON-BEARING FOOD CROPS**

Non-bearing fruit and nut crops are plants which will not bear fruit or nuts for at least one year following SELECT 2 EC Herbicide application.

**COMMON NAME    SCIENTIFIC NAME**

Apples	Malus spp.
Berries	Vaccinium spp.
	Rubus spp.
Citrus Fruits	Citrus spp.
Grapes	Vitis spp.
Olives	Olea spp.

Pears  
Stone Fruits  
Strawberries  
Tree Nuts

Pyrus communis  
Prunus spp.  
Fragaria spp.  
Juglans spp. (walnut)  
Carya illinoensis  
(pecan)  
Pistacia vera  
(pistacio)  
Prunus triloba  
(almond)

**CHRISTMAS TREES**

SELECT 2 EC Herbicide can be used to control labelled grasses in christmas tree farms, including forest conifer nurseries.

**COMMON NAME    SCIENTIFIC NAME**

Cedars	Cedrus spp.
Firs	Abies spp.
Pines	Pinus spp.
Spruces	Picea spp.

**NON-CROP OR NON-PLANTED AREAS**

The following areas are considered non-crop or non-planted areas:

Rights-of-way including railroads, highways, roads, dividers, medians, pipelines, public utility lines, pumping stations, transformer stations and substations. Around airports, electric utilities, commercial buildings, manufacturing plants, storage yards, rail yards, fence lines, parkways, ornamental gardens, walkways, and patios. Also beneath greenhouse benches, along driveways, and around golf courses.

# RECOMMENDATIONS FOR ANNUAL GRASSES

- Apply only to actively growing grasses at recommended weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the recommended growth stage for treatment.
- Use the high rate under heavy grass pressure and/or when grasses are at maximum height.

GRASS SPECIES		WEED* HEIGHT INCHES	RATE FL. OZ./ ACRE	HIGH RATE
Barnyardgrass	Echinochloa crusgalli	2-8	6	8
Broadleaf Signalgrass	Brachiaria platyphylla	2-6	6	8
Crabgrass				
Large	Digitaria sanguinalis	2-6**	6	8
Smooth	Digitaria ischaemum	2-6**	6	8
Southern	Digitaria ciliaris	2-6**	6	8
Crowfootgrass	Dactyloctenium aegyptium	2-6**	6	8
Fall Panicum	Panicum dichotomiflorum	2-8	6	8
Field Sandbur	Cenchrus incertus	2-6	6	8
Foxtail				
Giant	Setaria faberi	2-12	6	8
Green	Setaria viridis	2-8	6	8
Yellow	Setaria glauca	2-8	6	8
Goosegrass	Eleusine indica	2-6**	6	8
Itchgrass	Rottboellia exaltata	2-6	6	8
Junglerice	Echinochloa colona	2-6	6	8
Red Rice	Oryza sativa	1-3	6	8
Seedling Johnsongrass	Sorghum halepense	4-10	6	8
Shattercane	Sorghum bicolor	6-18	6	8
Southwestern Cupgrass	Eriochloa gracilis	2-6	6	8
Sprangle top				
Amazon	Leptochloa panicoides	2-6	6	8
Bearded	Leptochloa fascicularis	2-6	6	8
Red	Leptochloa filiformis	2-6	6	8
Texas Panicum	Panicum texanum	2-6	6	8
Volunteer Cereals				
Barley	Hordeum vulgare	2-6	6	8
Oats	Avena sativa	2-6	6	8
Rye	Secale cereale	2-6	6	8
Wheat	Triticum aestivum	2-6	6	8
Volunteer Corn	Zea mays	4-12	4	6
Volunteer Corn	Zea mays	12-24	6	8
Volunteer Grain Sorghum	Sorghum bicolor	8-12	6	8
Wild Oats	Avena fatua	2-6	6	8
Wild Proso Millet	Panicum miliaceum	2-10	6	8
Witchgrass	Panicum capillare	2-8	6	8
Woolly Cupgrass	Eriochloa villosa	2-8	6	8

\* Generally occurs between 3-leaf stage and tillering.

