51036-127 08/12/2005 1/23

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

AUG 12 2005

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Ms. Jean Butler
MicroFlo Company
PO Box 772099
Memphis, TN 38117-2099

Dear Ms. Butler

Subject: Simazine 4L
EPA Registration Number 51036-127
Resubmission dated July 28, 2005

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act as amended is acceptable, provided you make the following changes before you release the product for shipment.

1) Change the order of the subsections in the STORAGE AND DISPOSAL to Pesticide Storage, Pesticide Disposal, Container Disposal.

2) On page 6, revise the format of the equation for band applications to read clearly:
Band width in inches X Broadcast Rate = amount needed per acre
row width in inches Per acre

3) On page 22, in the trademark ownership section, replace Novartis with Syngenta Crop Protection Inc, and replace Stauffer Chemical Co with TRI AG, Inc.

Submit one (1) copy of final printed labeling incorporating the above changes before you release the product for shipment. Amended labeling will supercede all previously accepted ones. A stamped copy of labeling is enclosed for your records.

If you have any questions, please contact Hope Johnson at 703-305-5410.

Sincerely,

Donald R. Stubbs

James A. Tompkins,
Product Manager 25
Herbicide Branch
Registration Division (7505C)

ACCEPTED
with COMMENTS
In EPA Letter Dated

AUG 12 2005

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

51036-127

a/28

MICRO FLO

SIMAZINE 4 FL HERBICIDE

For weed control in certain crops, ornamental plantings, on industrial sites, and around-the-farm

ACTIVE INGREDIENT:	
Simazine (2-chloro-4,6-bis (ethylamino) -s-triazine	41.67%
INERT INGREDIENTS:	58.33%
TOTAL.....	100.00%

This product contains 4 pounds Simazine per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See [Side] [Back] Panel For Additional Precautions

FIRST AID	
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
IF INHALED:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by

REGISTRATION/AMENDMENTS/SIMAZINE 4 FL (127) First Aid Clean
Resubmitted 7-28-05 as per EPA letter of 7/11/05 jb

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	mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
IF SWALLOWED:	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
EMERGENCY TELEPHONE NUMBERS: 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) 424-9300 CHEMTREC (transportation and spills) (800) 832-HELP (4357) (human health) (800) 345-4735 ASPCA (animal health)	

EPA Reg. No. 51036-127
AD 122194

EPA Est. No. 51036-GA-1
Net Contents gal.

Manufactured By
MICRO FLO COMPANY
P.O. BOX 772099
MEMPHIS TN 38117-2099

PRECAUTIONARY STATEMENTS
Hazards To Humans And Domestic Animals

CAUTION

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

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:
1. Long-sleeved shirt and long pants
2. Chemical-resistant gloves
3. Shoes plus socks
4. Chemical-resistant headgear for overhead exposure

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

USER SAFETY RECOMENDATIONS

Users should:

1. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet

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

3. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water or wetlands. Do not contaminate water by cleaning of equipment or disposal of wastes. Simazine is a chemical which can travel (seep or leach) through soil and can contaminate ground water which may be used as drinking water. Simazine has been found in ground water as a result of agricultural use. Users are advised not to apply Simazine where the water table (ground water) is close to the surface and where the soils are very permeable, i.e., well-drained soils such as loamy sands. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

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 and restricted-entry intervals. 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:

1. Coveralls

2. Chemical-resistant gloves

3. Shoes plus socks

4. Chemical-resistant headgear for overhead exposure

CHEMIGATION PROHIBITION

Do not apply this product through any type of irrigation system.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. PESTICIDE DISPOSAL: For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

PESTICIDE STORAGE: Keep pesticide in original container. Store in a cool, dry place. Protect from excessive heat. Do not store or transport near feed or food.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

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GENERAL INFORMATION

Apply Simazine 4FL Herbicide before weeds emerge or after removal of weed growth. Simazine controls a wide variety of annual broadleaf and grass weeds when used at selective rates in agricultural crops and ornamental plantings. When used at higher, nonselective rates in noncrop areas, it also controls many perennial broadleaf grass weeds. Where a range of application rates is given, use the low rate on coaser textured soil and soil lower in organic matter; use the high rate on finer textured soil and soil higher in organic matter. To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, as crop injury may result. Since Simazine enters weeds mainly through their roots, moisture is needed to move it into the root zone. Very dry soil conditions following application may necessitate shallow cultivation or rotary hoeing. Simazine 4FL is nonflammable

