

66222-157

12/7/2007

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U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

NOTICE OF PESTICIDE:
 Registration
 Reregistration

(under FIFRA, as amended)

EPA Reg. Number:

66222-
157

Date of Issuance:

12-7-07

Term of Issuance:

Conditional

Name of Pesticide Product:

Zoomer Herbicide

Name and Address of Registrant (include ZIP Code):

Makhteshim Agan of North America Inc.
4515 Falls of Neuse Road
Suite 300
Raleigh, NC 27609

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered 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 section 3(c)(7)(a) provided you agree in writing to:

1. To the label add the correct EPA Registration Number and EPA Establishment Number.
2. Delete "Wash thoroughly after handling and before eating drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse. Wear protective clothing specified in the Personal Protective Equipment (PPE) section below" from the Hazards to Humans and Domestic Animals statements.
3. Add "exists" after "washables" on page 2 of the label.
4. To the Environmental Hazards add "or rinseate" after "wash waters".
5. To the Storage and Disposal section change "Storage" to "Pesticide Storage". Move "Do not contaminate water, food, or feed by storage or disposal" to directly under the heading "Storage and Disposal".
6. To the Limitation of Warranty and Liability section change "All such risks" to "To the

extent consistent with applicable law, all such risks”.

7. Change the PPE section to “Personal Protective Equipment (PPE) Some materials that are chemical-resistant to this product are (registrant inserts correct chemical-resistant material). If you want more options, follow the instructions for category [registrant inserts A,B,C,D,E,F,G,or H] on an EPA chemical-resistance category selection chart. Mixers, loaders and applicators using engineering controls (see engineering controls requirements below), must wear: Long-sleeved shirt and long pants, Shoes plus socks, Chemical-resistant gloves when mixing and loading, and Chemical-resistant apron when mixing and loading. All other mixers, loaders, applicators and other handlers must wear: Coveralls over long-sleeved shirt and long pants, Chemical-resistant footwear plus socks, Chemical-resistant gloves, Chemical-resistant headgear when exposed overhead, and Chemical-resistant apron when exposed to the concentrate.”.
8. After “Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.” add “Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product’s concentrate. Do not reuse them.”.
9. Replace the Engineering Controls section currently on the label with “Engineering Controls Mixers and loaders supporting aerial applications to fallow land or ground applications to corn, cotton, or soybeans must use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)], and must: wear the personal protective equipment required above for mixers/loaders using engineering controls, wear protective eyewear if the system operates under pressure, and be provided and have immediately available for use in an emergency, such as a broken package, spill, or equipment breakdown: coveralls, and chemical-resistant footwear . Pilots must use an enclosed cockpit in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)]; When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.”.
10. Replace the User Safety Recommendations section currently on the label with “User Safety Recommendations Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should 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.”.
11. To the label include the following spray drift buffer language “A 25 ft. vegetative buffer strip must be maintained between all areas treated with this product and lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish farm ponds. Do not allow spray to drift from the application site and contact people, structures people occupy at anytime and the associated property, parks and recreation areas, non-target crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals. For groundboom applications, apply with nozzle height no more than 4 feet above the ground or

crop canopy and when wind speed is 10 mph or less at the application site as measured by an anemometer. Use coarse spray according to ASAE 572 definition for standard nozzles or VMD of 475 microns for spinning atomizer nozzles. The applicator also must use all other measures necessary to control drift.” and remove any conflicting language from the label.

- 12. You have 18 months from the date of this registration to submit the results of the one year storage stability and corrosion characteristics studies.
- 13. In the Agricultural Use Requirements Box following “Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.” add “For onions, garlic, and horseradish the REI is increased to 48 hours.”
- 14. Rates for Garlic on the label exceed rates allowed in the oxyflurofen RED (see page 72). These rates must be reduced. Rates for onion on the label exceed rates allowed in the oxyflurofen RED (see page 77). These rates must be reduced.
- 15. To the Storage and Disposal section move “Do not contaminate water, food, or feed by storage or disposal” to directly under the heading Storage and Disposal” Change “Storage” to “Pesticide Storage”.
- 16. The term “recommended rates” is unacceptable. Change “recommend use rates in “Tank Mixing” on page 3 to “labeled use rates”; change “rates recommended” in “Note” at the bottom of page 4 to apply this product at the rates given on this label, on page 5 under Aerial Equipment and any other places on the label that refers to recommended rates or recommended use rates.
- 17. Remove sugar beet and celery from the label because these crops are not listed on the label of the Oxyflurofen technical that you are formulating from.

Signature of Approving Official:

James Tompkins, Product Manager (25)
Herbicide Branch, Registration Division (7505P)

Date:

12-7-07

You will submit one copy of your final printed labeling before you release the product for shipment. A stamped copy of labeling is enclosed for your records. If you have any questions please contact Erik Kraft at 703-308-9358.

4/19

12-7-07
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.

ZOOMER™ HERBICIDE

FOR CONTROL OR SUPPRESSION OF WEEDS IN DORMANT TREE AND VINE CROPS, FALLOW
SYSTEMS, AND COTTON (INCLUDING ROUNDUP® READY COTTON VARIETIES)

66222-157

ACTIVE INGREDIENTS*:	% BY WT.
Glyphosate; N-(phosphonomethyl)glycine, in the form of its isopropylamine salt.....	30.00%
Oxyfluorfen; 2-chloro-1-(3-ethoxy-4-nitrophenoxy)-4-(trifluoromethyl)benzene	3.75%
OTHER INGREDIENTS:.....	66.25%
TOTAL	100.0%

*Contains 745grams per liter or 6.2 lbs. per U.S. gallon of the active ingredient glyphosate, in the form of its isopropyl-amine salt, equivalent to 360 grams per liter or 3 lbs. per U.S. gallon of the acid, glyphosate and 45 grams per liter or 0.4 lb. per U.S. gallon of the active ingredient, oxyfluorfen.

KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID

- | | |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 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 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 by a poison control center or doctor. • Do not give anything by mouth to an unconscious person. |
| 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 mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice. |

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact PROSAR at 1-877-250-9291 for emergency medical treatment information.

Note to Physician: Domestic Animals: This product is considered to be relatively nontoxic to dogs and other domestic animals; however, ingestion of this product or large amounts of freshly sprayed vegetation may result in temporary gastrointestinal irritation (vomiting, diarrhea, colic, etc.). If such symptoms are observed, provide the animal with plenty of fluids to prevent dehydration. Call a veterinarian if symptoms persist for more than 24 hours.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse. Wear protective clothing specified in the Personal Protective Equipment (PPE) section below.

NET CONTENTS: ___ GALLONS

EPA Reg. No. 66222-xx
EPA Est. No.



