GROUP

HERBICIDE



# Envoy Plus



Active Ingredient	By Wt.
*Clethodim	. 12.6%
Other Ingredients	. <u>87.4%</u>
Total	100.0%

Contains Petroleum Distillates

\*(E)-2-[1-[[(3-chloro-2-propenyl)oxy]imino] propyl]-5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one

Contains 0.97 lbs clethodim per gal

EPA Reg. No. 59639-132

# KEEP OUT OF REACH OF CHILDREN CAUTION

#### PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS & DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Harmful if swallowed.

#### FIRST AID

If in eyes:

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 eye.

Call a poison control center or doctor for treatment advice.

If on skin or clothing:

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.

(Continued)

#### **FIRST AID (Continued)**

if swallowed: Immediately call a poison control center or doctor.

Do not induce vomiting unless told to do so by a poison control center or doctor.

Do not give **any** liquid to the person. Do not give anything by mouth to an

unconscious person.

If inhaled: Move person to fresh air.

If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-tomouth, if possible.

Call a poison control center or doctor for further treatment advice.

#### **HOT LINE 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 1-800-892-0099 for emergency treatment information.

#### **NOTE TO PHYSICIANS**

Ingestion of this product or subsequent vomiting can result in aspiration of light hydrocarbon liquid, which can cause pneumonitis. If ingested, probably mucosal damage may contraindicate the use of gastric lavage.

#### 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, or 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 PRECAU-TIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REG-**ULATIONS.** 

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 24 hours

(Continued)

#### AGRICULTURAL USE REQUIREMENTS, Continued

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 short-sleeved shirt and short pants, chemical-resistant gloves, such as barrier laminate or viton > 14 mils and shoes plus socks.

#### 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 Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, 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.

#### DISCLAIMER, RISKS OF USING THIS PRODUCT, LIMITED WARRANTY AND LIMITATION OF LIABILITY

IMPORTANT: Read the entire Label including this Disclaimer, Risks of Using this Product, Limited Warranty and Limitation of Liability before using this product. If the terms are not acceptable THEN DO NOT USE THE PRODUCT; rather, return the unopened product within 15 days of purchase for a refund of the purchase

#### RISKS OF USING THIS PRODUCT

The Buyer and User (referred to collectively herein as "Buyer") of this product should be aware that there are inherent unintended risks associated with the use of this product which are impossible to eliminate. These risks include, but are not limited to, injury to plants and crops to which this product is applied, lack of control of the target pests or weeds, resistance of the target pest or weeds to this product, injury caused by drift, and injury to rotational crops caused by carryover in the soil. Such risks of crop injury, non-performance, resistance or other unintended consequences are unavoidable and may result because of such factors as weather, soil conditions, disease, moisture conditions, irrigation practices, condition of the crop at the time of application, presence of other materials either applied in the tank mix with this product or prior to application of this product. cultural practices or the manner of use or application (or a combination of such factors) all of which are factors beyond the control of Valent. The Buyer should be aware that these inherent unintended risks may reduce the harvested yield of the crop in all or a portion of the treated acreage, or otherwise affect the crop such that additional care, treatment and expense are required to take the crop to harvest.

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#### RISKS OF USING THIS PRODUCT, Continued

If the Buyer chooses not to accept these risks, THEN THIS PRODUCT SHOULD NOT BE APPLIED. By applying this product Buyer acknowledges and accepts these inherent unintended risks AND AGREES THAT ALL SUCH RISKS ASSOCIATED WITH THE APPLICATION AND USE ARE ASSUMED BY THE BUYER.

Valent shall not be responsible for losses or damages (including, but not limited to, loss of yield, increased expenses of farming the crop or such incidental, consequential or special damages that may be claimed) resulting from use of this product in any manner not set forth on the label. Buyer assumes all risks associated with the use of this product in any manner or under conditions not specifically directed or approved on the label.

#### LIMITED WARRANTY

Valent warrants only that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the label, under average use conditions, when used strictly in accordance with the label and subject to the Risks of Using This Product as described above. EXCEPT AS SET FORTH ABOVE, VALENT MAKES NO OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED. No agent or representative of Valent or Seller is authorized to make or create any other express or implied warranty.