ANNUAL WEEDS CONTROLLED

alyssum, fireweed, common purslane,
annual bluegrass, fivehook basssia,
ragweed, annual Flora's paintbrush,
rattail fescue, morningglory, Florida pusley
redmaids, annual ryegrass, foxtails,
Russian thistle, barnyardgrass, goosegrass,
shepherdspurse (watergrass), groundsel,
signalgrass, burclover, henbit (Brachiaria spp.)
carelessweed, junglerice, silver hairgrass,
carpetweed, knawel, smartweed, common chickweed
(German moss), spanishneedles, crabgrass,
common speedwell (Digitaria spp.), lambsquarters
tansymustard, downy brome, nightshade,
wild mustard (cheatgrass), pepperweed,
wild oats, fall panicum, pigweed, witchgrass,
fiddleneck, pineappleweed, yellow flower,
filaree, prickly lettuce, pepperweed

Following many years of continuous use of this product and chemically related products, biotypes of some of the weeds listed on this label have been reported which cannot be effectively controlled by this and related herbicides. Where this is know or suspected and weeds controlled by this product are expected to be present along with resistant biotypes, we recommend the use of this product in registered combinations or in sequence with other registered herbicides which are not triazines. If only resistant biotypes are expected to be present, use a registered non-triazine herbicide. Consult with your State Agricultural Extension Service for specific recommendations.

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APPLICATION PROCEDURES

GROUND APPLICATION: Use conventional ground sprayers equipped with nozzles that provide accurate and uniform application. Be certain that nozzles are uniformly spaced and the same size. Calibrate sprayer before use and recalibrate at the start of each season and when changing carriers. Unless otherwise specified, use a minimum of 20 gallons of spray mixture per acre. Use a pump with capacity of (1) maintains 35 to 40 psi at nozzles, (2) provide sufficient agitation in tank to keep mixture in suspension, and (3) to provide a minimum of 20% bypass at all times. Use centrifugal pumps which provide propeller shear action for dispersing and mixing this product. The pump should provide a minimum of 10 gallons/minute/100 gallon tank size circulated through a correctly positioned sparager tube or jets. Use screens to protect the pump and to prevent nozzles from clogging. Screens placed on the suction side of the pump should be 16-mesh or coarser. Do not place a screen in the recirculation line. Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles. Check nozzle manufacturer's recommendations. For band applications, calculate amount to be applied per acre as follows: band width in inches X broadcast rate = amount needed per acre
row width in inches per acre

AERIAL APPLICATION:
Use aerial application only where specified in the use directions. Apply in a minimum of 1 gallon of water for each quart of Simazine applied per acre. Avoid applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. Avoid application to humans or animals.

AERIAL DRIFT REDUCTION ADVISORY

Information on 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).

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 - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
* Number of Nozzles - Use the minimum number of nozzles that provide uniform coverage.
* Nozzle Orientation - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

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* Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produces larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produces the largest droplets and the lowest drift.

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 target 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 windward. Therefore, on the up and down edges of the field, the applicator should compensate for the displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with the increasing drift potential (higher wind, smaller drops, etc.).

WIND
Drift potential is lowest between wind speeds of 2 - 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 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 concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward 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).

MIXING PROCEDURES - ALL USES:
(1) Be sure sprayer is clean and not contaminated with any other materials, or crop injury or sprayer clogging may result.
(2) Fill tank 1/4 full with clean water, nitrogen solution, or complete fluid fertilizer.

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(3) Start agitation.
(4) Be certain that the agitation system is working properly and creates a rippling or rolling action on the liquid surface.
(5) If any dry herbicides are being tank mixed, add them to tank and allow them to become thoroughly suspended.
(6) Then pour Simazine directly from jug into tank.
(7) Continue filling tank until 90% full. Increase agitation if necessary to maintain surface action.
(8) Add other liquid tank mix herbicide(s) after this product is thoroughly suspended.
(9) Finish filling tank. Maintain agitation to avoid separation of materials.
10) Empty tank as completely as possible before refilling to prevent buildup of emulsifiable concentrate residue from possible tank mix herbicides.
11) If an emulsifiable concentrate film starts to build up in tank,drain it and clean with strong detergent solution or solvent.
12) Clean sprayer thoroughly immediately after use by flushing system with water containing a detergent.

COMPATIBILITY TEST:
To determine the tank mix compatibility of Simazine 4FL with liquid fertilizer, crop oil, spreaders, or other recommended pesticides, use this test method. Nitrogen solutions or complete fluid fertilizers may replace all or part of the water in the spray in corn. Since liquid fertilizers can vary, even within the same analysis, check compatibility each time before use. Be especially careful when using complete suspension or fluid fertilizers as serious compatibility problems are more apt to occur. Commercial application equipment may improve compatibility in some instances. Check compatibility using this procedure:

1. Add 1 pint of fertilizer to each of 2 one quart glass jars with tight lids.

2. To one of the jars add 1/4 tsp. of a compatibility agent approved for use (1/4 tsp. is equivalent to 2 pts. per 100 gals. spray). Cap and shake until mixed. Examples of compatibility agents include Compex* and Unite*.