Makhteshim Agan of North America Inc.
4515 Falls of Neuse Rd., Suite 300
Raleigh, NC 27609

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

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

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

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.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters.

This product is highly toxic to aquatic invertebrates, aquatic plants, wildlife, and fish. Use with care when applying in areas frequented by wildlife or adjacent to any body of water or wetland area. Do not apply when weather conditions favor drift or erosion from target areas. Runoff may be hazardous to aquatic organisms in neighboring areas.

PHYSICAL AND CHEMICAL HAZARDS

Spray solutions of this product should be mixed, stored, and applied only in stainless steel, aluminum, fiberglass, plastic, and plastic-lined steel containers.

DO NOT MIX, STORE, OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette, or other ignition source.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

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
- Waterproof gloves
- Shoes plus socks

GENERAL INFORMATION

This product is a postemergent, systemic herbicide for control or suppression of emerged annual broadleaf weeds and grasses in fallow systems and dormant tree and vine crops. This product is also for use as a post directed/hooded sprayer application for broadleaf weed control and suppression in cotton and Roundup Ready

cotton. It is formulated as a water-based suspension concentrate. It may be applied through most standard industrial or field type sprayers after dilution and thorough mixing with water or other carriers according to label instructions.

How this product works: This product moves through the plant from the point of foliage contact to and into the root system. Visible effects on most annual weeds occur within 2 to 4 days, but on most perennial weeds may not occur for 7 days or more. Extremely cool or cloudy weather following treatment may slow activity of this product and delay development of visual symptoms. Visible effects are a gradual wilting and yellowing of the plant which advances to complete browning of above-ground growth and deterioration of underground plant parts.

Stage of Weeds: Annual weeds are easiest to control when they are small. Refer to the "Annual Weeds Rate Table" for recommendations for specific weeds.

Always use the higher rate of this product per acre within the recommended range when weed growth is heavy or dense or weeds are growing in an undisturbed (noncultivated) area.

Do not treat weeds under poor growing conditions such a drought stress, disease, or insect damage, as reduced weed control may result. Reduced results may also occur when treating weeds heavily covered with dust.

Cultural Considerations: Reduced control may result when applications are made to annual or perennial weeds that have been mowed, grazed, or cut, and have not been allowed to regrow to the recommended stage for treatment.

Rainfastness: Heavy rainfall soon after application may wash this product off of the foliage and a repeat application may be required for adequate control.

Spray Coverage: For best results, spray coverage should be uniform and complete. Do not spray weed foliage to the point of runoff.

Tank Mixing: At recommended use rates, this product does not provide residual weed control. For subsequent residual weed control, follow a label-approved herbicide program. Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used. Use according to the most restrictive label directions for each product in the mixture.

Buyer and all users are responsible for loss or damage in connections with the use or handling of mixtures of the product with herbicides, or other materials that are not expressly recommended in this labeling. Mixing this product with herbicides or other materials not recommended on this label may result in reduced performance.

Annual Maximum Use Rate: Except as otherwise specified in a crop section of this label, the combined total of all treatments must not exceed 8 quarts of this product per acre per year.

GENERAL APPLICATION PRECAUTIONS AND PROCEDURES

Precautions:

- Do not use any plants treated with Zoomer herbicide for feed or forage.
- Do not feed or allow animals to graze on any areas treated with Zoomer herbicide.
- Avoid direct application to any body of water.
- Do not apply this product through any type of irrigation or chemigation system.
- Do not contaminate irrigation water or water used for domestic purposes.

Rotation Crop Restrictions:

- Do not rotate to small-grain crops (includes barley, buckwheat, corn, oats, pearl millet, proso millet, popcorn, rice, rye, sorghum, triticale, wheat, wild rice) within 10 months following a Zoomer herbicide treatment.
- Do not direct seed any crop, other than Zoomer herbicide labeled crops, within 60 days following the Zoomer herbicide treatment.
- Do not transplant seedling crops, other than Zoomer herbicide labeled crops, within 30 days following the Zoomer herbicide treatment.

AVOID CONTACT OF HERBICIDE WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS (EXCEPT AS SPECIFIED FOR INDIVIDUAL ROUNDUP READY CROPS), DESIRABLE PLANTS AND TREES, BECAUSE SEVERE INJURY OR DESTRUCTION MAY RESULT.

NOTE: Use of this product in any manner not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences.

MIXING

Clean sprayer parts immediately after using this product by thoroughly flushing with water.

NOTE: REDUCED RESULTS MAY OCCUR IF WATER CONTAINING SOIL IS USED, SUCH AS VISIBLY MUDDY WATER OR WATER FROM PONDS AND DITCHES THAT IS NOT CLEAR.

SHAKE PRODUCT CONTAINER WELL BEFORE USE.

Mixing with Water: This product mixes readily with water. Mix spray solutions of this product as follows:

Fill the mixing or spray tank with the required amount of water. Add the recommended amount of this product near the end of the filling process and mix well. Use caution to avoid siphoning back into the carrier source. Use approved anti-back-siphoning devices where required by state or local regulations. During mixing and application, foaming of the spray solution may occur. To prevent or minimize foam, avoid the use of mechanical agitators, terminate by-pass and return lines at the bottom of the tank and, if needed, use an approved anti-foam or defoaming agent.

Tank Mixing Procedure: Mix labeled tank mixtures of this product with water as follows:

1. Place a 20 to 35 mesh screen or wetting basket over filling port.
2. Through the screen, fill the spray tank one-half full with water and start agitation.
3. If a wettable powder is used, make a slurry with the water carrier, and add it SLOWLY through the screen into the tank. Continue agitation.
4. If a flowable formulation is used, premix one part flowable with one part water. Add diluted mixture SLOWLY through the screen into the tank. Continue agitation.
5. If an emulsifiable concentrate formulation is used, premix one part emulsifiable concentrate with two parts water. Add diluted mixture slowly through the screen into the tank. Continue agitation.
6. Continue filling the spray tank with water and add the required amount of this product near the end of the filling process.
7. Add individual formulations to the spray tank as follows: wettable powder, flowable, emulsifiable concentrate, drift control additive and water soluble liquid.

Maintain good agitation at all times until the contents of the tank are sprayed. If the spray mixture is allowed to settle, thorough agitation is required to re-suspend the mixture before spraying is resumed.

Keep by-pass line on or near the bottom of the tank to minimize foaming. Screen size in nozzle or line strainers should be no finer than 50 mesh.

Always predetermine the compatibility of labeled tank mixtures of this product with water carrier by mixing small proportional quantities in advance.

Refer to the "Tank Mixing" section of General Information for additional precautions.

