

59639-166

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Washington, D.C. 20460

OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

August 1, 2013

Robin Charlton, Ph.D.
Valent USA Corporation
1600 Riviera Avenue, Suite 200
Walnut Creek, CA 94596-8025

Subject: Label Amendment (add new uses on melons and tuberous & corm vegetables)
Supplemental Label (use on melons and potato/ tuberous & corm vegetables)
V-10142 Ag Herbicide
EPA Reg. No. 59639-166
Application Dated March 15, 2012

Dear Dr. Charlton:

The application referred to above, submitted under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable under FIFRA §3(c)(7)(B) subject to the following conditions:

1. You must submit and/or cite all data required for registration/ reregistration/ registration review of your product when the Agency requires all registrants of similar products to submit such data.
2. If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action, including, among other things, cancellation under FIFRA §6(e).

Stamped copies of the labels are enclosed for your records. The main label supersedes all previously accepted labels. You must submit one (1) copy of the final printed label before you release the product for shipment. Products released for shipment after eighteen (18) months from the date of this letter must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA §6(e). Your release for shipment of the product constitutes acceptance of these conditions.

If you have any questions, please contact Mindy Ondish at (703)605-0723 or at ondish.mindy@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Kable Bo Davis", written over a horizontal line.

Kable Bo Davis
Product Manager 25
Herbicide Branch
Registration Division (7505P)



ACCEPTED

AUG 01 2013

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 59639-166

GROUP **2** HERBICIDE

V-10142 Ag Herbicide

[Bracketed text is optional]

FOR CONTROL AND/OR SUPPRESSION OF CERTAIN WEEDS IN MELON, PEPPERS (BELL AND NON-BELL), RICE, TOMATO AND [POTATO] [TUBEROUS AND CORM VEGETABLES]

Active Ingredient	By Wt
Imazosulfuron*	75.0%
Other Ingredients	<u>25.0%</u>
Total	100.0%

*2-chloro-N-[[[(4,6-dimethoxy-2-pyrimidinyl)-amino]carbonyl]imidazo[1,2-a]pyridine-3-sulfonamide

V-10142 Ag Herbicide is a water dispersible granule containing 75.0% active ingredient.

KEEP OUT OF REACH OF CHILDREN

CAUTION

SEE NEXT PAGE FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

NET CONTENTS: 5 Pounds

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION**

Harmful if swallowed, absorbed through skin, or inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

FIRST AID	
If swallowed:	<ul style="list-style-type: none"> • 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 on skin or clothing:	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • 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 inhaled:	<ul style="list-style-type: none"> • 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 **800-892-0099** for emergency medical treatment information.

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, shoes and 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:

- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

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

Surface Water Advisory:

Imazosulfuron and its degradates may impact surface water quality through spray and runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. Imazosulfuron and degradates are classified as having 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 the potential loading of imazosulfuron and degradates from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours.

Ground Water Advisory:

Imazosulfuron and several of its degradates have properties and characteristics associated with chemicals detected in ground water. These chemicals may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

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 instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE). 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, shoes and 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 ALLOWED BY LAW, 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 allowed by 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 ALLOWED BY 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-10142 Ag Herbicide is a Group 2 herbicide. Any weed population may contain plants naturally resistant to V-10142 Ag Herbicide and other Group 2 herbicides. Weed species with acquired resistance to Group 2 herbicides may eventually dominate the weed population if Group 2 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-10142 Ag Herbicide or other Group 2 herbicides.

To delay herbicide resistance consider:

- Make applications at the specified label rate at the specified stage of weed growth.
- Avoiding the consecutive use of V-10142 Ag Herbicide or other target site of action Group 2 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 selection on an Integrated Pest Management (IPM) program that includes scouting, record keeping, and consideration of cultivation practices, water management, weed free crop seed, crop rotation, and other chemical or cultural control practices.
- Monitoring treated weed population for resistance development and reporting suspected resistance.
- 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 contact Valent U.S.A. Corporation at the following toll-free number: 800-682-5368.

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PRODUCT INFORMATION

V-10142 Ag Herbicide is a selective herbicide which provides contact and residual control of susceptible weeds in labeled crops. V-10142 Ag Herbicide inhibits the enzyme acetolactate synthase (ALS), which plants require to produce three key amino acids. Nutsedge and other susceptible weeds usually stop growing within 7 to 14 days after treatment, and turn yellow or brown within 21 days after treatment. Plant death typically occurs by 21 to 28 days after treatment.

V-10142 Ag Herbicide is absorbed by plant foliage and roots. Plant uptake and performance of V-10142 Ag Herbicide is influenced by environmental conditions, cultural practices and spray coverage.

For postemergence application, applying V-10142 Ag Herbicide to actively growing weeds optimizes control and/or suppression of susceptible weeds. Factors such as weed species present, size of weeds at application, environmental conditions and other factors which affect plant metabolism may affect the length of residual activity and the degree of control provided by V-10142 Ag Herbicide.

Restrictions and Limitations

- Do not apply more than 6.4 oz/A (0.3 lb ai/A) of V-10142 Ag Herbicide during a single application.
- Do not apply more than 6.4 oz/A (0.3 lb ai/A) of V-10142 Ag Herbicide during a single calendar year.
- After application of V-10142 Ag Herbicide, temporary yellowing or stunting of the crop may occur.
- Do not apply V-10142 Ag Herbicide when weather conditions favor drift from treated areas.
- For aerial application, do not apply V-10142 Ag Herbicide within 1/2 mile of emerged cotton or non-STS soybeans AND do not apply within 100 feet of any other emerged non-target crops.
- For ground application, do not apply V-10142 Ag Herbicide within 100 feet of emerged non-target crops.
- Do not apply to rice fields if fields are used for the aquaculture of edible fish and/or crustaceans.
- Do not apply this product through any type of irrigation system.
- Do not apply V-10142 Ag Herbicide during low-level inversion conditions, including fog.
- Do not apply V-10142 Ag Herbicide to stressed crops or weeds. Stress conditions include, but are not limited to, soil moisture above field capacity, drought, temperatures below or above those known to be conducive for healthy growth, low fertility, carryover from a previous pesticide application or conditions/factors that decrease plant metabolism.
- When applying V-10142 Ag Herbicide by air (to rice only), observe "Spray Drift Management" instructions and precautions listed under "Aerial Application".
- Do not apply V-10142 Ag Herbicide using airblast spray equipment.
- Follow V-10142 Ag Herbicide label directions in "Sprayer Cleanout" section.
- Water drained from V-10142 Ag Herbicide treated fields must not be used to irrigate other crops.
- Do not apply V-10142 Ag Herbicide to second crop (stubble/ratoon) rice.
- Do not apply V-10142 Ag Herbicide in tank mix combination or sequential application programs with other soil residual acetolactate synthase (ALS) inhibiting herbicides on tomatoes or peppers.