3. To both jars add the appropriate amount of herbicide(s). If more than one herbicide is used, add them separately with dry herbicides first, flowables next, and emulsifiable concentrates last. After each addition, cap and shake until thoroughly mixed. The appropriate amount of herbicides for this test follows (assuming a spray volume of 25 gals. per acre):

DRY HERBICIDES:
FOR EACH POUND PER ACRE add 1.5 teaspoons to each jar. Fluff up

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wettable powder products before measuring.

LIQUID HERBICIDES:
FOR EACH PINT PER ACRE, add 0.5 teaspoon to each jar. For a spray volume other than 25 gals. per acre, change the teaspoons added to each jar as follows:

$$\frac{\text{25 gals. X no. teaspoons given above}}{\text{desired gals. spray volume per acre}} = \text{teaspoons to add to each jar}$$

4. After adding all ingredients, put lids on and tighten. Shake jars vigorously one minute. Let the mixtures stand 15 minutes and then look for separation, large flakes, precipitates, grease, gels, medium to heavy oily film on the jar, or other signs of incompatibility. Determine if the compatibility agent is needed in the spray mixture by comparing the two jars. If either mixture separates, but can be remixed readily, the mixture can probably be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility:

(A) slurry the dry herbicide(s) in water before addition, or

(B) add 1/2 of the compatibility agent to the fertilizer and the other 1/2 to the emulsifiable concentrate or flowable herbicide before addition to the mixture. If still incompatible, do not use the materials mixed in the same spray tank.

ROTATIONAL CROPS AND PERENNIAL CROP REPLANTING

To avoid crop injury, observe the following precautions:

(1) If rotating treated land the year following application, plant only corn, unless otherwise stated in this label.

(2) If replanting perennial crops or if rotating land to crops other than corn, do not apply Simazine in the year preceding planting these crops.

FRUIT AND NUT CROPS

Apply the spray to the orchard or vineyard floor avoiding contact with fruit, foliage, or stems. Recommended rates are based on broadcast treatment. For band applications or spot applications around trees in fruit or nut plantings, reduce the broadcast rate of Simazine 4FL and water per acre in proportion to the area actually sprayed.

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PRECAUTIONS
(All fruit and nut crops)

To avoid crop injury:

(1) Apply only to orchards or groves where trees have been established 12 months or more unless specified differently.

(2) Make only one application per year, except as noted otherwise.

(3) Do not use on gravelly, sand, or loam sand soil.

(4) Immediately following application, limit overhead sprinkler irrigation to 1/2 inch.

ALMONDS AND PEACHES (CA only):
Apply 1 to 2 quarts per treated acre in a 2 to 4 foot band on each side of the tree row. Apply before weeds emerge in late fall or early winter. Weeds controlled by 1 quart of Simazine include burclover, common chickweed, wild mustard, and shepherdspurse. Apply only once per year.

PRECAUTIONS: To avoid crop injury,
(1) Do not treat trees established in the grove less than 3 years.
(2) Do not treat the Mission (Texas) variety of almonds.
(3) Do not apply to almond trees propagated on plum rootstocks.
(4) Do not replant almonds or peaches in treated soil for 12 months after treatment.
(5) Do not apply on soil with less than 1% organic matter.
(6) Do not treat areas where water will accumulate.

APPLES, PEARS, SOUR CHERRIES:
Apply 2 to 4 quarts per acre.

AVOCADOS (CA and FL only):
Apply 2 to 4 quarts per acre after final preparation of grove.

BLUEBERRIES AND CANEBERRIES (Blackberries, Boysenberries, Loganberries, Raspberries):
Apply 2 to 4 quarts per acre in the spring or apply a split application of 2 quarts per acre in the spring plus 2 quarts per acre in the fall. Apply in a minimum of 40 gallons of water per acre. On plantings less than 6 months old, use 1/2 the above rate. To control quackgrass, apply 4 quarts per acre in the fall or split the application applying 2 quarts per acre in the fall plus 2 quarts per acre in the spring, when quackgrass is actively growing.
NOTE: Do not apply when fruit is present, or illegal residues may result.

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CRANBERRIES (MA): Apply up to 4 quarts per acre either before spring growth begins or in the fall after harvest.

OTHER AREAS: Apply 2 quarts per acre before spring growth begins.

FILBERTS:
Apply 2 to 4 quarts per acre in the fall or apply a split application of 2 quarts per acre in the fall plus 2 quarts per acre in the spring.

