

100-1152

07/26/2002

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

EPA Reg. Number:
100-1152

Date of Issuance:
Expiration Date:
June 4 2005

NOTICE OF PESTICIDE:

Registration
Reregistration

(under FIFRA, as amended)

Term of Issuance:
Conditional

Name of Pesticide Product:
Lumax™ Selective
Herbicide

Name and Address of Registrant (include ZIP Code):

Syngenta Crop Protection, Inc.
P.O. Box 18300
Greensboro, NC 27419

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

1. Add the phrase "EPA Registration No.100-1152" to the label before you release the product for shipment.

COMMENTS CONTINUED ON PAGE 2 AND 3 OF THIS NOTICE OF REGISTRATION

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

Joanne I. Miller
Product Manager (23)
Herbicide Branch
Registration Division (7505C)

Enclosure

Signature of Approving Official:

Date:

JUL 26 2002

Comments Continued:

2. Submit the following data required for the registration of this pesticide product within 12 months from the date of this registration .

<u>EPA Guideline Data Number</u>	<u>Guideline Descriptor</u>
6317	Storage Stability
6320	Corrosion Characteristics

3. By June 4, 2005 submit acceptable data required for the conditional registration of mesotrine, one of the active ingredients in this pesticide product. The data required are listed and described under the following EPA Guideline Numbers :

EPA Guideline	Descriptor of Study
Residue Chemistry	
860-1340	Residue Analytical Method (Revised Interference Study)
860-1300	(a) Nature of the Residue in Plants (b) Nature of the Residue in Livestock
Toxicology	
870-3465	90-Day; Inhalation Study (Administrated Dose of 1,000 mg/kg/day for 28 days)
870-3465	Developmental Neurotoxicity Study (in mice)
Ecological Effects	
123-1 (a) and (b)	a. Tier II. Seed Germination/Seedling Emergence b. Tier II. Vegetative Vigor
123-2	Tier II, Aquatic Plant Growth

Comments Continued:

Environmental Fate

164-1

Dissipation Studies - Field Soil (Restudy Extraction Procedures for Soil, with Special Emphasis on Aged Residues in Soil . Other Environmental Fate Studies May Be Required Pending the Results from This Study.

166-1

Small-Scale Propective Ground Water Monitoring Study

4. Submit production information (pounds or gallons produced) for this product for the fiscal year in which the use on field corn is conditionally registered, in accordance with FIFRA section 29. The fiscal year begins October 1, and ends September 30. The production information will be submitted to the Agency no later than November 15, following the end of the preceding fiscal year.

This information is to be submitted to:

Registration Support Branch
Registration Division (7505C)
Environmental Protection Agency
Washington, DC 20460

5. Submit and/or cite all data required for the registration of this product when the Agency requires all registrants of similar products to submit data; and submit acceptable responses required for reregistration of this product under FIFRA, section 4.
 6. Submit one (1) copy of the final printed labeling before you release this product for shipment.
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2.5, 120, 220, 330 Gallon and Bulk Booklet

**RESTRICTED USE PESTICIDE
(GROUND AND SURFACE WATER CONCERNS)**

**FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR
PERSONS UNDER THEIR DIRECT SUPERVISION, AND ONLY FOR THOSE USES
COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.**

**THIS PRODUCT IS A RESTRICTED-USE HERBICIDE DUE TO GROUND AND
SURFACE WATER CONCERNS. USERS MUST READ AND FOLLOW ALL
PRECAUTIONARY STATEMENTS AND INSTRUCTIONS FOR USE IN ORDER TO
MINIMIZE POTENTIAL FOR ATRAZINE TO REACH GROUND AND SURFACE
WATER.**

Lumax™
Selective Herbicide

A Preemergence Herbicide for Control of Annual Grass and Broadleaf Weeds in Field Corn,
Field Production Seed Corn, and Field Silage Corn

Active Ingredients*:

S-Metolachlor: (CAS No. 87392-12-9)	29.40%
Atrazine**: (CAS No. 1912-24-9).....	11.00%
Mesotrione: (CAS No. 104206-82-8).....	2.94%
<u>Other Ingredients:</u>	<u>56.66%</u>
Total:	100.00%

*Active ingredients per gallon: S-Metolachlor 2.68 pounds, Mesotrione 0.268 pounds, and Atrazine 1.0 pound.