- Do not apply V-10142 Ag Herbicide to a crop that has received or will receive a soil applied organophosphate insecticide.
- Do not apply V-10142 Ag Herbicide within 21 days before, or 7 days after, a foliar organophosphate insecticide application.
- After application of V-10142 Ag Herbicide follow all normal agricultural cultural practices, including cultivation, and ensure that adequate soil moisture is maintained either by rainfall or irrigation.
- Weed biotypes that exhibit resistance or tolerance to herbicides that inhibit the ALS enzyme may also exhibit resistance or tolerance to V-10142 Ag Herbicide.
- Maintain a 10 ft (minimum) vegetative buffer strip between treated areas and natural bodies of water (rivers, streams, lakes, wetlands, etc.).

Environmental Conditions and Biological Performance

V-10142 Ag Herbicide should be used as an integral part of a weed control program in conjunction with a resistance management strategy (see "Resistance Management" statement in this label). The mode of action is the inhibition of the ALS enzyme. V-10142 Ag Herbicide will, in most cases, prevent the emergence of susceptible weeds if application is made to a clean well-prepared seedbed. In some instances, susceptible weeds may germinate and emerge after application, but then growth ceases. The weed becomes chlorotic and either dies within 7 to 21 days or remains green but significantly stunted and noncompetitive. For optimum results from an application made prior to the emergence of susceptible weeds, rainfall or sprinkler irrigation is needed to move V-10142 Ag Herbicide into the soil. Applications to emerged susceptible weeds should be made when weeds are actively growing, have adequate soil moisture, are 1 to 3 inches in height and are not stressed due to environmental/biological/soil conditions [such as drought, extreme (high or low) temperatures, inadequate soil fertility, diseases or insects]. Susceptible weeds larger than 1 to 3 inches in height may not be adequately controlled. If cultivation is necessary to control unsusceptible weeds or for susceptible weeds that were larger than the recommended size at application, delay cultivation for at least 7 days after the application. Cultivation made either 1 to 7 days prior to a postemergence application, or sooner than 7 days after an application, may result in unacceptable or partial weed control.

Rainfastness

For postemergence applications V-10142 Ag Herbicide is rainfast 6 hours after application.

Soil Characteristics

Soil pH, temperature and moisture affect the degradation of V-10142 Ag Herbicide. Soil pH above 7, low temperatures and lack of moisture (less than 18 inches of rainfall, or irrigation, in the first six months after application) will decrease the degradation rate of V-10142 Ag Herbicide. In cropping systems that employ drip irrigation the rotational interval may need to be extended. These conditions also affect soil microbial populations, and increase the persistence of V-10142 Ag Herbicide in the soil. Persistence of V-10142 Ag Herbicide in the soil increases the potential for rotational crop injury and yield reduction.

Adjuvants

When an adjuvant is to be used with this product, Valent recommends the use of a Chemical Producers and Distributors Association certified adjuvant. For applications of V-10142 Ag Herbicide that require a surfactant or other adjuvant, refer to the Valent Bulletin, "Approved Surfactants for Use with V-10142 Ag Herbicide".

Mixing and Spraying Equipment Preparation and Cleanup

Precaution: Do not use chlorine bleach with ammonia. Remove all traces of liquid fertilizer containing any form of ammonia or ammonium before adding any chlorine source such as chlorine bleach.

Prior to using V-10142 Ag Herbicide thoroughly drain, clean and rinse all mixing and spraying equipment that will come in contact with V-10142 Ag Herbicide. Follow the cleanup procedures recommended by the manufacturer of the previously sprayed product. Failure to remove all deposits of previously sprayed products may result in collection of V-10142 Ag Herbicide residues and inhibit cleanup of mixing and spraying equipment after V-10142 Ag Herbicide use. Failure to remove all deposits of previously sprayed products may also result in reduced efficacy of V-10142 Ag Herbicide and/or crop injury.

Mixing Instructions

1. Fill the tank one-half full of clean water.
2. Begin agitation.
3. Buffer spray water if pH is below 7. If foaming is anticipated, add defoamer prior to the addition of the surfactant. Do not use products that reduce the pH of the spray solution as they may reduce weed control.
4. Add the required amount of V-10142 Ag Herbicide.
5. Add the surfactant if the application is to be made after weed emergence.
6. Add tank mix partner (if any) in the following order:
 - a. Water soluble packets (preferably added before the surfactant)
 - b. Water dispersible granules/wettable powder
 - c. Soluble powders/UAN
 - d. Suspension concentrate
 - e. Emulsifiable concentrate
7. Fill the remainder of the tank.
8. Mix only the amount of spray solution that can be applied the day of mixing. V-10142 Ag Herbicide must be applied within 12 hours of mixing.

Application Equipment

Application equipment should be clean and functioning properly. Proper sprayer calibration is required. Nozzles should be spaced to provide even, complete coverage and calibration should frequently be checked for accuracy. Select nozzles that deliver the recommended gallonage. Use the pressure range recommended by the manufacturer for the selected nozzle.

SPRAY DRIFT MANAGEMENT

- Aerial application refers to rice only.

Do not allow spray from ground or aerial equipment to drift onto adjacent land or crops. 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.

When drift may be a problem, do everything possible to reduce spray drift. The following aerial drift reduction information must be followed to avoid off target drift movement from aerial applications to agricultural field crops.

1. Do not spray if wind speed is greater than 8 mph or less than 2 mph. If sensitive crops or plants are downwind, extreme caution must be used under all conditions.
2. The distance between the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
3. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees. Where states have more stringent regulations, they must be observed.
4. Do not apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crops thereof rendered unfit for sale, use or consumption.
5. When making tank mixture applications follow the most restrictive label directions, including application buffer zones, of each product in the mixture.
6. Nozzles should be at a minimum of 10 inches below the trailing edge of the wing on a fixed wing aircraft to prevent spray particles from being released into turbulent air.

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 Droplet 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

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

Pressure: 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.

Nozzle type: Use a nozzle type that is designed for the intended application. Do not use air inducing or flood type nozzles.

Groundboom Application Height: Applications must not be made at a height greater than 4 feet above the top of the largest plants. Making applications at the lowest height that is safe 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 (e.g., when wind is blowing away from the sensitive areas).

Additional Spray Drift Reduction Advisory for Aerial Application to Rice

The following aerial drift reduction advisory information must be followed to avoid off-target movement from aerial applications to agricultural field crops.

1. Do not spray if wind speed is greater than 8 mph or less than 2 mph. If sensitive crops or plants are downwind, extreme caution must be used under all conditions.
2. The distance between the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
3. Nozzles must always point backwards parallel with the air stream and never be pointed downwards more than 45 degrees. Where states have more stringent regulations, they must be observed.
4. Do not apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crops thereof rendered unfit for sale, use or consumption.
5. When making tank mixture applications follow the most restrictive label directions, including application buffer zones, of each product in the mixture.
6. Nozzles should be at a minimum of 10 inches below the trailing edge of the wing on a fixed wing aircraft to prevent spray particles from being released into turbulent air. 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.
7. Applications should not be made at a height greater than 4 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Sprayer Cleanout

Residual amounts of herbicide in/on mixing or spraying equipment may have an adverse effect on subsequently sprayed crops. 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 residue.
2. Thoroughly drain and rinse tanks, booms and hoses with clean water.
3. Fill the tank one-half full of clean water and use a spraying/mixing tank cleaner that does not contain chlorine. Let agitate/re-circulate 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 of clean water and add one (1) gallon of 3% active household ammonia for every 100 gallons of water the tank will hold. Fill the remainder of the tank with clean water and allow the solution to agitate/recirculate for 15 minutes. Thoroughly flush the ammonia cleaning solution through the boom, nozzles, screens and strainers before draining the tank.