PRECAUTION: If trees are planted on a hillside, excessive soil erosion may result from the elimination of weeds.
NOTE: Do not apply when nuts are on the ground during the harvest period, or illegal residues may result.

GRAPES:
Apply 2 to 4.8 quarts per acre any time between harvest and early spring.

PRECAUTION: Do not use in vineyards established less than three years, or crop injury may occur.

GRAPEFRUIT, LEMONS, ORANGES (AZ, Lemons and Oranges only):
Apply a split application of 1.6 quarts per acre in the spring plus 1.6 quarts per acre in the fall.

CA:
Apply 2 to 4 quarts per acre in a single application; or apply 2 quarts per acre in the fall and 2 quarts per acre in the spring.
PRECAUTION: Do not use in the Imperial, Coachella, or Palo Verde Valleys, or crop injury may occur.

FL (Grapefruit and Oranges only):
Apply only once per year. For control of weeds listed under General Information, apply 6.4 to 9.6 quarts per acre in the spring; to control milkweed vine, use 8 to 9.6 quarts per acre either preemergence or before vines are 12 inches tall.

TX (Grapefruit and Oranges only):
Apply 4 to 4.8 quarts per acre.

PRECAUTIONS (ALL AREAS): To avoid crop injury,
(1) Do not use in nurseries.
(2) Do not apply to bedded grapefruit, lemons, or oranges.
(3) Do not apply to trees under stress from freeze damage for one year after the freeze.

MACADAMIA NUTS:
Apply 2 to 4 quarts in 50 gallons of water per acre before harvest

and just prior to weed emergence. Repeat application as necessary. NOTE: Do not apply when nuts are on the ground during the harvest period, as illegal residues may result.

OLIVES:
Apply 2 to 4 quarts per acre following grove preparation in the fall. Repeat annually in midwinter.

PEACHES, PLUMS, SWEET CHERRIES:
Apply 1.6 to 4 quarts per acre. Apply in late fall to early spring prior to weed emergence.

PRECAUTIONS: To avoid crop injury,
(1) Peaches: Use only in AR, LA, MO, OK, TX, and states east of the Mississippi River. For California, see specific directions in the section "Almonds and Peaches (CA only)".
(2) Plums and sweet cherries: Use only in MO and states east of the Mississippi River except TN.

PECANS: Apply 1.6 to 4 quarts per acre. Apply in late fall to early spring prior to weed emergence.

PRECAUTIONS: To avoid crop injury,
(1) Do not use west of the Pecos River in TX or in NM, AZ, or CA.

(2) Do not make applications to transplanted trees that have been established less than two years in the grove.
NOTE: Do not apply when nuts are on the ground, or illegal residues may result. Do not allow animals to graze treated areas.

STRAWBERRIES:
Oregon and Washington: For control of chickweed, groundsel, mustard, and shepherdspurse, apply broadcast 1 quart per acre. In fields where overhead irrigation is used to activate this product, apply after harvest at time of bed renovation. In fields where overhead irrigation is not available, apply during early October through November.

PRECAUTIONS: To avoid crop injury,
(1) Make only one application per growing season.
(2) Do not apply within 4 months after transplanting.

WALNUTS:
Apply 2 to 4 quarts per acre. Leveling and furrowing operations after application will lessen effectiveness of weed control.
NOTE: Do not apply when nuts are on the ground, or illegal residues may result.

SIMAZINE 4FL PLUS EVIK* 80W (Ametryne)

FOR GRAPEFRUIT AND ORANGES

Use in grapefruit and oranges in FL and TX for control of weeds listed in the following directions and under General Information. Apply the rates given below in a minimum of 40 gallons of water per acre thoroughly covering existing vegetation, but avoiding contact with citrus fruit, foliage, or stems. Apply when weeds have resumed active growth in the spring, but before they exceed 4 inches in height (except as noted for vines). Observe all precautions and limitations on the labeling of Simazine 4FL and Evik 80W. When mixing, add Evik 80W slurry to water in spray tank, agitate thoroughly, then add Simazine 4FL and agitate thoroughly again. FL (Ridge Area): Apply 4 quarts of Simazine 4FL plus 5 pounds of Evik 80W per acre; controls balsamapple when applied either preemergence or on vines up to 12 inches tall. TX: Apply 3.2 to 4 quarts of Simazine 4FL plus 2 to 3 pounds of Evik 80W per acre plus 2 quarts nonionic surfactant, such as X-77*, per 100 gallons of spray mixture (add surfactant to spray tank last); controls buffelgrass, marinevine (ivy treebine), Texas panicum, sandbur, and sunflower, and gives top-kill of johnsongrass. Use 4 quarts of Simazine 4FL per acre for longer residual control; use 3 pounds of Evik 80W per acre for control of heavy weed growth and for top-kill of johnsongrass; use the higher rate of both products for control of marinevine.