**Atrazine with a maximum of 0.4% related triazines.

KEEP OUT OF REACH OF CHILDREN.

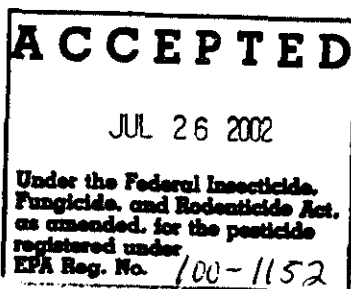
CAUTION

See additional precautionary statements and directions for use inside booklet

EPA Reg. No. 100-
EPA Est. No.

SCP xxxx

Net Weight
U.S. Standard Measure



FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a Poison Control Center or doctor for treatment advice
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a Poison Control Center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a Poison Control Center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a Poison Control Center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p>	
<p>HOT LINE NUMBER For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire or Accident), Call 1-800-888-8372</p>	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Causes moderate eye injury. Do not get in eyes or on clothing. Avoid contact with skin or clothing. Wash thoroughly with soap and water after handling and before eating, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse. Wear long-sleeved shirt and long pants, socks plus shoes and gloves. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Personal Protective Equipment

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves – Category A (e.g. barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or viton)
- Shoes plus socks

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Control Statements

Mixers and loaders supporting aerial applications are required to use closed systems. The closed system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)]. When using the closed system, the mixers' and loaders' PPE requirements may be reduced or modified as specified in the WPS.

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

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 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, 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. This pesticide contains atrazine, which has been shown to be toxic to aquatic invertebrates. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas.

Ground Water Advisory

Lumax contains the active ingredients S-metolachlor, mesotrione and atrazine.

Atrazine can travel (seep or leach) through soil and can enter ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (ground water) is close to the surface and where these soils are very permeable, i.e., well-drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

S-metolachlor has the potential to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

Surface Water Advisory

The active ingredients in this product have the potential to contaminate surface water through ground spray drift. Under some conditions, the active ingredients may also have a high potential for runoff into surface water (primarily via dissolution in runoff water) for several months post-application. These include poorly drained or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

Mixing/Loading Instructions

Care must be taken when using this product to prevent back-siphoning into wells, spills, or improper disposal of excess pesticide, spray mixtures, or rinsates.

Check valves or antisiphoning devices must be used on mixing equipment.

This product may not be mixed/loaded or used within 50 ft. of wells, including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing to this product into or from pesticide handling or application equipment or containers within 50 ft. of any well are prohibited, unless conducted on all impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash water, and rain water that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain, at a minimum, 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site.

States may have in effect additional requirements regarding well head setbacks and operational area containment.

This product may not be mixed or loaded within 50 ft. of perennial or intermittent streams and rivers, natural or impounded lakes and reservoirs. This product may not be applied within 66 ft. of the points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 ft. from the edge of natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66 ft. buffer or setback from runoff entry points must be planted to crop, or seeded with grass or other suitable crop.

Tile-Terraced Fields Containing Standpipes

To ensure protection of surface water from runoff through standpipes with tile-outlets in terraced fields, one of the following options may be used:

1. Do not apply this product within 66 ft. of standpipes in tile-outletted terraced fields.
2. Apply this product to the entire tile-outletted terraced field and immediately incorporate it to a depth of 2-3 inches in the entire tile-outletted terraced field.
3. Apply this product to the entire tile-outletted terraced field under a no-till practice only when a high crop residue management practice is practiced. High crop residue management practice is described as a crop management practice where little or no crop residue is removed from the field during and after crop harvest.

Physical and Chemical Hazards

Do not use or store near heat or open flame.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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.

The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, Inc. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall SYNGENTA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

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. Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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 and water, wear:

- Coveralls over long-sleeved shirt and long pants
- Socks and chemical resistant footwear
- Chemical-resistant gloves – Category A (e.g. barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or viton)

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL, CROP INJURY, OR ILLEGAL RESIDUES.

Note: Not for sale, use, or distribution in Nassau County or Suffolk County, New York.

STORAGE AND DISPOSAL

Prohibitions

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Keep away from heat and flame.

Storage

Keep container tightly closed when not in use. Do not store near seeds, fertilizers, or foodstuffs. Can be stored at temperatures as low as -10°F.