\*\* Length of lateral growth.

# **RECOMMENDATIONS FOR ANNUAL BLUEGRASS CONTROL WITH SELECT 2 EC HERBICIDE**

GRASS SPECIES	WEED STAGE	RATE FL. OZ./ ACRE	HIGH RATE
Annual Bluegrass (Poa annua)	to 4-Leaf	6	16

Apply under favorable soil moisture and humidity which exists within a few days after rainfall or within 7 days after irrigation. Grass needs to be actively growing at time of application(s).

Apply at weed stage indicated on the label, as reduced control can be expected with more mature annual bluegrass.

Use the high rate under heavy grass pressure and/or when annual bluegrass is more mature.

Always add a crop oil concentrate containing at least 15% emulsifier at 1% v/v (but not less than 1 pint per acre) to the finished spray volume.

## **DIRECTIONS FOR USE IN SOYBEANS AT A REDUCED RATE RECOMMENDATIONS FOR ANNUAL GRASSES**

GRASS SPECIES	WEED HEIGHT INCHES	RATE FL OZ/ ACRE
Barnyardgrass	Echinochloa crus-galli	1-4 4
Broadleaf Signalgrass	Brachiaria platyphylla	1-4 5
Crabgrass		
Large	Digitaria sanguinalis	1-3* 4
Large	Digitaria sanguinalis	1-4* 5
Smooth	Digitaria ischaemum	1-3* 4
Smooth	Digitaria ischaemum	1-4* 5
Southern	Digitaria ciliaris	1-4* 5
Fall Panicum	Panicum dichotomiflorum	1-4 4
Foxtail, Giant	Setaria faberi	1-4 4
Seedling Johnsongrass	Sorghum halepense	1-6 5
Shattercane	Sorghum bicolor	4-10 4
Texas Panicum	Panicum texanum	1-4 5
Wild Proso Millet	Panicum millaceum	1-6 4

\*Length of lateral growth

12 7 24

## RECOMMENDATIONS FOR PERENNIAL GRASSES

- Apply only to actively growing grasses at recommended weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the recommended growth stage for treatment.
- Use the high rate under heavy grass pressure and/or when grasses are at maximum height.

GRASS SPECIES	WEED HEIGHT INCHES	RATE FL. OZ./ ACRE	HIGH RATE
<b>Bermudagrass</b>			
(Cynodon dactylon)	3 (or up to		
First Application	6" runners)	8	16
Repeat Application(s)	3 (or up to		
(if regrowth occurs)	6" runners)	8	16
<b>Fescue, tall</b>			
(Festuca arundinacea)			
First Application	4-8	8	16
Repeat Application(s)			
(if regrowth occurs)	4-8	8	16
<b>Orchardgrass</b>			
(Dactylis glomerata)			
First Application	4-8	8	16
Repeat Application(s)			
(if regrowth occurs)	4-8	8	16
<b>Quackgrass</b>			
(Agropyron repens)			
First Application	4-8 12	8	16
Repeat Application(s)			
(if regrowth occurs)	4-8 12	8	16
<b>Rhizome Johnsongrass</b>			
(Sorghum halepense)			
First Application	12-24	8	16
Repeat Application(s)			
(if regrowth occurs)	6-18	6	8
<b>Wirestem Muhly</b>			
(Muhlenbergia frondisa)			
First Application	4-8	8	16
Repeat Application(s)			
(if regrowth occurs)	4-8	8	16

## TANK MIXES

### TANK MIX APPLICATION OF SELECT 2 EC HERBICIDE AND BROADLEAF HERBICIDES FOR CONTROL OF GRASSES AND BROADLEAF WEEDS IN SOYBEANS

