66222-246 12/6/2012 1/23

U S ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505P)
Ariel Rios Building
1200 Pennsylvania Ave , NW
Washington, D C 20460

A Reg Number	Date of Issuance
66222-246	DEC - 6 2012

Term of Issuance
Unconditional

Name of Pesticide Product
MANA 14201

NOTICE OF PESTICIDE
X Registration
__Reregistration
(under FIFRA as amended)

Name and Address of Registrant (include ZIP Code)

Makhteshim Agan of North America, Inc
3120 Highwoods Boulevard, Suite 100
Raleigh, NC 27604

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

On the basis of information furnished by the registrant the above named pesticide is hereby registered/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 sec 3(c)(5) provided that you address the following

1) Submit and/or cite all data required for registration/reregistration review of your product when the Agency requires all registrants of similar products to submit data If required, failure to submit acceptable data to fulfill these requirements may result in registration cancellation in accordance with FIFRA section 6(e)

2) Replace the phrase "EPA Reg No 66222-XXX" with "EPA Reg No 66222-246" and assure that the EPA Establishment Number and Net Contents are also on the label

3) Generate one-year storage stability (830 6317) and corrosion characteristics (830 6320) data on the product The observations should be made at 0, 3, 6, 9, and 12 month intervals The results must be submitted to the Agency in electronic and hard copy format within 15 months of the date on this notice

4) The phrase "Soybean Grass and Broadleaf Weed Control" appearing as the use site under the product name at the top of page 1 is confusing and must be clarified Replace "Soybean Grass and Broadleaf Weed Control" with "For control of Grass and Broadleaf Weeds in Soybeans" or similar language clearly and accurately representing the use of the product

5) NOTE Per the chemistry review, the Basic Confidential Statements of Formula dated July 6, 2012 is acceptable

SEE NEXT PAGE FOR ADDITIONAL COMMENTS

Signature of Approving Official	Date
Kathryn V Montague Product Manager 23 Herbicide Branch Registration Division (7505P)	DEC - 6 2012

6) Per the Acute Toxicity Review, the specific treatment statements in the First Aid box on page 1 must be reordered to appear as follows

IF SWALLOWED
IF ON SKIN OR CLOTHING
IF IN EYES
IF INHALED

NOTE The IF INHALED statement appearing in the FIRST AID box is not required for this product This optional statement may remain on the label as additional safety information for product users or it may be removed from the label

7) Per the Acute Toxicity Review, the text "NOTE TO PHYSICIAN – Probably mucosal damage may contraindicate the use of gastric lavage " appearing on page 1 at the bottom of the FIRST AID box is not required for this product and must be removed

8) Under the HAZARDS TO HUMANS AND DOMESTIC ANIMALS header at the top of page 2, the text that reads "This product contains fomesafen which has been determined to cause tumors in laboratory animals (mice) Risks can be reduced by closely following use directions and precautions and by wearing the protective clothing specified elsewhere on this label " is not appropriate for this product and may be removed from the label

9) Per the Acute Toxicity Review, the paragraph beginning with "CAUSES EYE AND SKIN IRRITATION " appearing near the top of page 2 under the "HAZARDS TO HUMANS AND DOMESTIC ANIMALS" header in the PRECAUTIONARY STATEMENTS section must be revised to read "Causes skin irritation Causes moderate eye irritation Harmful if absorbed through skin Harmful if swallowed Do not get on skin or on clothing Avoid contact with eyes Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals "

10) The text requiring a respirator for aerial application mixers and loaders on page 2 in the PERSONAL PROTECTIVE EQUIPMENT section that reads "In addition for aerial applications mixers and loaders handling more than 150 gallons of MANA 14201 in any single workday must wear Dust/mist filtering NIOSH-approved respirator with any N, R, P, or HE filter " is not appropriate for this product and may be removed from the label

11) Per the Acute Toxicity Review, protective equipment laundering instructions must appear on the label The statement "Follow the 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 " must appear just below the last PPE requirement that reads "Chemical-resistant apron when cleaning equipment, mixing or loading " in the PERSONAL PROTECTIVE EQUIPMENT section on page 2

SEE NEXT PAGE

12) Per the Acute Toxicity Review, the first bullet in the USER SAFETY RECOMMENDATIONS box on page 2 must be revised to read "Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet "

13) Per the Acute Toxicity Review, an additional bullet must be added to the USER SAFETY RECOMMENDATIONS box appearing on page 2 that reads "Remove and wash contaminated clothing before reuse "

14) The GROUNDWATER ADVISORY appearing on page 3 must be relocated to appear in the ENVIRONMENTAL HAZARDS section on page 2

15) The term "GENERAL INFORMATION" appearing as a header near the middle on page 5 must be replaced with the term "PRODUCT INFORMATION"

16) The Tank Mixtures section appearing at the bottom of page 5 is incomplete This text must be understandable for product users Complete the sentence by making the appropriate revision

17) In the middle of page 7 under the CROP ROTATION header, the states appearing OH, KY, IL, IN, IA, CT, ME, MA, NH, NY, RI, and VT must be spelled out to appear Ohio, Kentucky, Illinois, Indiana, and Iowa, etc

18) NOTE Check formatting in last sentence of Band Applications at bottom of page 6

19) Under Table 2, the header must be changed from "GENERAL PRECAUTIONS AND RESTRICTIONS FOR USE OF MANA 14201 ON SOYBEANS" must be revised to read "RESTRICTIONS AND PRECAUTIONS FOR USE OF MANA 14201 ON SOYBEANS"

20) NOTE Check formatting under the restrictions header continuing onto page 8, for Region 4 appearing as number 4 at the top of the page