Ground water contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material.

Pesticide Disposal

Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Rinse spray equipment. 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 as described above, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Container Disposal

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

FOR BULK AND MINI-BULK CONTAINERS

Container Disposal

When this container is empty, replace the cap and seal all openings that have been opened during use; and return the container to the point of purchase or to a designated location named at time of purchase of this product. This container must only be refilled with this pesticide product. **DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE.** Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transporting. Do not transport if this container is damaged or leaking. If the container is damaged, leaking, or obsolete, contact Syngenta Crop Protection, Inc. at 1-800-888-8372. If not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling. Disposal of this container must be in compliance with state and local regulations.

Container Precautions

Before refilling, inspect thoroughly for damage such as cracks, punctures, bulges, dents, abrasions, and damaged or worn threads on closure devices.

For Mini-Bulk Containers

REFILL ONLY WITH Lumax herbicide. The contents of this container cannot be completely removed by cleaning. Refilling with materials other than Lumax will result in contamination and may weaken container.

After filling and before transporting, check for leaks.

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Do not refill or transport damaged or leaking container.

Circulation before dispensing is required.

DO NOT USE MINI-BULK CONTAINERS FOR THE STORAGE OF FOOD, FEED, OR DRINKING WATER.

GENERAL INFORMATION

Lumax may be used only in the culture of field corn, field corn seed corn, and field corn silage.

Lumax is a selective herbicide recommended for preemergence use for control of most annual grasses and broadleaf weeds in field corn. Lumax may also be applied early postemergence for the control of broadleaf weeds in field corn. See Table 1 and 2 for a list of weeds controlled. Lumax will not provide adequate control of grasses that are emerged at the time of application.

Lumax is a unique combination of the herbicides: S-metolachlor, mesotrione, and atrazine plus the safener Benoxacor. Lumax controls weeds by interfering with normal germination and seedling development. It is recommended for control of the weeds listed in the Tables 1 and 2.

USE PRECAUTIONS

Read all label directions before using.

1. Do not apply this product through any type of irrigation system.
2. Do not apply under conditions which favor runoff or wind erosion of soil containing this product to nontarget areas.
3. To prevent off-site movement due to runoff or wind erosion:

Avoid treating powdery dry or light sand soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.

Do not apply to impervious substrates, such as paved or highly compacted surfaces.

Do not use tailwater from the first flood or furrow irrigation of treated fields to treat nontarget crops, unless at least ½ inch of rainfall has occurred between application and the first irrigation.

4. Where reference is made to weeds partially controlled, partial control can either mean erratic control from good to poor or consistent control at a level below that generally considered acceptable for commercial weed control.
5. Dry weather following preemergence application of Lumax or a tank mixture may reduce effectiveness. Cultivate if weeds develop in conventional tillage corn.

6. Observe all precautions and limitations on the label of each product used in tank mixtures.
7. Thoroughly clean sprayer or other application device before using. Dispose of cleaning solution in a responsible manner. Do not use a sprayer or applicator contaminated with other materials, or crop damage or sprayer clogging of the application device may occur.
8. This product will not provide consistent control of emerged grass weeds.
9. Do not apply more than 3 qts. of Lumax per growing season.
10. Do not apply Lumax early postemergence if the corn crop was treated with Counter® or Lorsban® insecticide, as severe corn injury may occur.
11. Do not make foliar postemergence applications of Lumax in a tank mix with any organophosphate or carbamate insecticide.
12. Do not make a foliar postemergence application of any organophosphate or carbamate insecticide within 7 days before or 7 days after a Lumax application, or severe corn injury may occur.
13. Do not use Lumax on any crop other than field corn (for grain, seed, or silage),
14. Do not apply metolachlor containing products, such as Inter 8E II or Inter Plus II, in tank mixture or as sequential applications with Lumax.
15. Do not use Lumax in the culture of sweet corn, popcorn, ornamental (Indian) corn.
16. Do not contaminate irrigation water used for crops other than field corn or water used for domestic purposes.
17. Avoid drift onto adjacent crops.
18. Avoid spray overlap, as crop injury may result.
19. Do not allow Lumax to contaminate feed or food.
20. Do not store Lumax near seeds, fertilizers, or foodstuffs.
21. All containers of Lumax must be kept tightly closed when not in use.

