59639-130 9/30/2004 1/26

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg. Number:	Date of Issuance:
59639-130	SEP 30 2004

Term of Issuance: Conditional

Name of Pesticide Product: Velocity SP Herbicide

NOTICE OF PESTICIDE:
x Registration
__ Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Mr. Eric H. Tamichi
Registration Manager
Valent U.S.A. Corporation
1600 Riviera Ave. Ste. 200
Walnut Creek, CA 94596

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product.

2. Add the phrase "EPA Registration No. 59639-130".

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Submit three (3) copies of your final printed labeling before you release the product for shipment.

Enclosed for your records is a copy of your label stamped "Accepted".

Signature of Approving Official:

Date: 9-30-04

EPA Form 8570-6

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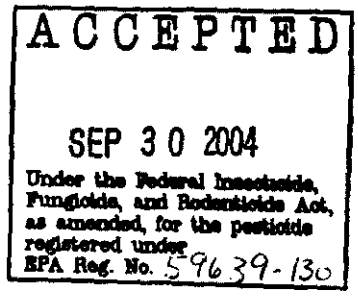

Velocity® SP Herbicide

SELECTIVE POSTEMERGENCE HERBICIDE FOR CONTROL OF ANNUAL BLUEGRASS, ROUGH BLUEGRASS AND CERTAIN BROADLEAF WEEDS ON GOLF COURSE TURFGRASS AND SOD FARMS

SUPPRESSION OF DOLLAR SPOT

Active Ingredient	By Wt.
*Bispyribac-sodium	80.0%
Other Ingredients	20.0%
Total 100.0%	

*Sodium 2,6-bis[(4,6-dimethoxypyrimidin-2-yl)oxy]benzoate

KEEP OUT OF REACH OF CHILDREN

CAUTION

SEE NEXT PAGE FOR ADDITIONAL PRECAUTIONARY STATEMENTS

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PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS & DOMESTIC ANIMALS

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CAUTION

Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Causes moderate eye irritation. Avoid breathing dust or spray mist.

FIRST AID

If on skin or clothing: • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.

If in eyes: • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

If swallowed: • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.

If inhaled: • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.

HOT LINE NUMBER Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact **1-800-892-0099** for emergency medical treatment information.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow instructions for category A on an EPA chemical resistant 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 butyl or nitrile), shoes plus socks.

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

USER SAFETY RECOMMENDATIONS Users should: • Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. • Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. • Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to non-target plants. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters or rinsate.

This product may contaminate water through drift of spray in wind. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. 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 the potential for contamination of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 24 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.

NON-AGRICULTURAL USE REQUIREMENTS The requirements in this box apply to uses of this product that are **NOT** within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, greenhouses or sodfarms. Keep all unprotected persons out of operating areas, or vicinity where there may be drift. Do not enter treated areas without protective clothing until sprays have dried.

AGRICULTURAL USE REQUIREMENTS Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, chemical-resistant gloves made of any waterproof material (such as butyl or nitrile), shoes plus socks.

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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 AGREES THAT ALL SUCH RISKS ASSOCIATED WITH THE APPLICATION AND USE ARE ASSUMED BY THE BUYER. Valent shall not be responsible for losses or damages (including, but not limited to, loss of yield, increased expenses of farming the crop or such incidental, consequential or special damages that may be claimed) resulting from use of this product in any manner not set forth on the label. Buyer assumes all risks associated with the use of this product in any manner or under conditions not specifically directed or approved on the label. **LIMITED WARRANTY** Valent warrants only that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the label, under average use conditions, when used strictly in accordance with the label **and subject to the Risks of Using This Product as described above. EXCEPT AS SET FORTH ABOVE, VALENT MAKES NO OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED.** No agent or representative of Valent or Seller is authorized to make or create any other express or implied warranty. **LIMITATION OF LIABILITY In no event shall Valent or Seller be liable for any incidental, consequential, indirect or special damages resulting from the use or handling of this product. The limitation includes, but is not limited to, loss of yield on all or any portion of the treated acreage, increased care, treatment or other expenses required to take the crop to harvest, increased finance charges or altered finance ratings, emotional or mental distress and/or exemplary damages. THE EXCLUSIVE REMEDY OF THE BUYER, AND THE EXCLUSIVE MAXIMUM LIABILITY OF VALENT OR SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT OR, AT THE ELECTION OF VALENT OR SELLER, THE REPLACEMENT OF THE PRODUCT. PROMPT NOTICE OF CLAIM** Valent must be provided notice as soon as Buyer has reason to believe it may have a claim, but in no event later than twenty-one days from date of planting, or twenty-one days from the date of application, whichever is latter, so that an immediate inspection of the affected property and growing crops can be made. If Buyer does not notify Valent of any claims, in such period, it shall be barred from obtaining any remedy. **NO AMENDMENTS** Valent and Seller offer this product, and Buyer accepts it, subject to the foregoing **Disclaimer, Risks of Using This Product, Limited Warranty** and **Limitation of Liability**, which may not be modified by any oral or written agreement.