#### LIMITATION OF LIABILITY

In no event shall Valent or Seller be liable for any incidental, consequential, indirect or special damages resulting from the use or handling of this product. The limitation includes, but is not limited to, loss of yield on all or any portion of the treated acreage, increased care, treatment or other expenses required to take the crop to harvest, increased finance charges or altered finance ratings, emotional or mental distress and/or exemplary damages. THE EXCLUSIVE REMEDY OF THE BUYER, AND THE EXCLUSIVE MAXIMUM LIABILITY OF VALENT OR SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT OR, AT THE ELECTION OF VALENT OR SELLER, THE REPLACEMENT OF THIS PRODUCT.

#### PROMPT NOTICE OF CLAIM

Valent must be provided notice as soon as Buyer has reason to believe it may have a claim, but in no event later than twenty-one days from date of planting, or twenty-one days from the date of application, whichever is later, so that an immediate inspection of the affected property and growing crops can be made.

(Continued)

#### PROMPT NOTICE OF CLAIM, Continued

If Buyer does not notify Valent of any claims, in such period, it shall be barred from obtaining any remedy.

#### NO AMENDMENTS

Valent and Seller offer this product, and Buyer accepts it, subject to the foregoing Disclaimer, Risks of Using This Product, Limited Warranty and Limitation of Liability, which may not be modified by any oral or written agreement.

#### **TANK MIXES**

NOTICE: Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor.

Read and follow the entire label of each product to be used in the tank mix with this product.

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#### **CHEMIGATION**

Do not apply this product through any irrigation system.

#### **GENERAL INFORMATION**

**FOR USE ON:** Conifer Trees, Non-Bearing Food Crops, Non-Crop or Non-Planted Areas and Ornamentals.

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

#### **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 after application depending on grass species treated and environmental conditions.

#### **APPLICATION INFORMATION**

#### **Timing of Applications**

Apply *Envoy Plus* 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, *Envoy Plus* should be applied as soon as possible after irrigation (within 7 days). In arid regions, a second application of *Envoy Plus* 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 *Envoy Plus* may reduce weed control.

#### **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. Under the following conditions a minimum of 10 gals per acre is required: broadleaf herbicide tank mixes, perennial grasses, volunteer corn, drought or stress conditions, heavy grass pressure or when grasses are at or near maximum height. Failure to use a minimum of 10 gals per acre under these conditions can result in poor coverage and reduced grass control requiring repeat applications. 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 unless otherwise directed in the label. 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 1/3% to 2/3% (0.44 oz to 0.85 oz per gal) *Envoy Plus* 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 1/4% (0.33 oz per gal) by volume.

NOTE: If Envoy Plus is applied as a spot treatment, care should be taken to not exceed the maximum rate allowed on a "per acre" basis or crop injury may occur.

#### **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 Envoy Plus or reduced grass control may result.
- Do not apply under conditions of stress. Applying Envoy Plus under conditions that do not promote active grass growth will reduce herbicide effectiveness. These conditions include drought, excessive water, extremes in temperature, low humidity and grasses either partially controlled or stunted from prior pesticide applications. Grasses under these kinds of stressful conditions will not absorb and translocate Envoy Plus effectively, and will be less susceptible to herbicide activity.
- Application on Long Island, New York, is restricted to no more than 32 fl oz of *Envoy Plus* Herbicide (0.25 lb ai) per acre per season.

Optimal 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, result in a very staggered, non-uniform weed emergence. Due to this non-uniform weed emergence, no fewer than two *Envoy Plus* applications per season per year are recommended at the appropriate weed-growth stage rate under continuous no-till conditions.

Grass crops such as com, rice, sorghum, small grains or turf, etc. are highly sensitive to Envoy Plus.

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 *Envoy Plus* and broadleaf herbicides may result in reduced grass control. If grass regrowth occurs an additional application of *Envoy Plus* may be necessary.