Applied according to directions and under normal growing conditions, Lumax will not harm the treated crop. During germination and early stages of growth, extended periods of unusually cold and wet or hot and dry weather, insect or plant disease attack, carryover pesticide residues, the use of certain soil applied systemic insecticides, improperly placed fertilizers or soil insecticides, may weaken crop seedlings. Lumax used under these conditions could result in crop injury.

RESISTANCE MANAGEMENT

Naturally occurring biotypes of certain broadleaf weed species with resistance to triazines or ALS herbicides are known to exist. However, no known resistance to this product exists and there are no known instances of cross resistance between this herbicide and other classes of herbicides. If biotypes of weeds resistant to triazines or ALS inhibitors are present in the field, this herbicide should control them if they are listed in Table 1 and 2.

INTEGRATED PEST (WEED) MANAGEMENT

Lumax may be integrated into an overall pest management strategy. Practices known to reduce weed development (tillage, crop competition) and herbicide use (weed scouting, proper application timing, banding, and rotations) should be followed wherever possible. Consult local agricultural and weed authorities for additional Integrated Pest Management strategies established for your area.

SOIL ORGANIC MATTER

The organic matter of the soil on which the application is to be made must be known or determined prior to application. The use rate of Lumax is based on percent soil organic matter.

USE RATES IN ALL TILLAGE SYSTEMS (CONVENTIONAL, REDUCED, AND NO-TILL)

The soil organic matter content of the field on which Lumax is to be applied must be known. If soil organic matter content is less than 3% use 2.5 qts. of Lumax per acre. If soil organic matter content is 3% or greater use 3 qts. of Lumax per acre. Do not apply more than 10 days prior to planting or to field corn higher than 5 inches.

LUMAX RATE LIMITATIONS

Certain states may have established rate limitations within specific geographical areas for the use of atrazine. These more restrictive/protective requirements must be followed. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations.

Note: For purposes of calculating total atrazine active ingredient applied, Lumax contains 1.0 lb. a.i. Atrazine plus relateds per gallon.

REDUCED AND NO-TILL SYSTEMS

Lumax may be used in reduced and no-till systems. The highest levels of control will be obtained when applications are made as close to planting as possible. It is recommended that a burndown herbicide such as Gramoxone® Extra, Gramoxone® Max, Touchdown®, Roundup Ultra®, Roundup UltraMax™ or 2,4-D be tank mixed with Lumax in reduced or no-till systems if weeds are present at application and the field corn has not yet emerged.

WEEDS CONTROLLED

Lumax applied as directed in this label will control or suppress the weeds listed in Tables 1 and 2. Additional weeds may be controlled with tank mixes. See the **Lumax Tank Mix Combinations** section for recommended tank mix combinations. Always consult the tank mix product labels for specific rates and use directions.

Table 1. Weeds Controlled or Partially Controlled by Preemergence Applications of Lumax

Common Name	Weed Type ¹	Scientific Name	C = Control PC = Partial Control
Barnyardgrass	G	<i>Echinochloa crus-galli</i>	C
Broadleaf signalgrass	G	<i>Bracharia platyphylla</i>	C
Browntop panicum	G	<i>Panicum fasciculatum</i>	C
Buffalobur	B	<i>Solanum rostratum</i>	C
Carpetweed	B	<i>Mollugo verticillata</i>	C
Cocklebur, common	B	<i>Xanthium strumarium</i>	PC
Crabgrass	G	<i>Digitaria</i> spp.	C
Crowfootgrass	G	<i>Dactyloctenium aegyptium</i>	C
Fall panicum	G	<i>Panicum dichotomiflorum</i>	C
Field sandbur	G	<i>Cenchrus incertus</i>	PC
Florida pusley	B	<i>Richardia scabra</i>	C
Foxtail millet	G	<i>Setaria italica</i>	C
Galinsoga	B	<i>Galinsoga parviflora</i>	C
Giant foxtail	G	<i>Setaria faberi</i>	C
Goosegrass	G	<i>Eleusine indica</i>	C
Green foxtail	G	<i>Setaria viridis</i>	C
Jimsonweed	B	<i>Datura stramonium</i>	C
Kochia	B	<i>Kochia scoparia</i>	C