TANK MIXES

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

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

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STORAGE AND DISPOSAL

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WATER SOLUBLE PACKAGING

MULTIPLE PACKAGING

This bag contains multiple water soluble packets (WSP) of Velocity SP Herbicide. Do not handle the packets with wet gloves or allow the packets to become wet prior to addition to spray tank. Do not break open packets. Open outer bag by pulling perforated tearstrip and place water soluble packet(s) in the spray tank. Refer to the "Table 2, Rate Conversions for Velocity SP" to calculate the number of packets to use. If all packets are not used, close and reseal outer container to protect remaining packet(s).

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GENERAL INFORMATION

GENERAL RESTRICTIONS AND LIMITATIONS

- Do not apply through any type of irrigation system.
- Do not apply by air.
- Do not apply to golf greens or roughs.
- Do not apply if rain is expected within 12 hrs. after application.
- Do not mow or irrigate turfgrass within 12 hrs. after application.
- Do not apply to moist or wet turfgrass.
- Do not mix with other pesticides, fertilizers, wetting agents, spreader stickers, surfactants or other adjuvants.
- Do not apply more than one 2 oz. water soluble packet per acre per application.
- Do not apply more than a total of one 2 oz. water soluble packet per 0.75 acre in a 28 day period.
- Do not apply with flood jet nozzles, air induction nozzles or hand sprayers.

SPRAY DRIFT

- Do not spray if winds are gusty or if wind speeds are greater than 5 mph.
- Do not apply within 15 ft. of native plant communities when sustained winds will carry VELOCITY SP towards these native plant communities.

GENERAL INFORMATION

Velocity SP is a postemergence herbicide that, when used in accordance with the label, will selectively control annual bluegrass *(Poa annua)*, rough bluegrass (*Poa trivialis)* and numerous broadleaf weeds that are growing within certain species of established turfgrass. Velocity SP will also suppress seedhead production by annual bluegrass. Velocity SP displays excellent activity against emerged weeds, but has almost no preemergent activity. Therefore, Velocity SP will not control weeds that germinate after application.

Velocity SP inhibits the enzyme acetolactate synthase (ALS), which plants require to produce three key amino acids. Annual bluegrass and other susceptible weeds usually stop growing within 3 to 7 days after treatment, and turn yellow or brown within 3 to 14 days after treatment. Plant death typically occurs by 21 to 28 days after treatment. More than one application of Velocity SP is usually required for maximum control, especially for annual and rough bluegrass.

Velocity SP may cause mild but temporary growth regulation and chlorosis (yellowing) in labeled turf species (i.e., creeping bentgrass, perennial ryegrass).

Velocity SP is absorbed by plant foliage and roots. Plant uptake and performance of Velocity SP is influenced by environmental conditions, cultural practices and spray coverage. For best results, only apply Velocity SP when turf and weeds are actively growing. Thorough spray coverage is also required to maximize performance; therefore, only apply Velocity SP using the application equipment and spray volume specified on the label. Irrigation is not required to activate Velocity SP. Turfgrass should not be mowed or irrigated for at least 24 hours after application in order to allow time for Velocity SP to be absorbed and translocated within foliage. Velocity SP may be less effective if applied when weeds or turfgrass are under stress due to extremes in temperature, drought, excessive water, disease, low fertility, heavy thatch or other stresses.

Velocity SP has not been evaluated under all microclimates or against all biotypes of annual and rough bluegrass. Therefore, performance may be less effective in some locations, and against some biotypes of these weed species.

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Application of Velocity SP to control weeds will also suppress infection of creeping bentgrass by dollar spot, *Sclerotinia homeocarpa*. Suppression of dollar spot will be greatest when a weed control program is initiated in the late spring or early summer before the appearance of significant dollar spot infection. When Velocity SP is applied at this time, dollar spot suppression is usually evident for several weeks after the last application of Velocity SP. Therefore, early season application of Velocity SP may delay the initiation of a dollar spot control program with fungicides, and reduce overall fungicide application on creeping bentgrass.

Velocity SP will also provide some curative control of dollar spot, but should not be used in place of labeled fungicides to control established infections of this disease.

IMPORTANT: Velocity SP is a very active herbicide, and users should exercise good judgment and caution until familiarity is gained with this product. Due to variability of turfgrass varieties, growth stages, environmental conditions, cultural practices and application techniques, users should test this product under user growing conditions in a small area, and evaluate treated turf for 28 days for phytotoxicity. Testing Velocity SP in a small area will help determine if the herbicide can be used safely in a widespread application.