#### GENERAL INFORMATION

The labels for each of the herbicides recommended for tank mixing with SELECT 2 EC Herbicide are unique to the characteristics of those products and contain restrictions and limitations that may be more restrictive than the SELECT 2 EC Herbicide label in certain considerations. Those concerns may include, but are not limited to:

1. Geographic restrictions - all products are not registered for use in all areas and rates may vary from one region of labeled use to another;
2. Crop rotation restrictions;
3. Soil type or soil characteristics (e.g. pH, OM);
4. Maximum dosage or number of applications per season;
5. Rain free period required; or
6. Application timing (e.g. pre-harvest interval)

#### THE MOST RESTRICTIVE LABELING OF ANY PRODUCT USED IN A TANK MIX MUST BE FOLLOWED.

- Apply only to actively growing grass and broadleaf weeds at recommended height or growth stage listed on each label.
- Apply when the first grass or broadleaf weed species in a mixed population reaches the recommended height or growth stage for treatment.

- Apply under favorable soil moisture and humidity which exist a few days after rainfall or within seven days after irrigation.
- Always add a crop oil concentrate to the spray mix at the rate recommended for each specific tank mix combination in Table 1.
- Tank mix applications may sometimes result in reduced grass control and possible increases in crop injury as compared to either product used alone. If regrowth occurs, or an additional flush of new grass emerges, make a second application of SELECT 2 EC Herbicide, as specified in the respective size and rate tables. **DO NOT EXCEED A TOTAL OF 32 FL. OZ./ACRE (0.5 LB.AI/A) OF SELECT 2 EC HERBICIDE PER SEASON, WHETHER APPLIED ALONE OR IN TANK MIX APPLICATIONS.**
- Do not tank mix SELECT 2 EC Herbicide when broadleaf weeds are tall and/or dense enough to prevent proper grass coverage.

#### INFORMATION ON ANTAGONISM

Tank mixes of SELECT 2 EC Herbicide with postemergence broadleaf herbicides have shown some reduction or failure to control certain grass species which would have otherwise been controlled when SELECT 2 EC Herbicide is applied alone. Activity of the postemergence broadleaf herbicide in the tank mix is not affected.

Table 1

**SELECT 2 EC HERBICIDE TANK MIXES TO CONTROL ANNUAL GRASSES (FOXTAIL AND FALL PANICUM) WHEN USED AS A BURNDOWN IN NO-TILL SOYBEANS**

PRODUCT	PRODUCT/ ACRE RATE <sup>(1)</sup>	GRASS HEIGHT	CROP OIL CONC. <sup>(2)</sup> (V/V)	28%N OR 32%N QTS./A
SELECT 2 EC Herbicide	3 oz.	Foxtail 1-3" Fall Panicum 1-3"	1%	1-2
	or			
	4 oz.	Foxtail 1-4" Fall Panicum 1-4"	1%	1-2
+ 2,4-D ESTER	0.5 lb			
SELECT 2 EC Herbicide	3 oz.	Foxtail 1-3" Fall Panicum 1-3"	1%	1-2
	or			
	4 oz.	Foxtail 1-4" Fall Panicum 1-4"	1%	1-2
+ PROWL	2 pts.			
+ 2,4-D ESTER	0.5 lb			
SELECT 2 EC Herbicide	3 oz.	Foxtail 1-3" Fall Panicum 1-3"	1%	1-2
	or			
	4 oz.	Foxtail 1-4" Fall Panicum 1-4"	1%	1-2
+ SENCOR DF	2-4 oz.			
+ 2,4-D ESTER	0.5 lb			

(1) If regrowth occurs or an additional flush of new grass emerges, make a second application of SELECT 2 EC Herbicide according to the appropriate size and rate recommendations.

(2) Always use a crop oil concentrate containing at least 15% emulsifier at the listed rate in the finished spray volume.