6. Remove the strainers, nozzles and screens and clean separately in a solution of one part 3% active household ammonia to 100 parts water.
7. Replace the strainer(s), 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 the traces of ammonia.
10. Dispose of the rinsate on site or at an approved waste disposal facility.

ROTATIONAL RESTRICTIONS

The following rotational intervals are recommended for crop safety. Crop injury may result if the specified intervals are not followed. The rotational interval should be extended 6 to 8 months if either drought conditions and/or extended periods of cool conditions occur after application. These conditions and/or failure to use conventional tillage and cultivation cultural practices increases the persistence of V-10142 Ag Herbicide in the soil and therefore increases the potential for rotational crop injury and yield reduction. In cropping systems that employ drip irrigation, the rotational interval may need to be extended.

CROP ROTATION	
Rotational Interval	Rotational Crop
Immediately	Rice
100 days	Tomato (transplanted)
8 months	Cotton, Cucumber ¹ , Eggplant, Lettuce, Melons ¹ (citron melon; muskmelon (cantaloupe), watermelon), Mustard Greens, Peppers (bell and non-bell), Radish, Spinach, Turnip, Turnip Greens, White Potato
9 months	Cabbage ¹ , Squash ¹
12 months	Field Corn, Sweet Corn, Grain Sorghum, Soybean, Wheat
24 months ²	All crops not listed

¹ Five (5) months in Florida and Georgia.

² A Successful soil bioassay must be performed prior to planting any crops not listed sooner than 24 months after a V-10142 Ag Herbicide application. A successful bioassay is one in which a representative soil sample is taken from the field in question and the crop to be planted into that field is safely grown in that soil.

DIRECTIONS FOR USE ON MELON
(Crop Subgroup 9A)
 Citron melon; Muskmelon (cantaloupe); Watermelon

Restrictions and Limitations

- Do not apply more than 6.4 oz of V-10142 Ag Herbicide per acre per year.
- Make only one application per year.
- Make application to field grown melons only.
- Apply to well established melons (at least 5 inches wide).
- Do not apply V-10142 Ag Herbicide by air on melons.
- V-10142 Ag Herbicide will not control ALS resistant weeds (Group 2).

Specific Use Instructions

- Movement of soil may influence residual activity and/or crop response.
- Use the higher rate listed if there is a field history of nutsedge or if weed pressure is normally heavy.
- To activate V-10142 Ag Herbicide into the soil solution, a rainfall event or overhead irrigation supplying 1/2 to 1 inch of water no sooner than 12 hours but not more than 5 days after application is necessary.
- When weeds are emerged at time of application (1 to 3 inches in height), use an approved surfactant as specified (see Adjuvant section on container label).

<p align="center">MELON (Crop Subgroup 9A) Citron melon; muskmelon (cantaloupe); watermelon</p>		
<p>V-10142 Ag Herbicide Application Rates</p>	<p>PHI</p>	<p>Special Instructions</p>
<p>4 to 6.4 oz/A (0.19 to 0.3 lb ai/A)</p>	<p>48 days</p>	<p>Row Middle Application for Plastic Mulch or Bare Soil Culture</p> <p>A row middle (between the rows) application may be made at any time during the cropping season (up to 48 days before harvest), as long as the melons are well established and at least 5 inches wide.</p> <ul style="list-style-type: none"> • Avoid contact with the melon crop. When application is being made to melons grown in plastic mulch culture, equipment must be adjusted to prevent the spray from contacting the plastic.
<ul style="list-style-type: none"> • Refer to Table 1 for preemergence weeds controlled and suppressed. • Refer to Table 2 for postemergence weeds controlled and suppressed. 		

Ground Application

For row middle application, determine the area to be sprayed and calculate the amount of V-10142 Ag Herbicide and water needed based on a broadcast total spray volume of 20 to 40 gallons of water per acre and a V-10142 Ag Herbicide rate of 4.27 to 6.4 oz/A (0.2 to 0.3 lb ai/A). For example, if the rows are 36 inches wide and 18 inches between the rows is the area to be sprayed at the rate of 6.4 oz/A (0.3 lb ai/A), the V-10142 Ag Herbicide calculation is:

Band Width in Inches	X	Rate per Broadcast Acre	=	Amount V-10142 Ag Herbicide Needed per Acre for Row Middle Application
Row Width in Inches				

Example:

$$\frac{18''}{36''} \times 6.4 \text{ oz/A} = 3.2 \text{ oz/A for row middle application}$$

If the broadcast water volume selected is 30 gallons per acre, the calculation is:

Band Width in Inches	X	Spray Volume per Broadcast Acre	=	Amount of Water Volume per Acre for Row Middle Application
Row Width in Inches				

Example:

$$\frac{18''}{36''} \times 30 \text{ gal} = 15 \text{ gal water per acre for row middle application}$$

DIRECTIONS FOR USE ON PEPPERS (BELL AND NON-BELL)

Specific Use Instructions

- Movement of soil may influence residual activity and/or crop response.
- Use the higher rate listed if there is a field history of nutsedge or if weed pressure is normally heavy.
- A rainfall event or overhead irrigation supplying 1/2 to 1 inch of water no sooner than 12 hours, but not more than 5 days after application, is necessary to activate V-10142 Ag Herbicide and carry it into the soil solution.
- When weeds are emerged at time of application (1 to 3 inches in height), use an approved surfactant as specified (see Adjuvant section in this label).

Restrictions and Limitations

- Do not apply more than 6.4 oz of V-10142 Ag Herbicide per acre per year.
- Make only one application per year.
- Make application to field grown peppers only.
- Apply to well established peppers (at least 10 inches tall).
- Do not apply V-10142 Ag Herbicide by air on peppers.

PEPPERS (Bell and Non-Bell)		
V-10142 Ag Herbicide Application Rates	PHI	Special Instructions
4 to 6.4 oz/A (0.19 to 0.3 lb ai/A)	21 days	<p>Row Middle, Plastic Mulch or Bare Soil Culture A row middle (between the rows) application may be made at any time during the cropping season (up to 21 days before harvest), as long as the peppers are well established and at least 10 inches tall.</p> <ul style="list-style-type: none"> • Avoid contact with the pepper crop. When application is being made to peppers grown in plastic mulch culture, equipment must be adjusted to prevent the spray from contacting the plastic.
		<p>Directed Spray A post-directed application (under the rows) may be made at any time during the cropping season (up to 21 days before harvest), as long as the peppers are well established and at least 10 inches tall.</p> <ul style="list-style-type: none"> • Avoid contact with the pepper fruit and direct application to the pepper plant. • Application must be directed toward the pepper stem, no higher than 2 inches from the soil surface.
<ul style="list-style-type: none"> • Refer to Table 1 for preemergence weeds controlled and suppressed. • Refer to Table 2 for postemergence weeds controlled and suppressed. 		

