



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Dr. Robert Hamilton
Senior Regulatory Scientist
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1600 Riviera Avenue, Suite 200
Walnut Creek, CA 94596-8025

AUG 1 6 2013

Subject:

Master and Supplemental Label Amendments - Adding New Uses on Wheat and Cotton

Product Name: V-10233 Herbicide

EPA Registration #: 59639-193, formerly 63588-93

Wheat Decision #: 464494; Submission Date: April 20, 2012 Cotton Decision #: 465297; Submission Date: May 22, 2012

Associated with Tolerance Petitions: 2F8026 (Wheat); 2F8042 (Cotton)

#### Dear Dr. Hamilton:

The proposed new uses of pyroxasulfone on wheat and cotton have been review. The label amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is <u>acceptable</u>, provided you make the following label revisions:

- 1. On page 18, under Directions for Use in Fall And Spring Preplant Burndown, remove the brackets surrounding the use rates, and revise first sentence to read, "Apply V-10233 Herbicide at 3 to 4.5 oz/A in the fall...."
- 2. On page 19, in Table 2, remove brackets around use rates in all programs, and list as "3 to 4.5 oz/A (3 oz/A in wheat)"
- 3. On page 25, under Preemergence Application and Postemergence Application, remove the brackets surrounding the use rates, and revise first sentence of each section to read, "Apply V-10233 Herbicide at 3 to 4.5 oz/A..."
- 4. On page 26, in Crop Rotational Interval table, remove the brackets surrounding the 2.75 oz/A and 4.5 oz/A rates.

Please note that while no additional data is being requested at this time, any marketing claims made on the pesticide label must be substantiated by data maintained in your files. If data supporting marketing claims made on the product label is not available then those claims must be removed.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ Comments continued on next page

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from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Products released for shipment after 18 months from the date on this notice or the next printing of the master label whichever occurs first, must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA. Your release for shipment of this product constitutes acceptance of these conditions. As required by 40 CFR 156.10(6), you must submit one copy of the final printed label before the product is released for shipment. If you have any questions please contact Michael Walsh by phone at (703) 308-2972 or via email at "walsh.michael@epa.gov".

Sincerely,

Kathryn V. Montague Product Manager (23)

Herbicide Branch

Registration Division (7505P)

Enclosure



# ACCEPTED with COMMENTS In EPA Letter Dated:

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

59639-193

GROUP 14 15 HERBICIDE

[MASTER LABEL]

## V-10233 Herbicide

FOR RESIDUAL CONTROL AND/OR SUPPRESSION OF CERTAIN WEEDS IN FIELD CORN, COTTON, SOYBEAN, WHEAT, FALLOW LAND, NON CROP AREAS AROUND FARMS, ORCHARDS AND VINEYARDS AND TO MAINTAIN BARE GROUND ON NON-CROP AREAS.

Active Ingredient	By Wt
Flumioxazin*	33.5%
Pyroxasulfone**	42.5%
Other Ingredients	24.0%
<b>G</b>	100.0%

\*2-[7-fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2*H*-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahyd ro-1*H*-isoindole-1,3(2*H*)-dione

\*\*3-[[[5-(difluoromethoxy)-1-methyl-3-(trifluoromethyl)-1*H*-pyrazol-4-yl]methyl]sulfonyl]-4.5-dihydro-5.5-dimethylisoxazole

V-10233 Herbicide is a water dispersible granule containing 76% active ingredient.

CAS No. 447399-55-5

KEEP OUT OF REACH OF CHILDREN

## **CAUTION**

SEE NEXT PAGE FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

**NET WEIGHT** 

# 4/65

## [Sub Label 1]

## V-10233 Herbicide

For residual control and/or suppression of certain weeds use in field corn, cotton, soybean, wheat, fallow land, non-crop areas around farms, orchards and vineyards.



REDLINE COPY
[Bracketed information is optional text]

GROUP 14 15 HERBICIDE

## V-10233 Herbicide

FOR RESIDUAL CONTROL AND/OR SUPPRESSION OF CERTAIN WEEDS USE IN FIELD CORN, COTTON, SOYBEAN, WHEAT, FALLOW LAND, NON CROP AREAS AROUND FARMS, ORCHARDS AND VINEYARDS AND TO MAINTAIN BARE GROUND ON NON-CROP AREAS.

	By Wt.
Flumioxazin*	33.5%
Pyroxasulfone**	
Other Ingredients	24.0%
Total	

\*2-[7-fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahyd ro-1H-isoindole-1,3(2H)-dione

\*\*3-[[[5-(difluoromethoxy)-1-methyl-3-(trifluoromethyl)-1*H*-pyrazol-4-yl]methyl]sulfonyl]-4,5-dihydro-5,5-dimethylisoxazole

V-10233 Herbicide is a water dispersible granule containing 76% active ingredient.

CAS No. 447399-55-5

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## **CAUTION**

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**NET WEIGHT 6 POUNDS** 

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# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS & DOMESTIC ANIMALS CAUTION

Avoid contact with skin, eyes, or clothing. Causes moderate eye irritation.

<b>.</b> ,
ostition oction of doctor for treatment advice.
n to fresh air. not breathing, call 911 or an ambulance, then give artificial preferable by mouth-to-mouth, if possible. n control center or doctor for further treatment advice.
n control center or doctor immediately for treatment advice. In sip a glass of water if able to swallow. The vomiting unless told to do so by the poison control center anything by mouth to an unconscious person.

#### **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 800-892-0099 for emergency medical treatment information.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standards (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

### Applicators and other handlers must wear

- -long-sleeved shirt and long pants
- -chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride, shoes and socks.

For aerial application to corn, cotton, soybean and wheat mixers and loaders must also wear: PF 5 respirator.

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

#### **USER SAFETY RECOMMENDATIONS**

#### Users should:

- Wash thoroughly with soap and water after handling and 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**

This product is toxic to non-target plants and aquatic invertebrates. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters.

This pesticide is toxic to plants and should be used strictly in accordance with the drift and run-off precautions on this label in order to minimize off-site exposures.

**Ground Water Advisory:** This chemical has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

**Surface Water Advisories:** Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

The product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce potential loading of pyroxasulfone and its degradation product, 5-difluoromethody-1H-pyrazol-4-yl) methanesulfonic acid (M1), from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

#### **DIRECTIONS FOR USE**

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

READ ENTIRE LABEL. 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 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 made of waterproof material, shoes plus socks.

#### 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 price.

#### **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. 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 TO THE FULLEST EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER 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. To the extent consistent with applicable law AND 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

To the fullest extent consistent with applicable law, Valent or Seller is not 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. TO THE FULLEST EXTENT CONSISTENT WITH APPLICABLE, LAW, 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 THE PRODUCT.

#### PROMPT NOTICE OF CLAIM

To the extent consistent with applicable law allowing such requirements 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 latter, so that an immediate inspection of the affected property and growing crops can be made.

To the extent consistent with applicable law 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, to the extent allowed by applicable law.

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

#### RESISTANCE MANAGEMENT RECOMMENDATIONS

V-10233 Herbicide is a premix of Group 14 and Group 15 herbicides. Any weed population may contain or develop plants naturally resistant to V-10233 Herbicide and other Group 14 and/or Group 15 herbicides. Weed species with acquired resistance to Group 14 and/or Group 15 herbicides may eventually dominate the weed population if Group 14 plus Group 15 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 V-10233 Herbicide or other Group 14 and/or Group 15 herbicides.

To delay herbicide resistance consider:

- Avoiding the consecutive use of V-10233 Herbicide or other target site of action Group 14 and/or Group 15 herbicides that might have a 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 Integrated Pest Management (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.

For further information or to report suspected resistance, you may call the following toll-free number: 800-6-VALENT (682-5368)

#### PRODUCT INFORMATION

V-10233 Herbicide provides residual control of susceptible weeds in labeled crops and provides additional burndown activity when used as part of a burndown program. In addition, V-10233 Herbicide can be applied as part of a fall burndown program for control of susceptible winter annuals.

Weeds controlled by V-10233 Herbicide are listed in Table 1. Application rates of V-10233 Herbicide vary depending on soil type and organic matter; refer to Table 2.

Moisture is necessary to activate V-10233 Herbicide in soil for residual weed control. When adequate moisture is not received after a V-10233 Herbicide application, weed residual control may be improved by irrigation with at least 1/2 inch of water. If emerged weeds are controlled by cultivation, residual weed control will be reduced.

<u>Burndown program</u>: Apply V-10233 Herbicide as part of a burndown program to actively growing weeds. Applying V-10233 Herbicide under conditions that do not promote active weed growth will reduce herbicide effectiveness. Do not apply V-10233 Herbicide when weeds are under stress due to drought, excessive water, extremes in temperature, disease or low humidity. Weeds under stress tend to become less susceptible to herbicidal action. V-10233 Herbicide is most effective when applied under warm sunny conditions.

[Rainfastness: V-10233 Herbicide is rainfast one hour after application. Do not apply V-10233 Herbicide if rain is expected within one hour of application or postemergence efficacy may be reduced.]

<u>Soil Characteristics:</u> Application of V-10233 Herbicide to soils with high organic matter and/or high clay content may require higher dosages than soils with low organic matter and/or low clay content. Application to cloddy seedbeds can result in reduced weed control.

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Table 1. Weeds Controlled or Suppressed by Residual Activity of V-10233 Herbicide

Common Name	Scientific Name	V-10233 Herbicide Rates		
		3:0°oz/A 3475;oz/A 445;oz/A		
		ATATICA STRAIN		[Fine textured
		Organic Matter	bia esiace) inedium textured	elios :
		\$3%J*** U	ser - soil sa	. Organic Matter
777		<b>***</b>	Organie Matter 3	<u>ම (6%)</u>
			* : 05% · · ·	
		liking mergence	[Preemergence]	[Non GMO program∈or
		postemergence	postemergence	heavy weed
		program - no:	**-alkbrosere or brodern	pressure:]
		glyphosate or	- glyphosate or	
		weeds.]	ALŠ reststant weeds or heavy	
			weed pressure:	E. S.
		of the second se	ontrol or S = Suppre	ssion
BROADLEAF WEED S	PECIES	<b>A</b>		
		S	S	S
Bristly Starbur	Acanthospermum hispidum	5	3	3
Carpetweed	Mollugo verticillata	С	С	С
Chickweeds				
Common	Stellaria media	С	С	С
Mouseear	Cerastium vulgatum	С	С	С
Coffee Senna	Cassia occidentalis	S	С	С.
Copperleaf, Hophornbeam	Acalypha ostryifolia	S	S	S
Dandelion	Taraxacum officinale	С	С	С
Eclipta	Eclipta prostrate	С	С	C
Eveningprimrose, Cutleaf	Oenothera laciniata	С	С	С
Florida Beggarweed	Desmodium tortuosum	S	С	С
Florida Pusley	Richardia scabra	С	С	C
Golden Crownbeard	Verbesina encelioides	S	С	C
Hairy Indigo	Indigofera hirsuta	S	С	O
Hemp Sesbania	Sesbania exaltata	, C	C .	С
Henbit	Lamium amplexicaule	С	С	С
Jimsonweed	Datura stramonium	C	С	O
Kochia	Kochia scoparia	С	С	C
Lambsquarters, Common	Chenopodium album	С	С	С
Little Mallow	Malva parviflora	С	С	С
Marestail/Horseweed	Conyza canadensis	С	С	С
Morningglories <sup>1</sup>			<u></u>	
Entireleaf	Ipomoea hederacea var. Integriuscula	S	С	С
lvyleaf	Ipomoea hederacea	S	С	С
Red/Scarlet	Ipomoea coccinea	S	С	С
Tall	Ipomoea purpurea	S	С	С
Mustard, Wild	Brassica kaber	С	С	С
Palmer Amaranth	Amaranthus palmeri	С	С	С

continued

Table 1. Weeds Controlled or Suppressed by Residual Activity of V-10233 Herbicide

Common Name	Scientific Name	V-10233 Herbicide Rates		
		3.0 oz/A  [All soil textures, Organic Matter <3%]	3:75 oz/A  [Coarse and medium textured soil organic Matter 3: to 5%]	3.to.5%]
		followed by postemergence program no glyphosate or ALS resistant weeds:	-glyphosate or ALS resistant	program or heavy weed pressure:]
BROADLEAF WEED S	PECIES			
Nightshades				
Black	Solanum nigrum	С	С	С
Eastern Black	Solanum ptycanthum	С	С	С
Hairy	Solanum sarrachoides	С	С	C
Pigweeds				
Redroot	Amaranthus retroflexus	С	С	C
Smooth	Amaranthus hybridus	· C	С	C .
Spiny Amaranth	Amaranthus spinosus	С	С	С
Tumble	Amaranthus albus	C	С	С
Prickly Sida (Teaweed)	Sida spinosa	С	С	С
Puncturevine	Tribulus terrestris	С	С	С
Purslane, Common	Portulaca oleracea	С	C	C
Radish, Wild	Raphanus raphanistrum	С	С	С
Ragweeds <sup>2</sup>		T		
Common Ragweed Ragweed, Giant	Ambrosia artemisiifolia Ambrosia trifida	S S	C S	C S
Redmaids	Calandrinia ciliata var menziessii	C	C	
Russian Thistle	Salsola iberica	S	С	С
Shepherd's-purse	Capsella bursa-pastoris	С	С	С
Smallflower Morningglory	Jacquemontia tamnifolia	С	С	С
Spotted Spurge	Euphorbia maculate	С	С	C
Smartweeds Ladysthumb	Polygonum persicaria	S	S	S
Pennsylvania	Polygonum pensylvanicum	S	S	S
Spurred Anoda	Anoda cristata	S	С	С
Tropic Croton	Croton glandulosus	s	С	С
Velvetleaf	Abutilon theophrasti	С	C	C
Venice Mallow	Hibiscus trionum	C	C	C
Waterhemps <sup>2</sup>		. <u> </u>		<u> </u>
Common	Amaranthus rudis	С	С	С
Tall	Amaranthus tuberculatus	C	C	C
Wild Buckwheat	Polygonum convolvulus	S	S	S
Wild Poinsettia	Euphorbia heterophylla	S	С	С
Wormwood, Biennial	Artemisia biennis	S	S	S

continued

Table 1. Weeds Controlled or Suppressed by Residual Activity of V-10233 Herbicide