Table 2

**SELECT 2 EC HERBICIDE TANK MIXES  
WITH BROADLEAF HERBICIDES FOR SOYBEANS  
(REFER TO THE RECOMMENDATION TABLES ABOVE  
FOR SPECIFIC GRASSES AND GROWTH STAGES)**

PRODUCT <sup>(2)</sup>	ANNUAL GRASSES	PERENNIAL GRASSES	APPLICATION RATES/ACRE <sup>(1)</sup>	
			CROP OIL CONC. <sup>(3)</sup> (V/V)	
			GROUND	AIR
SELECT 2 EC Herbicide + COBRA®	6 to 8 fl. oz. + 12.5 fl. oz.	8 to 16 fl. oz. + 12.5 fl. oz.	.5 to 1%	1%
SELECT 2 EC Herbicide + BASAGRAN® 4SL	8 to 10 fl. oz. + 1 to 2 pts.	10 to 16 fl. oz. + 1 to 2 pts.	1%	1%
SELECT 2 EC Herbicide + BLAZER® 2SL	6 to 8 fl. oz. + 1 to 1.5 pts.	8 to 16 fl. oz. + 1 to 1.5 pts.	.5 to 1%	1%
SELECT 2 EC Herbicide + CLASSIC® 25DG	8 to 10 fl. oz. + 0.5 to 0.75 oz.	10 to 16 fl. oz. + 0.5 to 0.75 oz.	1%	1%
SELECT 2 EC Herbicide <sup>(4)</sup> + PURSUIT®	6 to 8 fl. oz. + 4 fl. oz.	8 to 16 fl. oz. + 4 fl. oz.	1%	1%
SELECT 2 EC Herbicide + REFLEX® 2 LC	6 to 8 fl. oz. + 0.75 to 1.5 pts.	8 to 16 fl. oz. + 0.75 to 1.5 pts.	.5 to 1%	1%
SELECT 2 EC Herbicide <sup>(4)</sup> + GALAXY™	8 to 10 fl. oz. + 32 fl. oz.		5%	1%
SELECT 2 EC Herbicide <sup>(4)</sup> + COBRA + CLASSIC 25DG	8 to 10 fl. oz. + 6 to 8 fl. oz. + 0.5 to 0.75 oz.		5%	1%

## CONTINUED...

SELECT 2 EC Herbicide <sup>(1)</sup>	8 to 10 fl. oz.	5%	1%
+ COBRA	6 to 10 fl. oz.		
+ BASAGRAN 4 SL	1 to 1.5 pts.		
SELECT 2 EC Herbicide <sup>(1)</sup>	8 to 10 fl. oz.	5%	1%
+ COBRA	6 to 10 fl. oz.		
+ PURSUIT	4 fl. oz.		
SELECT 2 EC Herbicide <sup>(1)</sup>	8 to 10 fl. oz.	5%	1%
+ STORM®	1.5 pts.		
SELECT 2 EC Herbicide <sup>(1)</sup>	8 to 10 fl. oz.	1%	1%
+ RESOURCE Herbicide	4 fl. oz.		
+ PURSUIT	4 fl. oz.		
SELECT 2 EC Herbicide <sup>(1)</sup>	8 to 10 fl. oz.	1%	1%
+ RESOURCE Herbicide	4 fl. oz.		
+ BASAGRAN Herbicide	1 pt.		
SELECT 2 EC Herbicide <sup>(1)</sup>	8 to 10 fl. oz.	1%	1%
+ RESOURCE Herbicide	4 fl. oz.		
+ CLASSIC Herbicide	0.5 fl. oz.		
SELECT 2 EC Herbicide <sup>(1)</sup>	6 to 8 fl. oz.	5%	1%
+ COBRA	6 fl. oz.		
+ RESOURCE Herbicide	4 fl. oz.		
<sup>(1)</sup> If grass regrowth occurs or an additional flush of new grass emerges, make a second application of SELECT 2 EC Herbicide alone (without a tank mix herbicide), according to the appropriate size and rate recommendations. <sup>(2)</sup> Broadleaf weed control may be reduced when grass populations are tall enough or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not recommended in these situations. <sup>(3)</sup> Always use a crop oil concentrate containing at least 15% emulsifier at the listed rate (but not less than 1 pint per acre) in the finished spray volume. <sup>(4)</sup> The addition of 1 to 2 qts./A of liquid fertilizer (10-34-0, 28%N, or 32%N) is recommended when SELECT 2 EC Herbicide is tank mixed with PURSUIT, RESOURCE, GALAXY, STORM, COBRA + CLASSIC, COBRA + BASAGRAN, and COBRA + PURSUIT.			