Mixing for Hand-Held Sprayers: Prepare the desired volume of spray solution by mixing the amount of this product in water as shown in the following table:

Spray Solution

Amount of Zoomer Herbicide

Desired Volume	½%	1%	1 ½ %	2%	5%	10%
1 Gal	¾ oz	1 1/3 oz	2 oz	2 ¾ oz	6 ½ oz	13 oz
25 Gal	1 pt	1 qt	1 ½ qt	2 qt	5 qt	10 qt
100 Gal	2 qt	1 gal	1 ½ gal	2 gal	5 gal	10 gal

2 tablespoons = 1 fluid ounce

For use in knapsack sprayers, it is suggested that the recommended amount of this product be mixed with water in a large container. Fill sprayer with the mixed solution.

Surfactants: Nonionic surfactants which are labeled for use with herbicides may be used. Do not reduce rates of this product when adding surfactant. When adding additional surfactant use 0.5 percent surfactant concentration (2 quarts per 100 gallons of spray solution) when using surfactants with at least 70 percent active ingredient or a 1 percent surfactant concentration (4 quarts per 100 gallons spray solution) for those surfactants containing less than 70 percent active ingredient. Read and carefully observe surfactant cautionary statements and other information appearing on the surfactant label.

Ammonium Sulfate: The addition of 1 to 2 percent dry ammonium sulfate by weight or 8.5 to 17 pounds per 100 gallons of water may increase the performance of this product, particularly when tank mixed with certain residual herbicides on annual and perennial weeds. The equivalent rate of ammonium sulfate in a liquid formulation may also be used. Ensure that ammonium sulfate is completely dissolved in the spray tank before adding herbicides. Thoroughly rinse the spray system with clean water after use to reduce corrosion.

Note: When using ammonium sulfate, apply this product at rates recommended in this label. Lower rates will result in reduced performance.

Colorants and Dyes: Agriculturally approved colorants or marking dyes may be added to this product. Colorants or dyes used in spray solutions of this product may reduce performance, especially at lower rates or dilutions. Use colorants or dyes according to the manufacturer's recommendations.

Drift Control Additives: Drift control additives may be used with all equipment types, except wiper applicators, sponge bars and CDA equipment. When a drift control additive is used, read and carefully observe the cautionary statements and all other information appearing on the additive label.

APPLICATION EQUIPMENT AND TECHNIQUES
Spray Drift Management

AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

Do not allow the herbicide solution to mist, drip, drift, or splash onto desirable vegetation since minute quantities of this product can cause severe damage or destruction to the crop, plants or other areas on which treatment was not intended. The likelihood of injury occurring from the use of this product increases when winds are gusty, as wind velocity increases, when wind direction is constantly changing, or when there are other meteorological conditions that favor spray drift. When spraying, avoid combinations of pressure and nozzle type that will result in splatter or fine particles (mist) which are likely to drift. **AVOID APPLYING AT EXCESSIVE SPEED OR PRESSURE.**

This product may be applied with the following application equipment:

Aerial: Fixed Wing and Helicopter.

Ground Broadcast Spray: Boom or boomless systems, pull type sprayer, floaters, pick-up sprayers, spray coupes, and other ground broadcast equipment.

Hand-Held and High-Volume Spray Equipment: Knapsack and backpack sprayers, pump-up pressure sprayers, handguns, handwands, mistblowers,* lances and other hand-held and motorized spray equipment used to direct the spray onto weed foliage.

*This product is not registered in California or Arizona for use in mistblowers.

Selective Equipment: Recirculating sprayers, shielded and hooded sprayers, wiper applicators, and sponge bars.

Controlled Droplet Applicator (CDA): Hand-held or boom-mounted applicators which produce a spray consisting of a narrow range of droplet sizes.

APPLY THESE SPRAY SOLUTIONS IN PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING DESIRED VOLUMES.

Aerial Equipment

DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT EXCEPT UNDER CONDITIONS AS SPECIFIED WITHIN THIS LABEL.

Use the recommended rates of this herbicide in 3 to 15 gallons of water per acre unless otherwise specified on this label. Unless otherwise specified, do not exceed 2 quarts per acre. Aerial applications of this product may be made in annual cropping conventional tillage systems, fallow and reduced tillage systems. Refer to the individual use area section of this label for recommended volumes, application rates and further instructions.

FOR AERIAL APPLICATION IN CALIFORNIA, REFER TO THE FEDERAL SUPPLEMENTAL LABEL FOR AERIAL APPLICATIONS IN THAT STATE FOR SPECIFIC INSTRUCTIONS, RESTRICTIONS, AND REQUIREMENTS. FOR AERIAL APPLICATIONS, CONSULT WITH STATE OR LOCAL AUTHORITIES REGARDING ANY ADDITIONAL REQUIREMENTS FOR AERIAL TREATMENTS.

Banvel tank mixtures may not be applied by air in California.

Ensure uniform application: To avoid streaked, uneven, or overlapped application, use appropriate marking devices.

Aerial Spray Drift Management: The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops.

1. The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. 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 should be observed.

Importance of Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions section of this label).

Controlling Droplet Size

- **Volume**-Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure**-Use the lower spray pressures recommended for the nozzle. 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 airstream 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. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.
- **Boom Length**-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.
- **Application Height**-Applications should not be made at a height greater than 10 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.

Swath Adjustment

When applications are made with a crosswind, 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

Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided 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 spray drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Applications should not occur during a 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 should 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).

Equipment care and Maintenance: Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. **PROLONGED EXPOSURE OF THIS PRODUCT TO UNCOATED STEEL SURFACES MAY RESULT IN CORROSION AND POSSIBLE FAILURE OF THE PART. LANDING GEAR ARE MORE SUSCEPTIBLE.** The maintenance of an organic coating (paint), which meets aerospace specification MIL-C-38413, may prevent corrosion.

Ground Broadcast Equipment

Use the recommended rates of this product in 3 to 40 gallons of water per acre as a broadcast spray unless otherwise specified. As density of weeds increases, spray volume should be increased within the recommended range to ensure complete coverage. Carefully select proper nozzles to avoid spraying a fine mist. For best results with ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.

Hand-Held and High Volume Equipment

Apply to foliage of vegetation to be controlled. For applications made on a spray-to-wet basis, spray coverage should be uniform and complete. Do not spray to the point of runoff. Use coarse sprays only.

For control of weeds listed in the Annual Weeds Rate Table, apply a 0.5 percent solution of this product to weeds less than 6" in height or runner length. Apply prior to seedhead formation in grass or bud formation in broadleaf weeds. For annual weeds over 6 inches tall, or unless otherwise specified, use a 1 percent solution.

For best results, use a 2 percent solution on harder to control perennials, such as Bermuda grass, and field bindweed.

When using application methods which result in less than complete coverage, use a 5 percent solution for annual and perennial weeds.