21) For consistency, the header appearing under the Tank Mix section that reads "Precautions and Restrictions for Use of MANA 14201 in Tank Mixtures on Soybeans" appearing on page 16 must be revised to read "Restrictions and Precautions for Use of MANA 14201 in Tank Mixtures on Soybeans"

22) The second to last sentence in the Nonrefillable Container (five gallons or less) handling instructions in the Storage and Disposal box on page 19 must be corrected by adding the word "by" for the statement to read "Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, if allowed by state and local authorities, by burning

SEE NEXT PAGE

23) In the Storage and Disposal box on page 19, the ultimate disposition of the container must be addressed by adding the text "Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities " to appear as the last sentence in the Nonrefillable Container (greater than five gallons) handling instructions

24) In the Storage and Disposal box on page 19, the ultimate disposition of the container must be addressed by adding the text "For final disposal, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities " to appear as the last sentence in the Refillable Container handling instructions

25) NOTE While no additional data is being requested at this time, marketing claims made on the pesticide label must be substantiated by data maintained in your files If data supporting marketing claims made on the product label is not available then those claims must be removed

26) NOTE Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E) 40 CFR 156 10(a)(5) list examples of statements EPA may consider false or misleading In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance

27) Submit one (1) copy of the revised final printed label before the product is released for shipment

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec 6(e) Your release for shipment of the product constitutes acceptance of these conditions A stamped copy of the label is enclosed for your records

5/23

ACCEPTED
with COMMENTS
In EPA Letter Dated
DEC - 6 2012
Under the Federal In -ticide Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg No
66222 - 240

MANA 14201

(master label)

Soybean Grass and Broadleaf Weed Control

ACTIVE INGREDIENT	
Sodium salt of fomesafen	
5-[2-chloro-4-(trifluoromethyl)phenoxy]-N-(methylsulfonyl)-2-nitrobenzamide	22 1% *
OTHER INGREDIENTS	77 9%
TOTAL	100 0%

*Equivalent to 21 0% fomesafen or 1 88 lbs fomesafen active ingredient per gal

KEEP OUT OF REACH OF CHILDREN

WARNING/AVISO

Si usted no entienda 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)

Manufactured for
Makhteshim Agan of North America Inc
3120 Highwoods Blvd Suite 100
Raleigh NC 27604

EPA Reg No 66222-XXX

EPA Est No [redacted]

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 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 a poison control center or doctor • Do not give anything by mouth to an unconscious person
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 mouth-to-mouth if possible • Call a poison control center or doctor for further treatment advice
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment You may also contact PROSAR at 1-877-250 9291 for emergency medical treatment information	
NOTE TO PHYSICIAN – Probably mucosal damage may contraindicate the use of gastric lavage	

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING/AVISO

This product contains fomesafen which has been determined to cause tumors in laboratory animals (mice) Risks can be reduced by closely following use directions and precautions and by wearing the protective clothing specified elsewhere on this label

CAUSES EYE AND SKIN IRRITATION HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN Do not get on skin or on clothing Avoid breathing vapor or spray mist Avoid contact with eyes Prolonged or repeated skin contact may cause allergic reactions in some individuals **WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING**

PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

Applicators and other handlers must wear

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves such as barrier laminate nitrile rubber neoprene rubber or Viton®
- Chemical-resistant footwear plus socks
- Chemical-resistant apron when cleaning equipment mixing or loading

In addition for aerial applications mixers and loaders handling more than 150 gallons of MANA 14201 in any single workday must wear

- Dust/mist filtering NIOSH-approved respirator with any N R P or HE filter

USER SAFETY RECOMMENDATIONS

Users should

- Wash hands before eating drinking chewing gum using tobacco or using the toilet
- Remove clothing/PPE immediately if pesticide gets inside Then wash thoroughly and put on clean clothing
- Remove PPE immediately after handling this product Wash the outside of gloves before removing As soon as possible wash thoroughly and change into clean clothing

ENVIRONMENTAL HAZARDS

For Terrestrial Uses Only 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 water or rinsate Do not apply when weather conditions favor drift from target area

NOTICE Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product If the terms are not acceptable return the product at once unopened and the purchase price will be refunded

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 over short-sleeved shirt and short pants
- Chemical-resistant gloves such as barrier laminate nitrile rubber neoprene rubber or Viton
- Chemical-resistant footwear plus socks

GROUNDWATER ADVISORY

This chemical has properties and characteristics associated with chemicals detected in groundwater This chemical may leach into groundwater if used in areas where permeable particularly where the water table is shallow

SPRAY DRIFT MANAGEMENT ADVISORY

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR The interaction of many equipment-and-weather-related factors determines the potential for spray drift The applicator is responsible for considering all these factors when making decisions

The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops These requirements do not apply to forestry applications public health uses or to applications using dry formulations

1 The distance of the outer most nozzles on the boom must not exceed % 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

The applicator should be familiar with and take into account the information covered in the AERIAL DRIFT REDUCTION ADVISORY

SPRAY DRIFT REDUCTION ADVISORY INFORMATION

[This section is advisory in nature and does not supersede the mandatory label requirements]

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 pressure 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

- **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 the largest droplets and the lower drift

BOOM LENGTH

For some use patterns reducing the effective boom length to less than % 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 ft 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 downwind Therefore on the up and downwind edges of the field the applicator should 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 winds 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 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 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 nontarget crops) is minimal (e g when wind is blowing away from the sensitive areas)

CHEMIGATION APPLICATION

Do not apply MANA 14201 through any type of irrigation system

INTEGRATED PEST MANAGEMENT

MANA 14201 may be used as part of an Integrated Pest Management (IPM) program that can include biological cultural and genetic practices aimed at preventing economic pest damage Application of this product should be based on IPM principles and practices including field scouting or other detection methods correct target pest identification population monitoring and treating when target pest populations reach locally determined action thresholds Consult your state cooperative extension service professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area