# **TANK MIX APPLICATION OF SELECT 2 EC HERBICIDE AND INSECTICIDES FOR CONTROL OF GRASS WEEDS AND INSECTS IN SOYBEANS AND COTTON**

## **GENERAL INFORMATION**

The labels for each of the insecticides recommended for tank mixing with SELECT 2 EC Herbicide are unique to the characteristics of those products and contain restrictions and limitations that may be more restrictive than the SELECT 2 EC Herbicide label in certain considerations. Those concerns may include, but are not limited to:

1. Geographic restrictions - all products are not registered for use in all areas and rates may vary from one region of labeled use to another;
2. Applicator certification requirements;
3. Worker safety rules (e.g. protective clothing, reentry time, posting);
4. Maximum dosage or number of applications per season;
5. Rain free period required; or
6. Application timing (e.g. pre-harvest interval)

**THE MOST RESTRICTIVE LABELING OF ANY PRODUCT USED IN A TANK MIX MUST BE FOLLOWED.**

**DO NOT EXCEED A TOTAL OF 32 FL. OZ./ACRE (0.5 LB./A) OF SELECT 2 EC HERBICIDE PER SEASON, WHETHER APPLIED ALONE OR IN TANK MIX APPLICATIONS.**

**Table 3**

## **SELECT 2 EC HERBICIDE TANK MIXES WITH INSECTICIDES FOR SOYBEANS AND COTTON (REFER TO THE RECOMMENDATION TABLES ABOVE FOR SPECIFIC GRASSES AND GROWTH STAGES)**

PRODUCT <sup>(2)</sup>	APPLICATION RATES/ACRE <sup>(1)</sup>		
	ANNUAL GRASSES	PERENNIAL GRASSES	CROP OIL <sup>(3)</sup> CONC. (V/V)
SELECT 2 EC Herbicide +	6 to 8 fl. oz. +	8 to 16 fl. oz. +	1%
ORTHENE® 75 SP	.33 to 1.33 lbs.	.33 to 1.33 lbs.	
SELECT 2 EC Herbicide +	6 to 8 fl. oz. +	8 to 16 fl. oz. +	1%
ORTHENE 90 S	.25 to 1 lb.	.25 to 1 lb.	

<sup>(1)</sup> If grass regrowth occurs, or an additional flush of new grass emerges, make a second application of SELECT 2 EC Herbicide alone (without a tank mix insecticide) according to the appropriate size and rate recommendations.

<sup>(2)</sup> Refer to insecticide label for rates and insects controlled.

<sup>(3)</sup> Always use a crop oil concentrate containing at least 15% emulsifier at the listed rate (but not less than 1 pint per acre) in the finished spray volume.

**DIRECTIONS FOR USE IN ORNAMENTALS**

For ornamental plant uses, SELECT 2 EC Herbicide can be used to control labeled grass weeds in greenhouses, lathhouses, shadehouses, and around outdoor ornamentals, including nurseries, parks, roadside plantings, and structure landscapes.

**IMPORTANT**

SELECT 2 EC Herbicide successfully controls weeds in newly transplanted and established non-grassy ornamentals. Plant tolerance to SELECT 2 EC Herbicide at labeled rates has been found to be acceptable for the indicated genera and species listed below. Due to variability within species, crop growth stage, environmental conditions, and application techniques, it is recommended that the user determine if herbicide can be used safely on a few plants prior to widespread application. Neither the seller nor the manufacturer of SELECT 2 EC Herbicide have investigated the safety factor to ornamental plants not listed on the label.