TOLERANT TURFGRASS SPECIES

Velocity SP has not been evaluated on all turfgrass species and varieties, but has been safely used on the following turfgrass species:

- **Creeping Bentgrass** *(Agrostis palustris)*
- **Perennial Ryegrass** *(Lolium perenne)*

When applied in accordance with the label, Velocity SP has not caused commercially unacceptable injury to creeping bentgrass or perennial ryegrass. However, treated turfgrass may exhibit temporary chlorosis (yellowing) and mild growth regulation. These symptoms generally appear 3 to 10 days after application, but tolerant turfgrass species usually outgrow symptoms within 3 to 14 days. The onset, intensity and persistence of symptoms are at least partially influenced by environmental conditions (i.e., temperature, cloud cover and rainfall) and cultural practices. Under cool and cloudy conditions, symptoms tend to appear more slowly than under warm sunny conditions, but symptoms may also be more persistent under cool cloudy conditions because turfgrass is growing less vigorously. Tank mixing Velocity SP with surfactants may cause unacceptable chlorosis in tolerant turfgrass species.

Velocity SP may injure creeping bentgrass or perennial ryegrass that is not well established or that has been weakened by heat, moisture stress, pests, diseases, chemicals, low fertility, thatch, mechanical injury or other stresses. Velocity SP may also cause unacceptable injury to creeping bentgrass and perennial ryegrass mowed at greens height.

Velocity SP may cause unacceptable injury to other desirable turf species.

RESEEDING, OVERSEEDING OR SPRIGGING

Velocity SP may be applied to sodded or sprigged creeping bentgrass and to perennial ryegrass that is well established. Bentgrass must have a developed root system and uniform stand and have received at least two mowings before the first application of Velocity SP.

Following a single application of Velocity SP, wait 10 days before reseeding or sprigging. When reseeding or sprigging, always use proper cultural practices such as soil cultivation, irrigation and fertilization to ensure rapid turf establishment. For best results, use mechanical or power seeding equipment (slit seeders) designed to give good seed-to-soil contact.

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APPLYING VELOCITY SP

Apply Velocity SP using standard, low pressure (20 to 50 psi) spray equipment in a sufficient volume of water to provide thorough spray coverage and a uniform spray pattern. Calibrate spray equipment before each use and check periodically during application. Space nozzles uniformly on the boom.

To ensure thorough coverage, apply a minimum of 20 gals. of spray solution per acre. Apply Velocity SP with ground equipment using standard commercial sprayers equipped with nozzles designed to deliver the desired spray pressure and spray volume. Avoid streaking, skips or excessive overlaps during application. Do not apply with flood jet nozzles, air induction nozzles or hand held sprayers, as equipment may not provide adequate or uniform coverage. The addition of a spray indicator, such as dyes or foams, is recommended.

MIXING AND SPRAYING EQUIPMENT PREPARATION AND CLEANUP

Use well maintained and clean equipment to apply Velocity SP. Clean the spray tank, and all hoses and booms according to the manufacturer's directions for the last product used before applying Velocity SP. This will ensure that no residue from the previous application remains in the sprayer.

Trace amounts of Velocity SP in or on mixing or spraying equipment may have an adverse effect on subsequently sprayed plants. Therefore, it is important that the sprayer be properly cleaned after spraying Velocity SP. Thoroughly drain, clean and rinse all mixing and spraying equipment including tanks, booms, hoses, strainers, screens and nozzles immediately after use. Use the following procedure:

1. Remove all physical residues.
2. Thoroughly drain and rinse tanks, booms and hoses with clean water.
3. Fill the tank one half full with clean water and use a spraying or mixing tank cleaner that **does not** contain chlorine. Fill the remainder of the tank with clean water. Let agitate or recirculate according to the directions of the cleaner manufacturer. Thoroughly flush the boom and hoses before draining.
4. Rinse all hoses, tanks, nozzles, strainers and booms with clean water to remove the tank cleaner. Follow the directions provided by the tank cleaner manufacturer.
5. Fill the tank half full with clean water and add 1 gal. of 3% active household ammonia for every 100 gals. of water the tank will hold. Fill the remainder of the tank with clean water and allow the solution to agitate or recirculate for 15 minutes. Thoroughly flush the ammonia cleaning solution through the boom, hoses, nozzles, screens and strainers before draining the tank.
6. Remove the strainers, nozzles and screens and clean separately in a solution of household ammonia and water.
7. Replace the strainers, nozzles and screens.
8. Repeat Step 5.
9. Thoroughly rinse the tank with clean water and flush the water through the boom, nozzles and hoses in order to remove all traces of ammonia.
10. Dispose of the rinsate on site or at an approved waste disposal facility.

IMPORTANT: Do not use chlorine bleach with ammonia, or toxic chlorine gas may be released. Remove all traces of liquid fertilizer containing any form of ammonia or ammonium before adding any chlorine source such as chlorine bleach.

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MIXING INSTRUCTIONS - WATER SOLUBLE PACKAGING

This bag contains multiple water soluble packets of Velocity SP. Do not handle the packets with wet gloves or allow the packets to become wet prior to addition to spray tank. Do not break open packets. Open outer bag by pulling perforated tearstrip and place water soluble packets(s) in the spray tank. Refer to "Table 2, Rate Conversions for Velocity SP" to calculate the number of packets to use. If all packets are not used, close and reseal outer container to protect remaining packet(s).