Common Name Scientific Name		V-10233 Herbicide Rates		
		3.0 oz/A [Allisoil textures Organic Matter <3%]	S75 oz/A (Conspend medium craned soil (Consideration S	45 oz/A [Fine textured softs Organic Matter
		[[Premargance followed by postanergance program = no glyphosate or ALS resistant weeds]	to 5%1 [[Resinargence followed by postemargence program eglyphosete or ALS resistant weeds or heavy weed pressure)	[Non GMO program - or heavy weed pressure]
		C = C	Control or S = Suppr	ession
GRASS WEED SPECE Barnyardgrass	Echinochloa crus-galli	С	С	С
Bluegrass, Annual	Poa annua	C	C	c
Cheat	Bromus secalinus	C	c	C
Crabgrass	Diomas secalinas			
Large	Digitaria sanguinalis	С	С	С
Smooth	Digitaria ischaemum	C	C	C
Cupgrass, Southwestern	Eriochloa gracilis	С	C	C
Downy Brome	Bromus tectorum	С	С	С
Foxtails			<u> </u>	
Giant	Setaria faberi	С	С	С
Green	Setaria viridis	С	С	C
Yellow	Setaria glauca	С	С	С
Goosegrass	Eleusine indica	С	С	С
Johnsongrass (seedling)	Sorghum halepense	С	С	С
Lovegrass, California	Eragrostis diffusa	C	С	С
Panicums				
Fall	Panicum dichotomiflorum	C	С	С
Texas	Panicum texanum	C	С	С
Red Rice	Oryza sativa	С	С	С
Ryegrass				
Italian	Lolium multiflorum	С	С	С
Rigid	Lolium rigidum	С	С	С
Signalgrass, Broadleaf	Brachiaria platyphylla	С	С	С

<sup>&</sup>lt;sup>1</sup>Morningglory species are not adequately controlled on fine soils or soils with greater than 3% organic matter.

<sup>&</sup>lt;sup>2</sup> A postemergence herbicide, such as Cobra<sup>®</sup>, Phoenix<sup>™</sup> or glyphosate (Roundup Ready<sup>®</sup> soybeans only) may be needed following a preemergence application of V-10233 Herbicide to adequately control common ragweed or waterhemp in soybean fields with heavy pressure.

#### **APPLICATION RATES**

[Application rates of V-10233 Herbicide vary depending on soil type and organic matter, soil textures are defined as:

Coarse and Medium	Fine
[sandy loam,] loamy sand loamy, silt-loam, silt, sand clay, sandy clay loam	silty clay, silty clay loam, clay, clay loam]

#### USE PRECAUTIONS AND RESTRICTIONS TO FIELD CORN AND SOYBEAN

- Do not exceed the maximum seasonal rates as listed on this label.
- For field corn, use only on no-till or minimum tillage fields where last years crop residue has not been incorporated into the soil.
- · Do not use on popcorn, sweet corn or corn grown for seed.
- Do not use adjuvants when applying to corn.
- · Do not apply after crop has emerged.
- Do not apply to frozen or snow covered soil.
- Do not apply this product when weather conditions favor spray drift from treated areas.
- Do not apply during low-level inversion conditions, including fog.
- When applying by air, observe drift management restrictions and precautions listed under "aerial application".
- Any tillage operation after the application or mechanical incorporation into the soil will reduce residual weed control.
- [For field corn, do not use on soils with less than 1% organic matter unless an activation rainfall has occurred between application and planting.] [Do not plant corn within 30 days of V-10233 Herbicide application in the states of AR, LA, MS, OK or TX]
- [For field corn, do not plant corn within 30 days of V-10233 Herbicide application in the states of AL, GA and FL, unless a strip tillage operation has occurred between application and planting.]
- Do not graze treated soybean fields or feed treated forage or hay to livestock.

#### **USE PRECAUTIONS AND RESTRICTIONS TO WHEAT**

[For use in the states of DE, ID, KY, MD, MN, MT, NC, ND, NJ, OR, SC, SD, TN, VA and WA Only]

- Do not exceed the maximum seasonal rate of 3 oz/A.
- Use only on no-till or minimum tillage fields where last years crop residue has not been incorporated into the soil.
- Do not apply to frozen or snow covered soil.
- Do not apply this product when weather conditions favor spray drift from treated areas.
- Do not apply during low level inversion conditions, including fog.
- When applying by air, observe drift management restrictions and precautions listed under "aerial application".
- Any tillage operation after the application or mechanical incorporation into the soil will reduce residual weed control.
- [Do not irrigate between emergence and spike.]
- [Wheat must be planted a minimum of 1" deep.]
- [Do not graze until wheat has reached 5 inches in height.]



- Do not perform any tillage operation after application or residual weed control will be reduced.
- V-10233 Herbicide can be used at 3 oz/A with labeled burndown herbicides to enhance the speed of burndown and increase weed spectrum. A minimum of 30 days must pass, and 1 inch of rainfall/irrigation must occur, between V-10233 application and wheat planting.
- Application of lime within 30 days before or after application of this product may result in decreased weed control.

#### **USE PRECAUTIONS AND RESTRICTIONS TO COTTON**

#### Fall and Spring Burndown Programs

- Do not apply to frozen or snow covered soil.
- Any tillage operation after application will result in reduced residual weed control within the tilled area.
- V-10233 Herbicide can be used at 1.5 to 3 oz/A with labeled burndown herbicides to enhance the speed of burndown and increase weed spectrum.
- For conventional-till cotton, a minimum of 30 days must pass, and 1 inch of rainfall/irrigation must occur, between V-10233 Herbicide application and planting.
- [For no-till cotton, a minimum of 14 days must pass, and 1 inch of rainfall/irrigation must occur, between V-10233 Herbicide application and planting when a V-10233 Herbicide rate of 1.5 oz/A is used and 21 days when a V-10233 Herbicide rate of 2 to 3 oz/A is used. The field must contain the stubble from the previous crop or cover crop such as rye or wheat.]
- [For strip-till cotton, V-10233 Herbicide may be applied up to 7 days prior to planting. Conduct strip-till operation anytime between application and planting.]
- [For fallow bed applications, cotton may be planted 7 days following application if the top 2 inches are dragged off the beds prior to planting.]
- Observe all rotational intervals as listed in the "ROTATIONAL RESTRICTIONS" table.
- Refer to most restrictive label for minimum interval between application and planting.

#### Post Directed and Layby Use in Cotton

- Do not apply more than 3 oz of V-10233 Herbicide per acre during a single application.
- Do not apply more than 6 oz of V-10233 Herbicide per acre during a single growing season.
- Do not make a sequential V-10233 Herbicide application within 30 days of the first V-10233 Herbicide application.
- Do not apply within 60 days of harvest.
- Observe all rotational intervals as listed in the "ROTATIONAL RESTRICTIONS" table.
- Refer to most restrictive label for minimum interval between application and planting.

# DIRECTIONS FOR USE IN FIELD CORN (NO TILL AND MINIMUM TILL)

Apply V-10233 Herbicide at 3 [to 4.5] oz/A to field corn (no till and minimum till) early pre-plant. Corn must be planted between 7 and 30 days after application unless the application is made as part of a fall burndown program. Preemergence application of V-10233 Herbicide provide residual control of weeds listed in Table1, Weeds Controlled or Suppressed by Residual Activity of V-10233 Herbicide.

#### Burndown Use Directions - For Preplant Applications in Field Corn

V-10233 Herbicide, applied as part of a burndown program, may be used for residual weed control, as well as to assist in postemergence burndown of many weeds where field corn will be planted directly into the residue of the previous year. See Directions for Use in Fall and Spring Preplant Burndown and Fallow Seedbed Programs in Field Corn for rates and timing of applications. For control of emerged weeds, V-10233 Herbicide must be applied with an

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appropriate burndown tank mix partner. To ensure thorough coverage, use a minimum of 15 gallons of spray solution per acre. Always read and follow label directions for all tank mix products before using.

#### **Tank Mixes**

Do not use adjuvants when applying to corn. Always confirm that the tank mix partners are registered for use on corn. Always read and follow label directions for all tank mix products before using. V-10233 Herbicide may be tank mixed with 2,4-D LVE, atrazine, Basis<sup>®</sup>, dicamba, Express<sup>®</sup>, ghlyphosate, Hornet<sup>®</sup>, paraquat, Python WDG, Resolve<sup>®</sup> simazine, for pre-plant burndown applications. Refer to tank mix product labels for specific recommendations and weeds controlled.

# DIRECTIONS FOR USE IN SOYBEAN (Pre-plant and Preemergence)

Apply V-10233 Herbicide to soybeans early pre-plant, prior to planting or preemergence (after planting). Preemergence application of V-10233 Herbicide must be made within 3 days after planting and prior to soybean emergence to control weeds listed in Table1, Weeds Controlled or Suppressed by Residual Activity of V-10233 Herbicide. Application after the soybeans have begun to crack, or are emerged, will result in severe crop injury. Do not apply V-10233 Herbicide when soybeans have begun to crack.

#### **USE RESTRICTIONS**

- Do not apply more than [3.75] [4.5] oz of V-10233 Herbicide per acre during a single growing season.
- Do not use V-10233 Herbicide in soybeans in the same field that flufenacet (Axiom<sup>®</sup>, Domain<sup>®</sup>), alachlor (Micro-Tech<sup>®</sup>), metolachlor (Dual<sup>®</sup> products or Boundary<sup>®</sup>) or dimethenamid (Frontier<sup>®</sup> or Outlook<sup>®</sup>) will be used preemergence, or soybean injury may occur.
- · Do not irrigate when soybeans are cracking.

#### **TANK MIXES**

Read tank mix product label for rates and weeds controlled. Always read and follow label directions for all tank mix products before using. Always confirm that the tank mix partners are registered for use on soybeans. The most restrictive labeling of any tank mix product must be followed. V-10233 Herbicide, when applied according to label use directions, will provide residual control of the weeds claimed in crop specific use directions. This label makes no claims concerning control of other weed species.

*V-10233* Herbicide, applied as part of a burndown program, may be used for residual weed control, as well as to assist in postemergence burndown of many annual and perennial weeds where soybeans will be planted directly into a stale seedbed, cover crop or in previous crop residues. For control of emerged weeds, choose the most appropriate tank mix partner from Table 4, Tank Mix Partners for Control of Emerged Weeds. To ensure thorough coverage, use a minimum of 15 gals of spray solution per acre. Refer to tank mix partner's label for recommended application pressure. All *V-10233* Herbicide tank mixes applied to assist in the control of emerged weeds must be applied with crop oil concentrate or methylated seed oil at 1 to 2 pt/A or a non-ionic surfactant at 0.25% v/v.

#### ADDITIONAL RESIDUAL BROADLEAF CONTROL

V-10233 Herbicide can be tank mixed with chlorimuron, Extreme<sup>®</sup>, Gangster<sup>®</sup>, metribuzin, Firstrate<sup>®</sup>, Lorox<sup>®</sup>, Pursuit Plus<sup>®</sup>, pendimethalin, Python<sup>®</sup> WDG, Scepter<sup>®</sup> Valor<sup>®</sup>, Valor<sup>®</sup> XLT for additional broadleaf control. Refer to tank mix product labels for specific recommendations.

#### ADDITIONAL RESIDUAL GRASS CONTROL

V-10233 Herbicide can be tank mixed with pendimethalin or Command® for additional grass control. Refer to tank mix product labels for specific recommendations

## DIRECTIONS FOR USE IN WHEAT (NO TILL AND MINIMUM TILL)

Application of V-10233 Herbicide must be made no sooner than 30 days prior to wheat planting to control weeds listed in Table1.

#### **TANK MIXES**

V-10233 Herbicide, applied as part of a burndown program, may be used for residual weed control, as well as to assist in postemergence burndown of many annual and perennial weeds where wheat will be planted directly into a stale seedbed, cover crop or in previous crop residue. For control of emerged weeds, choose the most appropriate tank mix partner from Table 4, Tank Mix Partners for Control of Emerged Weeds. To ensure thorough coverage, use a minimum of 15 gals of spray solution per acre. Refer to tank mix partner's label for recommended application pressure. All V-10233 Herbicide tank mixes applied to assist in the control of emerged weeds must be applied with crop oil concentrate or methylated seed oil at 1 to 2pt/A or a non-ionic surfactant at 0.25% v/v.