PRECAUTIONS (ALL AREAS): To avoid injury,

(1) Do not use in nurseries, or around trees that have been established in the grove less than year after the freeze.
(2) Apply only once per year.

NOTE (ALL AREAS): Do not apply within 30 days before harvest, or illegal residues may result. Do not graze treated areas.

SIMAZINE 4FL PLUS BROMACIL 80W (Diuron)

FOR GRAPEFRUIT AND ORANGES (FLORIDA ONLY):

Use on grapefruit and oranges in FL for control of balsamapple, black nightshade, carpetweed, crabgrass, cutweed, hayweed, Florida pusley, horseweed, pepperweed, pigweed, poorjoe, ragweed, rattlebox, spanishneedles and sandbur, and for partial control of bermudagrass, bahiagrass, pangolagrass, paragrass, and torpedograss. Apply 3.2 to 4 quarts of Simazine 4FL plus 3 to 4 pounds of Bromacil 80W per acre beneath trees in a minimum of 40 gallons of water per acre before or soon after weed growth begins. When mixing, add Bromacil 80W slurry to water in spray tank, agitate thoroughly, then add Simazine 4FL and agitate thoroughly again. Use the lower rates for light weed infestations or all applications in bedded citrus areas. Use the higher rates for heavy weed infestations only in ridge grown citrus areas.

Temporary yellowing of citrus leaves may occur following treatment.

PRECAUTIONS: To avoid crop injury,

(1) Do not use in nurseries, or around trees that have been established in the grove less than four years, or where trees are under stress from freeze damage for one year after the freeze.

(2) Do not use on soil with less than 1%1 organic irrigation furrows.

(3) Do not treat diseased trees such as those with foot rot.

(4) Do not use in groves interplanted with other trees or desirable plants, nor in home grapefruit or orange plantings, or in areas where roots of other valuable plants or trees may extend.

(5) Treated areas may be planted to citrus trees one year after application.

(6) Do not rotate to other crops within two years of application.

NOTE: Apply only once per year and avoid contact with foliage and fruit with spray or mist, or illegal residues may result.

SIMAZINE 4FL PLUS PARAQUAT

This tank mix is effective in the following fruit and nut crops for kill of existing vegetation and for residual control of the annual broadleaf and grass weeds claimed for Simazine 4FL applied alone. This combination is also effective for top-kill and suppression of perennial weeds. Use this tank mix on these crops:

almonds (CA only)
apples,
avocados (CA and FL[1] only)
cherries (sour and sweet)[4]
filberts,
grapefruit (CA, FL2 and TX only),
grapes,
lemons (AZ and CA only),
macadamia nuts,
olives,
oranges2
peaches3,
pears,
pecans,
Plums4,
walnuts

Apply the Simazine 4FL rate given under the appropriate crop on this label plus 1 to 2 quarts paraquat* in 50 to 200 gallons (30 to 50 gallons for pecans) of water per acre to the orchard floor avoiding contact with fruit, foliage, or stems. Add a nonionic surfactant, such as X-77, at 0.5 pint per 100 gallons of spray. Apply when weeds are succulent and new growth is 1 to 6 inches tall. For mature woody weeds or difficult to control perennial weeds, re-treat or spot treat with paraquat if regrowth occurs. Add Simazine 4FL to the spray tank first (refer to Mixing Procedures section of this label), then add paraquat, and add the

surfactant last. Provide constant agitation during mixing and application to keep the mixture in suspension.

PRECAUTIONS: To avoid crop injury,
(1) Apply the tank mix only once per year.
(2) Use a shield for young trees or vines. Refer to the Simazine 4FL and paraquat labels for further directions, specific weeds controlled, and precautions and limitations on each crop.

1 In avocados in Florida, this tank mix also controls balsamapple, rattail amaranth, and at the higher rate of each herbicide, it suppresses coral vine.

2 In grapefruit and oranges in Florida, apply 3.2 quarts Simazine 4FL. Do not exceed 8 quarts of Simazine 4L during any one growing season.

3 Limited to CA, AR, LA, MO, OK, TX, and states east of the Miss. River. As appropriate, refer to Simazine 4FL sections "Almonds and Peaches (CA only)" or "Peaches, Plums, Sweet Cherries" for rate of Simazine 4FL and other information.

4 Limited to MO and states east of the Miss. River except TN.
*Based on a product containing 2 lbs. paraquat cation per gallon.