Water soluble packets should completely dissolve in the spray tank within approximately five minutes. Dissolution rate may be slowed by cold water, lack of agitation or water containing high concentrations of boron or sulfur. High concentrations of boron or sulfur may result in spray screen or nozzle clogging due to the incomplete dissolution of the water soluble packet material.

1. Fill clean spray tank 1/3 to 1/2 of desired level with clean water.
2. While agitating, add Velocity SP water soluble packets and ensure they have dissolved completely before proceeding. Agitation should create a rippling or rolling action on the water surface.
3. Fill spray tank to desired level with water. Agitation should continue until spray solution has been applied.
4. Mix only the amount of spray solution that can be applied the day of mixing.
5. Apply Velocity SP within 6 hours after mixing with water in spray tank.

RESISTANCE MANAGEMENT

Any weed population may contain plants that are naturally resistant to herbicides. Resistant biotypes may eventually dominate the weed population if herbicides with the same mode of action are applied repeatedly in the same area in successive years. Follow appropriate resistance management strategies.

TO DELAY HERBICIDE RESISTANCE

1. Do not use herbicides that have a similar mode of action in consecutive years.
2. Herbicide use should be part of an Integrated Pest Management (IPM) program that includes scouting, record keeping, consideration of cultivation practices, water management, weed free seed and other chemical or cultural control practices.
3. Monitor treated weed populations for resistance development and report suspected resistance.
4. Contact your local extension agent or consultant for additional pesticide resistance management and/or IPM recommendations.

Table 1. WEEDS CONTROLLED BY VELOCITY SP

Common Name	Scientific Name	Weed Size	
	Application Rate: Acres Treated with One 2 oz. Water Soluble Packet		
Bluegrass, Annual (annual and perennial biotypes)	*Poa annua*	Up to seedhead	1.0 to 4.5
Bluegrass, Rough	*Poa trivialis*	Up to seedhead	1.0 to 1.5
Chickweed			
Common	*Stellaria media*	Up to seedhead	
Sticky	*Cerastium glomeratum*	Up to seedhead	
Clover			
Large Hop	*Trifolium campestre*	Up to seedhead	
White	*Trifolium repens*	Up to seedhead	
Dandelion	*Taraxacum officinale*	Seedling stage	
Henbit	*Lamium amplexicaule*	Up to seedhead	
Lawn Burweed	*Soliva pterosperma*	Up to seedhead	
Parsley-Piert	*Alchemilla arvensis*	Up to seedhead	
Plantain			
Broadleaf	*Plantago major*	Up to seedhead	
Buckhorn	*Plantago lanceolata*	Up to seedhead	
Swinecress	*Coronopus didymus*	Up to seedhead	
Yellow Nutsedge	*Cyperus esculentus*	Seedling stage	
Yellow Woodsorrel	*Oxalis stricta*	Seedling stage	

Table 2. RATE CONVERSIONS FOR VELOCITY SP

Acres Treated with One 2 oz. Water Soluble Packet			Sq. Ft.
Treated with One 2 oz. Water Soluble Packet	**Application Rate oz. Per Acre**		
	Application Rate grams ai Per Acre		
4.5	196,020	0.44	10
3.0	130,680	0.65	15
2.25	98,010	0.88	20
1.5	65,340	1.3	30
1.0	43,560	2.0	45

DIRECTIONS FOR USE IN CREEPING BENTGRASS AND PERMANENTLY ESTABLISHED PERENNIAL RYEGRASS

CROP AND USE SITE

- Creeping Bentgrass, *Agrostis palustris*
- Perennial Ryegrass, *Lolium perenne*
- Golf course fairways and tees mowed at 3/8" to 3/4" in height; sod farms mowed at 1/2" to 3/4" in height.

Velocity SP can be safely applied to creeping bentgrass and perennial ryegrass that are well established and mowed at the prescribed height, but should not be applied to greens or roughs. Velocity SP should not be applied in heavy traffic and/or heavily shaded turf areas, which are more prone to herbicide injury.

Bentgrass tolerance varies by variety, and is influenced by environmental and cultural practices.

IMPORTANT: Velocity SP may cause mild discoloration (chlorosis) to creeping bentgrass and perennial ryegrass. Discoloration generally begins 3 to 10 days after application. However, vigorously growing creeping bentgrass and perennial ryegrass will generally outgrow symptoms within 3 to 14 days. Annual bluegrass chlorosis can be mistaken for bentgrass or ryegrass chlorosis, especially in sites with a moderate to heavy infestation. Turf chlorosis is usually more apparent when small patches of turf within a fairway or tee box are treated with Velocity SP, and less apparent when entire fairways or tee boxes are treated. Therefore, if temporary turf chlorosis is a concern, avoid treating small patches of turf that are surrounded by nontreated areas of turf.

Velocity SP can injure creeping bentgrass and perennial ryegrass that are under high heat stress. Therefore, do not apply Velocity SP to turfgrass that is exhibiting symptoms of heat stress, or if significant heat stress (temperatures above 90°F) is expected during the week following application. It is recommended that Velocity SP not be applied after June 30 in areas where creeping bentgrass or perennial ryegrass are typically exposed to prolonged periods of significant heat stress during the summer months.