#### DIRECTIONS FOR USE IN FALL AND SPRING PREPLANT BURNDOWN

Apply V-10233 Herbicide at 3 to 5 4.5 boz/A in the fall to provide residual weed control in fields that will be planted the following spring with field corn and soybean. Weeds controlled or suppressed by residual activity are listed in Table 1, Weeds Controlled or Suppressed by Residual Activity of V-10233 Herbicide. Application rates of V-10233 Herbicide vary depending on soil type and organic matter. If weeds have emerged at the time of application, use V-10233 Herbicide in combination with a labeled burndown herbicide.

Weeds controlled by burndown and residual activity are listed in Table 3, Weeds Controlled by Fall and Spring Preplant Burndown Programs.

V-10233 Herbicide can be used in a fall burndown or fallow seedbed program however, the length of residual control may be variable. Abnormally warm or wet winters will reduce the length of weed control observed in the spring.

Table 2.	Fall and	Spring	Preplant	Burndown	Programs
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Herbicide	Rates
Program 1 <sup>1</sup>	
V-10233 Herbicide Plus	[3 to 3.75] [3 to 4.5] oz/A
glyphosate <b>Plus</b>	0.5 to 1.0 lb ai/A (equivalent to 1 to 2 pt/A of Roundup PowerMAX®)
2,4-D LVE (2,4-D for use on preplant soybeans only) Plus	0.5 to 1.0 lb ai/A (equivalent to 1 to 2 pt/A of 2,4-D 4 LVE)
NIS + AMS	0.5% v/v + 17 lbs/100 gallons of water

#### OR

Program 2 <sup>1</sup>	
V-10233 Herbicide Plus	[3 to 3.75] [3 to 4.5] oz/A
glyphosate Plus	0.5 to 1.0 lb ai/A (equivalent to 1 to 2 pt/A of Roundup PowerMAX)
COC <sup>2</sup>	1pt/A
or NIS + AMS	or 0.5% v/v + 17 lbs/100 gallons of water

#### OR

Program 3 <sup>1</sup>	
V-10233 Herbicide	[3 to 3.75] [3 to 4.5] oz/A
Plus	
2,4-D LVE (2,4-D for use on preplant soybean only)	0.5 to 1.0 lb ai/A (equivalent to 1 to 2 pt/A of 2,4-D 4 LVE)
Plus	
COC	1 pt/A

#### OR

Program 4	·	
V-10233 Herbicide	[3 to 3.75] [3 to 4.5] oz/A	
Plus		
Ignite®	32 to 40 fl oz/A	

Dicamba (Banvel®/Clarity®), at 0.188 lb ai/A (6 fl oz/A of Banvel 4) can be added to Programs 1, 2 & 3 to assist in the control emerged broadleaves such as marestail, dandelions and other tough winter annuals. Refer to dicamba label for rotational restrictions. Also see CROP ROTATIONAL INTERVAL section of V-10233 Herbicide product label for additional information.

<sup>2</sup>Crop oil concentrate has been found to increase glyphosate burndown of emerged cutleaf, evening primrose and Carolina geranium.

Table 3. Weeds Controlled by Fall and Spring Preplant Burndown Programs

WEEDS CONTROLLED <sup>1</sup>		POSTEMERGENCE				
COMMON NAME	SCIENTIFIC NAME	Program 1	Program 2	Program 3	Program 4	RESIDUAL
			Weed	ls 3 inches o	r less	
Chickweed						
Common	Stellaria media	Yes	Yes	No	Yes	Yes
Mouseear	Cerastium vulgatum	Yes	Yes	No	Yes	Yes
Dandelion	Taraxacum officinale	Yes	No	Yes	Yes	Yes
Henbit	Lamium amplexicaule	Yes	Yes	Yes	No	Yes
Kochia	Kochia scoparia	Yes	Yes	Yes	No	Yes
Marestail/Horseweed	Conyza canadensis	Yes	Yes <sup>2</sup>	Yes	Yes	Yes
Groundsel, Cressleaf	Senecio glabellus	Yes	Yes	Yes	No	Yes
Purple Deadnettle	Lamium purpureum	Yes	Yes	Yes	No	Yes
		Weeds 12 inches or less				
Carolina Geranium	Geranium carolinianum	Yes	Yes	Yes	No	Yes
Eveningprimrose, Cutleaf <sup>3</sup>	Oenothera laciniata	Yes	Yes	Yes	No	Yes
Mustard, Wild	Brassica kaber	Yes	Yes	Yes	Yes	Yes
Shepherd's-purse	Capsella bursa-pastoris	Yes	Yes	Yes	Yes	Yes

<sup>&</sup>lt;sup>1</sup>Refer to glyphosate and/or 2,4-D labels for additional weeds controlled and rotational restrictions.

Programs 2 or 3 must not be used to control cutleaf eveningprimrose that are 12 inches or less and in the rosette stage.

#### **Tank Mix**

V-10233 Herbicide, applied as part of a burndown program, may be used for residual weed control, as well as to assist in postemergence burndown of many annual and perennial weeds where field corn and soybeans will be planted directly into a stale seedbed, cover crop or in previous crop residues. For control of emerged weeds, choose the most appropriate tank mix partner from Table 4, Tank Mix Partners for Control of Emerged Weeds. To ensure thorough coverage, use a minimum of 15 gals of spray solution per acre. Refer to tank mix partner's label. Always confirm that the tank mix partners are registered for use on [corn] [and] [soybeans].

<sup>&</sup>lt;sup>2</sup>Program 2 will not control emerged glyphosate resistant marestail/horseweed.

<sup>&</sup>lt;sup>3</sup>Program 1 must not be used to control cutleaf eveningprimrose that are nearing 12 inches in height or are past the rosette stage.

Table 4. Tank Mix Partners for Control of Emerged Weeds

TANK MIX PARTNER	TARGET WEEDS <sup>1</sup>
2,4-D	Marestail
	Giant Ragweed
	Dandelion
2,4-D	Chickweed
+	Marestail
glyphosate	Giant Ragweed
,	Dandelion
·	Grass
paraquat	Annual Grasses
	Henbit
Ignite	General burndown, including marestail
glyphosate	General Burndown
Select® Max	Grasses
Sceptor® 70 DG	Cocklebur
	Common Sunflower

<sup>&</sup>lt;sup>1</sup>Refer to tank mix product labels for specific recommendations for control of emerged weeds present.

## DIRECTIONS FOR USE IN FALL AND SPRING PREPLANT BURNDOWN PROGRAMS IN COTTON

#### **FALL BURNDOWN PROGRAMS**

V-10233 Herbicide, at 3 to 6 oz/A, can be used in the fall to provide residual weed control in fields that will be planted the following spring with cotton. Weeds controlled by residual activity are listed in Table 1. If weeds have emerged at the time of application, use V-10233 Herbicide in combination with a labeled burndown herbicide. [Application should be made when soil temperature falls below 50°F at a 2 inch depth to maintain residual weed control into the spring.] Abnormally warm or wet winters will reduce the length of weed control observed in the spring.

#### **SPRING BURNDOWN PROGRAMS**

V-10233 Herbicide, at 1.5 to 3 oz/A, can be used in combination with labeled preplant burndown herbicides to assist in the postemergence burndown of control emerged weeds and provide residual weed control prior to crop emergence in fields that will be planted with cotton. Weeds controlled by residual activity are listed in Table 1. No-till planters that incorporate the soil during planting may result in decreased weed control in the row.

#### DIRECTIONS FOR POST DIRECTED AND LAYBY USE IN COTTON

## **ENVIRONMENTAL CONDITIONS AND BIOLOGICAL PERFORMANCE**Hooded, Shielded and Layby Application

For best results, V-10233 Herbicide should be applied to actively growing weeds within the growth stages indicated in this label. Applying V-10233 Herbicide under conditions that do not promote active weed growth will reduce herbicide effectiveness. Do not apply V-10233 Herbicide when the crop or weeds are under stress due to drought, excessive water, extremes in temperature, disease or low humidity. Weeds under stress tend to become less susceptible to herbicidal action. V-10233 Herbicide is most effective when applied under sunny conditions at temperatures above 65°F.

V-10233 Herbicide is rainfast one hour after application. Applications should not be made if rain is expected within one hour of application or postemergence efficacy may be reduced. Rainfall within one hour of application will not adversely affect residual activity.

#### HERBICIDE RATE

#### Hooded, Shielded and Layby Application

For postemergence weed control, V-10233 Herbicide should be applied through a hooded or shielded sprayer or at layby, at 3 oz/A, in combinations with MSMA, diuron, or glyphosate, to assist in the control of weeds listed in Table 5. Residual weed control can also be obtained through hooded, shielded and layby application of V-10233 Herbicide. Weeds that are controlled or suppressed through residual activity of V-10233 Herbicide are listed in Table 1.

Table 5. Emerged Broadleaf Weeds Controlled by, Hooded, Shielded and Layby Application of V-10233 Herbicide Tank Mixes With Glyphosate or MSMA in Cotton

BROADLEAF WEED SPEC	WEED HEIGHT	
COMMON NAME	SCIENTIFIC NAME	(inches) 3 oz/A
Bindweed, Field <sup>1</sup>	Convolvulus arvensis	4
Carpetweed	Mollugo verticillata	4
Chickweed, Common	Stellaria media	4
Cocklebur, Common	Xanthium strumarium	4
Florida Beggarweed	Desmodium tortuosum	2
Hemp Sesbania	Sesbania exaltata	6
Jimsonweed	Datura stramonium	4
Lambsquarters, Common	Chenopodium album	4
Morningglories		
Entireleaf	Ipomoea hederacea var. integriuscula	4
lvyleaf	Ipomoea hederacea	4
Pitted	Ipomoea lacunose	4
Red	Ipomoea coccinea	4
Tall	Ipomoea purpurea	2
Mustard, Wild	Brassica kaber	6
Nightshades		
Black	Solanum nigrum	4
Eastern Black	Solanum ptycanthum	4
Hairy	Solanum sarrachoides	4

Table 5. Emerged Broadleaf Weeds Controlled by, Hooded, Shielded and Layby Application of V-10233 Herbicide Tank Mixes With Glyphosate or MSMA in Cotton

BROADLEAF WEED SPE	WEED HEIGHT (inches)	
COMMON NAME	SCIENTIFIC NAME	3 oz/A
Pigweeds		
Palmer Amaranth	Amaranthus palmeri	4
Redroot	Amaranthus retroflexus	4
Smooth	Amaranthus hybridus	. 4
Plaintain, Broadleaf	Plantago major	6
Prickly Sida (Teaweed)	Sida spinosa	4
Purslane, Common	Portulaca oleracea	2
Ragweeds		
Common	Ambrosia artemisiifolia	2
Giant	Ambrosia trifida	4
Rice Flatsedge	Cyperus iria	2
Sicklepod	Senna obtusifolia	4
Smartweeds		
Ladysthumb	Polygonum persicaria	4
Pale	Polygonum lapathifolium	4
Pennsylvania	Polygonum pensylvanicum	4
Spotted Spurge	Euphorbia maculat	4
Velvetleaf	Abutilon theophrasti	4
Venice Mallow	Hibiscus trionum	2
Waterhemps		
Common	Amaranthus rudis	2
Tall	Amaranthus tuberculatus	2

<sup>&</sup>lt;sup>1</sup>V-10233 Herbicide tank mixes will control the above ground portion of field bindweed. Repeated applications will be needed to control regrowth.

#### CARRIER VOLUME AND SPRAY PRESSURE

#### Hooded, Shielded and Layby Application

To ensure thorough coverage in hooded, shielded and layby applications, use a minimum of 15 gals spray solution per treated acre. Use a minimum of 20 gals per treated acre under heavy weed pressure. Nozzle selection should meet manufacturer's gallonage and pressure recommendations for application method being used. Do not use "Flood Jet" nozzles, as they tend to increase the chance of crop injury.

#### **ADDITIVES**

#### Hooded, Shielded and Layby Application

Weed control from hooded, shielded or layby application of V-10233 Herbicide in cotton requires the addition of an agronomically approved non-ionic surfactant to the spray mixture. Non-ionic surfactant must contain at least 80% active ingredient. Mixing compatibility qualities should be verified by a jar test. The use of crop oil concentrates, methylated seed oils, organo-silicant surfactants or products containing these ingredients, may result in severe crop injury and should not be used.

#### **APPLICATION EQUIPMENT**

Apply V-10233 Herbicide tank mixes, with ground equipment using standard commercial sprayers equipped with nozzles designed to deliver the desired spray pressure and spray volume. All nozzles must be under the hood or behind the shield to ensure no spray solution comes in contact with the cotton. Application equipment should be clean and in good repair. Nozzles should meet manufacturer's recommendations for spray pattern and placement on spray boom and should be checked frequently for accuracy.