Ground Application

For row middle application, determine the area to be sprayed and calculate the amount of V-10142 Ag Herbicide and water needed based on a broadcast total spray volume of 20 to 40 gallons of water per acre and a V-10142 Ag Herbicide rate of 4.27 to 6.4 oz/A (0.2 to 0.3 lb ai/A). For example, if the rows are 36 inches and 18 inches between the rows is the area to be sprayed at the rate of 6.4 oz/A (0.3 lb ai/A), the V-10142 Ag Herbicide calculation is:

Band Width in Inches							
	X		Rate per	=		Amount V-10142 Ag Herbicide	
Row Width in Inches			Broadcast Acre			Needed per Acre for Row	Middle Application

Example: $\frac{18''}{36''} \times 6.4 \text{ oz/A} = 3.2 \text{ oz/A}$ for row middle application

If the broadcast water volume selected is 30 gallons per acre, the calculation is:

Band Width in Inches							
	X		Spray Volume per	=		Amount of Water Volume per	
Row Width in Inches			Broadcast Acre			Acre for Row Middle Application	

Example: $\frac{18''}{36''} \times 30 \text{ gal} = 15 \text{ gal water per acre}$ for row middle application

DIRECTIONS FOR USE ON RICE

Specific Use Instructions

- Use the higher rate listed if there is a field history of nutsedge or if weed pressure is normally heavy.
- A rainfall event supplying 1/2 to 1 inch of water no sooner than 12 hours, but not more than 5 days after application is necessary to activate V-10142 Ag Herbicide and carry it into the soil solution.
- When weeds are emerged at time of application (1 to 3 inches in height), use an approved surfactant as specified (see Adjuvant section in this label).
- At the time of application to dry broadcast seeded or water-seeded rice, the seed and roots must be covered with soil and the plant must be living entirely off of the root system.
- When application is made post-flood, the flood water must be lowered so that at least 70% of the weed surface is above the flood water. Bring the field to normal flood level 3 to 4 days after application.
- When application is made to non-flooded fields, flood the fields as soon as the rice will tolerate a flood, but not sooner than 24 hours after application.
- V-10142 Ag Herbicide may be applied to rice with labeled tank mix partners by aerial or ground application.

Restrictions and Limitations

- Do not apply to second crop (stubble/ratoon) rice.
- Fields with a history of weed resistance to ALS-inhibiting herbicides may exhibit resistance to V-10142 Ag Herbicide.
- Do not apply V-10142 Ag Herbicide to stressed rice.
- For aerial application, do not apply V-10142 Ag Herbicide within 1/2 mile of emerged cotton or non-STS soybeans AND do not apply within 100 feet of any other emerged non-target crops.
- For ground application, do not apply V-10142 Ag Herbicide within 100 feet of emerged non-target crops.
- Do not apply to rice fields if fields are used for the aquaculture of edible fish and/or crustaceans.
- Do not drain the field for 7 days after application when making a postemergence application to a flooded field.
- Do not use V-10142 Ag Herbicide on the first rice crop grown in fields that have been land leveled resulting in severe cut and heavy fill areas (does not apply to maintenance leveling).
- Do not apply more than 6.4 oz of V-10142 Ag Herbicide per acre per year.
- For tank mix applications with other products, read and follow the entire label of each product to be used in the tank mix. Follow the most restrictive label language.
- Do not apply an organophosphate insecticide within 21 days before, or 7 days after, an application of V-10142 Ag Herbicide.
- Tank mixing V-10142 Ag Herbicide with Clincher® or RiceStar® HT may result in decreased grass control.

RICE		
V-10142 Ag Herbicide Application Rates	PHI	Special Instructions
4 to 6.4 oz/A (0.19 to 0.3 lb ai/A)	Application may be made up until 2 inch internode stage of rice	Drill Seeded Rice Only (Preemergence/Delayed Preemergence) <ul style="list-style-type: none"> Apply V-10142 Ag Herbicide to a well-prepared moist seedbed. Soil should be sealed by flushing or rainfall prior to application of V-10142 Ag Herbicide
3.2 to 4 oz/A (0.15 to 0.19 lb ai/A)		Dry Seeded Rice (Early Postemergence) <ul style="list-style-type: none"> Apply V-10142 Ag Herbicide to moist soil or flooded fields. Early postemergence application to drill seeded rice can be made after emergence. If tank mixing with NewPath®, follow NewPath timing and adjuvant recommendations.
		Dry Or Water-Seeded Rice (Postemergence) <ul style="list-style-type: none"> Apply V-10142 Ag Herbicide to moist soil or flooded fields. For drill seeded or water-seeded rice, postemergence application may be made to rice that is in at least the 2-leaf (second leaf fully expanded) stage of growth.
3.2 oz/A (0.15 lb ai/A) followed by 3.2 oz/A (0.15 lb ai/A)		SEQUENTIAL APPLICATION PROGRAM (Preemergence Application Followed By Early Postemergence Application) <ul style="list-style-type: none"> V-10142 Ag Herbicide may be applied preemergence to drill seeded rice. Apply 3.2 oz/A of V-10142 Ag Herbicide to a well prepared moist seedbed. Soil should be sealed by flushing or rainfall prior to application of V-10142 Ag Herbicide. The preemergence application should be followed with a postemergence application. The postemergence application must not be made any sooner than 21 days after the preemergence application. Apply 3.2 oz/A of V-10142 Ag Herbicide to moist soil or flooded fields.
3.2 to 6.4 oz/A (0.15 to 0.3 lb ai/A)		Tank Mix Application <ul style="list-style-type: none"> V-10142 Ag Herbicide may be applied in tank mix combination with labeled rates of propanil containing products. V-10142 Ag Herbicide may also be applied in tank mix combination with labeled rates of Bolero®, Command®, Facet®, NewPath® or Prowl®.

RICE		
V-10142 Ag Herbicide Application Rates	PHI	Special Instructions
<ul style="list-style-type: none"> Refer to Table 4 for preemergence weeds controlled by V-10142 Ag Herbicide on rice. Refer to Table 5 for postemergence weeds controlled by V-10142 Ag Herbicide on rice. Refer to Table 6 for postemergence weeds suppressed by V-10142 Ag Herbicide on rice. Refer to Table 7 for weeds controlled by V-10142 Ag Herbicide sequential application program on rice (preemergence application followed by early postemergence application). 		

Aerial Application - Rice Only

Uniformly apply V-10142 Ag Herbicide by aircraft in no less than 10 gallons of water per acre total spray volume. Inadequate coverage will result in unacceptable weed control and/or weed regrowth. Any factor, such as reduced spray volume, which adversely affects coverage and/or canopy penetration will have a negative effect on the performance of V-10142 Ag Herbicide. Use nozzle arrangements that provide maximum coverage and minimize potential for off target movement of spray particles. Droplet size should be in the "medium" size category as defined in the August 1999 ASAE S572 publication entitled, "Spray Nozzle Classification by Droplet Spectra". Refer to that publication for additional information.