Common Name	Weed Type ¹	Scientific Name	C = Control PC = Partial Control
Lambsquarters, common	B	<i>Chenopodium album</i>	C
Morningglory, ivyleaf/entireleaf	B	<i>Ipomoea hederacea</i>	PC
Nightshade, eastern black	B	<i>Solanum ptycanthum</i>	C
Palmer amaranth	B	<i>Amaranthus palmeri</i>	C
Prairie cupgrass	G	<i>Eriochloa contracta</i>	C
Prickly sida	B	<i>Sida spinosa</i>	PC
Purslane, common	B	<i>Portulaca oleracea</i>	C
Ragweed, common	B	<i>Ambrosia artemisiifolia</i>	C
Ragweed, giant*	B	<i>Ambrosia trifida</i>	C*
Red rice	G	<i>Oryza sativa</i>	C
Red sprangletop	G	<i>Leptochloa filiformis</i>	C
Redroot pigweed	B	<i>Amaranthus retroflexus</i>	C
Robust foxtail (purple, white)	G	<i>Setaria</i> spp.	C
Seedling johnsongrass	G	<i>Sorghum halepense</i>	PC
Shattercane	G	<i>Sorghum bicolor</i>	PC
Smartweed, ladysthumb	B	<i>Polygonum persicaria</i>	C
Smartweed, Pennsylvania	B	<i>Polygonum pennsylvanicum</i>	C
Southwestern cupgrass	G	<i>Eriochloa gracilis</i>	C
Texas panicum	G	<i>Panicum texanum</i>	PC
Velvetleaf	B	<i>Abutilon theophrasti</i>	C
Waterhemp, common	B	<i>Amaranthus tuberculatus</i>	C
Waterhemp, tall	B	<i>Amaranthus rudis</i>	C
Wild proso millet	G	<i>Panicum miliaceum</i>	PC

Common Name	Weed Type ¹	Scientific Name	C = Control PC = Partial Control
Witchgrass	G	<i>Panicum capillare</i>	C
Woolly cupgrass	G	<i>Eriochloa villosa</i>	PC
Yellow foxtail	G	<i>Setaria glauca</i>	C
Yellow nutsedge	S	<i>Cyperus esculentus</i>	C

¹B=Broadleaf, G=Grass, S=Sedge

*For control of moderate to heavy populations, use 3.0 qt. Rate.

Thoroughly till soil or make an application of a burndown herbicide to destroy germinating and emerged weeds. Plant crop into moist soil immediately after tillage.

If a significant rainfall does not occur within 7 days after application, weed control may be decreased. If irrigation is available, apply 1/2 to 1 inch of water. If irrigation is not available, a uniform shallow cultivation is recommended as as soon as weeds emerge.

Table 2. Weeds Controlled or Partially Controlled by Early Postemergence Applications of Lumax

Common Name	Weed Type ¹	Scientific Name	C = Control PC = Partial Control
Buffalobur	B	<i>Solanum rostratum</i>	C
Carpetweed	B	<i>Mollugo verticillata</i>	C
Cocklebur, common	B	<i>Xanthium strumarium</i>	C
Dandelion	B	<i>Taraxacum officinale</i> WEBER	PC
Florida pusley	B	<i>Richardia scabra</i>	C
Galinsoga	B	<i>Galinsoga parviflora</i>	C
Hemp	B	<i>Cannabis sativa</i> L.	C
Horsenettle	B	<i>Solanum carolinense</i>	C
Horseweed	B	<i>Hippuris vulgaris</i> L.	C
Jimsonweed	B	<i>Datura stramonium</i>	C
Kochia	B	<i>Kochia scoparia</i>	C
Lambsquarters, common	B	<i>Chenopodium album</i>	C
Marestail	B	<i>Hippuris vulgaris</i> L.	C
Morningglory, ivyleaf/entireleaf	B	<i>Ipomoea hederacea</i> .	C
Mustard, Wild	B	<i>Sinapis arvensis</i> L.	C
Nightshade, eastern black	B	<i>Solanum ptycanthum</i>	C
Nightshade, hairy	B	<i>Solanum sarachoides</i>	C
Palmer amaranth	B	<i>Amaranthus palmeri</i>	C
Pokeweed	B	<i>Phytolacca americana</i>	C
Potatoes, volunteer	B	<i>Solanum</i> Spp	C
Prickly sida	B	<i>Sida spinosa</i>	C