Velocity SP may increase the susceptibility of creeping bentgrass to Pythium blight when it is applied under conditions favorable to infection by this pathogen (i.e.prolonged high heat stress, poor air circulation and wet soil). Therefore, avoid application of Velocity to bentgrass that is exhibiting symptoms of Pythium infection, or under conditions that are favorable to infection.

Growing conditions, fertilization, rainfall, overseeding and other agronomic and environmental conditions will affect conversion from a mixed stand of bentgrass or ryegrass, and annual or rough bluegrass, to a stand that is predominantly bentgrass or ryegrass.

Always apply Velocity SP to healthy, actively growing turfgrass. Any environmental (i.e., temperature, drought, etc.) or other stress factors (i.e., herbicide injury, fertilizer injury, nutrient deficiencies, heavy thatch, etc.), which decrease plant metabolism and growth may reduce weed control.

Velocity SP may be less efficacious if applied in the spring before bentgrass or perennial ryegrass resumes active growth, or in the fall after growth slows, especially in more Northern states. Application during these times may also result in a more extended period of chlorosis to bentgrass and ryegrass, especially if applied in the fall.

In general, Velocity SP will perform optimally (i.e. best weed control and least chlorosis to bentgrass and ryegrass) under sunny conditions when daytime high temperatures are between 65°F and 80°F during and after application.

In turfgrass with >10% annual bluegrass, overseeding is recommended in conjunction with Velocity SP applications to promote conversion to creeping bentgrass or perennial ryegrass, and to avoid stand thinning due to loss of annual bluegrass and/or rough bluegrass. Do not apply Velocity SP between 10 days before and 60 days after overseeding with creeping bentgrass or perennial ryegrass.

Velocity SP may cause significant injury to other turf species, especially certain cultivars of Kentucky bluegrass, *Poa pratensis*. Therefore, Velocity SP should be used with caution when Kentucky bluegrass comprises a significant portion of a mixed stand of turfgrass.

Table 3. WEEDS CONTROLLED BY VELOCITY SP IN CREEPING BENTGRASS AND PERMANENTLY ESTABLISHED PERENNIAL RYEGRASS

Common Name	**Scientific Name**	**Application Rate**
Bluegrass, Annual (annual & perennial biotypes)	*Poa Annua*	One 2 oz. Water Soluble Packet (WSP) Per 1.0 to 1.5 Acres
Bluegrass, Rough	*Poa trivialis*	One 2 oz. Water Soluble Packet (WSP) per 1.5 Acres
Chickweed		
Common	*Stellaria media*	
Sticky	*Cerastium glomeratum*	
Clover		
Large Hop	*Trifolium campestre*	
White	*Trifolium repens*	
Dandelion	*Taraxicum officinale*	
Henbit	*Lamium amplexicaule*	
Lawn Burweed	*Soliva pterosperma*	
Parsley-Piert	*Alchemilla arvensis*	
Plantain		
Broadleaf	*Plantago major*	
Buckhorn	*Plantago lanceolata*	
Yellow Nutsedge	*Cyperus esculentus*	
Yellow Woodsorrell	*Oxalis stricta*	

continued

Table 3. WEEDS CONTROLLED BY VELOCITY SP IN CREEPING BENTGRASS AND PERMANENTLY ESTABLISHED PERENNIAL RYEGRASS - continued

SPECIAL DIRECTIONS: Velocity SP should only be applied during the time of year when creeping bentgrass, perennial ryegrass and target weeds are most actively growing. The use season for Velocity SP will therefore vary according to location. Recommended Use Season: Northern States - May 15 to September 1 Southern States - April 15 to June 30 Velocity SP may be less efficacious if applied outside of the recommended use season, especially in more Northern states. Therefore, avoid application of Velocity SP in the spring before bentgrass or ryegrass resumes active growth, or in the fall after bentgrass growth slows. Velocity SP may cause mild chlorosis to creeping bentgrass or perennial ryegrass. However, chlorosis is temporary and turfgrass will recover when Velocity SP is applied in accordance with the label. Chlorosis may be more extended when plants are not actively growing due to cold temperatures. Therefore, avoid application of Velocity SP in the spring before grass resumes active growth, or in the fall after growth slows. Velocity SP may injure bentgrass if applied during the summer when bentgrass or ryegrass is under high heat stress, especially in more Southern states. Therefore, do not apply Velocity SP to bentgrass or ryegrass that is exhibiting symptoms of heat stress, or if significant heat stress (several days with temperatures above 90°F) is expected during the week following application. **Contact your Valent representative or your local extension specialist for a recommendation specific to your area. Recommended control programs** The control program for Velocity SP should be determined by considering the desired level and speed of control, and the severity of infestation by annual and/or rough bluegrass. Maximum control will usually require more than one application. **1. Slow conversion to creeping bentgrass or perennial ryegrass** Apply Velocity SP on a 7 day interval at the rate of one 2.0 oz. WSP per 4.5 acres. Begin application early in the recommended use season, and continue until the desired level of control is achieved. This program should be considered for turf with a heavy infestation of annual and/or rough bluegrass, where complete removal of these weeds during a single season could result in an unacceptable stand of bentgrass or perennial ryegrass. **2. Rapid conversion to creeping bentgrass or perennial ryegrass** Apply Velocity SP up to four times at the rate of one 2.0 oz. WSP per 1.5 acres on a 14 to 21 day interval. Use 21 day interval if creeping bentgrass or perennial ryegrass is exhibiting undesirable chlorosis at 14 days after application. Efficacy may be decreased if application interval exceeds 21 days. This program should be considered for turf with light infestations of annual and/or rough bluegrass, where removal of these weeds would NOT result in an unacceptable stand of turfgrass. Velocity SP may be applied to creeping bentgrass or perennial ryegrass at up to one 2.0 oz. WSP per acre, but the application interval must be increased to 28 days if the use rate exceeds one 2.0 oz. WSP per 1.5 acres. **Note: Velocity SP may dramatically reduce overall turfgrass cover due to its high activity against annual and rough bluegrass.** In creeping bentgrass or perennial ryegrass with greater than 10% annual and/or rough bluegrass, apply Velocity SP as part of a weed management system that includes overseeding with bentgrass