Selective Equipment

This product may be applied through recirculating spray systems, shielded applicators, hooded sprayers, wiper applicators or sponge bars after dilution and thorough mixing with water to listed weeds growing in any noncrop site specified on this label and only when specifically recommended in cropping systems.

A recirculating spray system directs the spray solution onto weeds growing above desirable vegetation while spray solution not intercepted by weeds is collected and returned to the spray tank for reuse.

A shielded or hooded applicator directs the herbicide solution onto weeds, while shielding desirable vegetation from the herbicide.

A wiper or sponge applicator applies the herbicide solution onto weeds by rubbing the weed with an absorbent material containing the herbicide solution.

AVOID CONTACT OF HERBICIDE WITH DESIRABLE VEGETATION.

Contact of the herbicide solution with desirable vegetation may result in damage or destruction. Applicators used above desirable vegetation should be adjusted so that the lowest spray stream or wiper contact point is at least 2 inches above the desirable vegetation. Droplets, mist, foam, or splatter of the herbicide solution setting on desirable vegetation may result in discoloration, stunting or destruction.

Applications made above the crops should be made when the weeds are a minimum of 6 inches above the desirable vegetation. Better results may be obtained when more of the weed is exposed to the herbicide solution. Weeds not contacted by the herbicide solution will not be affected. This may occur in dense clumps, severe infestations or when the height of the weeds varies so that not all weeds are contacted. In these instances, repeat treatment may be necessary.

Shielded and Hooded Applicators: Use nozzles that provide uniform coverage within the treated area. Keep shields on these sprayers adjusted to protect desirable vegetation. **EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF HERBICIDE WITH DESIRABLE VEGETATION.**

A hooded sprayer is a type of shielded applicator. The spray pattern is completely enclosed on the top and all 4 sides by a hood, thereby shielding the crop from the spray solution. This equipment must be set up and operated in a manner that avoids bouncing or raising the hoods off the ground in any way. If the hoods are raised, spray particles may escape and come into contact with the crop, causing damage or destruction of the crop. The spray hoods must be operated on the ground or skimming across the ground. Tractor speed must be adjusted to avoid bouncing of the spray hoods. Avoid operation on rough or sloping ground where the spray hoods might be raised off the ground.

Wiper Applicators and Sponge Bars: Wiper applicators are devices that physically wipe appropriate amount of this product directly onto the weed.

Equipment must be designed, maintained and operated to prevent the herbicide solution from contacting desirable vegetation. Operate this equipment at ground speeds no greater than 5 mph. Performance may be improved by reducing speed in areas of heavy weed infestations to ensure adequate wiper saturation. Better results may be obtained if 2 applications are made in opposite directions.

Avoid leakage or dripping onto desirable vegetation. Adjust height of applicator to ensure adequate contact with weeds. Keep wiping surfaces clean. Be aware that, on sloping ground, the herbicide solution may migrate, causing dripping on the lower end and drying of the wicks on the upper end of a wiper applicator.

Do not use wiper equipment when weeds are wet.

Mix only the amount of solution to be used during a 1-day period, as reduced activity may result from use of leftover solutions. Clean wiper parts immediately after using this product by thoroughly flushing with water.

For Rope or Sponge Wick Applicators: Mix 1 gallon of this product in 2 gallons of water to prepare a 33 percent solution. Apply this solution to weeds listed in this section.

For Porous-Plastic Applicators: Solutions ranging from 33 to 100 percent of this product in water may be used in porous-plastic wiper applicators.

CDA Equipment

The rate of this product applied per acre by vehicle mount CDA equipment must not be less than the amount recommended in this label when applied by conventional broadcast equipment. For vehicle-mounted CDA equipment, apply 3 to 15 gallons of water per acre.

For the control of annual weeds with hand-held CDA units, apply a 20 percent solution of this product at a flow rate of 2 fluid ounces per minute and a walking speed of 1.5 mph (1 quart per acre). For the control of perennial weeds, apply a 20 to 40 percent solution of this product at a flow rate of 2 fluid ounces per minute and a walking speed of 0.75 mph (2 to 4 quarts per acre).

Controlled droplet application equipment produces a spray pattern which is not easily visible. Extreme care must be exercised to avoid spray or drift contacting the foliage or any other green tissue of desirable vegetation, as damage or destruction may result.

CROPS

This section is organized alphabetically by crop category. There may be several labeled crops listed in a crop category.

Timing of Application: This product should be applied postemergence to vigorously growing weeds when they have reached the recommended size given in the "Annual Weeds Rate Table" or "Perennial Weeds Rate Table" of this label. Application should be delayed until maximum emergence of the target weeds, but before weeds exceed the maximum size recommended. For annual weeds, allow 1 day after treatment before tillage.

Reduced control may result if treatments are made during poor growing conditions such as drought stress, disease or insect damage or if weeds have been mowed, grazed or cut. Heavy dust on foliage or an overstory canopy covering targeted weeds may also reduce control.

Heavy rainfall or irrigation soon after application may wash this product off the foliage and a repeat treatment may be required for adequate control.

Citrus Crops (Nonbearing only)

Labeled Crops: Calamondin, Chironja, Citron, Citrus Hybrids, Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Orange (All), Pummelo, Tangelo, Tangor

FOR USE ONLY IN PERMANENTLY ESTABLISHED GROVES IN ARIZONA AND CALIFORNIA.

NOTE: FOR GENERAL USE DIRECTIONS, SEE THE "TREE AND VINE CROPS (GENERAL)" SECTION. THE FOLLOWING DIRECTIONS ARE SPECIFIC TO CITRUS CROPS.

TYPES OF APPLICATIONS: General weed control, middles (between rows of trees), strips (in row of trees), selective equipment.

For rates, refer to the "Annual Weeds Rate Table." Single applications cannot exceed 4 quarts of Zoomer herbicide per acre. Repeat applications may be made up to a maximum of 8 quarts per acre per year.

PRECAUTIONS, RESTRICTIONS: Applications may be made to newly planted trees or to young trees that will not bear fruit for one year. Do not apply this product during periods of new foliage growth. Applications should be made after foliage has fully expanded and hardened off. Direct spray toward the base of trees. Avoid direct spray contact on the citrus foliage.

Cotton (Including Roundup Ready Cotton Varieties)

TYPES OF APPLICATIONS: Preplant, hooded sprayer, selective equipment, and precision post-directed equipment. PRECISION POST-DIRECTED EQUIPMENT IS PERMITTED ONLY IN COTTON WITH THE ROUND UP READY GENE.