#### **TIMING TO COTTON**

#### **Hooded and Shielded Application**

V-10233 Herbicide tank mixes may be applied with a hooded or shielded sprayer after cotton has reached a minimum of 6 inches in height. Care must be taken to ensure the spray solution or drift does not come in contact with the cotton or severe crop injury can occur.

#### Layby Application

Layby application of V-10233 Herbicide tank mixes may be made once cotton has reached a minimum of 16 inches in height. Cotton that is smaller than 16 inches in height may be injured by V-10233 Herbicide applications. V-10233 Herbicide application must be directed to the lower 2 inches of the cotton stem to avoid crop injury.

#### TIMING TO WEEDS

V-10233 Herbicide tank mix applications must be made to weeds within the height range given in Table 5.

#### **TANK MIXES**

V-10233 Herbicide must be tank mixed with one of the herbicides listed in Table 6 for postemergence control of the weeds listed in Table 5.

Table 6. Tank Mixes with V-10233 Herbicide for Hooded, Shielded and/or Layby Use in Cotton

TANK MIX PARTNER	TARGET WEEDS	HOODED AND SHIELDED	LAYBY
glyphosate	Perennial Grasses Broadleaf Weeds	Х	X <sup>1</sup>
MSMA	Annual Grasses Yellow Nutsedge	Х	Х
diuron	glyphosate resistant Palmer amaranth	×	Х

For use only in cotton with the Roundup Ready gene.

#### **DIRECTIONS FOR USE IN FALLOW LAND**

Apply V-10233 Herbicide, at [3 to 3.75] [3 to 4.5] oz/A, in combination with labeled burndown herbicides to control emerged weeds and provides residual weed control. Weeds controlled by residual activity are listed in Table 1, Weeds Controlled or Suppressed by Residual Activity of V-10233 Herbicide.

# DIRECTIONS FOR USE TO MAINTAIN BARE GROUND ON NON-CROP AREAS OF FARMS, ORCHARDS AND VINEYARDS

Use V-10233 Herbicide to maintain bare ground on non-crop areas of farms, orchards and vineyards, for non-selective vegetation control and to maintain bare ground on non-crop areas that must be kept weed free. Follow all directions as outlined in "PRODUCT INFORMATION" section of this label.

V-10233 Herbicide offers residual and postemergence control of susceptible broadleaf and grass weeds as well as an additional mode of action to assist in the control of ALS (acetolactate synthase) resistant weeds. V-10233 Herbicide can be tank mixed with the herbicides listed in Table 5, Tank Mix Combinations to Maintain Bare Ground on Non-Crop Areas, for increased residual or postemergence control. The length of residual control is dependent on the rate applied as well as on rainfall and temperature conditions. Length of residual control will decrease as temperature and precipitation increase. V-10233 Herbicide rates of 3 to 4.5 oz/A are required to provide residual control of the weeds listed in Table 1, Weeds Controlled or Suppressed by Residual Activity of V-10233 Herbicide.

#### **USE RESTRICTIONS**

- Do not apply to farm alleys or roads where traffic may result in treated dust settling onto crops or other desirable vegetation.
- · Do not apply to ditch banks.

#### PREEMERGENCE APPLICATION

Apply 3 to 3/15/16/16/16/2014 of V-10233 Herbicide per broadcast acre as a preemergence application. Make the preemergence (to weed emergence) applications of V-10233 Herbicide to a weed-free soil surface. Preemergence applications of V-10233 Herbicide must be completed prior to weed emergence. Moisture is necessary to activate V-10233 Herbicide on soil for residual weed control. Dry weather following application of V-10233 Herbicide may reduce effectiveness. However, when adequate moisture is received after dry conditions, V-10233 HERBICIDE will control susceptible germinating weeds.

#### POSTEMERGENCE APPLICATION

Apply 3 to 273 Merbicide activity of V-10233 Herbicide per broadcast acre plus an adjuvant (0.25% v/v non-ionic surfactant or 1 qt/A crop oil concentrate). The addition of an adjuvant enhances V-10233 Herbicide activity on emerged weeds. Thorough spray coverage is necessary to maximize the postemergence activity of V-10233 Herbicide. Emerged weeds are controlled postemergence with V-10233 Herbicide, however, translocation of V-10233 Herbicide within a weed is limited, and control is affected by spray coverage and by the addition of an adjuvant. The most effective postemergence weed control with V-10233 Herbicide occurs when applied in combination with a surfactant to weeds less than 2 inches in height. A tank mix partner must not be used in combination with V-10233 Herbicide for the postemergence control of weeds larger than 2 inches.

**IMPORTANT:** Completely read and follow the label of any potential tank mix partner with V-10233 Herbicide. When using tank mixtures, use conditions must be in accordance with the most restrictive of the label limitations and precautions on either herbicide label.

Table 5. Tank Mix Combinations to Maintain Bare Ground on Non-Crop Areas

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	glyphosate	2,4-D	Rely <sup>®</sup>	paraquat

#### **CROP ROTATIONAL INTERVAL**

The following rotational crops may be planted after applying V-10233 Herbicide at the listed rate. Planting earlier than the recommended rotational interval may result in crop injury.

Crops	V-10233 Herbicide Use Rates Interval Months			
	3 oz/A	\$3.75 oz/A	44.5 oz/A	
Alfalfa	10	10	10	
Corn, Field	0	1	1	
Cotton	1	4	4	
Edible Peas and other edible beans	11	11	11	
Grass grown for seed	18	18	18	
Lentils	6	7	7	
Peanuts	4	4	4	
Peas, Field	6	- 6	6	
Potato	4	4	4	
Rice	10	10	12	
Small Grains (other than wheat)	11	11	11	
Soybean	0	0	0	
Sugarbeet	15	15	15	
Sunflower	4	4	4	
Sweet Potato	4	4	4 .	
Tobacco	. 12	12	12]	
Wheat	1	2	2	
Other crops not listed above	. 18	18	18	

Restriction: Crops listed on the label may be planted after pyroxasulfone application. Other crops may be planted after 18 months.

#### **APPLICATION INFORMATION**

#### SPRAYER PREPARATION

Before applying V-10233 Herbicide, start with clean, well maintained application equipment. The spray tank, as well as all hoses and booms, must be cleaned to ensure no residue from the previous spraying operation remains in the sprayer. Some pesticides, including but not limited to, the sulfonylurea and phenoxy herbicides, (i.e., Classic® and 2,4-D respectively) are active at very small amounts and can cause crop injury when applied to susceptible crops. The spray equipment must be cleaned according to the manufacturer's directions for the last product used before the equipment is used to apply V-10233 Herbicide. If two or more products were tank mixed prior to V-10233 Herbicide application, follow the most restrictive cleanup procedure.

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#### MIXING INSTRUCTIONS

- 1. Fill clean spray tank 1/2 to 2/3 of desired level with clean water.
- 2. If a drift retardant is to be used, add 10 lbs of spray grade ammonium sulfate per 100 gallons of spray solution.
- 3. To ensure a uniform spray mixture, pre-slurry the required amount of V-10233 Herbicide with water prior to addition to the spray tank. Use a minimum of 1 gallon of water per 10 oz of V-10233 Herbicide.
- 4. While agitating, slowly add the pre-slurried V-10233 Herbicide to the spray tank. Agitation should create a rippling or rolling action on the water surface.
- 5. If tank mixing V-10233 Herbicide with other labeled herbicides, add water soluble bags first, followed by dry formulations, flowables, emulsifiable concentrates and then solutions. Prepare no more spray mixture than is required for the immediate spray operation.
- 6. Add any required adjuvants.
- 7. Fill spray tank to desired level with water. Agitation should continue until all spray solution has been applied.
- 8. Mix only the amount of spray solution that can be applied the day of mixing. V-10233 HERBICIDE should be applied within 6 hours of mixing.

#### **APPLICATION METHOD**

V-10233 Herbicide is applied by ground or by air. Application equipment should be clean and in good repair. Nozzles should be uniformly spaced on boom and frequently checked for accuracy.

#### 1. GROUND APPLICATION

Apply V-10233 Herbicide, and V-10233 Herbicide tank mixes, with ground equipment using standard commercial sprayers equipped with flat fan (preplant or preemergence applications only) designed to deliver the desired spray pressure and spray volume.

#### 2. AERIAL APPLICATION

Spray drift away from the site of application may cause damage to non-target vegetation. To minimize drift, apply the largest droplet size consistent with uniform coverage and satisfactory weed control. To obtain satisfactory application and avoid drift, the following directions must be observed:

- Do not apply during low-level inversion conditions (including fog), when winds are gusty or under other conditions that favor drift.
- Do not spray when wind velocity is less than 2 mph or more than 10 mph.
- Do not apply this product by air within 40 ft of non-target plants including non-target crops.
- Do not apply this product by air within 100 ft of emerged cotton crops.
- Do not apply this product by air within 40 ft of streams, wetlands, marshes, ponds, lakes and reservoirs.

#### CARRIER VOLUME AND SPRAY PRESSURE

#### 1. GROUND APPLICATION:

**Preemergence Application (Conventional Tillage):** To ensure uniform coverage, use 10 to 30 gals of spray solution per acre for conventional tillage applications. Nozzle selection should meet manufacturer's gallonage and pressure recommendations for preemergence herbicide application.

**Burndown Application (Prior to Crop Emergence):** To ensure thorough coverage in burndown applications, use 15 to 60 gals spray solution per acre. Use 20 to 60 gals per acre if dense vegetation or heavy crop residue is present. Nozzle selection should meet manufacturer's gallonage and pressure recommendations for postemergence herbicide application. Do not use flood jet nozzles

#### 2. AERIAL APPLICATION:

When used as part of a burndown weed control program, apply V-10233 Herbicide in 7 to 10 gallons of water per acre. Application at less than 7 gallons per acre may provide inadequate control. When used for preemergence weed control, apply V-10233 Herbicide in 5 to 10 gallons of water per acre. The higher gallonage applications generally afford more consistent weed control. Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

#### NOZZLE SELECTION AND ORIENTATION

Use nozzles that produce flat or hollow cone spray patterns. Use non-drip type nozzles, such as diaphragm type nozzles, to avoid unwanted discharge of spray solution. The nozzles must be directed toward the rear of the aircraft, at an angle between 0 and 15° downward. Do not place nozzles on the outer 25% of the wings or rotors.

#### ADJUVANTS AND DRIFT CONTROL ADDITIVES

Do not use adjuvants when applying to corn. Refer to tank mix partner's label for adjuvant recommendation. Drift control additives may be used. When a drift control additive is used, read and carefully observe the cautionary statements and all other information appearing on the additive label.

#### **Spray Drift Management**

The interaction of many equipment and weather related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all factors involved in minimizing drift potential.

#### Importance of Droplet Size

The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Use nozzle types and nozzle arrangements that will provide maximum coverage and minimize the potential for off target movement of spray particles. Droplet size for both ground and air applications must be in the "medium" size category as defined in the August 1999 ASAE S572 publication entitled, "Spray Nozzle Classification by Drop Spectra". Refer to that publication for additional information. Regardless of droplet size, if applications are made improperly or under unfavorable environmental conditions off target movement will occur. (see Wind, Temperature and Humidity, and Temperature Inversion sections in this label).

#### Controlling Droplet Size

<u>Volume:</u> Use high flow rate nozzles that produce medium droplets to apply the highest practical spray volume.

<u>Pressure:</u> Use the lower spray pressures recommended for the nozzle and do not exceed the manufacturer's recommended pressure. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

Number of nozzles: Use the minimum number of nozzles that provide uniform coverage.

<u>Nozzle orientation:</u> Orienting nozzles so that the spray is released backwards parallel to the air-stream will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.

<u>Nozzle type:</u> Use a nozzle type that is designed for the intended application. Do not use air inducting or flood type nozzles.

<u>Boom length:</u> For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

Ground Boom Application Height: Applications should not be made at a height greater than 4 feet above the top of the largest plants. Making applications at the lowest possible height reduces exposure of droplets to evaporation and wind.

#### Swath Adjustment

When applications are made with a cross wind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

#### Wind

Variable wind speeds with changing directions may pose the largest potential for drift damage if crops other than rice are adjacent to the field to be sprayed. Drift potential is lowest between wind speeds of 2 to 8 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application must be avoided if wind speed is below 2 mph due to variable wind direction and high inversion potential. Note: local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect drift.

#### Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation, but they still should remain within the medium droplet size category. Droplet evaporation is most severe when conditions are both hot and dry.

#### Temperature Inversions

Do not spray at times when spray particles may be entrained into a temperature inversion layer. If inversion conditions are suspected, consult with local weather services before making an application. Applications must not occur during temperature inversion, because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a connected cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards and rapidly dissipates indicates good vertical air mixing.

#### Sensitive Areas

The pesticide must only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (i.e., when wind is blowing away from the sensitive areas).