continued

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Table 3. WEEDS CONTROLLED BY VELOCITY SP IN CREEPING BENTGRASS AND PERMANENTLY ESTABLISHED PERENNIAL RYEGRASS - continued

USE PRECAUTIONS: • Do not apply to creeping bentgrass or perennial ryegrass mowed at less than 3/8". • Do not apply to golf greens and roughs. • Do not apply when temperatures are below 55°F or above 85°F. • Do not apply more than a total of two 2.0 oz. WSP of Velocity SP per 0.75 acre per year. • Do not apply more than one 2.0 oz. WSP of Velocity SP per acre in a single application. • Do not apply to turfgrass under stress due to drought, temperature, disease, low fertility, heavy thatch, mechanical injury, or other stresses. • Velocity SP has not been evaluated for safety on all bentgrass and ryegrass cultivars. • Velocity SP has not been evaluated for efficacy against all biotypes of annual bluegrass and rough bluegrass, and may not be effective against all biotypes.

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Table 4. DOLLAR SPOT SUPPRESSION BY VELOCITY SP IN CREEPING BENTGRASS

Diseases		Application Rate	Special Instructions
Common Name	**ScientificName**		
Dollar Spot	*Sclerotinia homeocarpa*		One 2 oz. Water Soluble Packet (WSP) Per 1.0 to 4.5 Acres When used for weed control (see Table 3), Velocity SP can substantially suppress the development and severity of dollar spot in bentgrass fairways and tee boxes. Suppression may be evident for several weeks after the final application. To maximize suppression of dollar spot, initiate weed control program in the late spring or early summer before or soon after the appearance of dollar spot symptoms in bentgrass.
USE PRECAUTIONS: • See "Use Precautions" in Table 3. • Velocity SP can suppress dollar spot when applied before or soon after appearance of symptoms, but may not provide adequate curative control of established infections of dollar spot. • Do not use Velocity SP in place of labeled fungicides for curative control of dollar spot. • Do not use Velocity SP to suppress dollar spot on golf greens.			

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DIRECTIONS FOR USE IN BERMUDAGRASS OVERSEEDED WITH PERENNIAL RYEGRASS

CROP AND USE SITE

- Hybrid or Common Bermudagrass turf, *Cynodon dactylon*, that is fall overseeded with perennial ryegrass, *Lolium perenne*.
- Golf course fairways and tees mowed at 3/8" to 3/4" in height; sod farms mowed at 1/2" to 3/4".

Velocity SP can be safely applied to overseeded perennial ryegrass that is well established and mowed at the prescribed height, but should not be applied to greens or roughs. Do not apply Velocity SP in heavy traffic and/or heavily shaded turf areas, as these areas are more prone to herbicide injury

Ryegrass tolerance varies by cultivar and is influenced by environmental and cultural practices.

IMPORTANT: Velocity SP can injure perennial ryegrass if applied before ryegrass is established. Therefore, do not apply Velocity SP until at least 60 days after seedling emergence.

Velocity SP may cause mild discoloration (chlorosis) and growth regulation to established ryegrass. Symptoms typically appear 3 to 10 days after application, but ryegrass will generally outgrow symptoms within 3 to14 days. Cultural and environmental conditions (i.e., temperature, cloud cover and rainfall) will affect the onset, intensity and duration of ryegrass discoloration and growth regulation. Under cool and cloudy conditions, symptoms tend to appear more slowly and be less apparent than under warm, sunny conditions. However, symptoms also tend to be less persistent under warm, sunny conditions.