RESISTANCE

Naturally occurring biotypes of certain broadleaf species with resistance to MANA 14201 and related products (same mode of action) are known to exist Selection of resistant biotypes through repeated use of these herbicides may result in control failures

If poor performance cannot be attributed to adverse weather conditions or improper application methods a resistant biotype may be present In such a case additional treatments with MANA 14201 or similar modes of action products are not recommended Consult your local MANA representative or agricultural advisor for assistance

GENERAL INFORMATION

Read all label directions before using

MANA 14201 is a selective herbicide which may be applied preplant preemergence or postemergence for control or suppression of broadleaf weeds grasses and sedges in soybeans The most consistent weed control comes from contact activity when MANA 14201 is applied as a postemergence application Thorough spray coverage of emerged weeds is very important Although soybean leaves may have some crinkling bronzing or spotting following a postemergence application of MANA 14201 the soybean plants will outgrow the effects and develop normally

Apply MANA 14201 to young actively growing weeds that are not under stress (i e from lack of moisture high temperature low soil fertility or chemical injury)

Certain germinating broadleaf weeds grasses and sedges may be controlled or suppressed by soil residual activity from either preplant preemergence or postemergence application if rainfall occurs shortly after application The extent and consistency of soil activity is dependent upon soil characteristics ground cover amount of rainfall following application and the rate of MANA 14201 used

Crop Uses MANA 14201 is registered only for use on soybeans

Grazing Do not graze livestock in areas treated with MANA 14201 or harvest treated areas for forage or hay

Crop Rotation See the **Crop Rotation** section of this label for specific instructions on crop rotation Crop injury may result if crop rotation guidelines are not followed

Replanting If replanting is necessary in fields previously treated with MANA 14201 the field may be replanted cotton dry beans snap beans or soybeans Do not apply a second application of MANA 14201 or other fomesafen-containing product as crop injury or illegal residues may occur in harvested crops If tank-mix combinations were used refer to product labels for any additional replanting instructions

Rainfastness MANA 14201 requires a 1 hour rain-free period for best results when applied postemergence

Cultivation Cultivation prior to application in not recommended Cultivation may put weeds under stress which could reduce control A timely cultivation 1-3 weeks after application may increase weed control with MANA 14201

Tank Mixtures Tank mixes of MANA 14201 with other pesticides fertilizers or any other additives except as specified on this label or other approved MANA supplemental labels may result in tank

SPRAY ADDITIVES

When using MANA 14201 as a postemergence application for broadleaf weed control a spray additive should be used Only spray additives cleared for use on growing crops under 40 CFR 180 1001 may be used in the spray mixture For best postemergence control of broadleaf weeds in Regions 2 3 4 and 5 (see Regional Use Maps) use MANA 14201 with 1 0-2 5% v/v liquid nitrogen (28% or similar) or a minimum of 8 5 lbs ammonium sulfate per 100 gallons of spray volume

For Postemergence Applications Always Add One of the Following except in tank mix with products prohibiting spray additives - (See Tank Mix Directions for Use)

Crop Oil Concentrate (COC) or Methylated Seed Oil (MSO) Use a nonphytotoxic COC or MOS containing 15-20% approved emulsifier at 0 5-1% v/v (2-4 quarts per 100 gallons) of finished spray volume COC or MSO can improve weed control but may slightly reduce crop tolerance

Nonionic Surfactant (NIS) Use a NIS containing at least 80% active ingredient at 0 25-0 5% v/v (2 4 quarts per 100 gallons) of finished spray volume (Region 1 and East of Interstates 79 and 77 for Regions 2 and 3)

Other Adjuvants Adjuvants other than COC or NIS may be used providing the product meets the following criteria (1) Is supported locally for use with MANA 14201 on soybeans through proven field trials from university and extension recommendations (2) Contains only EPA exempt ingredients (3) is compatible in mixture determined using a jar test and (4) Does not injure soybeans

Note Spray additives are not needed for preplant or preemergence applications unless MANA 14201 is being applied for burndown weed control

Recommended Mixing Order (1) fill spray tank with half the required amount of water and begin agitation* (2) add fertilizer (UAN AMS) (3) add dry pesticide formulations (4) add MANA 14201 (5) add liquid pesticide formulation (6) add adjuvant (MSO COC or NIS) (7) add remainder of water and then maintain constant agitation

*Compatibility agent 1 gallon per 500 gallons of water or 0 2% v/v may be added as needed

APPLICATION DIRECTIONS

Application Timing When applying MANA 14201 for postemergence broadleaf weed control the best broad spectrum control is achieved when the application is made to actively growing weeds This usually occurs 14 to 28 days after planting Refer to the weed control tables for specific recommendations on weed growth stages and rates

Ground Application Thorough spray coverage is important when using MANA 14201 If possible use a minimum spray volume of 15 gallons per acre and 30 60 psi at the nozzle tip On large weeds and/or dense foliage use 60 psi and a minimum of 20 gallons per acre to ensure coverage of weed foliage The use of flat fan nozzles will result in the most effective postemergence application of MANA 14201 Be sure the sprayer is calibrated to provide the proper volume and rate per acre In addition the boom and nozzle height must be adjusted to provide complete coverage of target weeds DO NOT USE FLOOD TYPE OR OTHER SPRAY NOZZLES WHICH DELIVER LARGE COARSE DROPLET

Band Applications Thorough weed coverage is important for postemergent control Best coverage is obtained with a minimum of two nozzles one directed to each side of the planted row Application with a single nozzle directed over the top of the row is not recommended for postemergence applications but is suitable for preemergence applications Cultivation of untreated areas may be needed following band applications When making postemergence band applications and cultivating in the same operation position nozzles in advance of the cultivation device This will reduce dust in the spray area Dust can intercept spray reducing weed coverage resulting in less than adequate weed control