Ground Application

Apply V-10142 Ag Herbicide in a minimum of 10 gallons of water per acre and ensure thorough, uniform coverage.

DIRECTIONS FOR USE ON TOMATO

Specific Use Instructions

- Movement of soil may influence residual activity and/or crop response.
- Use the higher rate listed if there is a field history of nutsedge or if weed pressure is normally heavy.
- A rainfall event or overhead irrigation supplying 1/2 to 1 inch of water no sooner than 12 hours, but not more than 5 days after application, is necessary to activate V-10142 Ag Herbicide and carry it into the soil solution.
- When weeds are emerged at time of application (1 to 3 inches in height), use an approved surfactant as specified (see adjuvant section in this label).

Restrictions and Limitations

- Do not apply more than 6.4 oz of V-10142 Ag Herbicide per acre per year.
- Make only one application per year.
- Make application to field grown tomatoes only.
- Do not apply V-10142 Ag Herbicide by air on tomatoes.

TOMATO		
V-10142 Ag Herbicide Application Rates	PHI	Special Instructions
4 to 6.4 oz/A (0.19 to 0.3 lb ai/A)	21 days	Pre-Transplant, Non-Plastic Mulch Culture <ul style="list-style-type: none"> • Apply V-10142 Ag Herbicide pre-transplant to a prepared weed-free planting bed. • Transplanting may begin 1 day after application.
		Pre-Transplant Under Plastic Mulch <ul style="list-style-type: none"> • Apply V-10142 Ag Herbicide after the last tillage operation and just prior to the installation of plastic mulch (weeds not emerged). • Transplanting may begin 1 day after application.
		Direct Seeded <ul style="list-style-type: none"> • A postemergence "over the top application" of V-10142 Ag Herbicide may be made to well-established tomatoes (4 to 5 leaf stage of development). • Application may be made through the early bloom stage.
		Post Transplant <ul style="list-style-type: none"> • A postemergence "over the top" application of V-10142 Ag Herbicide may be made from 3 to 5 days after transplanting through the early bloom stage, if a pre-transplant application was NOT made.
		Directed Spray, Transplanted or Direct Seeded A directed spray of V-10142 Ag Herbicide may be made to transplanted (non-plastic mulch culture) or direct seeded tomatoes after they are well established (4 to 5 leaf stage of development), if a pre-transplant application was not made. The spray should cover the soil surface (from the crop row to the row middle) if possible.
<ul style="list-style-type: none"> • Refer to Table 1 for preemergence weeds controlled and suppressed. • Refer to Table 2 for postemergence weeds controlled and suppressed. 		

Ground Application

Apply V-10142 Ag Herbicide in 20 to 40 gallons of water per acre and ensure thorough, uniform coverage. For banded application, use proportionately less water and V-10142 Ag Herbicide.

**DIRECTIONS FOR USE ON [POTATO] [TUBEROUS AND CORM VEGETABLES
(Crop Subgroup 1C)**

Arracacha; Arrowroot; Cassava (bitter and sweet); Chayote (root); Chinese Artichoke;
Chufa; Dasheen (taro); Edible Canna; Ginger; Jerusalem Artichoke; Leren; Potato;
Sweet Potato; Tanier; True Yam; Turmeric; Yam Bean]

Restrictions and Limitations

- Do not apply more than 6.4 oz of V-10142 Ag Herbicide per acre per year.
- Make only two applications per year.
- Do not apply V-10142 Ag Herbicide by air on [potato] [tuberous and corm vegetables].

Specific Use Instructions

- Movement of soil may influence residual activity and/or crop response.
- Use the higher rate listed if there is a field history of nutsedge or if weed pressure is normally heavy.
- To activate V-10142 Ag Herbicide into the soil solution, a rainfall event or overhead irrigation supplying 1/2 to 1 inch of water no sooner than 12 hours but not more than 5 days after application is necessary.
- When weeds are emerged at time of application (1 to 3 inches in height), use an approved surfactant as specified (see Adjuvant section on container label).

<p align="center">[POTATO] [TUBEROUS AND CORM VEGETABLES (Crop Subgroup 1C)</p> <p>Arracacha; Arrowroot; Cassava (bitter and sweet); Chayote (root); Chinese Artichoke; Chufa; Dasheen (taro); Edible Canna; Ginger; Jerusalem Artichoke; Leren; Potato; Sweet Potato; Tanier; True Yam; Turmeric; Yam Bean]</p>		
V-10142 Ag Herbicide Application Rates	PHI	Special Instructions
4 to 6.4 oz/A (0.19 to 0.3 lb ai/A)	45 days	<p>Preemergence</p> <ul style="list-style-type: none"> Apply V-10142 Ag Herbicide to a well-prepared moist seedbed after the crop has been planted, prior to emergence or immediately after hilling.
3.2 to 4 oz/A (0.15 to 0.19lb ai/A)		<p>Postemergence</p> <ul style="list-style-type: none"> V-10142 Ag Herbicide may be applied after the crop has emerged if weeds are less than 3 inches in height as part of a weed control program.
<p>3.2 oz/A (0.15 lb ai/A)</p> <p>followed by</p> <p>3.2 oz/A (0.15 lb ai/A)</p>		<p>SEQUENTIAL APPLICATION PROGRAM (Preemergence Application Followed By Early Postemergence Application)</p> <ul style="list-style-type: none"> Apply V-10142 Ag Herbicide to a well-prepared moist seedbed after the crop has been planted, prior to emergence or immediately after hilling. Follow the preemergence application with an early postemergence application. The early postemergence application must not be made any sooner than 21 days after the preemergence application. Emerged weeds must be under 3 inches in height.
<ul style="list-style-type: none"> Refer to Table 1 for preemergence weeds controlled and suppressed. Refer to Table 2 for postemergence weeds controlled and suppressed. Refer to Table 3 for weeds controlled by V-10142 Ag Herbicide sequential application program (preemergence application followed by early postemergence application). 		

Ground Application

Apply V-10142 Ag Herbicide in 20 to 40 gal of water per acre and ensure thorough, uniform coverage. For banded application, use proportionately less water and V-10142 Ag Herbicide.