Tank mixing Velocity SP with surfactants or other adjuvants may increase ryegrass chlorosis to unacceptable levels, and should therefore be avoided.

Application of a complete foliar fertilizer 3 to 4 days after application of Velocity SP may decrease the amount of ryegrass chlorosis. Some forms of iron can antagonize the performance of Velocity SP. Therefore, do not tank mix Velocity SP with foliar fertilizers that contain iron.

Annual bluegrass chlorosis can be mistaken for ryegrass chlorosis, especially under higher infestation levels of annual bluegrass, and when Velocity SP application is not initiated until mid-late flower. Turf chlorosis is usually more apparent when small patches of turf within a fairway or tee box are treated, and less apparent when entire tee boxes or fairways are treated. Therefore, if turf chlorosis is a concern, avoid treating small patches of ryegrass that are surrounded by larger areas of nontreated turf.

Velocity SP should not thin ryegrass when applied in accordance with the label, but can cause thinning if applied at excessive rates, especially when ryegrass is under heat or moisture stress, and mowed at less than ½". Therefore, do not exceed labeled rates, do not apply to ryegrass that is exhibiting symptoms of heat or moisture stress, and do not apply when air temperatures are greater than 80°F or are predicted to exceed 80°F in the three days after application.

The efficacy of Velocity SP may be decreased when applied to overseeded ryegrass that is under environmental (i.e., temperature, drought etc.) or other stresses (i.e., herbicide injury, fertilizer injury, heavy thatch or nutrient deficiencies, etc.) that decrease plant metabolism and growth. Therefore, only apply Velocity SP to overseeded ryegrass that is healthy and actively growing.

To maximize performance, initiate treatment with Velocity SP when annual bluegrass first begins flowering in the mid-late winter AND temperatures are high enough to promote active growth. Do not apply when air temperatures are below 55°F or are NOT predicted to exceed 55°F in any of the three days following application. In general, Velocity SP will perform optimally (i.e. best weed control and least chlorosis to ryegrass) under sunny conditions when daytime high temperatures

are consistently between 60°F and 75°F during and after application.

Velocity SP may be less efficacious against annual bluegrass growing in thin stands of ryegrass. In thin ryegrass stands, annual bluegrass is exposed to less competition from ryegrass and therefore, more annual bluegrass will germinate, and the resulting plants will grow more vigorously and be more difficult to control than in denser stands of ryegrass. To maximize the efficacy of Velocity SP, broadcast ryegrass seed at a minimum of 300 lb per acre, and employ cultural practices that encourage the rapid formation of a dense stand of ryegrass.

Velocity SP can be applied in locations where bermudagrass does not go completely dormant and retains some green color during the winter, and will not delay spring green-up if applied before bermudagrass begins active growth (i.e. obvious tillering) in the late winter and spring. Velocity SP may temporarily discolor and regulate the growth of bermudagrass if applied after bermudagrass begins active growth, especially when applied at above the maximum-labeled rate.

Runoff of Velocity SP from treated ryegrass onto adjacent creeping bentgrass greens or bermudagrass greens overseeded with *Poa trivialis* is possible if heavy rainfall occurs immediately after application, especially on heavier soils where greens are located down slope from treated ryegrass. Runoff could cause some chlorosis to bentgrass, but significant injury is unlikely because bentgrass is much more tolerant to Velocity SP than other ALS inhibitors currently labeled for use on turf. The potential for runoff injury is higher for *Poa trivialis* because this turf species is quite sensitive to Velocity SP. If runoff injury to bentgrass or *Poa trivialis* greens is a concern, do not treat ryegrass immediately adjacent to greens with Velocity SP.

Annual bluegrass density and vigor are higher in non-overseeded bermudagrass than in bermudagrass overseeded with perennial ryegrass. As a result, Velocity SP may not be effective against annual bluegrass growing in non-overseeded bermudagrass, especially when applied during the late winter and spring. In addition, if Velocity SP is applied after non-overseeded bermudagrass has resumed actively growing, any resulting discoloration or growth regulation will be more evident than in an overseeded site, where it would be masked by ryegrass. Therefore, application of Velocity SP is not recommended in non-overseeded bermudagrass.

Velocity SP may cause unacceptable injury to other desirable turf species.

Table 5. WEEDS CONTROLLED BY VELOCITY SP IN BERMUDAGRASS OVERSEEDED WITH PERENNIAL RYEGRASS

Common Name	Scientific Name	Application Rate
Annual Bluegrass	*Poa annua*	One 2 oz. Water Soluble Packet (WSP) Per 1.0 to 3.0 Acres **Do not exceed one 2.0 oz. WSP per 1.5 acres per application when ryegrass is mowed at less than 1/2"**
Rough Bluegrass	*Poa trivialis*	
Chickweed		
Common	*Stellaria media*	
Sticky	*Cerastium glomeratum*	
Clover		
Large Hop	*Trifolium campestre*	
White	*Trifolium repens*	
Dandelion	*Taraxicum officinale*	
Henbit	*Lamium amplexicaule*	
Lawn Burweed	*Soliva pterosperma*	
Parsley-Piert	*Alchemilla arvensis*	
Plantain		
Broadleaf	*Plantago major*	
Buckhorn	*Plantago lanceolata*	
Swinecress	*Cronopus didymus*	
Yellow Woodsorrell	*Oxalis stricta*	