Calculate the amount of herbicide and water volume needed for postemergence band treatment by the following formulas

Band width in inches / Row width in inches X Broadcast rate per acre = Band herbicide rate per acre

Band width in inches / Row width in inches X Broadcast volume per acre = Band herbicide rate per acre

Aerial Applications Use sufficient spray volume and pressure to ensure complete coverage on the target A minimum of 5 gallons per acre of spray mixture should be applied with a maximum of 10 gallons per acre to ensure coverage of weed foliage

CROP ROTATION

Do not rotate to any food or feed crops following application of MANA 14201 other than those listed below in **Table 1** or injury could result

Table 1 Time Interval Between Treatment With MANA 14201 and Planting Rotation Crops[1]

Crop	Months
Dry bean Snap bean Soybean Cotton	0
Small grains such as Wheat Barley Rye	4
Corn [1] Peanuts Peas Rice Seed Corn	10
Alfalfa Sunflower Sugar beet Sorghum[2] or any other crops	18

1 **Popcorn** Use 12 month minimum rotation interval for popcorn in the states of OH KY IL IN IA and Region 4 when applied at a rate of 1 0 pt /A or more **Sweet corn** Use 18 month minimum rotation interval for sweet corn in the states of CT ME MA NH NY RI VT and Region 5
2 **Sorghum** Sorghum may be planted back after 10 months in Region 1
3 Do not graze rotated small grain crops or harvest forage or straw for livestock

Table 2 Use Rate Table for MANA 14201 Application in Different Soybean Growing Regions

Region	Maximum Rate (Pints Per Acre)	Frequency of Use
1	1 6	Per year
2	1 6	Alternate years
3	1 3	Alternate years
4	1 0	Alternate years
5	0 75	Alternate years

GENERAL PRECAUTIONS AND RESTRICTIONS FOR USE OF MANA 14201 ON SOYBEANS

1 A maximum of 1 6 pints of MANA 14201 (or a maximum of 0 375 lb ai/A of fomesafen from any product containing fomesafen MANA 14201®, Vice™ Herbicide, or Reflex®) may be applied per acre per year in Region 1 (See **Region 1 Use Map**)
2 A maximum of 1 6 pints of MANA 14201 (or a maximum of 0 375 lb ai/A of fomesafen from any product containing fomesafen MANA 14201® VICE, or Reflex®) may be applied per acre in ALTERNATE years in Region 2 (See **Region 2 Use Map**)
3 A maximum of 1 3 pints of MANA 14201 (or a maximum of 0 313 lb ai/A of fomesafen from any product containing fomesafen MANA 14201® VICE or Reflex®) may be applied per acre in ALTERNATE

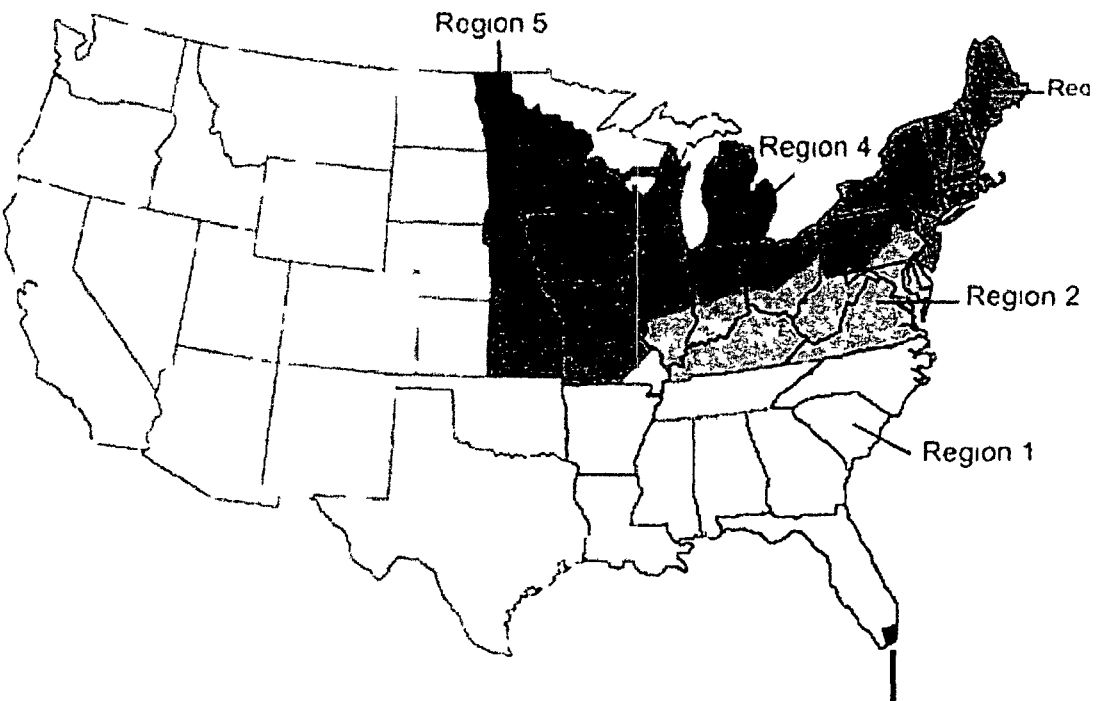
12/23

4 A maximum of 1 pint of MANA 14201 (or a maximum of 0 25 lb ai/A of fomesafen from any product containing fomesafen MANA 14201®, VICE, or Reflex®) may be applied per acre in ALTERNATE years in Region
4 (See **Region 4 Use Map**)
5 A maximum of 0 75 pint of MANA 14201 (or a maximum of 0 1875 lb ai/A of fomesafen from any product containing fomesafen MANA 14201®, VICE, or Reflex®) may be applied per acre in ALTERNATE years in Region 5 (See **Region 5 Use Map**)
6 Avoid overlapping spray swaths, as injury may occur to rotational crops
7 Do not graze treated areas or harvest for forage or hay
8 Do not apply within 45 days of soybean harvest
9 To provide adequate coverage it is recommended that ground speed not exceed 10 mph during application
10 Thoroughly clean the spray system with water and a commercial tank cleaner before and after each use