ATTENTION: IN-CROP APPLICATIONS OF THIS PRODUCT THROUGH PRECISION POST-DIRECTED EQUIPMENT DIRECTED ONTO COTTON IS RECOMMENDED ONLY ON IMPROVED COTTON VARIETIES THAT ARE DESIGNATED AS COTTON WITH THE ROUNDUP READY GENE. SEVERE INJURY OR DEATH OF COTTON WILL RESULT IF ANY COTTON VARIETIES NOT PROPERLY DESIGNATED AS HAVING THE ROUND READY GENE ARE SPRAYED WITH THIS PRODUCT. AVOID CONTACT OF HERBICIDE WITH FOLIAGE, GREEN STEMS, OR FRUIT OF CROPS, OR ANY DESIRABLE PLANTS AND TREES SINCE SEVERE INJURY OR DESTRUCTION WILL RESULT. ROUNDUP READY COTTON VARIETIES MUST BE

PURCHASED FROM AN AUTHORIZED LICENSED SEED SUPPLIER. THE DESIGNATION "ROUNDUP READY" INDICATES THE COTTON VARIETY CONTAINS A PATENTED PROPRIETARY TRAIT.

Preplant: Use Instructions: This product may be applied before planting cotton. Do not apply Zoomer herbicide within 7 days prior to planting. The fallow beds should be worked thoroughly to a depth of at least 2.5 inches prior to planting.

Selective Equipment: Use Instructions: This product may be applied through shielded or hooded sprayers which do not allow contact of the spray with cotton. Applications may be made from 6-inch tall cotton through layby. CONTACT OF THE SPRAY SOLUTION WITH COTTON FOLIAGE, GREEN STEMS, OR FRUIT MAY RESULT IN SEVERE CROP INJURY OR DESTRUCTION.

ROUND-UP READY COTTON: In addition to preplant and selective equipment applications, this product may be applied using precision post-directed or hooded sprayers to Roundup Ready cotton after the fifth leaf (node) stage of development through layby. Cotton must be at least 6-8 inches tall. Post-directed equipment that directs the spray to the base of the cotton plants should be used. Contact of the spray with cotton leaves should be avoided to the maximum extent possible. To minimize the spray onto the leaves of the cotton plants, place nozzles in a low position directing a horizontal spray pattern under the cotton leaves to contact in the row, and maintain low spray pressure (less than 30 PSI).

For best results, make applications while weeds are small (less than 3 inches). Any single post-directed application should not exceed 1 quart per acre of this product. No more than 2 applications should be made from the fifth leaf through layby. Sequential in crop applications of this product must be at least 10 days apart and cotton must have at least two nodes of incremental growth between applications. Do not apply within 75 days of harvest.

ATTENTION: USE OF ZOOMER HERBICIDE IN ACCORDANCE WITH LABEL DIRECTIONS IS EXPECTED TO RESULT IN NORMAL GROWTH OF ROUND UP READY COTTON: HOWEVER, VARIOUS ENVIRONMENTAL CONDITIONS, AGRONOMIC PRACTICES AND OTHER FACTORS MAKE IT IMPOSSIBLE TO ELIMINATE ALL RISKS ASSOCIATED WITH THIS PRODUCT, EVEN WHEN APPLICATIONS ARE MADE IN CONFORMANCE WITH THE LABEL SPECIFICATIONS. IN SOME CASES, THESE FACTORS CAN RESULT IN BOLL LOSS, DELAYED MATURITY, AND/OR YIELD LOSS.

NOTE: Total in-crop applications of herbicides contained glyphosate as an active ingredient, whether applied as a mixture or separately, may not exceed 3 pounds of glyphosate active ingredient from the cracking stage to layby in Roundup Ready cotton. When using this product as part of an overall weed control program that includes other herbicides containing glyphosate as an active ingredient, calculate the application rates and ensure that the total use of this and other glyphosate containing products does not exceed stated maximum use rates.

Fallow Systems

TYPES OF APPLICATION: Chemical fallow, preplant fallow beds.

NOT FOR USE ON FALLOW BEDS TO BE PLANTED TO SOYBEANS IN CALIFORNIA.

USE INSTRUCTIONS: This product may be applied during the fallow period prior to planting or emergence of any crop listed on this label. For any crop not listed on this label, applications must be made at least 60 days prior to direct seeding and 30 days prior to transplanting crops. For rates refer to the "Annual Weeds Rate Table". Single applications cannot exceed 4 quarts of this product per acre. Repeat applications may be made up to a maximum of 8 quarts per acre per year. This product may be used as a substitute for tillage to control annual weeds in fallow fields. Ground or aerial application equipment may be used.

Minimum Treatment-Planting Interval (DAYS)

DIRECT SEEDED CROPS	ZOOMER HERBICIDE USE RATE	
	Up to 4 quarts/acre	Up to 8 quarts/acre
Carrot	90 Days	90 Days
Potato	60 Days	60 Days
Sugarbeet	60 Days	90 Days
Other root/tuber crops	90 Days	90 Days
Onions	180 Days	180 Days
Other bulb vegetables	180 Days	180 Days
Cabbage	90 Days	90 Days
Cauliflower	90 Days	90 Days
Other brassica crops	120 Days	120 Days
Lettuce	90 Days	120 Days

Other leafy vegetables (except brassica crops)	120 Days	120 Days
Pepper	90 Days	120 Days
Tomato	60 Days	120 Days
Other fruiting vegetables	120 Days	120 Days
Cantaloupe	60 Days	90 Days
Squash	90 Days	120 Days
Watermelon	60 Days	60 Days
Other cucurbits	90 Days	120 Days
Dry beans	60 Days	60 Days
Peanut	60 Days	60 Days
Other legume vegetables	60 Days	60 Days
Safflower	60 Days	60 Days
Cereal grains (includes barley, buckwheat, corn, proso millet, pearl millet, oats, popcorn, rice, rye, sorghum, triticale, wheat, wild rice)	10 Months	10 Months
Cotton and soybean	7 Days	7 Days

TRANSPLANTED CROPS	ZOOMER HERBICIDE USE RATE	
	Up to 4 quarts/acre	Up to 8 quarts/acre
Broccoli	0 Days	30 Days
Cabbage	0 Days	30 Days
Cauliflower	0 Days	30 Days
Celery	30 Days	30 Days
Conifer	0 Days	0 Days
Garlic	0 Days	30 Days
Grape/Kiwi	3 Days	3 Days
Onion	0 Days	30 Days
Pepper	30 Days	30 Days
Strawberries	30 Days	30 Days
Tomato	30 Days	30 Days
Treefruit/Nut/Citrus	3 Days	3 Days

IMPORTANT: The fallow beds should be worked thoroughly to a depth of at least 2.5 inches prior to planting. FAILURE TO ACHIEVE THOROUGH AND COMPLETE INCORPORATION, OR TO FOLLOW THE RECOMMENDED TREATMENT PLANTING INTERVAL MAY RESULT IN STAND REDUCTION AND/OR VIGOR REDUCTION OF THE PLANTED CROP.