#### SPRAYER CLEANUP

Spray equipment, including mixing vessels and nurse tanks, must be cleaned each day following V-10233 Herbicide application. After V-10233 Herbicide is applied, the following steps must be used to clean the spray equipment:

- 1. Completely drain the spray tank, rinse the sprayer thoroughly, including the inside and outside of the tank and all in-line screens.
- 2. Fill the spray tank with clean water and flush all hoses, booms, screens and nozzles.
- 3. Top off tank, add 1 gallon of 3% household ammonia (or equivalent) for every 100 gallons of water, circulate through sprayer for 5 minutes, and then flush all hoses, booms, screens and nozzles for a minimum of 15 minutes. If diaphragms are being used on the spray boom, loosen diaphragms before flushing the spray system, allowing cleaning solution to spray through the open diaphragm. If spray lines have any end caps, they must be loosened before flushing the system, allowing cleaning solution to spray though the loosened caps. To enhance removal of V-10233 Herbicide from the spray system, add a tank cleaner such as "Valent Tank Cleaner", in place of ammonia and allow the cleaning solution to remain in the pressurized spray system (spray tank, hoses and boom) for 8 hours before flushing the

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- system for a minimum of 15 minutes.
- 4. Drain tank completely.
- 5. Add enough clean water to the spray tank to allow all hoses, booms, screens and nozzles to be flushed for 2 minutes.
- 6. Remove all nozzles and screens and rinse them in clean water.

Thoroughly clean spray equipment, including all tanks, hoses, booms, screens and nozzles, before it is used to apply postemergence pesticides. Equipment with V-10233 Herbicide residue remaining in the system may result in crop injury to the subsequently treated crop.

#### **ADDITIVES**

Do not use adjuvants when applying to corn. When an adjuvant is to be used with V-10233 Herbicide, Valent USA Corporation recommends the use of a Chemical Producers and Distributors Association certified adjuvant. Either a crop oil concentrate or methylated seed oil which contains at least 15% emulsifiers and 80% oil or a non-ionic surfactant at 0.25% v/v, may be used when applying V-10233 Herbicide as part of a burndown program. Some tank mix partners, such as Roundup PowerMAX, are formulated with sufficient adjuvants and do not require the addition of a crop oil concentrate, methylated seed oil or non-ionic surfactant when tank mixed with V-10233 Herbicide. The addition of a crop oil concentrate or methylated seed oil may increase the burndown activity on certain weeds such as cutleaf eveningprimrose and Carolina geranium. Verify mixing compatibility qualities by a jar test.

A spray grade nitrogen source (either ammonium sulfate at 2 to 2.5 lbs/A or a 28 to 32% nitrogen solution at 1 to 2 qts/A) may be added to the spray mixture along with either a crop oil concentrate, methylated seed oil or non-ionic surfactant to enhance weed control. The addition of a nitrogen source does not replace the need for a crop oil concentrate, a methylated seed oil or a non-ionic surfactant.

JAR TEST TO DETERMINE COMPATIBILITY OF ADJUVANTS AND V-10233 HERBICIDE When using V-10233 Herbicide and an adjuvant, such as in stale seed bed or reduced tillage situations, a jar test should be performed before mixing commercial quantities of V-10233 Herbicide, when using V-10233 Herbicide for the first time, when using new adjuvants or when a new water source is being used.

- 1. Add 1 pt of the water to a quart jar. The water should be from the same source and temperature as which will be used in the spray tank mixing operation.
- 2. Add 1 g of V-10233 Herbicide to the quart jar for every 3 oz of V-10233 Herbicide per acre being applied (2 g if 6 oz/A is the desired V-10233 Herbicide rate), gently mix until product goes into suspension.
- 3. Add 60 ml (4 Tbsps or 2 fl oz) of the crop oil or methylated seed oil to the quart jar or 1 ml of non-ionic surfactant if it is being used in place of oil, gently mix.
- 4. If nitrogen is being used, add 16 ml (1 Tbsp or 0.5 oz) of the 28 to 32% nitrogen source to the quart jar. If ammonium sulfate is being used, add 19 g AMS to the quart jar in place of the 28 to 32% nitrogen.
- 5. Place cap on jar, invert 10 times, let stand for 15 minutes, evaluate.
- 6. An ideal tank mix combination will be uniform and free of suspended particles. If any of the following conditions are observed the choice of adjuvant should be questioned:
  - a) Layer of oil or globules on the mixture's surface.
  - b) Flocculation: fine particles in suspension or as a layer on the bottom of the jar.
  - c) Clabbering: Thickening texture (coagulated) like gelatin.

#### **CROP FAILURE**

If the crop treated with V-10233 Herbicide is lost due to a catastrophe, such as hail or other forms of inclement weather, soybeans can be replanted immediately, provided no more than 4.5 oz/A of V-10233 Herbicide have been used on the lost crop. Field corn can be planted 7 days after a V-10233 Herbicide application, provided no more than 4.5 oz/A of V-10233 Herbicide had been used on the lost crop and a minimum of 1 inch of rainfall/irrigation has occurred between V-10233 Herbicide application and replanting. Crop injury may occur if these restrictions are not followed.

#### STORAGE AND DISPOSAL

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

#### **PESTICIDE STORAGE**

Keep pesticide in original container.

Store in a cool, dry, secure place.

Do not put formulation or dilute spray solution into food or drink containers.

Do not contaminate food or foodstuffs.

Do not store or transport near feed or food.

Not for use or storage in or around the home.

For help with any spill, leak, fire or exposure involving this material, call day or night (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 HANDLING**

Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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Manufactured for: Valent U.S.A. Corporation P.O. Box 8025 Walnut Creek, CA 94596-8025

Made in U.S.A.

EPA Reg. No. 59639-193 EPA Est.

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# [Sub Label 2]

## V-10233 Herbicide

For control and/or suppression of certain weeds to maintain bare ground on non-crop areas.



GROUP 14 15 HERBICIDE

## V-10233 Herbicide

# FOR CONTROL AND/OR SUPPRESSION OF CERTAIN WEEDS TO MAINTAIN BARE GROUND ON NON-CROP AREAS.

Active Ingredient	By Wt
Flumioxazin*	. 33.5%
Pyroxasulfone**	. 42.5%
Other Ingredients	
Total	100.0%

<sup>\*2-[7-</sup>fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahyd ro-1H-isoindole-1,3(2H)-dione

V-10233 Herbicide is a water dispersible granule containing 76% active ingredient.

CAS No. 447399-55-5

#### KEEP OUT OF REACH OF CHILDREN

## **CAUTION**

SEE NEXT PAGE FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

#### **NET WEIGHT 6 POUNDS**

<sup>\*\*3-[[[5-(</sup>difluoromethoxy)-1-methyl-3-(trifluoromethyl)-1*H*-pyrazol-4-yl]methyl]sulfonyl]-4,5-dihydro-5,5-dimethylisoxazole

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS & DOMESTIC ANIMALS CAUTION

Avoid contact with skin, eyes, or clothing. Causes moderate eye irritation.

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

#### **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 800-892-0099 for emergency medical treatment information.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Werker Protection Standards (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE):

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

Applicators and other handlers must wear: long-sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride, shoes and socks.

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

#### **USER SAFETY RECOMMENDATIONS**

Users should:

- Wash thoroughly with soap and water after handling and 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:**

This product is toxic to non-target plants and aquatic invertebrates. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters.

This pesticide is toxic to plants and should be used strictly in accordance with the drift and run-off precautions on this label in order to minimize off-site exposures.

**Ground Water Advisory:** This chemical has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

**Surface Water Advisories:** Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

The product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce potential loading of pyroxasulfone and its degradation product, 5-difluoromethody-1H-pyrazol-4-yl) methanesulfonic acid (M1), from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

#### **DIRECTIONS FOR USE**

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

READ ENTIRE LABEL. 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 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 made of waterproof material, 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 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 or allow others to enter treated areas until sprays have dried.

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#### 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 price.

#### **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. 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 TO THE FULLEST EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER 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. To the extent consistent with applicable law AND 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**

To the fullest extent consistent with applicable law, Valent or Seller is not 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. TO THE FULLEST EXTENT CONSISTENT WITH APPLICABLE, LAW, 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 THE PRODUCT.

#### PROMPT NOTICE OF CLAIM

To the extent consistent with applicable law allowing such requirements 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 latter, so that an immediate inspection of the affected property and growing crops can be made.

To the extent consistent with applicable law 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, to the extent allowed by applicable law. Read and follow the entire label of each product to be used in the tank mix with this product.

#### RESISTANCE MANAGEMENT RECOMMENDATIONS

V-10233 Herbicide is a premix of Group 14 and Group 15 herbicides. Any weed population may contain or develop plants naturally resistant to V-10233 Herbicide and other Group 14 and/or Group 15 herbicides. Weed species with acquired resistance to Group 14 and/or Group 15 herbicides may eventually dominate the weed population if Group 14 plus Group 15 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 V-10233 Herbicide or other Group 14 and/or Group 15 herbicides.

To delay herbicide resistance consider:

- Avoiding the consecutive use of V-10233 Herbicide or other target site of action Group 14 and/or Group 15 herbicides that might have a 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 Integrated Pest Management (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.

For further information or to report suspected resistance, you may call the following toll-free number: 800-6-VALENT 682-5368.

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#### PRODUCT INFORMATION

V-10233 Herbicide is a preemergence and early postemergence herbicide for control of selected grass and broadleaf weeds in and around ornamental woody shrubs, deciduous trees and conifers grown outdoors in containers or in the field (in ground) and to maintain bare ground non-crop areas.

Weeds controlled by V-10233 Herbicide are listed in Table 1, Weeds Controlled or Suppressed by Residual Activity of V-10233 Herbicide.

Preemergence weed control with V-10233 Herbicide is most effective when applied to clean, weed free soil surfaces. The most effective postemergence weed control with V-10233 Herbicide occurs when applied in combination with a surfactant to weeds less than 2 inches in height. Follow specific site use directions prior to using surfactant as certain over the top applications restrict the use of the surfactants.

#### PRODUCT USE RESTRICTIONS AND PRECAUTIONS FOR NON-CROP AREAS

- Do not rotate to food or feed crops after application to bare ground on noncrop areas.
- Do not apply in enclosed greenhouse structures.
- Do not apply when weather conditions favor spray drift from treated areas.
- Do not incorporate into soil after application.
- · Do not apply this product through any type of irrigation system.
- · Do not apply to turfgrass.
- Do not apply to areas with adjacent non-dormant pome or stone fruit crops.
- Treatment of powdery, dry soil or light sandy soil, or light sandy soil when there is little to no
  likelihood of rainfall soon after may result in off target movement and possible damage to
  actively growing susceptible crops when soil particles are moved by wind or water.
- Do not apply when these soil environmental conditions are present.

#### APPLICATION INFORMATION

#### SPRAYER PREPARATION

Before applying V-10233 Herbicide, start with clean, well maintained application equipment. The spray tank, as well as all hoses and booms, must be cleaned to ensure no residue from the previous spraying operation remains in the sprayer. Some pesticides, including but not limited to, the sulfonylurea and phenoxy herbicides, are active at very small amounts and can cause crop injury when applied to susceptible crops. The spray equipment must be cleaned according to the manufacturer's directions for the last product used before the equipment is used to apply V-10233 Herbicide. Follow the most restrictive cleanup procedure If two or more products were tank mixed prior to V-10233 Herbicide application.

#### MIXING INSTRUCTIONS

- 1. Fill clean spray tank 1/2 to 2/3 of desired level with clean water.
- 2. If a drift retardant is to be used, add 10 lbs of spray grade ammonium sulfate per 100 gallons of spray solution.
- To ensure a uniform spray mixture, pre-slurry the required amount of V-10233 Herbicide with water prior to addition to the spray tank. Use a minimum of 1 gallon of water per 10 oz of V-10233 Herbicide.
- 4. While agitating, slowly add the pre-slurried V-10233 Herbicide to the spray tank. Agitation should create a rippling or rolling action on the water surface.
- If tank mixing V-10233 Herbicide with other labeled herbicides, add water soluble bags first, followed by dry formulations, flowables, emulsifiable concentrates and then solutions. Prepare no more spray mixture than is required for the immediate spray

- operation.
- 6. Add any required adjuvants.
- 7. Fill spray tank to desired level with water. Agitation should continue until all spray solution has been applied.
- 8. Mix only the amount of spray solution that can be applied the day of mixing. V-10233 HERBICIDE should be applied within 6 hours of mixing.

#### **APPLICATION METHOD**

V-10233 Herbicide is applied by ground or by air. Application equipment should be clean and in good repair. Nozzles should be uniformly spaced on boom and frequently checked for accuracy.

#### 1. GROUND APPLICATION

Apply V-10233 Herbicide, and V-10233 Herbicide tank mixes, with ground equipment using standard commercial sprayers equipped with flat fan (preplant or preemergence applications only) designed to deliver the desired spray pressure and spray volume.

#### 2. AERIAL APPLICATION

Spray drift away from the site of application may cause damage to non-target vegetation. To minimize drift, apply the largest droplet size consistent with uniform coverage and satisfactory weed control. To obtain satisfactory application and avoid drift, the following directions must be observed:

- Do not apply during low-level inversion conditions (including fog), when winds are gusty or under other conditions that favor drift.
- Do not spray when wind velocity is less than 2 mph or more than 10 mph.
- Do not apply this product by air within 40 ft of non-target plants including non-target crops.
- Do not apply this product by air within 100 ft of emerged cotton crops.
- Do not apply this product by air within 40 ft of streams, wetlands, marshes, ponds, lakes and reservoirs.