MANA 14201 - USE RATES AND WEEDS CONTROLLED

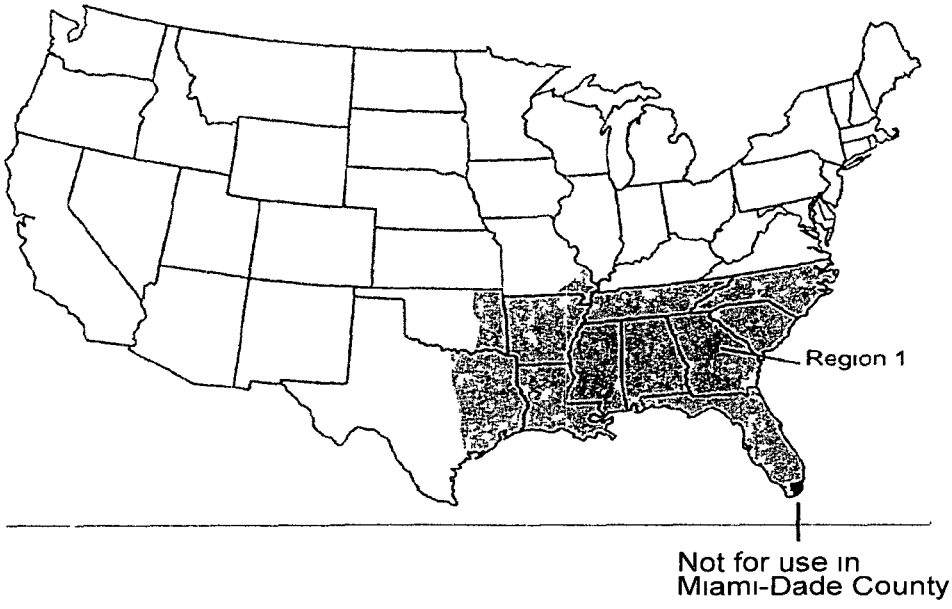
REFER TO MAP FOR DEFINITION OF SPECIFIED GEOGRAPHIC REGIONS

MANA 14201 REGIONAL USE MAP



REGION 1
(Maximum Rate 1 6 pints per acre per year)

REGION 1 Includes the following states or portion of states where MANA 14201 may be applied Alabama Arkansas Florida (except Miami-Dade County) Georgia Louisiana Mississippi Missouri (Counties of Bollinger Butler Cape Giradeau Dunklin Madison Mississippi New Madrid Pemiscot Perry Ripley Scott Stoddard and Wayne) North Carolina Oklahoma (East of U S Highway 75 and East of Indian Nation Parkway) South Carolina Tennessee and Texas (all areas East of U S Highway 77 to State Road 239 including all of Calhoun County)

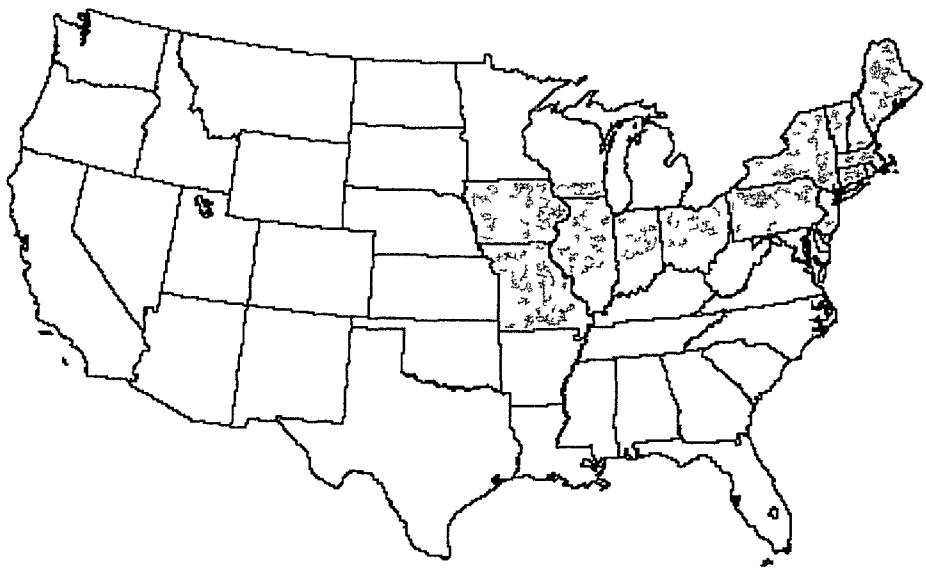


REGION 2
(Maximum Rate 1 6 pints per acre, alternate years)

REGION 2 Includes the following states or portion of states where MANA 14201 may be applied Delaware Kentucky Maryland Virginia and West Virginia South of Interstate 70 in the following states Illinois Indiana and Ohio and in Pennsylvania (all areas South of Interstate 80 to the intersection of U S Highway 15 and East of U S Highway 15 and U S Highway 522)