The following plants have shown a tolerance for SELECT 2 EC Herbicide applications:

ORNAMENTAL TREES

COMMON NAME	SCIENTIFIC NAME
BIRCH, WHITE	<i>Betula papyrifera</i>
DOGWOOD, FLOWERING	<i>Cornus florida</i>
MAPLES	<i>Acer</i> spp.
OAKS	<i>Quercus</i> spp.
OLIVE, COMMON	<i>Elaeagnus angustifolia</i>
SWEET GUM	<i>Liquidambar styraciflua</i>

GARDEN FLOWERS AND PLANTS

COMMON NAME	SCIENTIFIC NAME
AGERATUM	<i>Ageratum</i> spp.
ALYSSUM *	<i>Lobularia maritima</i>
ASPARAGUS FERN	<i>Asparagus setaceus</i>
CHRYSANTHEMUM	<i>Chrysanthemum indicum</i>
CINQUEFOIL	<i>Potentilla</i> spp.
COLEUS	<i>Coleus</i> spp.
CRANESBILL	<i>Geranium</i> spp.
CREeping FIG	<i>Ficus pumila</i>
DAHLIA	<i>Dahlia</i> spp.
DAYLILY	<i>Hemerocallis</i> spp.
GAZANIA	<i>Gazania</i> spp.
GERANIUM	<i>Pelargonium hortorum</i>
IRIS	<i>Iris</i> spp.
JASMINE TOBACCO	<i>Nicotiana glauca</i>
MARIGOLD	<i>Tagetes</i> spp.
PARTRIDGEBERRY	<i>Mitchella domestica</i>
PETUNIA *	<i>Petunia hybrida</i>
PHLOX	<i>Phlox</i> spp.
PINKS	<i>Dianthus</i> spp.
PORTULACA	<i>Portulaca grandiflora</i>
SALVIA	<i>Salvia</i> spp.
SAXIFRAGE, ROCKFOIL	<i>Saxifraga</i> spp.
SEDUM	<i>Sedum</i> spp.
SNAPDRAGON *	<i>Antirrhinum majus</i>
SWEET WILLIAM	<i>Dianthus barbatus</i>
TOUCH-ME-NOT	<i>Balsamorhiza</i> spp.
VERBENA	<i>Verbena hortensis</i>
VIOLET	<i>Viola</i> spp.
ZINNIA	<i>Zinnia elegans</i>

\* Slight foliage or flower speckling has been observed on these species.

GROUND COVERS

COMMON NAME	SCIENTIFIC NAME
AJUGA	Ajuga reptans
CREEPING CHARLIE	Glechoma hederacea
IVY, ENGLISH	Hedera helix
IVY, VARIEGATED YELLOW	Hedera helix
IVY, VARIEGATED WHITE	Hedera helix
LIRIOPE, GREEN	Liriope spp.
LIRIOPE, VARIEGATED	Liriope muscarii
MONEYWORT	Lysimachia nummularia
MONDO GRASS	Ophiopogon japonicus
MONDO GRASS, DWARF	Ophiopogon japonicus "Nana"
PERIWINKLE	Vinca minor