#### SPRAY DRIFT MANAGEMENT

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 apply when conditions are favorable for drift (high temperatures, drought and low relative humidity), especially when sensitive plants are located nearby.
- 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.
- Do not apply when a temperature inversion exists. If inversion conditions are suspected, consult with local weather services before making an application.
- Do not allow Envoy Plus to come into contact with desirable grass crops such as corn, rice, small grains, sorghum, or turf, as these and other grass crops will be injured or killed.

Further reductions in drift can be obtained by:

- 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.
- 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.
- 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
- Applying 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.

#### RESISTANCE MANAGEMENT

Envoy Plus is a Group 1 herbicide. Any weed population may contain or develop plants naturally resistant to Envoy Plus and other Group 1 herbicides. Weed species with acquired resistance to Group 1 may eventually dominate the weed population if Group 1 herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by Envoy Plus or other Group 1 herbicides.

Repeated use of *Envoy Plus* (or similar postemergence grass herbicide 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 application 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.

To delay herbicide resistance consider:

- Avoiding the consecutive use of Envoy Plus or other target site of action Group 1 herbicides that have similar target site of action, on the same weed species.
- Using tank mixtures or premixes with herbicides from different target site of action groups as long as the involved products are all registered for the same use, have different sites of action, and are both effective at the tank mix or prepack rate on the weed(s) of concern.
- Basing herbicide use on a comprehensive IPM program.
- Monitoring treated weed populations for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for herbicide resistance management and/or integrated weed management recommendations for specific crops and resistant weed biotypes.

TABLE 1. CROP-SPECIFIC USE DIRECTIONS, RESTRICTIONS AND LIMITATIONS FOR *ENVOY PLUS* HERBICIDE

Crops	Minimum Time From Application to Harvest (PHI)	Annual Grass Use Rate Per Acre <sup>(1)</sup>	Perennial Grass Use Rate Per Acre	Adjuvant Recommen- dation <sup>(2)</sup>	Ammonium Sulfate Rec- ommenda- tion <sup>(3)</sup>	Special Use Instructions and Restrictions
Conifer Trees  Non-Crop or Non-Planted Areas	N/A	9 to 16 fl oz	12 to 32 fl oz	NIS at 0.25% v/v or COC/MSO at 1 qt/A or 1% v/v	2.5 to 4 lbs/A	Do not plant any crop for 30 days after application unless clethodim is registered for use in that crop. Do not apply more than 32 fl oz/A per
						application.  Do not apply more than 64 fl oz/A (0.5 lb ai/A) per season.  For repeat applications, make on a minimum of a 14 day
Ornamentals	N/A	9 to 16 fl oz	12 to 32 fl oz	NIS at 0.25% v/v	None	interval.  Do not apply more than 64 fl oz/A (0.5 lb ai/A) per season.
Non-Bearing Food Crops <sup>(4)</sup>	N/A	9 to 16 fl oz	12 to 16 fl oz			For repeat applications, make on a minimum of a 14 day interval.
						Sugar maples cannot be tapped for syrup within one year of Envoy Plus application

N/A = Not Applicable

(1) See annual and perennial grass control tables for specific use rate recommendations.

- (2) Non-ionic surfactant (NIS) in this case refers to an adjuvant containing at least 80% non-ionic surfactant. Crop oil concentrate in this case refers to both crop oil concentrate and crop oil concentrate blends. Acceptable crop oil concentrates would be those which contain a minimum of 80% oils and 15% emulsifier. Acceptable crop oil concentrate blends would be those that contain a minimum of 60% oils and 25-40% surfactants and emulsifiers. A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all the following criteria: be non-phytotoxic, contain only EPA-exempt ingredients, provide good mixing quality and be successful in local experience. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils.
- (3) Use spray grade ammonium sulfate. The use of ammonium sulfate does not take the place of the required surfactant.
- (4) If Envoy Plus is applied as a spot treatment to non-bearing food crops, care should be taken to not exceed the maximum rate allowed on a "per acre" basis or crop injury may occur.