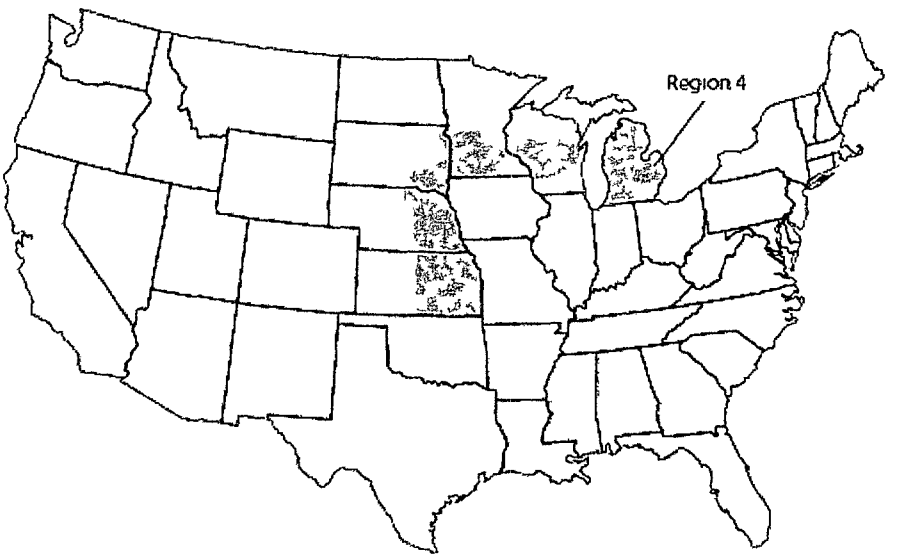
REGION 3
(Maximum Rate 1 3 pints per acre, alternate years)

REGION 3 Includes the following states or portion of states where MANA 14201 may be applied Connecticut Iowa Maine Massachusetts Missouri (all counties except for those listed in Region 1) New Hampshire New Jersey New York Pennsylvania (all areas except those listed in Region 2) Rhode Island Vermont Wisconsin (South of U S Highway 18 between Prairie Du Chien and Madison and South of Interstate 94 between Madison and Milwaukee) and North of Interstate 70 in the following states Illinois Indiana and Ohio



REGION 4
(Maximum Rate 1 pint per acre, alternate years)

REGION 4 Includes the following states or portion of states where MANA 14201 may be applied Kansas (all counties East of or intersected by U S Highway 281) Michigan (Southern Peninsula) Minnesota (all areas South of Interstate 94) Nebraska (all counties East of or intersected by U S Highway 281) and Wisconsin (all areas except those in Region 3 South of Interstate 94 from Minnesota state line to Eau Claire and South of U S Highway 29 from Eau Claire to Green Bay plus Barron Chippewa Clark Door Dunn Eau Claire Kewaunee Marathon Menominee Oconto Polk Shawano and St Croix counties) The following counties are excluded Adams Marquette Portage Waupaca Waushara and Wood) North Dakota (all areas East of Interstate 29 from Fargo South to the South Dakota state line) South Dakota (all areas East of Interstate 29 from the North Dakota state line to Watertown all areas East of Highway 81 from Watertown to Madison and all areas East and South of State Road 34 and U S Highway 281 to the Nebraska state line)



REGION 5
(Maximum Rate 0 75 pint per acre, alternate years)

REGION 5 Includes the following states or portion of states where MANA 14201 may be applied North Dakota (all areas East of U S Highway 281 except those areas in Region 4) South Dakota (all areas East of U S Highway 281 except those areas in Region 4) and Minnesota (all areas South of U S Highway 2 except those areas in Region 4)

WEEDS CONTROLLED

Table 3 Application Rates for Weeds Controlled with MANA 14201 at Different Growth Stages

Weed Controlled / Partially Controlled	Maximum Growth Stage (Number of True Leaves) for Control at the Specified Rate of MANA 14201			
	0 75 pint per acre	1 pint per acre	1 25 pints per acre	1 5 pints per acre
Anoda Spurred	--	2*	2	2
Balloonvine	--	--	2	2
Carpetweed	--	8 Diameter Size	Unlimited Size	Unlimited Size
Citron (Wild Watermelon)		2	4	4
Cocklebur Common	2	4	6	8
Copperleaf Hophornbeam	--	4	4	6
Copperleaf Virginia	--	4	4	6
Crotalaria Showy	--	6	6	8
Croton Tropic	--	4	4	6
Cucumber Volunteer	--	4	6	8
Eclipta		2	4	4
Groundcherry Cutleaf	--	4	6	8
Hemp	--	4	6	6
Horsenettle	--	2	4	4
Jimsonweed	4	6	8	8
Ladysthumb	2	2	4	6
Lambsquarters Common	2	2	2	2
Mexicanweed	--	2	2	4
Morningglory spp				
Cypressvine	2	4	6	6
Entireleaf var	3	3	4	5
Ivyleaf	3	3	4	5
Purple Moonflower	3	3	5	6
Red (Scarlet)	3	3	6	6
Smallflower	3	3	4	6
Pitted (Smallwhite)	4*	4	6	6
Tall (Common)	2	2	3	5
Palmleaf (Willowleaf)	3	3	6	6
Mustard Wild	4	6	8	6
Nightshade Black	2	4	6	6
Nutsedge Yellow	--	--	Suppression	Suppression
Pigweed spp				
Amaranth Palmer	2	4	6	6
Amaranth Spiny	2	2	4	6
Redroot	2	4	6	8
Smooth	2	4	6	6
Waterhemp common	2*	2	4	6
Waterhemp tall	2*	2	4	6
Poinsettia Wild	--	2	4	6
Purslane Common	-	Multi-Leaf 6 Diameter	Multi-Leaf 8 Diameter	Multi-Leaf 8 Diameter
Pusley Florida	--	2	2	4
Ragweed Common	4*	4	6	8