Common Name	Weed Type ¹	Scientific Name	C = Control PC = Partial Control
Purslane, common	B	<i>Portulaca oleracea</i>	C
Ragweed, common	B	<i>Ambrosia artemisiifolia</i>	C
Ragweed, giant	B	<i>Ambrosia trifida</i>	C
Redroot pigweed	B	<i>Amaranthus retroflexus</i>	C
Smartweed, ladysthumb	B	<i>Polygonum persicaria</i>	C
Smartweed, Pennsylvania	B	<i>Polygonum pensylvanicum</i>	C
Thistle, canada	B	<i>Cirsium arvense (L.) SCOP.</i>	C
Velvetleaf	B	<i>Abutilon theophrasti</i>	C
Waterhemp, common	B	<i>Amaranthus tuberculatus</i>	C
Waterhemp, tall	B	<i>Amaranthus rudis</i>	C
Yellow nutsedge	S	<i>Cyperus esculentus</i>	PC

¹B=Broadleaf, G=Grass, S=Sedge

Lumax will not provide consistent control of emerged grass weeds.

A tank mix of AAtrex® with Lumax can provide control of certain emerged annual grass weeds. Refer to the AAtrex label for weeds controlled and other restrictions.

ROTATIONAL CROPS

Field corn may be replanted immediately, if crop is lost. Do not reapply Lumax.

- (1) Do not rotate to crops other than corn (all types), cotton, soybeans, sorghum or peanuts the spring following application of Lumax.
- (2) Do not graze or feed forage or fodder from cotton to livestock, or illegal residues may result.
- (3) Injury may occur to soybeans planted the year following application on soils having a calcareous surface layer if additional atrazine or atrazine-containing products are used.
- (4) In eastern parts of the Dakotas, KS, western MN, and NE, do not rotate to soybeans for 18 months following application if the combined atrazine rate applied was more than 2.0 lbs. a.i./A, or equivalent band application rate, or soybean injury may occur.
- (5) If applied after June 10, do not rotate with crops other than corn (all types) the next season, or crop injury may occur.
- (6) In the High Plains and Intermountain areas of the West, where rainfall is sparse and erratic or where irrigation is required, use only when corn (all types) or sorghum is to follow field corn, or a crop of untreated corn (all types) or sorghum is to precede other rotational crops.

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- (7) Do not plant sugar beets, tobacco, vegetables (including dry beans), or small-seeded legumes the year following application, or injury may occur.
- (8) Winter wheat may be planted 4 ½ months following application.

APPLICATION PROCEDURES

In reduced or no-till systems, a burndown herbicide such as Gramoxone Extra, Gramoxone Max, Roundup UltraMax, Roundup Ultra, Touchdown, or 2,4-D may be tank mixed with Lumax if emerged weeds are present at the time of application and the field corn has not yet emerged.

ADJUVANTS

Where Lumax is applied after the field corn has emerged, a non-ionic surfactant may be used. The use of crop oil concentrate may result in temporary crop injury. Do not use nitrogen based adjuvants (AMS or UAN) or methylated seed oil (MSO) with Lumax when applied alone or in tank mixture with other products to field corn that has emerged. Any of these adjuvants may be used preemergence or preplant where the field corn has not yet emerged.

Early Preplant: Lumax may be applied up to 10 days prior to planting.

Preemergence Surface: Do not exceed 3.0 qts.of Lumax per season. Lumax may be applied to the soil surface as a broadcast or banded application.

Banding Preemergence: Lumax may be applied in a 10-15 inch band after corn planting but prior to corn emergence.

Band Applications: For band applications, using row and band width measurements in inches, calculate the amount to be applied per acre as follows:

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Rate per acre for a broadcast treatment} = \text{Amount needed per acre}$$

Early Postemergence: A maximum of 3.0 qts./A of Lumax may be applied after corn emergence. Do not apply early postemergence in liquid fertilizer or severe crop injury may occur. Apply this treatment to small broadleaf weeds (less than 3 inches tall) and before corn exceeds 5 inches in height. Occasional corn leaf burn may result, but this will not affect later growth or corn yield.