Table 1. Preemergence Weeds Controlled and Suppressed by V-10142 Ag Herbicide

Common Name	Scientific Name	V-10142 Ag Herbicide Rates oz/A
Weeds Controlled		
Buckwheat, Wild	<i>Polygonum convolvulus</i>	6.4
Galinsoga, Hairy	<i>Galinsoga ciliata</i>	4
Lambsquarters, Common	<i>Chenopodium album</i>	6.4
Nutsedge, Yellow	<i>Cyperus esculentus</i>	6.4
Pigweeds (except Livid)	<i>Amaranthus</i> spp.	4 to 6.4
Purslane, Common	<i>Portulaca oleracea</i>	4 to 6.4
Ragweed, Common	<i>Ambrosia artemisiifolia</i>	6.4
Turnip, Wild	<i>Brassica napus</i>	6.4
Weeds Suppressed		
Barnyardgrass	<i>Echinochloa crus-galli</i>	6.4
Burning Nettle	<i>Urtica urens</i>	4 to 6.4
Crabgrass, Large	<i>Digitaria sanguinalis</i>	4
Foxtail, Giant	<i>Setaria faberi</i>	6.4
Groundsel, Common	<i>Senecio vulgaris</i>	4 to 6.4
Mayweed	<i>Anthemis cotula</i>	4
Nightshade, Black	<i>Solanum nigrum</i>	6.4
Nutsedge, Purple	<i>Cyperus rotundus</i>	6.4
Shepherd's-purse	<i>Capsella bursa-pastoris</i>	4 to 6.4
Sowthistle	<i>Sonchus oleraceus</i>	4 to 6.4
Thistle, Russian	<i>Salsola iberica</i>	4 to 6.4

Table 2. Postemergence Weeds Controlled and Suppressed by V-10142 Ag Herbicide

Common Name ¹	Scientific Name	V-10142 Ag Herbicide Rates oz/A
Weeds Controlled		
Galinsoga, Hairy	<i>Galinsoga ciliata</i>	4 to 6.4
Morningglory	<i>Ipomoea</i> spp.	6.4
Nutsedge, Yellow	<i>Cyperus esculentus</i>	6.4
Pigweeds (except Livid)	<i>Amaranthus</i> spp.	4 to 6.4
Purslane, Common	<i>Portulaca oleracea</i>	4 to 6.4
Weeds Suppressed		
Barnyardgrass	<i>Echinochloa crus-galli</i>	6.4
Crabgrass, Large	<i>Digitaria sanguinalis</i>	4 to 6.4
Smartweed, Pennsylvania	<i>Polygonum pensylvanicum</i>	6.4

¹ For weeds 1 to 3 inches in height, to be used with an approved surfactant.

Table 3. Weeds Controlled by V-10142 Ag Herbicide Sequential Application Program

Common Name ¹	Scientific Name	V-10142 Ag Herbicide Rates
Weeds Controlled		
Buckwheat, Wild Croton, Woolly Dayflower Eclipta Galinsoga, Hairy Gourd, Texas Groundcherry, Cutleaf Hemp Sesbania Horseweed Jointvetch, Northern Jointvetch, Indian Lambsquarters, Common Morningglory, Pitted Nutsedge, Yellow Pigweeds (except Livid) Purslane, Common Ragweed, Common Texasweed Turnip, Wild	<i>Polygonum convolvulus</i> <i>Croton capitatus</i> <i>Commelina communis</i> <i>Eclipta prostrata</i> <i>Galinsoga ciliata</i> <i>Cucurbita foetidissima</i> <i>Physalis angulata</i> <i>Sesbania exaltata</i> <i>Conyza canadensis</i> <i>Aeschynomene virginica</i> <i>Aeschynomene indicica</i> <i>Chenopodium album</i> <i>Ipomoea lacunosa</i> <i>Cyperus esculentus</i> <i>Amaranthus</i> spp. <i>Portulaca oleracea</i> <i>Ambrosia artemisiifolia</i> <i>Caperonia palustris</i> <i>Brassica napus</i>	3.2 oz/A preemergence followed by 3.2 oz/A early postemergence

¹Early postemergence application for weeds 1 to 3 inches in height, to be used with an approved surfactant.

Table 4. Preemergence Weeds Controlled by V-10142 Ag Herbicide on Rice

Common Name	Scientific Name	V-10142 Ag Herbicide Rates oz/A
Croton, Woolly	<i>Croton capitatus</i>	4 to 6.4
Dayflower	<i>Commelina communis</i>	4 to 6.4
Ducksalad	<i>Heteranthera</i> spp.	4 to 6.4
Eclipta	<i>Eclipta prostrata</i>	4 to 6.4
Flatsedge, Rice	<i>Cyperus iria</i>	3.2 to 6.4
Gourd, Texas	<i>Cucurbita foetidissima</i>	4 to 6.4
Groundcherry, Cutleaf	<i>Physalis angulata</i>	4 to 6.4
Hemp Sesbania	<i>Sesbania exaltata</i>	4 to 6.4
Horseweed	<i>Conyza canadensis</i>	4 to 6.4
Jointvetch, Northern	<i>Aeschynomene virginica</i>	3.2 to 6.4
Jointvetch, Indian	<i>Aeschynomene indica</i>	3.2 to 6.4
Morningglory, Pitted	<i>Ipomoea lacunosa</i>	6.4
Nutsedge, Yellow	<i>Cyperus esculentus</i>	4 to 6.4
Pigweeds (except Livid)	<i>Amaranthus</i> spp.	3.2 to 6.4
Ricefield Bulrush	<i>Scirpus mucronatus</i>	3.2 to 6.4
Texasweed	<i>Caperonia palustris</i>	4 to 6.4

- Length of residual weed control will increase when the higher rate is used.
- Temporary stunting may occur when V-10142 Ag Herbicide is used at 6.4 oz/A on high clay soils with a pH above 8.0.

Table 5. Postemergence Weeds Controlled by V-10142 Ag Herbicide on Rice

Common Name ¹	Scientific Name	V-10142 Ag Herbicide Rates oz/A
Croton, Woolly	<i>Croton capitatus</i>	4
Dayflower	<i>Commelina communis</i>	4
Ducksalad	<i>Heteranthera</i> spp.	4
Eclipta	<i>Eclipta prostrata</i>	4
Flatsedge, Rice	<i>Cyperus iria</i>	3.2 to 4
Gourd, Texas	<i>Cucurbita foetidissima</i>	4
Groundcherry, Cutleaf	<i>Physalis angulata</i>	4
Hemp Sesbania	<i>Sesbania exaltata</i>	3.2 to 4
Horseweed	<i>Conyza canadensis</i>	4
Jointvetch, Northern	<i>Aeschynomene virginica</i>	3.2 to 4
Jointvetch, Indian	<i>Aeschynomene indicica</i>	3.2 to 4
Morningglory, Pitted	<i>Ipomoea lacunosa</i>	4
Nutsedge, Yellow	<i>Cyperus esculentus</i>	3.2 to 4
Pigweeds (except Livid)	<i>Amaranthus</i> spp.	3.2 to 4
Redstem	<i>Ammannia</i> spp.	3.2 to 4
Texasweed	<i>Caperonia palustris</i>	4

¹For weeds 1 to 3 inches in height, to be used with an approved surfactant.