For best results, apply this product after most weed seeds have germinated but before seedhead formation in grasses or flower bud formation in broadleaves.

When applied as directed, this product will provide control or suppression of weeds listed in the annual and perennial weed tables.

Tree and Vine Crops (General)

TYPES OF APPLICATIONS: General weed control, middles (between rows of trees), strips (in row of trees), selective equipment (except kiwi) in DORMANT tree and vine crops.

NOTE: THIS SECTION GIVES GENERAL DIRECTIONS THAT APPLY TO ALL CITRUS CROPS (NON BEARING ONLY), TREE FRUITS, TREE NUTS AND VINE CROPS. SEE THE INDIVIDUAL CROP SECTION AND RESTRICTIONS FOR SPECIFIC CROPS.

This product may be applied in middles, strips, and for general weed control in established citrus groves, tree fruit and tree nut orchards, and vineyards. This product may also be used for site preparation and prior to transplanting these crops. For rates refer to the "ANNUAL WEEDS RATE TABLE". Single applications cannot exceed 4 quarts of Zoomer herbicide per acre. Repeat applications may be made up to a maximum of 8 quarts per acre per year. Allow a minimum of 3 days between application and transplanting. Applications may be made with boom equipment, CDA, shielded sprayers, handheld and high-volume wands, lances, orchard guns or with wiper applicator equipment, except as directed.

Middles (between rows): USE INSTRUCTIONS: This product will control or suppress annual weeds growing between the rows of labeled tree and vine crops. If weeds are under drought stress, irrigate prior to application. Reduced control may result if weeds have been mowed prior to application.

Strips (in rows): USE INSTRUCTIONS: This product may be applied in rows of tree or vine crops and may also be tank mixed with the following products:

DEVIRINOL™ 50DF	DIREX™ 4L	KARMEX	KARMEX DF	KERB
KROVAR I	KROVAR II	PROWL	PRINCEP CALIBER™ 90	SIMAZINE 4L
SIMAZINE 80W	SIM-TROL™ 4L	SOLICAM™ DF	SURFLAN™ AS	SURFLAN 75W

Refer to the individual product labels for specific crops, rates, geographic restrictions and precautionary statements.

Selective equipment: Shielded and wiper applicators may be used in tree crops and grapes. Refer to the individual crop sections for time interval between application and harvest.

GENERAL PRECAUTIONS/RESTRICTIONS: Zoomer herbicide or any of the combinations recommended on this label should be applied only to healthy growing trees and vines. Direct spray toward the base of tree or vines. Avoid direct plant contact.

For citron and olives, apply as a post-directed spray only.

EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF HERBICIDE SOLUTION, SPRAY, DRIFT OR MIST WITH FOLIAGE OR GREEN BARK OF TRUNK, BRANCHES, SUCKERS, FRUIT OR OTHER PARTS OF TREES AND VINES. CONTACT OF THIS PRODUCT WITH OTHER THAN MATURED BROWN BARK CAN RESULT IN SERIOUS CROP DAMAGE.

AVOID PAINTING CUT STUMPS WITH THIS PRODUCT AS INJURY RESULTING FROM ROOT GRAFTING MAY OCCUR IN ADJACENT TRESS.

THE FOLLOWING RESTRICTIONS APPLY ONLY TO TREE FRUITS, NUT AND VINE CROPS.

Do not apply Zoomer herbicide during the period between bud swell and completion of final harvest or when fruit or nuts are present. Zoomer herbicide can be applied upon completion of final harvest.

In Arizona and California: Zoomer herbicide can be applied during the period following completion of final harvest up to February 15 (February 1st in Coachella Valley, CA). Applications made after the calendar dates above, but prior to bud swell, may result in significant crop injury and are the responsibility of the user.

Tree Fruits (Including Tropical)

LABELED CROPS: Apple, Apricot, Cherry (Sweet, Sour), Crabapple, Loquat, Mayhaw, Nectarine, Olive, Peach, Pear, Plum/Prune (All), Quince, Date, Fig, Persimmon, Pomegranates.

TYPES OF APPLICATIONS: General weed control, middles (between rows of trees), strips (in rows of trees), selective equipment.

For rates refer to the "Annual Weeds Rate Table". Single applications cannot exceed 4 quarts of Zoomer herbicide per acre. Repeat applications may be made up to a maximum of 8 quarts per acre per year.

NOTE: FOR GENERAL USE DIRECTIONS, SEE THE "TREE AND VINE CROP (GENERAL)" SECTION. THE FOLLOWING DIRECTIONS ARE SPECIFIC TO TREE FRUITS.

Restrictions on application equipment: For cherries, any application equipment listed in this section may be used in all states.

Any application equipment listed in this section may be used in apricots, nectarines, peaches and plums/prunes growing in Arizona, California, Oregon, and Washington.

Tree Nuts

LABELED CROPS: Almond, Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (Hazelnut), Hickory nut, Macadamia, Pecan, Pistachio, Walnut (Black, English).

TYPES OF APPLICATIONS: General weed control, middles (between rows of trees), strips (in row of trees), selective equipment.

NOTE: FOR GENERAL USE DIRECTIONS, SEE THE "TREE AND VINE CROPS (GENERAL)" SECTION FOLLOWING DIRECTIONS THAT ARE SPECIFIC TO TREE NUTS.

For rates refer to the "Annual Weeds Rate Table". Single applications cannot exceed 4 quarts of Zoomer herbicide per acre. Repeat applications may be made up to a maximum of 8 quarts per acre per year.

Vegetable Crops

LABELED CROPS: Broccoli (All), Cabbage (All), Cauliflower, Garlic, Horseradish*, Onion.

USE INSTRUCTIONS: This product may be applied up to 4 quarts/acre prior to transplanting these listed vegetables. For rates between 4 and 8 quarts/acre, do not transplant within 30 days following the Zoomer herbicide treatment.

*For horseradish, applications must be made after the horseradish roots have been planted and prior to plant emergence.

PRECAUTIONS, RESTRICTIONS: When applying this product prior to transplanting crops into plastic mulch, care must be taken to remove residues of this product which could cause crop injury from the plastic prior to transplanting. Residues can be removed by a single 0.5 inch application of water, either by natural rainfall or via a sprinkler system. Applications made at emergence will result in injury or death to emerged seedlings. Do not apply this product preemergence to direct-seeded broccoli, cabbage or cauliflower. Do not apply this product post transplant or postemergence to broccoli, cabbage or cauliflower. Do not apply this product in an enclosed greenhouse structure, as injury to plant foliage may result.