#### **FALLOW LAND**

#### **DIRECTIONS FOR USE**

Envoy Plus may be used to control annual and perennial grasses in land that has been left fallow the previous year and other non-producing agricultural areas. Apply Envoy Plus at 12 to 16 fl oz/A for annual grasses and 16 to 32 fl oz/A for perennial grasses. When both grass and broadleaf weeds are the target pest, Envoy Plus may be tank mixed with 2,4-D ester or Banvel® SGF for broad spectrum control. When both annual and perennial grasses occur in the same field, use a minimum of 16 fl oz/A Envoy Plus rate

#### **GENERAL INFORMATION:**

- Use a minimum spray volume of 5 gals/A for aerial applications and 15gals/A for ground applications. Apply only to actively growing grasses when the first grass reaches the recommended weed height as specified by the Recommendations for Annual and Perennial Grasses section of this label.
- Annual grasses that emerge after the Envoy Plus application will not be controlled, and a second application may be necessary.
- The control of perennial grasses may require more than 1 application in non-tilled areas.
- Do not apply to grasses that have tillered, formed seedheads or exceeded recommended growth stage.
- Do not use flood jet nozzles.

- Do not apply to drought stressed grasses.
- Do not mow area for 2 weeks prior to or after the Envoy Plus application.

TABLE 2. ENVOY PLUS IN TANK MIXES TO CONTROL ANNUAL AND PERENNIAL GRASSES IN FALLOW LAND

	APPLICATION RATES/ACRE <sup>(1)</sup>		ON RATES/ACRE <sup>(1)</sup> ADJUVANT RECO	
PRODUCT	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
Envoy Plus	12 to 16 fl oz	16 to 32 fl oz	NIS at 0.25% v/v or	
+	+	+	COC at 1% +	COC at 1% +
2,4-D ester	0.5 lb/A	0.5 lb/A	AMS at 2.5 lbs/A	AMS at 17 lbs/100
or	or	or		gals
Banvel SGF	See Banvel SGF label for rates	See Banvel SGF label for rates		

<sup>(1)</sup> Refer to Envoy Plus label for weed height and species control. Review Banvel SGF and 2,4-D labels for crop restrictions, use rates and weeds controlled.

#### RECOMMENDATIONS FOR GRASS SUPPRESSION IN NON-CROP AREAS WITH ENVOY PLUS

		APPLICATION RATES		
GRASS SPECIES	WEED STAGE FL OZ/A		MAXIMUM RATE FL OZ/A	
Annual and perennial grasses that exceed height claimed for control on height chart above	Up to and including grasses in the seed head stage	24	32	

- Do not apply as part of a tank mix when applying Envoy Plus for grass suppression.
- Add a crop oil concentrate at 1 gt/A by ground to the finished spray volume.

#### **DIRECTIONS FOR USE IN ORNAMENTALS**

For ornamental plant uses, *Envoy Plus* 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

Envoy Plus successfully controls weeds in newly transplanted and established non-grassy ornamentals. Plant tolerance to Envoy Plus 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 Envoy Plus have investigated the safety factor to ornamental plants not listed on the label.

The following plants have shown a tolerance for *Envoy Plus* applications:

#### ORNAMENTAL TREES

COMMON NAME	SCIENTIFIC NAME
Alder, Red	Alnus oregona
Ash	Fraxinus spp.
Basswood	Tilia spp.
Birch, European White	Betula pendula
Birch, River	Betula nigra
Birch, White	Betula papyrifera
Crabapple, Flowering	Malus halliana
Dogwood, Flowering	Cornus florida
Golden Chain Tree	Labumum anagyroides
Maples	Acer spp.
Mulberry, White	Morus alba
Oaks	Quercus spp.
Olive, Wild	Elaeagnus angustifolia
Redbud, Eastern	Cercis canadinsis
Sweet Gum, American	Liquidambar styraciflua

#### **GROUND COVERS**

COMMON NAME	SCIENTIFIC NAME
Bugleweed, Carpet	Ajuga reptans
lvy, English	Hedera helix
Japanese Spurge	Pachysandra terminalis
Lilyturf	Liriope muscari
Moneywort	Lysimachia nummularia
Mondo Grass, White	Ophiopogon jaburan
Mondo Grass, Dwarf	Ophiopogon japonicus
Periwinkle, Lesser	Vinca minor