TANK MIXTURE WITH ROUNDUP

This tank mixture is effective in grape vineyards and in the following bearing or nonbearing tree crops for control of existing vegetation and for residual control of the annual broadleaf and grass weeds claimed for this product applied alone. This combination is also effective for partial control of perennial weeds contacted by the spray mixture during application. Use this tank mixture on these crops:

almonds**(CA only)
apples*

pears*
filberts**

grapes*
lemons* (AZ and CA)

Macadamia Nuts**
avocados*(CA and FL only)

pecans**

walnuts**

cherries (sour and sweet[3]) ****
grapefruits *** (CA,FL[1],TX)
oranges *** (AZ,CA, FL[1],TX)
peaches ****[2]
plums ****[3]

Use the appropriate rate given elsewhere on this label for Simazine 4FL applied alone to the crop being treated. Add to the spray tank 1 to 5 quarts of Roundup per acre depending on weeds present and their growth stage. Also add an agriculturally approved nonionic surfactant at 0.5% by volume of spray solution. Apply the mixture in 10 to 40 gallons of water per acre as a postemergence spray to the weeds at the appropriate weed growth stage given on the Roundup label. Add Simazine to the spray tank first, then add Roundup. Provide constant agitation during mixing and application to keep the mixture in suspension. Refer to Application Procedures section of this label for further direction.

PRECAUTIONS: To avoid crop injury, take extreme care 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 or vines. Observe precautions on both the Simazine and Roundup labels for each crop involved. Refer to the labels of both herbicides for further directions, specific weeds controlled, precautions and limitations on each crop.
*Allow a minimum of 14 days between last application and harvest.
**Allow a minimum of 21 days between last application and harvest of these crops.
*** Allow a minimum of 1 day between last application and harvest
**** Allow a minimum of 17 days between last application and harvest.

1 In grapefruit and oranges in Florida, apply 3.2 quarts of this product per acre in bedded areas and 6.4 to 9.6 quarts per acre in ridge areas.

2 Limited to CA, AR, LA, MO, OK, TX, and states east of the Miss. River. For CA, see specific direction in the section "Almonds and Peaches (CA only)"

3 Plums and sweet cherries: Limited to MO and states east of the Miss. River expent TN.

SIMAZINE 4FL Plus SURFLAN*

Use this tank mix in the following crops for preemergence control of all weeds claimed on both labels:

almonds	cherries	lemons
pecans	apples	peaches
filberts	oranges	plums
	avocados	grapes
English walnuts	caneberries	grapefruit
	pears	

Apply the Simazine 4FL rate given under the appropriate crop on this label plus 2.67 to 5.33 pounds of Surflan 75W or 2 to 4 quarts of Surflan A.S. in 20 to 40 gallons of water per acre. Refer to the Surflan 75W or Surflan A>S> label for complete tank mix directions, and use 0.8 qt. of Simazine 4FL for each pound of Simazine 80W. Observe all precautions and limitations on the Simazine and Surflan labels.

FIELD CROPS

CORN

Nitrogen solution or complete liquid fertilizer may replace all or part of the water in the spray. Determine the physical compatibility of Simazine 4FL with fertilizer before use. Refer to the General Information section of this label for a compatibility test procedure. Do not apply after corn has emerged, as there is danger of liquid fertilizer causing crop injury. Use a minimum of 10 gals. of spray mixture per acre.

PREEMERGENCE: Apply before weeds and corn emerge. Use the appropriate rate in the following table.

PREPLANT: Broadcast in the spring after plowing at the appropriate rate in the following table. Apply before, during, or after final seedbed preparation. If soil is tilled or worked after application, avoid deep incorporation of Simazine 4FL. Best results will be obtained when Simazine is applied within 2 weeks before planting. Under dry weather conditions, preplant applications may give better weed control than preemergence. If weeds develop, particularly under relatively dry conditions, a shallow cultivation will generally result in better weed control.

SOIL TEXTURE	BROADCAST* RATE PER ACRE
Sand, silt, and loam that is low in organic matter	4 pints
Soil containing moderate amounts of clay and organic matter	4.8 pints
Loam that is high in organic matter and clay (including dark prairie soils of the Corn Belt)	6 pints
Peat, muck and high-organic clay	8 pints

*For calculation of band treatment rate, see the General Information section.

QUACKGRASS CONTROL:
Broadcast 6 to 8 pints per acre in the fall. Plow 2 to 3 weeks later, or if erosion is a problem, delay plowing until spring.