Vine Crops

LABELED CROPS: Grapes (raisin, table, wine, juice), Kiwi fruit.

TYPES OF APPLICATIONS: General weed control, middles (between rows), strips (in row), selective equipment (except kiwi).

NOTE: FOR GENERAL USE DIRECTIONS, SEE THE "TREE AND VINE CROPS (GENERAL)" SECTION. THE FOLLOWING DIRECTIONS ARE SPECIFIC TO VINE CROPS.

Direct spray toward the base of vines.

For rates refer to the "Annual Weeds Rate Table". Single applications cannot exceed 4 quarts Zoomer Herbicide per acre. Repeat applications may be made up to a maximum of 8 quarts per acre per year.

PRECAUTIONS, RESTRICTIONS: Applications should not be made when green shoots, canes or foliage are in the spray zone. Do not apply to grapes or kiwi that are not staked or trellised unless vines are free-standing.

Annual Weeds Rate Table

Water carrier volumes of 3 to 10 gallons per acre for ground applications and 3 to 5 gallons per acre for aerial applications are recommended.

Apply to actively growing annual weeds. Annual weeds are easiest to control when they are small.

Always use the higher rate within the provided rate range when applications are made to larger weeds within the range.

For weeds that have been mowed, grazed or cut, allow regrowth to occur prior to treatment.

For those rates less than 48 fluid ounces per acre, this product may be used up to 48 fluid ounces per acre where heavy weed densities exist.

WEED SPECIES	RATE (FLUID OUNCES PER ACRE)	
	24-32	40-48
	MAXIMUM HEIGHT/LENGTH	
Barnyardgrass	3" - 8"	9" - 12"
Bluegrass, annual	8" - 12"	- -
Buttercup, smallflower	12" - 24"	- -
Carolina geranium	2" - 4"	5" - 9"
Carpetweed	6" - 12"	- -
Cheeseweed (<i>Malva parviflora</i>)	3" - 6"	6" - 9"
Chickweed	12" - 24"	- -
Cocklebur	12" - 24"	- -
Crabgrass	6" - 24"	- -
Cutleaf evening primrose	2" - 3"	4" - 6"
Fiddleneck, Coast	4" - 6"	7" - 12"
Filaree, broadleaf	- - 3"	6" - 12"
Filaree, whitestem	- - 3"	6" - 12"
Filaree, redstem	- - 3"	6" - 12"
Fleabane, hairy (<i>Conyza bonariensis</i>)	- - 3"	6" - 9"
Fleabane, rough	3" - 12"	- -
Florida, pusley	2" - 4"	5" - 6"
Goosegrass	3" - 8"	9" - 18"
Groundcherry, cutleaf	6" - 12"	- -
Groundcherry, Wright	6" - 12"	- -

Groundsel, common	6" - 12"	- -
Hemp, sesbania	2" - 4"	5" - 8"
Henbit	4" - 6"	7" - 20"
Horseweed/Marestail (<i>Conyza Canadensis</i>)	6" - 12"	- -
Jimsonweed	4" - 6"	7" - 12"
Johnsongrass, seedling	12" - 24"	- -
Junglerice	3" - 8"	9" - 12"
Knotweed	3" - 12"	13" - 20"
Lambsquarters	6" - 12"	13" - 20"
London rocket	6" - 12"	- -
Morningglory (<i>Ipomoea spp.</i>)	2" - 4"	5" - 6"
Mustard, blue	6" - 18"	- -
Mustard, tansy	6" - 18"	- -
Mustard, tumble	6" - 18"	- -
Mustard, wild	6" - 18"	- -
Nightshade, black	6" - 18"	- -
Nightshade, hairy	6" - 18"	- -
Pigweed	12" - 24"	- -
Prickly lettuce	6" - 20"	- -
Purslane	4" - 6"	7" - 12"
Redmaids	6" - 12"	- -
Ryegrass, common	4" - 6"	7" - 18"
Shepherd's purse	6" - 12"	- -
Sicklepod	2" - 4"	5" - 8"
Smartweed, ladythumb	4" - 8"	9" - 12"
Smartweed, Pennsylvania	4" - 8"	9" - 12"
Sowthistle, annual	4" - 6"	7" - 12"
Spurge, prostrate	6" - 20"	- -
Spurge, spotted	6" - 20"	- -
Teaweed/Prickly sida	1" - 3"	4" - 6"
Velvetleaf south	2" - 4"	5" - 8"
Velvetleaf North	3" - 12"	- -
Virginia pepperweed	12" - 18"	- -

Perennial Weeds Rate Table

Apply to actively growing perennial weeds.

NOTE: If weeds have been mowed, grazed, cut or tilled, do not treat until plants have resumed active growth and have reached the recommended stages.

Best control of most perennial weeds is obtained when treatment is made at late growth stages approaching maturity.

Repeat treatments may be necessary to control weeds regenerating from underground parts or seed. Repeat treatments must be made prior to crop emergence.

Unless otherwise stated, allow 7 or more days after application before tillage.

Best results are obtained when soil moisture is adequate for active weed growth.

WEED SPECIES	RATE (QT/A)	WATER VOLUME (GPA)	HAND-HELD % SOLUTION
Alfalfa	1-2	3-10	2%
After fall cutting and 6 to 8" regrowth, Deep till 7 days after application.			
Alligatorweed*	4	3-20	1.5%
Broom stage. Repeat applications will be required to maintain control.			
Anise (fennel)	-	-	1-2%
Bud to full-bloom stage.			
Bahiagrass	3-5	3-20	2%
Early head stage.			
Bentgrass*	1.5	10-20	2%
Resumed growth of crown area to at least 3" in height.			