#### **GARDEN FLOWERS AND PLANTS**

GANDER FEOTERS AND FEARING				
COMMON NAME	SCIENTIFIC NAME			
Ageratum	Ageratum spp.			
Alyssum*, Sweet	Lobularia maritima			
Asparagus Fern	Asparagus setaceus			
Bleeding Heart	Dicentra spectabilis			
Cast Iron Plant	Aspidistra elatior			
Chrysanthemum	Chrysanthemum spp.			
Cinquefoil	Potentilla spp.			
Coleus	Coleus spp.			
Coralbells	Heuchera sanguinea			
Cranesbill	Geranium spp.			
Dahlia	Dahlia spp.			
Daisy, Trailing African	Osteospermum fruticosum			
Daylily	Hemerocallis spp.			
Dusty Miller	Senecio cineraria			
Euonymus	Euonymus spp.			
Gazania	Gazania spp.			
Geranium, House	Pelargonium hortorum			
Heather, False	Cuphea hyssopifolia			
Hosta	Hosta fortunei			
Iris	Iris spp.			
Jasmine Tobacco	Nicotiana alata			
Loosestrife	Lythrum salicaria			
Marigold	Tagetes spp.			
Partridgeberry	Mitchella repens			
Petunia*	Petunia hybrida			
Phiox	Phlox spp.			
Pinks	Dianthus spp.			
Portulaca	Portulaca grandiflora			
Salvia	Salvia spp.			
Saxifrage	Saxifraga spp.			
Sedum	Sedum spp.			
Selloum	Philodendrum selloum			
Snapdragon*	Antirrhinum majus			
Sweet Flag	Aacorus gramineus			
Tickseed	Coreopsis grandiflora			
Touch-Me-Not	Impatiens spp.			
Verbena	Verbena spp.			
Violet	Viola spp.			
Yarrow, Common	Achillea millefolium			
Zinnia	Zinnia elegans			

<sup>\*</sup> Slight foliage or flower speckling has been observed on these species.

#### SHRUBS

COMMON NAME	SCIENTIFIC NAME
Abelia	Abelia spp.
Anise, Purple	Illicium floridanum
Aucuba	Aucuba spp.
Azalea*	Rhododendron spp.
Bamboo	Bambusa spp.
Barberry, Japanese	Berberis thunbergii
Barberry, Magellan	Berberis buxifolia
Bayberry	Myrica pensylvanica
Bottlebrush	Callistemon citrinus
Boxwood, Common	Buxus sempervirens
Camellia, Common	Camellia japonica
Candytuft	Iberis sempervirens
Cleyera	Cleyera japonica
Coralberry	Ardisia crenata
Crape Myrtle	Lagerstroemia indica
Coyote Brush	Baccharis pilularis
Fig, Creeping	Ficus pumila
Gardenia	Gardenia spp.
Holly	llex spp.
Honeysuckle	Lonicera pileata
Indian Hawthorn	Raphiolepis indica
Jasmine	Jasminum spp.
Jasmine, Asiatic	Trachelospermum asiaticum
Jasmine, Star	Trachelospermum jasminoides
luninor	Juniperus spp.
Juniper Lantana	Lantana spp.
Nandina* Bamboo,	Nandinia domestica
Heavenly Oleander, Common	Nerium oleander
Oregon Grape	Mahonia aquifolium
Photinia	Photinia spp.
Pittosporum	Pittosporum spp.
Podocarpus	Podocarpus spp.
Privet	Ligustrum spp.
Pyracantha	Pyracantha spp.
Rhododendron	Rhododendron spp.
Rose	
	Rosa spp.
Spirea Sweet Olive	Spirea bumalda
	Osmanthus fragrans
Viburnum	Vibernum tinus
Wisteria	Wisteria spp.
Yellow Sage/Shrub Verbena	Lantana camera

<sup>\*</sup> Slight foliage or flower speckling has been observed on these species.

### RECOMMENDATIONS FOR ANNUAL GRASSES IN ORNAMENTALS

- 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.