PRECAUTIONS:
(1) Do not apply more than 8 pints of Simazine 4FL per acre of corn per year.
(2) Do not plant any crop except corn until the following year or injury may occur.
(3) Following harvest, plow and thoroughly till the soil in fall or spring to minimize possible injury to spring-seeded rotational crops, regardless of the rate used.
(4) If Simazine 4FL is used at a rate higher than 6 pints per acre or equivalent band rate, a crop of untreated corn should precede the next rotational crop.
(5) Do not apply Simazine 4FL preplant incorporated for weed control in corn in the High Plains and Intermountain areas of the West (including central and western KS, western NE, western OK, and the Panhandle of TX) where rainfall is sparse and erratic or where irrigation is required.
(6) In the High Plains and Intermountain areas of the West where rainfall is sparse and erratic or where irrigation is required,use Simazine 4FL only when corn is to follow corn or when a crop of untreated corn is to precede other rotational crops.
(7) In western MN and eastern parts of the Dakotas, NE and KS, do not rotate to soybeans if the rate applied was more than 4 pints per acre or equivalent band rate or injury may occur.
(8) Injury may occur to soybeans planted in north-central and northwest IA, south-central and southwest MN, northeast NE, southeast SD, and other areas the year following application on soils having a calcerous surface layer.
(9) Do not plant sugar beets, tobacco, vegetables (including dry beans), spring seeded small grains, or small seeded legumes and grasses the year following Simazine 4FL application or injury may occur.

NOTE: Do not graze treated areas, or illegal residues may result.

TANK MIXTURES ON CORN AATREX* (Atrazine)

Use Simazine 4FL in a preplant or preemergence tank mixture with AAtrex 4L (4LC) for control of many annual weeds, including carpetweed, crabgrass fall panicum, foxtail, lambsquarters, morningglory, pigweed, ragweed, and velvetleaf and velvetleaf.

Apply at the rates given below. Use the 1:1 ratio for most weeds and the 2:1 ratio for expected heavy infestations of crabgrass and fall panicum.

Broadcast rate per acre

	1:1 Ratio		2:1 Ratio	
	Simazine	AAtrex	Simazine	AAtrex
Soil Texture	4FL	4L	4FL	4L
Sand, loamy sand, sandy loam	1 qt.	1 qt	1.33 qts.	21.3 oz.
Loam, silt loam, silt, clay loam, sandy clay loam, silty clay loam, sandy clay, or silty clay with low organic matter	1.2 qts.	1.2 qts.	1.6 qts.	25.6 oz.
Loam, silt loam, silt, clay loam, sandy clay loam, silty clay loam, sandy clay, or silty clay with medium to high organic matter, and clay (including dark prairie soils of the Corn Belt)	1.44 qts.	1.44 qts.	1.92 qts.	30.7 oz.

Refer to the Corn section of this label for precautions and limitations.

ERADICANE*

Use in a preplant incorporated tank mixture for control of all weeds claimed on both the Simazine and Eradicane labels including partial control (suppression) of shattercane (wild cane). Fluid fertilizer may replace all or part of the water in the spray. Check the physical compatibility of mixture with fertilizer before use. Refer to the General Information section of this label for a compatibility test procedure. Use a minimum of 20 gals. of spray volume per acre. Refer to the Eradicane label for incorporation directions. Use the higher rate of Simazine on fine-textured soil

and where heavy broadleaf infestations are expected. Use the higher rate of Eradicane for heavy nutsedge and bermudagrass infestations. For partial control (suppression) of shattercane, broadcast and incorporate IMMEDIATELY before planting 2 to 4 pints of Simazine 4FL plus 7.33 pts. of Eradicane 6.7E (or 8 pints Eradicane Extra) per acre. For control of the other weeds claimed on both labels broadcast and incorporate 2 to 6 pints of Simazine 4FL plus 4.75 to 7.33 pints of Eradicane 6.7E (or 5.33 pints of Eradicane Extra) per acre. Observe all precautions and limitations on the Simazine 4FL and Eradicane labels.

PARAQUAT

Use in a tank mixture where corn will be planted directly in a cover crop, established sod, or previous crop residues. This combination controls existing vegetation and provides residual control of the annual broadleaf and grass weeds listed under General Information. Add Simazine 4FL to the spray tank, mix thoroughly with water, and then add paraquat and a nonionic surfactant. Provide constant agitation during mixing and application to keep the mixture in suspension. Apply 4 to 6 qts. of Simazine 4FL plus 1 to 2 pts. of paraquat* in 20 to 60 gals. of water per acre as a broadcast spray either before or after planting but before corn emerges. Add a nonionic surfactant at the rate of 0.5 pt. per 100 gals. of spray volume. For further information, see general information, caution and warning statements, precautions, and notes on the Simazine 4FL and the paraquat labels. *Based on a product containing 2 lbs. paraquat cation per gal.