#### **CARRIER VOLUME AND SPRAY PRESSURE**

When used as part of a burndown weed control program, apply V-10233 Herbicide in 7 to 10 gallons of water per acre. Application at less than 7 gallons per acre may provide inadequate control. When used for preemergence weed control, apply V-10233 Herbicide in 5 to 10 gallons of water per acre. The higher gallonage applications generally afford more consistent weed control. Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

#### **NOZZLE SELECTION AND ORIENTATION**

Use nozzles that produce flat or hollow cone spray patterns. Use non-drip type nozzles, such as diaphragm type nozzles, to avoid unwanted discharge of spray solution. The nozzles must be directed toward the rear of the aircraft, at an angle between 0 and 15° downward. Do not place nozzles on the outer 25% of the wings or rotors.

#### ADJUVANTS AND DRIFT CONTROL ADDITIVES

Refer to tank mix partner's label for adjuvant recommendation. Drift control additives may be used. When a drift control additive is used, read and carefully observe the cautionary statements and all other information appearing on the additive label.

#### SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all factors involved in minimizing drift potential.

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#### Importance of Droplet Size

The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Use nozzle types and nozzle arrangements that will provide maximum coverage and minimize the potential for off target movement of spray particles. Droplet size for both ground and air applications must be in the "medium" size category as defined in the August 1999 ASAE S572 publication entitled, "Spray Nozzle Classification by Drop Spectra". Refer to that publication for additional information. Regardless of droplet size, if applications are made improperly or under unfavorable environmental conditions off target movement will occur. (see Wind, Temperature and Humidity, and Temperature Inversion sections in this label).

#### Controlling Droplet Size

<u>Volume:</u> Use high flow rate nozzles that produce medium droplets to apply the highest practical spray volume.

<u>Pressure:</u> Use the lower spray pressures recommended for the nozzle and do not exceed the manufacturer's recommended pressure. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

Number of nozzles: Use the minimum number of nozzles that provide uniform coverage.

Nozzle orientation: Orienting nozzles so that the spray is released backwards parallel to the air-stream will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.

<u>Nozzle type:</u> Use a nozzle type that is designed for the intended application. Do not use air inducting or flood type nozzles.

<u>Boom length:</u> For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width. <u>Ground Boom Application Height:</u> Applications should not be made at a height greater than 4 feet above the top of the largest plants. Making applications at the lowest possible height reduces exposure of droplets to evaporation and wind.

#### Swath Adjustment

When applications are made with a cross wind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

#### Wind

Variable wind speeds with changing directions may pose the largest potential for drift damage if crops other than rice are adjacent to the field to be sprayed. Drift potential is lowest between wind speeds of 2 to 8 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application must be avoided if wind speed is below 2 mph due to variable wind direction and high inversion potential. Note: local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect drift.

#### Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation, but they still should remain within the medium droplet size category. Droplet evaporation is most severe when conditions are both hot and dry.

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#### Temperature Inversions

Do not spray at times when spray particles may be entrained into a temperature inversion layer. If inversion conditions are suspected, consult with local weather services before making an application. Applications must not occur during temperature inversion, because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a connected cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards and rapidly dissipates indicates good vertical air mixing.

#### Sensitive Areas

The pesticide must only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (i.e., when wind is blowing away from the sensitive areas).

#### SPRAYER CLEANUP

Spray equipment, including mixing vessels and nurse tanks, must be cleaned each day following V-10233 Herbicide application. After V-10233 Herbicide is applied, the following steps must be used to clean the spray equipment:

- Completely drain the spray tank, rinse the sprayer thoroughly, including the inside and outside of the tank and all in-line screens.
- Fill the spray tank with clean water and flush all hoses, booms, screens and nozzles.
- Top off tank, add 1 gallon of 3% household ammonia (or equivalent) for every 100 gallons of water, circulate through sprayer for 5 minutes, and then flush all hoses, booms, screens and nozzles for a minimum of 15 minutes. If diaphragms are being used on the spray boom, loosen diaphragms before flushing the spray system, allowing cleaning solution to spray through the open diaphragm. If spray lines have any end caps, they must be loosened before flushing the system, allowing cleaning solution to spray though the loosened caps. To enhance removal of V-10233 Herbicide from the spray system, add a tank cleaner such as "Valent Tank Cleaner", in place of ammonia and allow the cleaning solution to remain in the pressurized spray system (spray tank, hoses and boom) for 8 hours before flushing the system for a minimum of 15 minutes.
- Drain tank completely.
- Add enough clean water to the spray tank to allow all hoses, booms, screens and nozzles to be flushed for 2 minutes.
- Remove all nozzles and screens and rinse them in clean water.

Thoroughly clean the spray equipment, including all tanks, hoses, booms, screens and nozzles, before it is used to apply postemergence pesticides. Equipment with V-10233 Herbicide residue remaining in the system may result in crop injury to the subsequently treated crop.

#### **ADDITIVES**

When an adjuvant is to be used with this product, Valent recommends the use of a Chemical Producers and Distributors Association certified adjuvant. Mix V-10233 Herbicide with a crop oil concentrate that contains at least 15% emulsifiers and 80% oil or a non-ionic surfactant containing at least 80% active ingredient when applying V-10233 Herbicide as part of a postemergence weed control program. Verify the mixing compatibility by a jar test before using. Do not mix V-10233 Herbicide with a surfactant when applying over the top of dormant woody ornamentals or conifer trees.

A spray-grade nitrogen source (either ammonium sulfate at 2.0 to 2.5 lb/A or a 28 to 32% nitrogen solution at 1 to 2 qts/A) may be added to the spray mixture along with a crop oil concentrate or non-ionic surfactant to enhance weed control. The addition of a nitrogen source does not replace the need for crop oil concentrate or non-ionic surfactant.

JAR TEST TO DETERMINE COMPATIBILITY OF ADJUVANTS AND V-10233 HERBICIDE When using V-10233 Herbicide and an adjuvant, such as in stale seed bed or reduced tillage situations, a jar test should be performed before mixing commercial quantities of V-10233 Herbicide, when using V-10233 Herbicide for the first time, when using new adjuvants or when a new water source is being used.

- 1. Add 1 pt of the water to a quart jar. The water should be from the same source and temperature as which will be used in the spray tank mixing operation.
- 2. Add 1 g of V-10233 Herbicide to the quart jar for every 3 oz of V-10233 Herbicide per acre being applied (2 g if 6 oz/A is the desired V-10233 Herbicide rate), gently mix until product goes into suspension.
- 3. Add 60 ml (4 Tbsps or 2 fl oz) of the crop oil or methylated seed oil to the quart jar or 1 ml of non-ionic surfactant if it is being used in place of oil, gently mix.
- 4. If nitrogen is being used, add 16 ml (1 Tbsp or 0.5 oz) of the 28 to 32% nitrogen source to the quart jar. If ammonium sulfate is being used, add 19 g AMS to the quart jar in place of the 28 to 32% nitrogen.
- 5. Place cap on jar, invert 10 times, let stand for 15 minutes, evaluate.
- 6. An ideal tank mix combination will be uniform and free of suspended particles. If any of the following conditions are observed the choice of adjuvant should be questioned:
  - a) Layer of oil or globules on the mixture's surface.
  - b) Flocculation: fine particles in suspension or as a layer on the bottom of the jar.
  - c) Clabbering: Thickening texture (coagulated) like gelatin.

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Table 1. Weeds Controlled or Suppressed by Residual Activity of V-10233 Herbicide

Common Name	Scientific Name	C = Control S = Suppression
BROADLEAF WEED SPECIES		
Bristly Starbur	Acanthospermum hispidum	S
Carpetweed	Mollugo verticillata	С
Chickweeds		
Common	Stellaria media	С
Mouseear	Cerastium vulgatum	C
Copperleaf, Hophornbeam	Acalypha ostryifolia	S
Dandelion	Taraxacum officinale	С
Eclipta	Eclipta prostrate	С
Eveningprimrose, Cutleaf	Oenothera laciniata	С
Florida Pusley	Richardia scabra	С
Henbit	Lamium amplexicaule	С
Lambsquarters, Common	Chenopodium album	С
Little Mallow	Malva parviflora	С
Marestail/Horseweed	Conyza canadensis	C
Nightshades		
Black	Solanum nigrum	С
Eastern Black	Solanum ptycanthum	С
Hairy	Solanum sarrachoides	С
Pigweeds		
Redroot	Amaranthus retroflexus	С
Smooth	Amaranthus hybridus	С
Spiny Amaranth	Amaranthus spinosus	С
Tumble	Amaranthus albus	С
Prickly Sida (Teaweed)	Sida spinosa	С
Puncturevine	Tribulus terrestris	С
Purslane, Common	Portulaca oleracea	С
Radish, Wild	Raphanus raphanistrum	С
Redmaids	Calandrinia ciliata var menziessii	С
Shepherd's-purse	Capsella bursa-pastoris	С
Smallflower Morningglory	Jacquemontia tamnifolia	С
Spotted Spurge	Euphorbia maculate	С
Venice Mallow	Hibiscus trionum	С
Coffee Senna	Cassia occidentalis	С
Common Ragweed	Ambrosia artemisiifolia	. С
Florida Beggarweed	Desmodium tortuosum	С
Golden Crownbeard	Verbesina encelioides	С
Hairy Indigo	Indigofera hirsuta	C
Hemp Sesbania	Sesbania exaltata	C
Jimsonweed	Datura stramonium	C

Common Name Scientific Name		C = Control S = Suppression
BROADLEAF WEED SPECIES		
Kochia	Kochia scoparia	С
Morningglories		<u> </u>
Entireleaf	Inomona hadaraana var intagriusaula	С
<del></del>	Ipomoea hederacea var. integriuscula Ipomoea hederacea	- C
lvyleaf		C
Red/Scarlet	Ipomoea coccinea	C
Tall	Ipomoea purpurea	C
Mustard, Wild	Brassica kaber	<del></del>
Palmer Amaranth	Amaranthus palmeri	C
Ragweed, Giant	Ambrosia trifida	- S
Russian Thistle	Salsola iberica	
Smartweeds	<del></del>	
Ladysthumb	Polygonum persicaria	S S
Pennsylvania	Polygonum pensylvanicum	
Spurred Anoda	Anoda cristata	<u>C</u>
Tropic Croton	Croton glandulosus	C
Velvetleaf	Abutilon theophrasti	С
Waterhemps		
Common	Amaranthus rudis	С
Tall	Amaranthus tuberculatus	C
Wild Buckwheat	Polygonum convolvulus	S
Wild Poinsettia	Euphorbia heterophylla	С
Wormwood, Biennial	Artemisia biennis	S
GRASS WEED SPECIES		
Barnyardgrass	Echinochloa crus-galli	С
Bluegrass, Annual	Poa annua	C
Cheat	Bromus secalinus	С
Crabgrass		
Large	Digitaria sanguinalis	С
Smooth	Digitaria ischaemum	С
Cupgrass, Southwestern	Eriochloa gracilis	C
Downy Brome	Bromus tectorum	С
Foxtails		C
Giant	Setaria faberi	C
Green	Setaria viridis	C
Yellow	Setaria glauca	C
	Eleusine indica	C
Goosegrass Johnsongrass (seedling)	Sorghum halepense	C
Lovegrass, California	Eragrostis diffusa	C

(continued)

Common Name	Scientific Name	C = Control S = Suppression
GRASS WEED SPECIES		
Panicums		
Fall	Panicum dichotomiflorum	С
Texas	Panicum texanum	С
Red Rice	Oryza sativa	С
Ryegrass		
Italian	Lolium multiflorum	С
Rigid	Lolium rigidum	С
Signalgrass, Broadleaf	Brachiaria platyphylla	С

#### DIRECTIONS FOR USE TO MAINTAIN BARE GROUND ON NON-CROP AREAS

V-10233 Herbicide, when used as directed, can be used for non-selective vegetation control to maintain bare ground non-crop areas that must be kept weed-free. Apply V-10233 Herbicide only to:

- Bare ground under guardrails, pipelines, railroad beds, railroad yards and surrounding areas
- Bare ground in parking and storage areas, plant sites, substations, pumping stations, and tank farms
- Bare ground areas of airports, brickyards, industrial plant sites, lumber yards and military installations, and storage areas
- Bare ground around farm buildings and along ungrazed fencerows, wind breaks, and shelter belts
- Road surfaces, improved roadside areas and gravel shoulders

V-10233 Herbicide offers residual and postemergence control of susceptible broadleaf and grass weeds as well as an additional mode of action to assist in the control of ALS (acetolactate synthase) resistant weeds listed in Table 1, Weeds Controlled or Suppressed by Residual Activity of V-10233 Herbicide. V-10233 Herbicide can be tank mixed with the herbicides listed in Table 2 for increased residual or postemergence control. The length of residual control is dependent on the rate applied as well as on rainfall and temperature conditions. Length of residual control will decrease as temperature and precipitation increase.