			APPLICATIO	N RATES
GRASS SPECIES	SCIENTIFIC NAME	WEED HEIGHT* INCHES	MINIMUM RATE FL OZ/A <sup>(1)</sup>	MAXIMUM RATE <sup>(2)</sup>
Barnyardgrass	Echinochloa crus-galli	2 to 8	12	32
Broadleaf Signalgrass	Brachiaria platyphylla	2 to 6	12	32
Brome				
California	Bromus carinatus	2 to 6	12	32
Cheat	Bromus secalinus	2 to 6	12	32
Downy	Bromus tectorum	2 to 6	12	32
Ripgut	Bromus diandrus	2 to 6	12	32
Canarygrass	Phalaris canariensis	1 to 4	12	32
Crabgrass				
Hairy	Digitaria adscendens	2 to 6**	12	32
Large	Digitaria sanguinalis	2 to 6**	12	32
Smooth	Digitaria ischaemum	2 to 6**	12	32
Southern	Digitaria ciliaris	2 to 6**	12	32
Crowfootgrass	Dactyloctenium aegyptium	2 to 6**	12	32
Fall Panicum	Panicum dichotomiflorum	2 to 8	12	32
Field Sandbur	Cenchrus incertus	2 to 6	12	32
Foxtail				
Giant	Setaria faberi	2 to 12	12	32
Green	Setaria viridis	2 to 8	12	32
Yellow	Setaria glauca	2 to 8	12	32
Goosegrass	Eleusine indica	2 to 6**	12	32
Itchgrass	Rottboellia cochin	2 to 6	12	32
Junglerice	Echinochloa colona	2 to 6	12	32
Lovegrass (Stinkgrass)	Eragrostis cilanensis	2 to 6	12	32
Rabbitsfootgrass	Polypogon monspeliensis	1 to 4	12	32
Red Rice	Oryza sativa	1 to 3	12	32
Ryegrass	0.,,22 000.0		.=	-
Hardy	Lolium remotum	2 to 6	12	32
Italian	Lolium multiflorum	2 to 6	12	32
Seedling Johnsongrass	Sorghum halepense	4 to 10	12	32
Shattercane	Sorghum bicolor	6 to 18	12	32
Southwestern Cupgrass	Erochloa gracilis	2 to 6	12	32
Sprangletop	Eroomoa graomo	2.00	12	02
Amazon	Leptochloa panicoides	2 to 6	12	32
Bearded	Leptochloa fascicularis	2 to 6	12	32
Mexican	Leptochloa uninervia	2 to 6	12	32
Red	Leptochloa filiformis	2 to 6	12	32
Texas Panicum	Panicum texanum	2 to 6	12	32
Volunteer Cereals	i anicum texanum	2100	12	32
Barley	Hordeum vulgare	2 to 6	12	32
Oats	Avena sativa	2 to 6	12	32
Rye	Secale cereale	2 to 6	12	32 32
Wheat	Triticum aestivum	2 to 6	12	32 32
Volunteer Corn	Zea mays	4 to 12	12	32 16
Volunteer Com	Zea mays	12 to 24	12	32
	Sorghum bicolor	8 to 12	12	32 32
Volunteer Grain Sorghum	Avena fatua			32 32
Wild Oats Wild Proso Millet		2 to 6 2 to 10	12	
	Panicum miliaceum		12 12	32
Witchgrass	Panicum capillare	2 to 8		32
Woolly Cupgrass	Eriochloa villosa	2 to 8	12	32

<sup>\*</sup> Generally occurs between 3-leaf stage and tillering.

\*\* Length of lateral growth.

(1) 16 fl oz/A = approximately 0.4 fl oz/1000 sq ft

(2) 32 fl oz/A = approximately 0.8 fl oz/1000 sq ft

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

#### RECOMMENDATIONS FOR ANNUAL BLUEGRASS CONTROL WITH ENVOY PLUS IN ORNAMENTALS

#### **APPLICATION RATES**

<b>GRASS SPECIES</b>	WEED STAGE	MINIMUM RATE FL OZ/A	MAXIMUM HIGH RATE FL OZ/A
Annual Bluegrass	to 4-Leaf	12	32
(Poa annua)			

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.