Table 6. Postemergence Weeds Suppressed by V-10142 Ag Herbicide on Rice

Common Name	Scientific Name	V-10142 Ag Herbicide Rate oz/A
Nutsedge, Purple	<i>Cyperus rotundus</i>	4

Table 7. Weeds Controlled by V-10142 Ag Herbicide Sequential Application Program on Rice

Common Name ¹	Scientific Name	V-10142 Ag Herbicide Rates
Croton, Woolly	<i>Croton capitatus</i>	3.2 oz/A preemergence followed by 3.2 oz/A early postemergence
Dayflower	<i>Commelina communis</i>	
Ducksalad	<i>Heteranthera</i> spp.	
Eclipta	<i>Eclipta prostrata</i>	
Flatsedge, Rice	<i>Cyperus iria</i>	
Gourd, Texas	<i>Cucurbita foetidissima</i>	
Groundcherry, Cutleaf	<i>Physalis angulata</i>	
Hemp Sesbania	<i>Sesbania exaltata</i>	
Horseweed	<i>Conyza canadensis</i>	
Jointvetch, Northern	<i>Aeschynomene virginica</i>	
Jointvetch, Indian	<i>Aeschynomene indicica</i>	
Morningglory, Pitted	<i>Ipomoea lacunosa</i>	
Nutsedge, Yellow	<i>Cyperus esculentus</i>	
Pigweeds (except Livid)	<i>Amaranthus</i> spp.	
Redstem	<i>Ammannia</i> spp.	
Texasweed	<i>Caperonia palustris</i>	

¹Early postemergence application for weeds 1 to 3 inches in height, to be used with an approved surfactant.

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 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

Waste resulting from the use of this product must be disposed of on site in accordance with the directions for use on the label 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 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.

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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. 59639-166

EPA Est.

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20120316

Supplemental Label



31/37

[Bracketed text is optional]

V-10142 AG HERBICIDE EPA Reg. No. 59639-166

V-10142 AG HERBICIDE FOR USE ON MELONS AND [POTATO] [TUBEROUS AND CORM VEGETABLES]

This supplemental label expires on August 31, 2016 and must not be used or distributed after this date.

DIRECTIONS FOR USE

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

THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF APPLICATION. READ THE LABEL AFFIXED TO THE CONTAINER FOR V-10142 AG HERBICIDE BEFORE APPLYING. USE OF V-10142 AG HERBICIDE ACCORDING TO THIS LABELING IS SUBJECT TO THE USE PRECAUTIONS AND LIMITATIONS IMPOSED BY THE LABEL AFFIXED TO THE CONTAINER FOR V-10142 AG HERBICIDE.

DIRECTIONS FOR USE ON MELONS (Crop Subgroup 9A)

Citron melon; Muskmelon (cantaloupe); Watermelon

ACCEPTED

AUG 01 2013

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under
EPA Reg. No. 59639-166

Restrictions and Limitations

- Do not apply more than 6.4 oz of V-10142 Ag Herbicide per acre per year.
- Make only one application per year.
- Make application to field grown melons only.
- Apply to well established melons (at least 5 inches wide).
- Do not apply V-10142 Ag Herbicide by air on melons.
- V-10142 Ag Herbicide will not control ALS resistant weeds (Group 2).

Specific Use Instructions

- Movement of soil may influence residual activity and/or crop response.
- Use the higher rate listed if there is a field history of nutsedge or if weed pressure is normally heavy.
- To activate V-10142 Ag Herbicide into the soil solution, a rainfall event or overhead irrigation supplying 1/2 to 1 inch of water no sooner than 12 hours but not more than 5 days after application is necessary.
- When weeds are emerged at time of application (1 to 3 inches in height), use an approved surfactant as specified (see Adjuvant section on container label).

MELON (Crop Subgroup 9A) Citron melon; muskmelon (cantaloupe); watermelon		
V-10142 Ag Herbicide Application Rates	PHI	Special Instructions
4 to 6.4 oz/A (0.19 to 0.3 lb ai/A)	48 days	<p>Row Middle Application for Plastic Mulch or Bare Soil Culture</p> <p>A row middle (between the rows) application may be made at any time during the cropping season (up to 48 days before harvest), as long as the melons are well established and at least 5 inches wide.</p> <ul style="list-style-type: none"> • Avoid contact with the melon crop. When application is being made to melons grown in plastic mulch culture, equipment must be adjusted to prevent the spray from contacting the plastic.
<ul style="list-style-type: none"> • Refer to Table 1 for preemergence weeds controlled and suppressed. • Refer to Table 2 for postemergence weeds controlled and suppressed. 		

Ground Application

For row middle application, determine the area to be sprayed and calculate the amount of V-10142 Ag Herbicide and water needed based on a broadcast total spray volume of 20 to 40 gallons of water per acre and a V-10142 Ag Herbicide rate of 4.27 to 6.4 oz/A (0.2 to 0.3 lb ai/A). For example, if the rows are 36 inches wide and 18 inches between the rows is the area to be sprayed at the rate of 6.4 oz/A (0.3 lb ai/A), the V-10142 Ag Herbicide calculation is:

Band Width in Inches	X	Rate per Broadcast Acre	=	Amount V-10142 Ag Herbicide Needed per Acre for Row Middle Application
Row Width in Inches				

Example: $\frac{18''}{36''} \times 6.4 \text{ oz/A} = 3.2 \text{ oz/A}$ for row middle application

If the broadcast water volume selected is 30 gallons per acre, the calculation is:

Band Width in Inches	X	Spray Volume per Broadcast Acre	=	Amount of Water Volume per Acre for Row Middle Application
Row Width in Inches				

Example: $\frac{18''}{36''} \times 30 \text{ gal} = 15 \text{ gal water per acre}$ for row middle application

**DIRECTIONS FOR USE ON [POTATO] [TUBEROUS AND CORM VEGETABLES
(Crop Subgroup 1C)**

Arracacha; Arrowroot; Cassava (bitter and sweet); Chayote (root); Chinese Artichoke;
Chufa; Dasheen (taro); Edible Canna; Ginger; Jerusalem Artichoke; Leren; Potato;
Sweet Potato; Tanier; True Yam; Turmeric; Yam Bean]

Restrictions and Limitations

- Do not apply more than 6.4 oz of V-10142 Ag Herbicide per acre per year.
- Make only two applications per year.
- Do not apply V-10142 Ag Herbicide by air on [potato] [tuberous and corm vegetables].

Specific Use Instructions

- Movement of soil may influence residual activity and/or crop response.
- Use the higher rate listed if there is a field history of nutsedge or if weed pressure is normally heavy.
- To activate V-10142 Ag Herbicide into the soil solution, a rainfall event or overhead irrigation supplying 1/2 to 1 inch of water no sooner than 12 hours but not more than 5 days after application is necessary.
- When weeds are emerged at time of application (1 to 3 inches in height), use an approved surfactant as specified (see Adjuvant section on container label).