SHRUBS

COMMON NAME	SCIENTIFIC NAME
ABELIA	Abelia spp.
AUCUBA	Aucuba spp.
AZALEA *	Rhododendron spp.
BAMBOO	Bambusa spp.
BOXWOOD	Buxus sempervirens
CAMELLIA	Camellia japonica
CLEYER	Cleyera japonica
CORALBERRY	Ardisia crenata
CAPE MYRTLE	Lagerstroemia indica
EUONYMUS	Euonymus spp.
GARDENIA	Gardenia spp.
HOLLY	Ilex spp.
HOLLY, CHINESE	Ilex cornuta
HOLLY, JAPANESE	Ilex crenata
HONEYSUCKLE	Lonicera spp.
INDIAN HAWTHORN	Raphiolepis indica
JAPANESE BARBERRY	Berberis Thunbergii
JASMINE	Jasmine spp.
JASMINE, ASIATIC	Trachelospermum asiaticum
JUNIPER, CHINESE	Juniperus chinensis
JUNIPER, CREEPING	Juniperus horizontalis
JUNIPER, SHORE *	Juniperus conferta
LANTANA	Lantana spp.
NANDINA *	Nandinia domestica
PHOTINIA	Photinia spp.
PITTOSPORUM	Pittosporum spp.
PODOCARPUS	Podocarpus spp.
PRIVET	Ligustrum spp.
PYRACANTHA	Pyracantha spp.
RHODODENDRON	Rhododendron spp.
ROSE	Rosa spp.
SPIREA	Spiraea bumalda
WISTERIA	Wisteria spp.

\* Slight foliage or flower speckling has been observed on these species.

# RECOMMENDATIONS FOR ANNUAL GRASSES

- Apply only to actively growing grasses at recommended weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the recommended growth stage for treatment.
- Use the high rate under heavy grass pressure and/or when grasses are at maximum height.

GRASS SPECIES	WEED HEIGHT INCHES	RATE FL. OZ./ ACRE	HIGH RATE
Barnyardgrass	Echinochloa crusgalli	2-8	(1) 8 (2) 16
Broadleaf Signalgrass	Brachiaria platyphylla	2-6	8 16
Crabgrass			
Large	Digitaria sanguinalis	2-6**	8 16
Smooth	Digitaria ischaemum	2-6**	8 16
Southern	Digitaria ciliaris	2-6**	8 16
Crowfootgrass	Dactyloctenium aegyptium	2-6**	8 16
Fall Panicum	Panicum dichotomiflorum	2-8	8 16
Field Sandbur	Cenchrus incertus	2-6	8 16
Foxtail			
Giant	Setaria faberi	2-12	8 16
Green	Setaria viridis	2-8	8 16
Yellow	Setaria glauca	2-8	8 16
Goosegrass	Eleusine indica	2-6**	8 16
Itchgrass	Rottboellia exaltata	2-6	8 16
Junglerice	Echinochloa colona	2-6	8 16
Red Rice	Oryza sativa	1-3	8 16
Seedling Johnsongrass	Sorghum halepense	4-10	8 16
Shattercane	Sorghum bicolor	6-18	8 16
Southwestern Cupgrass	Eriochloa gracilis	2-6	8 16
Sprangle top			
Amazon	Leptochloa panicoides	2-6	6 8
Bearded	Leptochloa fascicularis	2-6	6 8
Red	Leptochloa filiformis	2-6	6 8
Texas Panicum	Panicum texanum	2-6	8 16
Volunteer Cereals			
Barley	Hordeum vulgare	2-6	8 16
Oats	Avena sativa	2-6	8 16
Rye	Secale cereale	2-6	8 16
Wheat	Triticum aestivum	2-6	8 16
Volunteer Corn	Zea mays	4-12	4 8
Volunteer Corn	Zea mays	12-24	8 16
Volunteer Grain Sorghum	Sorghum bicolor	8-12	6 8
Wild Oats	Avena fatua	2-6	8 16
Wild Proso Millet	Panicum miliaceum	2-10	8 16
Witchgrass	Panicum capillare	2-8	8 16
Woolly Cupgrass	Eriochloa villosa	2-8	8 16

\* Generally occurs between 3-leaf stage and tillering.

\*\* Length of lateral growth.

(1) 8 fl. oz./acre = approximately 0.2 fl. oz./1000 sq. ft.

(2) 16 fl. oz./acre = approximately 0.4 fl. oz./1000 sq. ft.

Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v).