SUTAN+*:

Use in a preplant incorporated tank mixture for control of all weeds claimed on both the Simazine and Sutan+ labels including partial control (suppression) of shattercane (wild cane). Fluid fertilizer may replace all or part of the water in the spray. Check the physical compatibility of mixture with fertilizer before use. Refer to the General Information section of this label for a compatibility test procedure. Use a minimum of 20 gals. of spray volume per acre. Refer to the Sutan+ label for incorporation directions. Use the higher rate of Simazine on fine-textured soil and where heavy broadleaf infestations are expected. For partial control (suppression) of shattercane, broadcast and incorporate IMMEDIATELY before planting 2 to 4 pts. of Simazine 4FL plus 7.33 pts. of Sutan+ 6.7E per acre. For control of the other weeds claimed on both labels, broadcast and incorporate 2 to 6 pts. of Simazine 4FL plus 4.75 pts. of Sutan+ 6.7E per acre. Observe all precautions and limitations on the Simazine 4FL and Sutan+ labels.

NURSERIES, CHRISTMAS TREE PLANTINGS, SHELTERBELTS NURSERIES (see list below):
Apply 2 to 3 qts. in at least 25 gals. of water per acre in fall or spring.

PRECAUTION: To avoid plant injury, do not apply for at least one year after transplanting.

CHRISTMAS TREE PLANTINGS AND SHELTERBELTS (see list below):
Remove weed growth before application. Apply 2 to 4 qts. in at least 25 gals. of water per acre after transplanting. Use the same rate for annual maintenance applications. For quackgrass control apply 4 qts. per acre in the fall or apply a split application of 2 qts. per acre in the fall plus 2 qts. per acre in early spring, after quackgrass begins growth.

PRECAUTIONS: To avoid tree injury,
(1) Do not use Simazine 4FL on seedbeds or cutting beds.
(2) In CA, OR, and WA, do not apply to Christmas trees or shelterbelts sooner than one year after transplanting. In other areas, do not apply to Christmas trees or shelterbelt transplants less than three years of age.
(3) Do not use until soil is firmly settled around roots.
(4) Do not apply more than once a year, except as directed for quackgrass control.

Apply Simazine 4FL to these species of trees and shrubs, as recommended above:

CONIFERS arborvitae, Austrian pine, *Bishop pine, *knobcone pint, lodgepole pine (short pine), *Monterey pine, Mugho pine, red pine (Norway pine), Scotch pine, white pine, blue spruce, Norway spruce, red spruce, white spruce, balsam fir, Douglas fir, Fraser fir, white fir, hemlock, juniper, red cedar, white cedar, yew (Tasus spp.)
DECIDUOUS TREES AND WOODY ORNAMENTALS American elm, Siberian elm, barberry, boxelder, bush honeysuckle, caragana, cotoneaster, dogwood, eucalyptus, holly (Ilex spp.) (max. 3.2 qts./A), honey locust, Oregon grape (Mahonia spp.) Pieris spp. (max. 3.2 qts./A), red oak, Russian olive, *oleander, *palm (2 qts./A), *bottle brush, *carob
*For California only

SURFLAN TANK MIX

On Christmas tree plantings, use this tank mix for preemergence control of weeds listed on the Surflan 75W (or Surflan A>S>) and Simazine 4FL labels. Use on field grown conifer species listed on the labels for each herbicide plus grand fir, alpine fir,

Engelmann spruce, black spruce, Colorado blue spruce, Coulter pine, giant redwood, and Veitchi fir. Broadcast the mixture as a directed spray to the soil surface or as an overtop spray using 2 to 4 qts. of Simazine 4FL and 2.67 to 5.33 lbs. of Surflan 75W (or 2 to 4 qts. of Surflan A.S.). Apply in sufficient water per acre to uniformly treat the area. Follow overtop sprays with sprinkler irrigation to move the herbicide from leaf surfaces to the soil. Remove weed growth before application. Mix weed residues, prunings or trash into the soil, or remove them before treatment. Soil should be in good tilth and free of clods at time of application. Shallow cultivation (1-2 inches) after treatment will not reduce weed control. Observe all precautions and limitations on the Simazine 4FL and Surflan labels.

AAtrex* trademark of Novartis for atrazine, Eradicane* trademark of Gowan Company, LLC, Evik* trademark of Novartis for ametryne, Roundup* trademark of Monsanto company for glyphosate herbicide, Surflan* trademark of United Phosphorus for oryzalin, Sutan+* trademark of Stauffer Chemical Co., X-77* trademark of Loveland Products, Inc.

CONDITIONS OF SALE AND LIMITED WARRANTY

The Directions For Use of this product reflects the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with 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 use of the product in a manner inconsistent with its labeling, all of which are beyond the control of MICRO FLO COMPANY (MICRO FLO) or the SELLER. All such risks shall be assumed by the Buyer.

MICRO FLO warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions For Use, subject to the inherent risks, referred to above.

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