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

#### RECOMMENDATIONS FOR PERENNIAL GRASSES IN ORNAMENTALS

- 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.

		APPLICATION RATES		
GRASS SPECIES	WEED HEIGHT (INCHES)	MINIMUM RATE FL OZ/A <sup>(1)</sup>	MAXIMUM RATE FL OZ/A <sup>(2)</sup>	
Bermudagrass (Cynodon dactylon)				
First Application	3 (or up to 6" runners)	12	32	
Repeat Application(s) (if regrowth occurs)	3 (or up to 6" runners)	12	32	
Foxtail Barley (Hordeum jubatum)				
First Application	2 to 6	12	32	
Repeat Application(s) (if regrowth occurs)	2 to 6	12	32	
Quackgrass (Elytrigia repens)				
First Application	4 to 8	12	32	
Repeat Application(s) (if regrowth occurs)	4 to 8	12	32	
Rhizome Johnsongrass (Sorghum				
halepense)	12 to 24	12	32	
First Application	6 to 18	9	16	
Repeat Application(s) (if regrowth occurs)				
Wirestern Muhly (Muhlenbergia frondosa)				
First Application	4 to 8	12	32	
Repeat Application(s) (if regrowth occurs)	4 to 8	12	32	

<sup>(1) 16</sup> fl oz/A = approximately 0.4 fl oz/1000 sq ft

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

#### **IMPORTANT**

Plant tolerance to *Envoy Plus* 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 *Envoy Plus* have investigated the safety factor to plants not listed on the label.

#### NON BEARING FOOD CROPS

ENVOY PLUS SHOULD NOT BE APPLIED TO NON-BEARING FRUIT OR NUT CROPS WHICH ARE GROWN FOR ROOT STOCK.

Crop injury to non-bearing fruit and nut crops can occur if *Envoy Plus* is improperly applied. *Envoy Plus* should not be applied directly over the top of these plant types. Instead spray should be directed at the base of the plant where grassy weeds are growing near the ground.

Non-bearing fruit and nut crops are plants which will not bear fruit or nuts for at least one year following *Envoy Plus* application.

<sup>(2)</sup> 32 fl oz/A = approximately 0.8 fl oz/1000 sq ft

COMMON NAME	SCIENTIFIC NAME
Apples	Malus spp.
Berries	Vaccinium spp.
	Rubus spp.
Cherry, Sweet	Prunus avium
Citrus Fruits	Citrus spp.
Grapes	Vitis spp.
Olives	Olea spp.
Peach	Prunus persica
Pears	Pyrus communis
Prunes	Prunus spp.
Stone Fruits	Prunus spp.
Strawberries	Fragaria spp.
Tree Nuts	-
Almond	Prunus triloba
Filbert	Corylus maxima
Pecan	Carya illionoinensis
Pistachio	Pistacia vera
Walnut	Juglans spp.

#### **CONIFER TREES**

Envoy Plus can be used to control labeled grasses in Christmas tree farms, conifer nurseries and conifer plantations (but not in forests).

COMMON NAME	SCIENTIFIC NAME
Arborvitae, American	Thuja occidentalis
Cedars	Cedrus spp.
Cypress	Taxodium spp.
Douglas Fir	Pseudotsuga menziesii
Firs	Abies spp.
Hemlock, Canadian/ Eastern	Tsuga canadinsis
Hemlock, Western	Tsuga heterophylla
Pines	Pinus spp.
Spruces	Picea spp.
Yew	Taxus 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 and post-harvest croplands. Also, beneath greenhouse benches and around golf courses.

#### STORAGE AND DISPOSAL

#### **PROHIBITIONS**

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

Open dumping is prohibited.

#### **PESTICIDE 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.

Manufactured for

#### Valent U.S.A. Corporation

P.O. Box 8025

Walnut Creek, CA 94596-8025

Form 1612-B Made in U.S.A.

EPA Reg. No. 59639-132

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