22 7 24

**RECOMMENDATIONS FOR ANNUAL BLUEGRASS CONTROL WITH  
SELECT 2 EC HERBICIDE IN ORNAMENTALS**

GRASS SPECIES	WEED STAGE	RATE FL. OZ./ ACRE	HIGH RATE
Annual Bluegrass (Poa annua)	to 4-Leaf	6	16
<p>Apply under favorable soil moisture and humidity which exists within a few days after rainfall or within 7 days after irrigation. Grass needs to be actively growing at time of application(s).</p> <p>Apply at weed stage indicated on the label, as reduced control can be expected with more mature annual bluegrass.</p> <p>Use the high rate under heavy grass pressure and / or when annual bluegrass is more mature.</p> <p>Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v).</p>			

# RECOMMENDATIONS FOR PERENNIAL GRASSES

- Apply only to actively growing grasses at recommended weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the recommended growth stage for treatment.
- Use the high rate under heavy grass pressure and/or when grasses are at maximum height.

GRASS SPECIES	WEED HEIGHT INCHES	RATE FL. OZ./ ACRE	HIGH RATE
Bermudagrass (Cynodon dactylon)		(1) 8	(2) 16
First Application	3 (or up to 6" runners)		
Repeat Application(s) (if regrowth occurs)	3 (or up to 6" runners)	8	16
Quackgrass (Agropyron repens)			
First Application	4-8	8	16
Repeat Application(s) (if regrowth occurs)	4-8	8	16
Rhizome Johnsongrass (Sorghum halepense)			
First Application	12-24	8	16
Repeat Application(s) (if regrowth occurs)	6-18	6	8
Wirestem Muhly (Muhlenbergia frondisa)			
First Application	4-8	8	16
Repeat Application(s) (if regrowth occurs)	4-8	8	16

(1) 8 fl. oz./acre = approximately 0.2 fl. oz./1000 sq. ft.

(2) 16 fl. oz./acre = approximately 0.4 fl. oz./1000 sq. ft.

Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v).

## STORAGE AND DISPOSAL

### PROHIBITIONS

Do not contaminate water, food or feed by storage, disposal or cleaning of equipment.  
Open dumping is prohibited.

### STORAGE

Keep pesticide in original container.  
Do not put concentrate or dilute into food or drink containers.  
Store in cool, dry place.  
Do not store diluted spray.

**Emergency Response:** For help with any spill, leak, fire or exposure involving this material, call day or night 1-800-892-0099.

### PESTICIDE DISPOSAL

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

### CONTAINER DISPOSAL

Triple rinse (or equivalent). Do not reuse container. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

### IMPORTANT INFORMATION. READ BEFORE USING PRODUCT.

**LIMITED WARRANTY:** 1. Valent U.S.A. Corporation warrants that this product conforms to the chemical description on the label and is reasonably fit for use under average conditions when used strictly in accordance with the directions on the labeling. Valent does not make nor authorizes any agent or representative to make, any other warranty, guarantee or representation, express or implied, concerning this product. Specifically, NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE IS MADE.

2. Critical and unforeseeable factors beyond Valent's control prevent it from eliminating all risks in connection with the use of this product. Such risks include, but are not limited to, damage to plants and crops to which product is applied, lack of complete control over the handling and application of this product, and damage caused by drift to other plants or crops. Such risks occur even though the product is reasonably fit under average conditions for the uses stated on the labeling and even though

label directions are followed. Buyer and user acknowledge and assume all risks and liability (except those assumed by Valent under 1 above) resulting from handling, storage, and use of the product.

3. Precautions stated on the labeling should be followed to avoid hazardous exposure to the product.

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CLASSIC® - Reg. TM of E.I. DuPont de Nemours & Co. Inc. for chlorimuron ethyl herbicide.

ORTHENE® - Reg. TM of Monsanto Company for acephate insecticide.

PURSUIT® - Reg. TM of American Cyanamid Co. for imazethapyr herbicide.

REFLEX® - Reg. TM of ICI Americas, Inc. for fomesafen herbicide.

GALAXY™ - Trademark of BASF Corporation.

STORM® - Reg. TM of BASF Corporation.

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