Weed Controlled / Partially Controlled	Maximum Growth Stage (Number of True Leaves) for Control at the Specified Rate of MANA 14201			
	0 75 pint per acre	1 pint per acre	1 25 pints per acre	1 5 pints per acre
Ragweed Giant	4*	4	6	8
Redweed	-	--	2*	3
Sesbania Hemp	--	8	12	12
Sicklepod	--	-	Cotyledon	Cotyledon
Sida Prickly	--	2*	2	4
Smartweed Pennsylvania	4*	4	6	6
Smellmelon	--	2	2	4
Spurge Prostrate	--	--	1 Diameter	1 Diameter
Spurge Spotted	--	--	2*	2*
Starbur Bristly	--	4	4	6
Sunflower Common	--	--	2	4
Velvetleaf	--	2	4	4
Venice Mallow	4	6	6	8
Witchweed	--	Multi-Leaf Up to 7	Multi Leaf Up to 10	Multi Leaf Up to 10
Yellow Rocket	4	4	6	8
Suppression of weeds with Flexstgar Significant activity but may not provide a level of control that is acceptable for commercial weed control				

MANA 14201 APPLICATION DIRECTIONS FOR SPECIAL WEED PROBLEMS

Suppression of Annual Grasses A postemergence application of MANA 14201 at 1-1 5 pints per acre may suppress the grasses listed in **Table 4** The same grasses may be controlled or suppressed by a preemergence application of *MANA 14201* at 1-1 5 pints per acre Consult **Use Rate Table** for maximum rate in each region For full-season broad-spectrum annual grass control Fusilade® OX or Fusion® herbicide should be used alone or in tank mix with MANA 14201 Consult **Tank Mix** section

Table 4 Grasses Controlled or Suppressed by MANA 14201 Applied Preemergence or Postemergence

Barnyardgrass	Goosegrass
Broadleaf Signalgrass	Johnsongrass Seedling
Crabgrass	Panicum, Fall
Foxtail (Giant, Green Yellow)	Panicum, Texas

Suppression of Perennial Weeds A postemergence application of MANA 14201 at rates of 1-1 5 pints per acre will aid in suppressing the *above*-ground portions of the following weeds until crop canopy can assist in suppression (1) Climbing mildweed (2) honeyvine milkweed (3) field bindweed (4) hedge bindweed and (5) trumpetcreeper These perennial weeds will continue to regrow from underground rootstocks *even* if above-ground foliage is temporarily controlled or retarded Even though MANA 14201 and crop competition can suppress perennial weeds for a season the rootstocks will continue to live and reestablishment will occur in subsequent years

TANK MIX AND SEQUENTIAL APPLICATIONS OF MANA 14201 FOR SOYBEANS

MANA 14201 can be used sequentially or in tank mix with one or more of the following products Assure II® Basagran® Butyrac® Classic® FirstRate® Fusilade DX Fusion Ignite® Glyphosate (such as Touchdown® Roundup® Glyphogan(™) Gramoxone Inteon® Harmony® Poast® Poast Plus® Pursuit® Raptor® Resource® Scepter® Select® and Synchrony® STS®

Under certain conditions the mixture of MANA 14201 with one or more of the above mentioned broadleaf herbicides may cause a reduction in activity of any postemergence grass herbicide in the mixture

For sequential applications allow 2 3days after the application of the grass herbicide before applying MANA 14201 or MANA 14201 mixtures Where MANA 14201 or the MANA 14201 mixture is applied first apply the grass herbicide when grass weeds begin to develop new leaves (generally around 7 days)

Precautions and Restrictions for Use of MANA 14201 in Tank Mixtures on Soybeans

1 Tank mix applications can result in increased crop injury as compared to either product used alone
2 Do not exceed 1 fl oz of Butyrac per acre in mixture with MANA 14201
3 Do not exceed 0 25 oz /A of Synchrony STS herbicide in the tank with labeled rates of MANA 14201 on non-STS varieties This tank mix can be applied postemergence to any soybean variety for additional broadleaf weed control Refer to the Synchrony STS label for more information and crop rotation restrictions
4 Always read and follow the recommendations restrictions and limitations for all products whether used alone sequentially or in a tank mix The most restrictive labeling of any product used applies

GLYPHOSATE TOLERANT SOYBEAN TANK MIXES

MANA 14201 can be mixed with glyphosate products that are labeled for treatment of Roundup Ready soybeans (i e glyphosate tolerant) Examples of glyphosate products for Roundup Ready crops include Glyphogan Glyphogan Plus Roundup and Touchdown MANA 14201 should be applied in the tank mix at a rate of 6-12 fluid ounces per acre Tank mixing MANA 14201 with a Roundup Ready glyphosate product may improve postemergence control of a number of target weeds including waterhemp hemp sesbania black nightshade and morningglory spp i e species which have a tolerance to glyphosate products but are susceptible to MANA 14201

Read and follow the directions for the use of spray additives in the tank mix on the glyphosate product label

Even very small quantities of this tank mix can cause death or severe crop damage to non-target species Do not allow this tank mix to contact any vegetation other than that targeted

Important If this tank mix is applied postemergence to soybeans which do not contain the Roundup Ready gene the result will be death or severe injury to the soybean crop

Read and follow the directions and restrictions in all tank-mix partner labels The most restrictive directions of those products must be followed