Bermudagrass	3-5	3-20	2%
Actively growing and seedheads present.			
Bermudagrass, water (knotgrass)	1-1.5	5-10	2%
12 to 18" weeds, 7 days before tilling. This product is not registered in California for use on water bermudagrass.			
Bindweed, field	0.5-5	3-20	2%
At or beyond full bloom in late summer or fall. Also for control, apply 2 quarts of this product plus 0.5 pound a.i. of Banvel in 10 to 20 gallons of water per acre. Do not apply by air. Do not treat when weeds are under drought stress.			
Bluegrass, Kentucky	2	3-30	2%
Boot to early seedhead stage.			
Blueweed, Texas	3-5	3-30	2%
At or beyond full bloom in late summer or fall.			
Brackenfern	3-4	3-30	1-1.5%
Fully expanded fronds which are at least 18 inches long.			
Bromegrass, smooth	2	3-30	2%
Boot-to-early seedhead stage.			
Bursage, woolly-leaf	-	3-20	2%
For control, apply 2 quarts plus 1 pint of Banvel per acre. At or beyond flowering and new active growth.			
Canary grass, reed	2-3	3-30	2%
Boot-to-head stage.			
Cattail	3-5	3-30	2%
Early head stage.			
Clover; red, white	3-5	3-20	2%
Early head stage.			
Cogongrass	3-5	10-30	2%
At least 18 inches tall in late summer of fall.			
Dallisgrass	3-5	3-20	2%
Early head stage.			
Dandelion	3-5	3-30	2%
Early bud stage. Also for control, apply 16 fluid ounces plus 0.5 pound a.i. 2,-4-D in 3 to 10 gallons of water per acre.			
Dock, curly	3-5	3-30	2%
Early bud stage. Also for control, apply 16 fluid ounces plus 0.5 pound a.i. 2,4-D in 3 to 10 gallons of water per acre.			
Dogbane, hemp	4	3-30	2%
Late bud to flower stage in late summer or fall. For suppression, apply 16 fluid ounces plus 0.5 pound a.i. of 2,4-D in 3 to 10 GPA by ground and 3 to 5 GPA by air.			
Fescue (except fall)	3-5	3-20	2%
Early head stage.			
Boot-to-early seedhead stage. Fall applications only; Apply 1 quart in 3 to 10 GPA to fescue with 6 to 12" of new growth.			
Guineagrass	3	3-30	1%
7-leaf stage.			
Horsenettle	3-5	3-20	2%
Early bud stage.			
Horseradish	4	3-30	2%
Late bud to flower stage in late summer or fall.			
Iceplant	-	-	1.5-2%
At or beyond the early bud stage. Thorough coverage is necessary for best control.			
Jerusalem artichoke	3-5	3-20	2%
Early bud stage.			
Johnsongrass	1-3	3-30	1%
Boot-to-head stage of growth or in the fall prior to frost.			
Kikuyugrass	2-3	3-30	2%
At least 8 inches in height (3- or 4-leaf stage of growth)			

Knapweed	4	3-30	2%
Late bud to flower stage in late summer of fall.			
Lantana	-	-	1-1.25%
At or beyond the bloom stage.			
Lespedeza	3-5	3-20	2%
Early bud stage.			
Milkweed, common	3	3-30	2%
Late bud to flower stage.			
Muhly, wirestem	1-2	3-30	2%
8" or greater.			
Mullein, common	3-5	3-20	2%
Early bud stage.			
Napiergrass	3-5	3-20	2%
Early head stage.			
Nightshade, silverleaf	2	3-10	2%
Apply when at least 60 percent of the plants have berries.			
Nutsedge; purple, yellow	1-3	3-30	1-2%
Apply 3 quarts when plants are in flower or when new nutlets can be found at rhizome tips. Sequential applications: 1 to 2 quarts when plants are in the 3- to 5-leaf stage (less than 6 inches tall)			
Orchardgrass	2	3-30	2%
Boot-to-early seedhead stage, actively growing plants.			
Pampasgrass	-	-	1.5-2%
At or beyond the boot stage of growth.			
Paragrass	3-5	3-20	2%
Early head stage.			
Phragmites*	3-5	10-30	1-2%
Actively growing and in full bloom in late summer or fall.			
Poison hemlock	-	-	1-2%
Apply as a spray to wet treatment. Optimum results are obtained when plants are treated at the bud to full bloom stage of growth.			
Pokeweed, common	1	3-30	2%
Apply to actively growing plants up to 24 inches tall.			
Quackgrass	1-3	3-30	2%
6 to 8" tall followed by deep tillage.			
Redvine*	2	5-10	2%
At least 18" tall in late September or early October.			
Reed, giant	-	-	2%
Apply in late summer to fall for best results.			
Ryegrass, perennial	1-3	3-30	1%
Boot-to-head stage or in the fall prior to frost. Do not tank-mix with residual herbicide when using the 1-quart per acre rate.			
Smartweed, swamp	3-5	3-30	2%
Early bud stage. Also for control, apply 16 fluid ounces plus 0.5 pound a.i. of 2,-4-D in 3 to 10 GPA in the late summer or fall.			
Sowthistle, perennial	2-3	3-30	2%
At or beyond bud stage			
Spurge, leafy*	-	3-10	2%
Apply 16 fluid ounces plus 0.5 pound a.i. 2,-4-D in a 3 to 10 gallons of water per acre in the late summer or fall.			
Starthistle, yellow	2	10-30	2%
Rosette, bolting and early flower stages.			
Sweet potato, wild*	-	-	2%
At or beyond the bloom stage.			
Thistle, artichoke*	-	-	2%
At or beyond the bloom stage of growth.			
Thistle, Canada	2-3	3-30	2%
At or beyond the bud stage, actively growing.			
Timothy	2-3	3-30	2%

Boot-to-head stage.			
Torpedograss*	4-5	3-30	2%
At or beyond the seedhead stage.			
Trumpetcreeper*	2	5-10	2%
At least 18" tall in late September or October.			
Vaseygrass	3-5	3-20	2%
Early head stage.			
Velvetgrass	3-5	3-20	2%
Early head stage.			
Wheatgrass, western	2-3	3-30	2%
Boot-to-head stage.			

*Partial Control.

For management of burning nettle in vine crops, tree fruits, tree nuts, citrus crops (nonbearing only), fallow systems, and vegetable crops.

See the "Crops" section of this label for specific instructions on applications in Vine Crops, Tree Fruits (Including Tropical), Tree Nuts, Citrus Crops (Nonbearing Only), Fallow Systems, and Vegetable Crops.

Application Information

Apply up to 4 quarts per acre of Zoomer herbicide per single application. Repeat applications may be made up to a maximum of 8 quarts per acre. For best results, apply this product after most weeds have germinated but before weeds exceed the maximum size recommended.

Weed Species	Rate (fluid ounces per acre)
	24-32
	Maximum Height/Length (in inches)
Burning Nettle	3-12

Precautions/Restrictions

The maximum amount of Zoomer herbicide applied must not exceed 8 quarts per acre per year. Zoomer herbicide should be applied only around healthy growing trees. Direct spray toward base of tree. Avoid direct herbicide contact with foliage or nuts.

STORAGE AND DISPOSAL.

STORAGE: Do not contaminate water, food, or feed by storage or disposal. Store at temperatures above 3°F. If allowed to freeze, remix before using.

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

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK OR FIRE), CALL INFOTRAC AT (800) 535-5053.

LIMITATION OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Makhteshim Agan of North America, Inc. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, Makhteshim Agan of North America, Inc. makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of Makhteshim Agan of North America, Inc. is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Makhteshim Agan of North America, Inc. disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at Makhteshim Agan of North America, Inc.'s election, the replacement of product.

Zoomer (66222-xx) (to EPA 5-14-07)