#### PREEMERGENCE APPLICATION

Apply 10 oz of V-10233 Herbicide per broadcast acre as a preemergence application on all soil types (up to 5% organic matter). Make the preemergence (to weed emergence) applications of V-10233 Herbicide to a weed-free soil surface. Preemergence applications of V-10233 Herbicide must be completed prior to weed emergence. Moisture is necessary to activate V-10233 Herbicide on soil for residual weed control. Dry weather following application of V-10233 Herbicide may reduce effectiveness. However, when adequate moisture is received after dry conditions, V-10233 Herbicide will control susceptible germinating weeds.

#### POSTEMERGENCE APPLICATION

Apply 10 oz of V-10233 Herbicide per broadcast acre plus an adjuvant (0.25% v/v non-ionic surfactant or 1 qt/A crop oil concentrate). The addition of an adjuvant enhances V-10233 Herbicide activity on emerged weeds. Thorough spray coverage is necessary to maximize the postemergence activity of V-10233 Herbicide. Emerged weeds are controlled postemergence with V-10233 Herbicide, however, translocation of V-10233 Herbicide within a weed is limited, and control is affected by spray coverage and by the addition of an adjuvant. The most effective postemergence weed control with V-10233 Herbicide occurs when applied in combination with a surfactant to weeds less than 2 inches in height. Use a tank mix partner in combination with V-10233 Herbicide for the postemergence control of weeds larger than 2 inches. Recommended tank mix partners are listed in Table 2, Suggested Tank Mix Combinations For Non-Selective Vegetation Control.

**IMPORTANT:** Completely read and follow the label of any potential tank mix partner with V-10233 Herbicide. When using tank mixtures, use conditions must be in accordance with the most restrictive of the label limitations and precautions on either herbicide label.

Table 2. Suggested Tank Mix Combinations For Non-Selective Vegetation Control

2,4-D	hexazinone	picloram	
Bromacil	imazapic	pramitol	
Chlorsulfuron	imazapyr	prodiamine	
Dicamba	metsulfuron methyl	simazine	
Diuron	norfurazon	Sulfometuron methyl	
Chlorpyralid	oryzalin	tebuthiuron	
Glyphosate	pendimethalin	Triclopyr	
Sulfentrazone	aminopyralid	Topramezone	

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#### STORAGE AND DISPOSAL

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

#### PESTICIDE STORAGE

Keep pesticide in original container.

Store in a cool, dry, secure place.

Do not put formulation or dilute spray solution into food or drink containers.

Do not contaminate food or foodstuffs.

Do not store or transport near feed or food.

Not for use or storage in or around the home.

For help with any spill, leak, fire or exposure involving this material, call day or night (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 HANDLING**

Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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Manufactured for: Valent U.S.A. Corporation P.O. Box 8025 Walnut Creek, CA 94596-8025

Made in U.S.A.

EPA Reg. No. 59639-193 EPA Est.

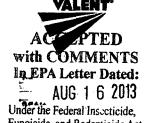
059639-00193.20130816.V-10233

### Supplemental Label

#### V-10233 HERBICIDE

EPA Reg. No. 59639-193

#### REVISED CROP ROTATIONAL INTERVAL



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

59139-193

This supplemental label expires August 16, 2016 and must not be used or distributed after this date:

THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF APPLICATION. READ THE LABEL AFFIXED TO THE CONTAINER FOR V-10233 HERBICIDE BEFORE APPLYING. USE OF V-10233 HERBICIDE ACCORDING TO THIS LABELING IS SUBJECT TO THE USE PRECAUTIONS AND LIMITATIONS IMPOSED BY THE LABEL AFFIXED TO THE CONTAINER FOR V-10233 HERBICIDE

#### **DIRECTIONS FOR USE**

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

CROP	ROI	CATIO	NAL	IN	ΓERV	/AL

The following rotational crops may be planted after applying V-10233 Herbicide at the listed rate. Planting earlier than the recommended rotational interval may result in crop injury.

Crops	V-10233 Herbicide Use Rates Interval Months		
· · · · · · · · · · · · · · · · · · ·	3 oz/A	3.75 oz/A	
Alfalfa	10	10	
Corn, Field	0	1	
Cotton	1	4	
Edible Peas and other edible beans	11	11	
Grass grown for seed	18	18	
Lentils	6	7	
Peanuts	4	4	
Peas, Field	6	. 6	
Potato	4	4	
Rice	10	10	
Small Grains (other than wheat)	11	11	
Soybean	0	0	
Sugarbeet	15	15	
Sunflower	4	4	
Sweet Potato	. 4	4	
Wheat	1	2	
Other crops not listed above	18	18	

Restriction: Crops listed on the label may be planted after pyroxasulfone application. Other crops may be planted after 18 months.

# PLEASE CONTACT VALENT U.S.A. CORPORATION AT 800-6-VALENT (682-5368) TO DETERMINE IF THIS USE IS REGISTERED IN YOUR STATE.

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Made in U.S.A.

059639-00193.20130815.V-10233.fed supp.croprot.

### Supplemental Label

### V-10233 HERBICIDE

EPA Reg. No. 59639-193



Turder the Federal Interticide, Fungicide, and Rodernicide Act as amended, for the pesticide registered under EPA Reg. No.

#### V-10233 HERBICIDE FOR IN WHEAT

391639-193

This supplemental label expires August 16, 2016 and must not be used or distributed after this date.

THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF APPLICATION. READ THE LABEL AFFIXED TO THE CONTAINER FOR V-10233 HERBICIDE BEFORE APPLYING. USE OF V-10233 HERBICIDE ACCORDING TO THIS LABELING IS SUBJECT TO THE USE PRECAUTIONS AND LIMITATIONS IMPOSED BY THE LABEL AFFIXED TO THE CONTAINER FOR V-10233 HERBICIDE

#### **DIRECTIONS FOR USE**

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

## DIRECTIONS FOR USE IN WHEAT (NO TILL AND MINIMUM TILL)

Application of V-10233 Herbicide must be made no sooner than 30 days prior to wheat planting to control weeds listed in Table1, Weeds Controlled or Suppressed by Residual Activity of V-10233 Herbicide.

#### **Use Precautions And Restrictions**

- Do not exceed the maximum seasonal rate of 3 oz/A.
- Use only on no-till or minimum tillage fields where last years crop residue has not been incorporated into the soil.
- Do not apply to frozen or snow covered soil.
- Do not apply this product when weather conditions favor spray drift from treated areas.
- Do not apply during low level inversion conditions, including fog.
- When applying by air, observe drift management restrictions and precautions listed under "aerial application" on the container label.
- Any tillage operation after the application or mechanical incorporation into the soil will reduce residual weed control.
- [Do not irrigate between emergence and spike.]
- [Wheat must be planted a minimum of 1" deep.]
- [Do not graze until wheat has reached 5 inches in height.]

- Do not perform any tillage operation after application or residual weed control will be reduced.
- V-10233 Herbicide can be used at 3 oz/A with labeled burndown herbicides to enhance the speed of burndown and increase weed spectrum. A minimum of 30 days must pass, and 1 inch of rainfall/irrigation must occur, between V-10233 application and wheat planting.
- Application of lime within 30 days before or after application of this product may result in decreased weed control.

#### **TANK MIXES**

V-10233 Herbicide, applied as part of a burndown program, may be used for residual weed control, as well as to assist in postemergence burndown of many annual and perennial weeds where wheat will be planted directly into a stale seedbed, cover crop or in previous crop residue. For control of emerged weeds, choose the most appropriate tank mix partner. To ensure thorough coverage, use a minimum of 15 gals of spray solution per acre. Refer to tank mix partner's label for recommended application pressure. All V-10233 Herbicide tank mixes applied to assist in the control of emerged weeds must be applied with crop oil concentrate or methylated seed oil at 1 to 2pt/A or a non-ionic surfactant at 0.25% v/v.

Common Name	or Suppressed by Residual Activity of Scientific Name	V-10233 Herbicide Rate 3.0 oz/A C = Control or	
		S = Suppression	
Bristly Starbur	Acanthospermum hispidum	S	
Carpetweed	Mollugo verticillata	С	
Common	Stellaria media	С	
Mouseear	Cerastium vulgatum	С	
Coffee Senna	Cassia occidentalis	S	
Copperleaf, Hophornbeam	Acalypha ostryifolia	S	
Dandelion	Taraxacum officinale	С	
Eclipta	Eclipta prostrate	С	
Eveningprimrose, Cutleaf	Oenothera laciniata	С	
Florida Beggarweed	Desmodium tortuosum	S	
Florida Pusley	Richardia scabra	С	
Golden Crownbeard	Verbesina encelioides	S	
Hairy Indigo	Indigofera hirsuta	, S	
Hemp Sesbania	Sesbania exaltata	С	
Henbit	Lamium amplexicaule	C	
Jimsonweed	Datura stramonium	С	
Kochia	Kochia scoparia	С	
Lambsquarters, Common	Chenopodium album	С	
Little Mallow	Malva parviflora	С	
Marestail/Horseweed	Conyza canadensis	С	

Common Name	Scientific Name	V-10233 Herbicide V-10233 Herbicide Rate 3.0 oz/A	
		C = Control or S = Suppression	
Morningglories <sup>1</sup>		3 - Suppression	
Entireleaf	Ipomoea hederacea var. Integriuscula	S	
lvyleaf	Ipomoea hederacea	S	
Red/Scarlet	Ipomoea coccinea	S	
Tall	Ipomoea purpurea	s s	
Mustard, Wild	Brassica kaber	C	
Palmer Amaranth	Amaranthus palmeri	C	
	Amaraninus paimen	<u> </u>	
Nightshades			
Black	Solanum nigrum	С	
Eastern Black	Solanum ptycanthum	C	
Hairy	Solanum sarrachoides	С	
Pigweeds	A		
Redroot	Amaranthus retroflexus	C	
Smooth	Amaranthus hybridus	C	
Spiny Amaranth	Amaranthus spinosus	C	
Tumble	Amaranthus albus	C	
Prickly Sida (Teaweed)	Sida spinosa	Ç	
Puncturevine	Tribulus terrestris	C	
Purslane, Common	Portulaca oleracea	C	
Radish, Wild	Raphanus raphanistrum	C	
Redmaids	Calandrinia ciliata var menziessii	C	
Shepherd's-purse	Capsella bursa-pastoris	C	
Smallflower Morningglory	Jacquemontia tamnifolia	C	
Spotted Spurge	Euphorbia maculate	С	
Ragweeds	1 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Common Ragweed	Ambrosia artemisiifolia	<u> </u>	
Giant Ragweed	Ambrosia trifida	<u> </u>	
Russian Thistle	Salsola iberica	S	
Smartweeds			
Ladysthumb	Polygonum persicaria	S	
Pennsylvania	Polygonum pensylvanicum	S	
Spurred Anoda	Anoda cristata	. S	
Tropic Croton	Croton glandulosus	S	
Velvetleaf	Abutilon theophrasti	C ,	
Venice Mallow	Hibiscus trionum	C	
Waterhemps			
Common	Amaranthus rudis	C	
Tall	Amaranthus tuberculatus	С	
Wild Buckwheat	Polygonum convolvulus	S	
Wild Poinsettia	Euphorbia heterophylla	S	
Wormwood, Biennial	Artemisia biennis	S	

Common Name	Scientific Name	V-10233 Herbicide Rate 3.0 oz/A C = Control or S = Suppression
<b>GRASS WEED SPECIES</b>		
Barnyardgrass	Echinochloa crus-galli	С
Bluegrass, Annual	Poa annua	С
Cheat	Bromus secalinus	С
Crabgrass		
Large	Digitaria sanguinalis	С
Smooth	Digitaria ischaemum	С
Cupgrass, Southwestern	Eriochloa gracilis	С
Downy Brome	Bromus tectorum	С
Foxtails		
Giant	Setaria faberi	С
Green	Setaria viridis	С
Yellow	Setaria glauca	С
Goosegrass	Eleusine indica	С
Johnsongrass (seedling)	Sorghum halepense	C
Lovegrass, California	Eragrostis diffusa	С
Panicums		
Fall	Panicum dichotomiflorum	С
Texas	Panicum texanum	С
Red Rice	Oryza sativa	С
Ryegrass		
Italian	Lolium multiflorum	С
Rigid	Lolium rigidum	С
Signalgrass, Broadleaf	Brachiaria platyphylla	С

<sup>&</sup>lt;sup>1</sup> Morningglory species are not adequately controlled on fine soils or soils with greater than 3% organic matter.

# PLEASE CONTACT VALENT U.S.A. CORPORATION AT 800-6-VALENT (682-5368) TO DETERMINE IF THIS USE IS REGISTERED IN YOUR STATE.

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Manufactured for: Valent U.S.A. Corporation P. O. Box 8025 Walnut Creek, CA 94596-8025

Made in U.S.A.

059639-00193.20130815.V-10233.fed supp.wheat

### Supplemental Label

### V-10233 HERBICIDE EPA Reg. No. 59639-193

ACCEPTED
with COMMENTS
In EPA Letter Dated:
AUG 1 6 2013

Under the Federal Institute, Fungicide, and Rodenucide Act as amended, for the pesticide

V-10233 HERBICIDE FOR POST-DIRECTED AND LAYBY USE IN COETIGON under EPA Reg. No.

39-193

This supplemental label expires August 16, 2016 and must not be used or distributed after this date.

THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF APPLICATION. READ THE LABEL AFFIXED TO THE CONTAINER FOR V-10233 HERBICIDE BEFORE APPLYING. USE OF V-10233 HERBICIDE ACCORDING TO THIS LABELING IS SUBJECT TO THE USE PRECAUTIONS AND LIMITATIONS IMPOSED BY THE LABEL AFFIXED TO THE CONTAINER FOR V-10233 HERBICIDE

#### **DIRECTIONS FOR USE**

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

In addition to the PPE required on the container label the following is also required:

For aerial application to cotton mixers and loaders must also wear: PF 5 respirator.

#### POST DIRECTED AND LAYBY USE

- Do not apply more than 3 oz of V-10233 Herbicide per acre during a single application.
- Do not apply more than 6 oz of V-10233 Herbicide per acre during a single growing season.
- Do not make a sequential V-10233 Herbicide application within 30 days of the first V-10233 Herbicide application.
- Do not apply within 60 days of harvest.
- Observe all rotational intervals as listed in the "ROTATIONAL RESTRICTIONS" table.
- Refer to most restrictive label for minimum interval between application and planting.

#### **DIRECTIONS FOR POST DIRECTED AND LAYBY USE**

# ENVIRONMENTAL CONDITIONS AND BIOLOGICAL PERFORMANCE Hooded, Shielded and Layby Application

For best results, V-10233 Herbicide should be applied to actively growing weeds within the growth stages indicated in this label. Applying V-10233 Herbicide under conditions that do not promote active weed growth will reduce herbicide effectiveness. Do not apply V-10233 Herbicide when the crop or weeds are under stress due to drought, excessive water, extremes in temperature, disease or low humidity. Weeds under stress tend to become less susceptible to herbicidal action. V-10233 Herbicide is most effective when applied under sunny conditions at temperatures above 65°F.

V-10233 Herbicide is rainfast one hour after application. Applications should not be made if rain is expected within one hour of application or postemergence efficacy may be reduced. Rainfall within one hour of application will not adversely affect residual activity.

#### HERBICIDE RATE

#### Hooded, Shielded and Layby Application

For postemergence weed control, V-10233 Herbicide should be applied through a hooded or shielded sprayer or at layby, at 3 oz/A, in combinations with MSMA, diuron or glyphosate, to assist in the control of weeds listed in Table 2, *Emerged Broadleaf Weeds Controlled by, Hooded, Shielded and Layby Application of V-10233 Herbicide Tank Mixes With Glyphosate or MSMA*. Residual weed control can also be obtained through hooded, shielded and layby application of V-10233 Herbicide. Weeds that are controlled or suppressed through residual activity of V-10233 Herbicide are listed in Table 1, *Weeds Controlled or Suppressed by Residual Activity of V-10233 Herbicide*.

Table 1. Weeds Controlled or Suppressed by Residual Activity of V-10233 Herbicide

	or Suppressed by Residual Activity of	V-10233 Herbicide	
Common Name	Sojontifia Nama	Rate	
Common Name	Scientific Name	3.0 oz/A	
		C = Control or S = Suppression	
Bristly Starbur	Acanthospermum hispidum	S	
Carpetweed	Mollugo verticillata	C	
Common	Stellaria media	Č	
Mouseear	Cerastium vulgatum	C	
Coffee Senna	Cassia occidentalis	S	
Copperleaf, Hophornbeam	Acalypha ostryifolia	8	
Dandelion	Taraxacum officinale	C	
Eclipta	Eclipta prostrate	Č	
Eveningprimrose, Cutleaf	Oenothera laciniata	C	
Florida Beggarweed	Desmodium tortuosum	S	
Florida Pusley	Richardia scabra	C	
Golden Crownbeard	Verbesina encelioides	S	
Hairy Indigo	Indigofera hirsuta	S	
Hemp Sesbania	Sesbania exaltata	С	
Henbit	Lamium amplexicaule	C	
Jimsonweed	Datura stramonium	C	
Kochia	Kochia scoparia	С	
Lambsquarters, Common	Chenopodium album	С	
Little Mallow	Malva parviflora	С	
Marestail/Horseweed	Conyza canadensis	C	
Morningglories <sup>1</sup>			
Entireleaf	Ipomoea hederacea var. Integriuscula	S	
lvyleaf	Ipomoea hederacea	S	
Red/Scarlet	Ipomoea coccinea	S	
Tall	İpomoea purpurea	S	
Mustard, Wild	Brassica kaber	C	
Nightshades			
Black	Solanum nigrum	С	
Eastern Black	Solanum ptycanthum	С	
Hairy	Solanum sarrachoides	С	

Common Name	Scientific Name	Vity of V-10233 Herbicide V-10233 Herbicide Rate 3.0 oz/A C = Control or S = Suppression	
Palmer Amaranth	Amaranthus palmeri	C	
Pigweeds	, marantrae parmen		
Redroot	Amaranthus retroflexus	C	
Smooth	Amaranthus hybridus	C	
Spiny Amaranth	Amaranthus spinosus	C	
Tumble	Amaranthus albus	C	
Prickly Sida (Teaweed)	Sida spinosa	C	
Puncturevine	Tribulus terrestris	C	
Purslane, Common	Portulaca oleracea	С	
Radish, Wild	Raphanus raphanistrum	С	
Ragweeds			
Common Ragweed	Ambrosia artemisiifolia	S	
Giant Ragweed	Ambrosia trifida	S	
Redmaids	Calandrinia ciliata var menziessii	С	
Russian Thistle	Salsola iberica	S	
Shepherd's-purse	Capsella bursa-pastoris	С	
Smallflower Morningglory	Jacquemontia tamnifolia	С	
Spotted Spurge	Euphorbia maculate	C	
Smartweeds			
Ladysthumb	Polygonum persicaria	S	
Pennsylvania	Polygonum pensylvanicum	S	
Spurred Anoda	Anoda cristata	S	
Tropic Croton	Croton glandulosus	S	
Velvetleaf	Abutilon theophrasti	C	
Venice Mallow	Hibiscus trionum	C	
Waterhemps	Tholecas thoriam	<u> </u>	
Common	Amaranthus rudis	С	
Tall	Amaranthus tuberculatus	C	
Wild Buckwheat	Polygonum convolvulus	S	
Wild Poinsettia	Euphorbia heterophylla	S	
	Artemisia biennis	S	
Wormwood, Biennial GRASS WEED SPECIES	Arternisia pieririis		
<del></del>	Fobinophica on a selli	T	
Barnyardgrass	Echinochloa crus-galli	C	
Bluegrass, Annual	Poa annua	С	
Cheat	Bromus secalinus	С	
Crabgrass	·		
Large	Digitaria sanguinalis	С	
Smooth	Digitaria ischaemum	С	
Cupgrass, Southwestern	Eriochloa gracilis	С	
Downy Brome	Bromus tectorum	С	

Common Name	Scientific Name	V-10233 Herbicide Rate 3.0 oz/A C = Control or S = Suppression
Foxtails		
Giant	Setaria faberi	С
Green	Setaria viridis	С
Yellow	Setaria glauca	С
Goosegrass	Eleusine indica	С
Johnsongrass (seedling)	Sorghum halepense	С
Lovegrass, California	Eragrostis diffusa	С
Panicums		
Fall	Panicum dichotomiflorum	С
Texas	Panicum texanum	С
Red Rice	Oryza sativa	С
Ryegrass		
Italian	Lolium multiflorum	С
Rigid	Lolium rigidum	С
Signalgrass, Broadleaf	Brachiaria platyphylla	С

<sup>&</sup>lt;sup>1</sup>Morningglory species are not adequately controlled on fine soils or soils with greater than 3% organic matter.

Table 2. Emerged Broadleaf Weeds Controlled by, Hooded, Shielded and Layby Application of V-10233 Herbicide Tank Mixes With Glyphosate or MSMA

BROADLEAF WEED SPEC	WEED HEIGHT (inches)		
COMMON NAME	SCIENTIFIC NAME	3 oz/A	
Bindweed, Field <sup>1</sup>	Convolvulus arvensis	4	
Carpetweed	Mollugo verticillata	4	
Chickweed, Common	Stellaria media	4	
Cocklebur, Common	Xanthium strumarium	4	
Florida Beggarweed	Desmodium tortuosum	2	
Hemp Sesbania	Sesbania exaltata	6	
Jimsonweed	Datura stramonium	4	
Lambsquarters, Common	Chenopodium album	4	
Morningglories	1		
Entireleaf	Ipomoea hederacea var. integriuscula	4	
lvyleaf	Ipomoea hederacea	4	
Pitted	Ipomoea lacunose	4	
Red	Ipomoea coccinea	4	
Tall	Ipomoea purpurea	2	
Mustard, Wild	Brassica kaber	6	
Nightshades			
Black	Solanum nigrum	, 4	
Eastern Black	Solanum ptycanthum	. 4	
Hairy	Solanum sarrachoides	4	
Pigweeds			
Palmer Amaranth	Amaranthus palmen	4	
Redroot	Amaranthus retroflexus	4	
Smooth	Amaranthus hybridus	4	
Plaintain, Broadleaf	Plantago major	6	
Prickly Sida (Teaweed)	Sida spinosa	4	
Purslane, Common	Portulaca oleracea	2	
Ragweeds		- <u></u> - <u></u>	
Common	Ambrosia artemisiifolia	2	
Giant	Ambrosia trifida	4	
Rice Flatsedge	Cyperus iria	2	
Sicklepod	Senna obtusifolia	4	
Smartweeds			
Ladysthumb	Polygonum persicaria	4	
Pale	Polygonum lapathifolium	4	
Pennsylvania	Polygonum pensylvanicum	4	
Spotted Spurge	Euphorbia maculat	4	
Velvetleaf	Abutilon theophrasti	4	
Venice Mallow	Hibiscus trionum	2	
Waterhemps		<u> </u>	
Common	Amaranthus rudis	2	
Tall	Amaranthus tuberculatus	2	
Tall			

V-10233 Herbicide tank mixes will control the above ground portion of field bindweed. Repeated applications will be needed to control regrowth.

#### CARRIER VOLUME AND SPRAY PRESSURE

#### Hooded, Shielded and Layby Application

To ensure thorough coverage in hooded, shielded and layby applications, use a minimum of 15 gals spray solution per treated acre. Use a minimum of 20 gals per treated acre under heavy weed pressure. Nozzle selection should meet manufacturer's gallonage and pressure recommendations for application method being used. Do not use "Flood Jet" nozzles, as they tend to increase the chance of crop injury.

#### **ADDITIVES**

#### Hooded, Shielded and Layby Application

Weed control from hooded, shielded or layby application of V-10233 Herbicide in cotton requires the addition of an agronomically approved non-ionic surfactant to the spray mixture. Non-ionic surfactant must contain at least 80% active ingredient. Mixing compatibility qualities should be verified by a jar test. The use of crop oil concentrates, methylated seed oils, organo-silicant surfactants or products containing these ingredients, may result in severe crop injury and should not be used.

#### APPLICATION EQUIPMENT

Apply V-10233 Herbicide tank mixes, with ground equipment using standard commercial sprayers equipped with nozzles designed to deliver the desired spray pressure and spray volume. All nozzles must be under the hood or behind the shield to ensure no spray solution comes in contact with the cotton. Application equipment should be clean and in good repair. Nozzles should meet manufacturer's recommendations for spray pattern and placement on spray boom and should be checked frequently for accuracy.

#### **TIMING TO COTTON**

#### **Hooded and Shielded Application**

V-10233 Herbicide tank mixes may be applied with a hooded or shielded sprayer after cotton has reached a minimum of 6 inches in height. Care must be taken to ensure the spray solution or drift does not come in contact with the cotton or severe crop injury can occur.

#### Layby Application

Layby application of V-10233 Herbicide tank mixes may be made once cotton has reached a minimum of 16 inches in height. Cotton that is smaller than 16 inches in height may be injured by V-10233 Herbicide applications. V-10233 Herbicide application must be directed to the lower 2 inches of the cotton stem to avoid crop injury.

#### **TIMING TO WEEDS**

V-10233 Herbicide tank mix applications must be made to weeds within the height range given in Table 2, *Emerged Broadleaf Weeds Controlled by, Hooded, Shielded and Layby Application of V-10233 Herbicide Tank Mixes With Glyphosate or MSMA.* 

#### **TANK MIXES**

V-10233 Herbicide must be tank mixed with one of the herbicides listed in Table 3, *Tank Mixes with V-10233 Herbicide for Hooded, Shielded and/or Layby Use* for postemergence control of the weeds listed in Table 2, *Emerged Broadleaf Weeds Controlled by, Hooded, Shielded and Layby Application of V-10233 Herbicide Tank Mixes With Glyphosate or MSMA*.

Table 3. Tank Mixes with V-10233 Herbicide for Hooded, Shielded and/or Layby Use

TANK MIX PARTNER	TARGET WEEDS	HOODED AND SHIELDED	LAYBY
glyphosate	Perennial Grasses Broadleaf Weeds	х	X <sup>1</sup>
MSMA	Annual Grasses Yellow Nutsedge	. X	Х
diuron	glyphosate resistant Palmer amaranth	Х	X

<sup>&</sup>lt;sup>1</sup>For use only in cotton with the Roundup Ready gene.

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