APPENDIX

Table 5 Scientific names for those weeds referred to in the MANA 14201 label

COMMON NAME	SCIENTIFIC NAME
Amaranth Palmer	*Amaranthus palmeri*
Amaranth Spiny	*Amaranthus spinosus*
Anoda Spurred	*Anoda cristata*
Balloonvine	*Cadiospermum halicacabum*
Barnyardgrass	*Echinochloa crus-galli*
Bindweed Field	*Convolvulus arvensis*
Bindweed Hedge	*Calystegia sepium*
Broadleaf Signalgrass	*Brachiaria platyphylla*
Carpetweed	*Mollugo verticillata*
Citron (Wild Watermelon)	*Citrullus vulgaris*
Cocklebur Common	*Xanthium strumarium*
Copperleaf Hophornbeam	*Acalypha ostryifolia*
Copperleaf Virginia	*Acalypha virginica*
Crabgrass	*Digitaria spp*
Crotalaria Showy	*Crotalaria spectabilis*
Croton Tropic	*Croton glandulosus*
Cucumber Volunteer	*Cucumbis sativas*
Eclipta	*Eclipta prostrate*
Foxtail Giant	*Setaria faberi*
Foxtail Green	*Setaria viridis*
Foxtail Yellow	*Setaria glauca*
Goosegrass	*Eleusine indica*
Groundcherry Cutleaf	*Physalis angulata*
Hemp	*Cannabis sativa*
Horsenettle	*Solanum carolinense*
Jimsonweed	*Datura stramonium*
Johnsongrass Seedling	*Sorghum halepense*
Ladysthumb	*Polygonum persicaria*
Lambsquarters Common	*Chenopodium album*
Mexicanweed	*Caperonia castaniifolia*
Milkweed Climbing	*Sarcostemma cyanchoides*
Milkweed Honeyvine	*Ampelamus albidus*
Morningglory Cypressvine	*Ipomoea quamoclit*
Entireleaf var	*Ipomoea hederacea var integriuscula*
Ivyleaf	*Ipomoea hederacea var hederacea*
Purple Moonflower	*Ipomoea turbinata*
Red (Scarlet)	*Ipomoea coccinea*
Smallflower	*Jacquemontia tamnifolia*
Pitted (Smallwhite)	*Ipomoea lacunose*
Tall (Common)	*Ipomoea purpurea*
Palmleaf (Willowleaf)	*Ipomoea wrightii*
Mustard Wild	*Brassica kaber*
Nightshade Black	*Solanum nigrum*

Nutsedge Yellow	*Cyperus esculentus*
Panicum Fall	*Panicum dichotomiflorum*
Panicum Texas	*Panicum texanum*
Pigweed Redroot	*Amaranthus retroflexus*
Pigweed Smooth	*Amaranthus hybridus*
Poinsettia Wild	*Euphorbia heterophylla*
Purslane Common	*Portulaca oleracea*
Pusley Florida	*Richardia scabra*
Ragweed Common	*Ambrosia artemisifolia*
Ragweed Giant	*Ambrosia trifida*
Redweed	*Melochia corchorifolia*
Sesbania Hemp	*Sesbania exaltata*
Sicklepod	*Cassia obtusifolia*
Sida Prickly	*Sida spinosa*
Smartweed Pennsylvania	*Polygonum pennsylvanicum*
Smellmelon	*Cucumis melo*
Prostrate	*Euphorbia humistrata*
Spurge Spotted	*Euphorbia maculata*
Starbur Bristly	*Acanthospermum hispidum*
Sunflower Common	*Helianthus annuus*
Trumpetcreeper	*Campsis radicans*
Velvetleaf	*Abutilon theophrasti*
Venice Mallow	*Hibiscus trionum*
Waterhemp Common	*Amaranthus rudis*
Waterhemp Tall	*Amaranthus tuberculatos*
Witchweed	*Striga asiatica*
Yellow Rocket	*Barbarea vulgaris*

STORAGE AND DISPOSAL

Do not contaminate water food or feed by storage or disposal
Prohibitions Open dumping is prohibited Do not reuse empty container
PESTICIDE STORAGE Store above 32°F in original containers only If product freezes return to room temperature and agitate to reconstitute Keep container closed when not in use Do not store near food or feed In case of spill or leak on floor or paved surfaces soak up with sand earth or synthetic absorbent Remove to chemical waste area
PESTICIDE DISPOSAL Pesticide wastes are acutely hazardous Improper disposal of excess pesticide spray mixture or rinsate is a violation of federal law If these wastes cannot be disposed of by use according to label instructions contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance
CONTAINER HANDLING
Nonrefillable Container (five gallons or less) Nonrefillable container Do not reuse or refill this container Offer for recycling if available Clean container promptly after emptying Triple rinse as follows Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip Fill the container 1/4 full with water and recap Shake for 10 seconds Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal Drain for 10 seconds after the flow begins to drip Repeat this procedure two more times Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration if allowed by state and local authorities by burning If burned stay out of smoke
Nonrefillable Container (greater than five gallons) Nonrefillable container Do not reuse or refill this container Offer for recycling if available Clean container promptly after emptying Triple rinse as follows Empty the remaining contents into application equipment or a mix tank Fill the container 1/4 full with water Replace and tighten closures Tip container on its side and roll it back and forth ensuring at least one complete revolution for 30 seconds Stand the container on its end and tip it back and forth several times Turn the container over onto its other end and tip it back and forth several times Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal Repeat this procedure two more times
Refillable Container Refillable container Refill this container with Fomesafen 2 SL Do not reuse this container for any other purpose Cleaning the container before final disposal is the responsibility of the person disposing of the container Cleaning before refilling is the responsibility of the refiller To clean the container before final disposal empty the remaining contents from this container into application equipment or mix tank Fill the container about 10 percent full with water Agitate vigorously or recirculate water with the pump for 2 minutes Pour or pump rinsate into application equipment or rinsate collection system Repeat this rinsing procedure two more times
CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER

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
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