continued

Table 5. WEEDS CONTROLLED BY VELOCITY SP IN BERMUDAGRASS OVERSEEDED WITH PERENNIAL RYEGRASS - continued

SPECIAL INSTRUCTIONS: Velocity SP should be applied in the winter or early spring when annual bluegrass first begins to actively flower in the late winter or early spring and temperatures are within the recommended range, but not until at least 60 days after ryegrass emergence. The use season will therefore vary according to location and environmental conditions. Recommended Use Season: January 1 to April 15 Application of Velocity SP should be avoided during the latter part of the Recommended Use Season in areas where bermudagrass does not go completely dormant during the winter, and avoided during the early part of the recommended use season in areas where bermudagrass does go completely dormant during the winter. Velocity SP may be less efficacious if applied when annual bluegrass is not actively growing due to cold temperatures. Therefore, avoid application until after rising temperatures stimulate annual bluegrass to begin flowering. Velocity SP may injure ryegrass that is under heat stress, and may also injure actively growing bermudagrass. Therefore, do not apply when temperatures are above 80°F, or after bermudagrass begins to actively tiller in the late winter or spring. Contact your Valent representative or your local extension specialist for a recommendation specific to your area. **Recommended Control Programs:** Velocity SP may cause mild chlorosis and growth regulation to ryegrass, but symptoms will be temporary when applied in accordance with the label. The control program for Velocity SP should be determined by considering the desired level of control, and the tolerance for ryegrass chlorosis. Effective control or seed head suppression will require more than one application. **1. Maximum Control of Annual Bluegrass and Broadleaf weeds** Apply Velocity SP two or three times on a 14 to 21 day interval at one 2.0 oz. wt. WSP per 1.5 acres. Use 21 day interval if perennial ryegrass is exhibiting undesirable chlorosis at 14 days after application Do not make more than two applications per year where mowing height is less than 1/2". Efficacy may be decreased if application interval exceeds 21 days. This program should be considered for heavier infestations of annual bluegrass, and where there is a higher tolerance for temporary ryegrass chlorosis. **2. Seed head Suppression of Annual Bluegrass** Apply Velocity SP three times on a 14 day interval at one 2.0 oz. wt. WSP per 3.0 acres of perennial ryegrass. Efficacy may be decreased at longer applications. While this program will strongly suppress production of seed heads, it may kill a lower percentage of annual bluegrass and other labeled weeds than will the Maximum Control program. This program will cause less chlorosis than the Maximum Control program, and should be considered where there is a low tolerance for ryegrass chlorosis. On sites, where ryegrass is mowed at no less than 1/2", Velocity SP may be applied at up to one 2.0 oz. WSP per acre. When applied at more than one 2.0 oz. WSP per 1.5 acres, the application interval must be increased to 28 days, do not make more than two applications per year. Turf growth regulators may affect the efficacy and safety of Velocity SP.

continued

Table 5. WEEDS CONTROLLED BY VELOCITY SP IN BERMUDAGRASS OVERSEEDED WITH PERENNIAL RYEGRASS - continued

USE PRECAUTIONS: • Do not apply to other species of desirable turfgrass. • Do not apply to golf greens or roughs. • Do not apply to perennial ryegrass until at least 60 days after seedling emergence. • Do not apply in spring after bermudagrass has begun actively tillering. • Do not apply Velocity SP to ryegrass mowed at less than 3/8". • Do not apply more than one 2.0 oz. WSP of Velocity SP per acre in a single application. • Do not apply more than one 2.0 oz. WSP of Velocity SP per 1.5 acres in a single application when mowing height is less than 1/2". • Do not apply more than a total of one 2.0 oz. WSP of Velocity SP per 0.75 acres in a 28-day period. • Do not apply more than a total of two 2.0 oz. WSP of Velocity SP per acre per year • Do not exceed three applications per acre per year. • Do not apply when temperatures are below 55°F or above 80°F. • Do not apply if rainfall is expected within 12 hours after application. • Do not mow or irrigate ryegrass for at least 12 hours after application. • Do not apply to perennial ryegrass under stress due to moisture, temperature, mechanical injury, or disease. • Velocity SP has not been evaluated for safety on all ryegrass cultivars, or for efficacy against all biotypes of annual bluegrass.

STORAGE AND DISPOSAL

PROHIBITIONS

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

PESTICIDE STORAGE

Store in a cool dry place.
Keep pesticide in original container.
Keep container closed when not in use.
Do not put concentrate or dilute into food or drink containers.
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 **1-800-892-0099**.

PESTICIDE DISPOSAL

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

CONTAINER DISPOSAL

Do not reuse the outer bag. Dispose of outer bag 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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