[POTATO] [TUBEROUS AND CORM VEGETABLES (Crop Subgroup 1C) Arracacha; Arrowroot; Cassava (bitter and sweet); Chayote (root); Chinese Artichoke; Chufa; Dasheen (taro); Edible Canna; Ginger; Jerusalem Artichoke; Leren; Potato; Sweet Potato; Tanier; True Yam; Turmeric; Yam Bean]		
V-10142 Ag Herbicide Application Rates	PHI	Special Instructions
4 to 6.4 oz/A (0.19 to 0.3 lb ai/A)	45 days	Preemergence <ul style="list-style-type: none"> Apply V-10142 Ag Herbicide to a well-prepared moist seedbed after the crop has been planted, prior to emergence or immediately after hilling.
3.2 to 4 oz/A (0.15 to 0.19lb ai/A)		Postemergence <ul style="list-style-type: none"> V-10142 Ag Herbicide may be applied after the crop has emerged if weeds are less than 3 inches in height as part of a weed control program.
3.2 oz/A (0.15 lb ai/A) followed by 3.2 oz/A (0.15 lb ai/A)		SEQUENTIAL APPLICATION PROGRAM (Preemergence Application Followed By Early Postemergence Application) <ul style="list-style-type: none"> Apply V-10142 Ag Herbicide to a well-prepared moist seedbed after the crop has been planted, prior to emergence or immediately after hilling. Follow the preemergence application with an early postemergence application. The early postemergence application must not be made any sooner than 21 days after the preemergence application. Emerged weeds must be under 3 inches in height.
<ul style="list-style-type: none"> Refer to Table 1 for preemergence weeds controlled and suppressed. Refer to Table 2 for postemergence weeds controlled and suppressed. Refer to Table 3 for weeds controlled by V-10142 Ag Herbicide sequential application program (preemergence application followed by early postemergence application). 		

Ground Application

Apply V-10142 Ag Herbicide in 20 to 40 gal of water per acre and ensure thorough, uniform coverage. For banded application, use proportionately less water and V-10142 Ag Herbicide.

Table 1. Preemergence Weeds Controlled and Suppressed by V-10142 Ag Herbicide

Common Name	Scientific Name	V-10142 Ag Herbicide Rates oz/A
Weeds Controlled		
Buckwheat, Wild	<i>Polygonum convolvulus</i>	6.4
Galinsoga, Hairy	<i>Galinsoga ciliata</i>	4
Lambsquarters, Common	<i>Chenopodium album</i>	6.4
Nutsedge, Yellow	<i>Cyperus esculentus</i>	6.4
Pigweeds (except Livid)	<i>Amaranthus</i> spp.	4 to 6.4
Purslane, Common	<i>Portulaca oleracea</i>	4 to 6.4
Ragweed, Common	<i>Ambrosia artemisiifolia</i>	6.4
Turnip, Wild	<i>Brassica napus</i>	6.4
Weeds Suppressed		
Barnyardgrass	<i>Echinochloa crus-galli</i>	6.4
Burning Nettle	<i>Urtica urens</i>	4 to 6.4
Crabgrass, Large	<i>Digitaria sanguinalis</i>	4
Foxtail, Giant	<i>Setaria faberi</i>	6.4
Groundsel, Common	<i>Senecio vulgaris</i>	4 to 6.4
Mayweed	<i>Anthemis cotula</i>	4
Nightshade, Black	<i>Solanum nigrum</i>	6.4
Nutsedge, Purple	<i>Cyperus rotundus</i>	6.4
Shepherd's-purse	<i>Capsella bursa-pastoris</i>	4 to 6.4
Sowthistle	<i>Sonchus oleraceus</i>	4 to 6.4
Thistle, Russian	<i>Salsola iberica</i>	4 to 6.4

Table 2. Postemergence Weeds Controlled and Suppressed by V-10142 Ag Herbicide

Common Name ¹	Scientific Name	V-10142 Ag Herbicide Rates oz/A
Weeds Controlled		
Galinsoga, Hairy	<i>Galinsoga ciliata</i>	4 to 6.4
Morningglory	<i>Ipomoea</i> spp.	6.4
Nutsedge, Yellow	<i>Cyperus esculentus</i>	6.4
Pigweeds (except Livid)	<i>Amaranthus</i> spp.	4 to 6.4
Purslane, Common	<i>Portulaca oleracea</i>	4 to 6.4
Weeds Suppressed		
Barnyardgrass	<i>Echinochloa crus-galli</i>	6.4
Crabgrass, Large	<i>Digitaria sanguinalis</i>	4 to 6.4
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>	6.4

¹For weeds 1 to 3 inches in height, to be used with an approved surfactant.

Table 3. Weeds Controlled by V-10142 Ag Herbicide Sequential Application Program

Common Name ¹	Scientific Name	V-10142 Ag Herbicide Rates
Weeds Controlled		
Buckwheat, Wild Croton, Woolly Dayflower Eclipta Galinsoga, Hairy Gourd, Texas Groundcherry, Cutleaf Hemp Sesbania Horseweed Jointvetch, Northern Jointvetch, Indian Lambsquarters, Common Morningglory, Pitted Nutsedge, Yellow Pigweeds (except Livid) Purslane, Common Ragweed, Common Texasweed Turnip, Wild	<i>Polygonum convolvulus</i> <i>Croton capitatus</i> <i>Commelina communis</i> <i>Eclipta prostrata</i> <i>Galinsoga ciliata</i> <i>Cucurbita foetidissima</i> <i>Physalis angulata</i> <i>Sesbania exaltata</i> <i>Conyza canadensis</i> <i>Aeschynomene virginica</i> <i>Aeschynomene indicica</i> <i>Chenopodium album</i> <i>Ipomoea lacunosa</i> <i>Cyperus esculentus</i> <i>Amaranthus</i> spp. <i>Portulaca oleracea</i> <i>Ambrosia artemisiifolia</i> <i>Caperonia palustris</i> <i>Brassica napus</i>	3.2 oz/A preemergence followed by 3.2 oz/A early postemergence

¹Early postemergence application for weeds 1 to 3 inches in height, to be used with an approved surfactant.

ROTATIONAL RESTRICTIONS

The following rotational intervals are recommended for crop safety. Crop injury may result if the specified intervals are not followed. The rotational interval should be extended 6 to 8 months if either drought conditions and/or extended periods of cool conditions occur after application. These conditions and/or failure to use conventional tillage and cultivation cultural practices increases the persistence of V-10142 Ag Herbicide in the soil and therefore increases the potential for rotational crop injury and yield reduction. In cropping systems that employ drip irrigation, the rotational interval may need to be extended.

CROP ROTATION	
Rotational Interval	Rotational Crop
Immediately	Rice
100 days	Tomato (transplanted)
8 months	Cucumber ¹ , Eggplant, Lettuce, Melons ¹ (citron melon, muskmelon (cantaloupe), watermelon), Mustard Greens, Peppers (bell and non-bell), Radish, Spinach, Turnip, Turnip Greens, White Potato
9 months	Cabbage ¹ , Squash ¹
12 months	Field Corn, Sweet Corn, Grain Sorghum, Soybean, Wheat
24 months ²	All crops not listed

¹5 months in Florida and Georgia.

² A Successful soil bioassay must be performed prior to planting any crops not listed sooner than 24 months after a V-10142 Ag Herbicide application. A successful bioassay is one in which a representative soil sample is taken from the field in question and the crop to be planted into that field is safely grown in that soil.

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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Walnut Creek, CA 94596-8025

Made in U.S.A.

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