This product will not provide consistent control of emerged grass weeds. Tank mixes of AAtrex can improve control of emerged annual grass weeds. Refer to the AAtrex label for weeds controlled and use restrictions.

If Bicep II MAGNUM®, Bicep Lite II Magnum®, AAtrex (atrazine), Dual MAGNUM®, or Dual II MAGNUM® alone or in tank mixtures have been applied early preplant, preplant surface, preplant incorporated, or preemergence, limit the Lumax early post application to not exceed a total of 2.5 lbs. of active ingredient of Atrazine or 3.75 lbs. of S-metolachlor active per acre, or illegal residues may result.

Grazing Restriction: To avoid possible illegal residues, do not graze or feed forage from treated areas for 45 days following application.

Preharvest Interval (PHI): Corn may be treated up to 5 inches tall. Do not harvest forage, grain, or stover within 45 days after application.

Sprinkler Irrigation: Do not apply Lumax by sprinkler irrigation. Use a sprinkler system only to incorporate Lumax after application. After Lumax has been applied, a sprinkler irrigation system set to deliver ½-1 inch of water may be used to incorporate the product. Using more than 1 inch of water could result in reduced performance. On sandy soil low in organic matter, use no more than ½ inch of water. Do not use flood irrigation to apply or incorporate Lumax.

CULTIVATION

Should weeds develop, a shallow cultivation or rotary hoeing will generally result in improved weed control. If Lumax was incorporated, cultivate less than half the depth of incorporation.

If cultivation is necessary due to soil crusting, compaction, or escaped weeds, adjust equipment to run shallow and minimize soil movement. This will decrease the possibility of diluting or moving the herbicide from the weed control zone.

SPRAY EQUIPMENT

Aerial Application: Use aerial application only where broadcast applications are specified. Apply a minimum of 1.0 gal. of water for each 1.0 gal. of this product applied per acre, but for rates below 1.0 gal./A, use in sufficient water to equal 2.0 gals./A of total spray. Avoid applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. In order to assure that spray will be controllable within the target area when used according to the label directions, make applications at a maximum height of 10 ft., using low-drift nozzles at a maximum pressure of 40 psi, and restrict application to periods when wind speed does not exceed 10 mph. To assure that spray will not adversely affect adjacent sensitive nontarget plants, apply Lumax by aircraft at a minimum upwind distance of 400 ft. from sensitive plants.

Avoid application to humans or animals. Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

Aerial Drift Management

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

The following drift management requirements must be followed to avoid off-target drift 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 outermost nozzles on the boom must not exceed $\frac{3}{4}$ the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45 degrees.

Where states have more stringent regulations, they must be observed.

The applicator should be familiar with and take into account the information covered in the **Aerial Drift Reduction Advisory Information** section below.

Aerial Drift Reduction Advisory Information

Information on Droplet Size

The most effective way to reduce spray 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.

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 manufacturers 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 large 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 lowest drift.

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 cross wind, the swath will be displaced downwind. Therefore, on the upwind and downwind edges of the field, the applicator should compensate for this displacement by adjusting the path of the aircraft. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops).

Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size, pressure, and equipment type determine drift potential at any given speed. Application should be avoided at wind speeds below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns.

Leave a sufficient buffer downwind of the application to avoid drift to sensitive crops. This buffer may be untreated corn rows or field border species maintained for this purpose. The width of the buffer needed for a specific application will depend on the wind speed, distance to sensitive crops, and application equipment parameters.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is greatest 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).

Cleaning Equipment After Application

Special attention must be given to cleaning equipment before spraying a crop other than field corn. Mix only as much spray solution as needed.

1. Flush tank, hoses, boom, and nozzles with clean water.
2. Prepare a cleaning solution of 1 gal. of household ammonia per 25 gals. of water. Many commercial spray tank cleaners may be used.
3. Use a pressure washer to clean the inside of the spray tank with this solution. Take care to wash all parts of the tank, including the inside top surface. If a pressure washer is not available, completely fill the sprayer with the cleaning solution to ensure contact of the cleaning solution with all internal surfaces of the tank and plumbing. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
4. Flush hoses, spray lines, and nozzles for at least 1 minute with the cleaning solution.
5. Dispose of rinsate from steps 1-3 in an appropriate manner.
6. Repeat steps 2-5.
7. Remove nozzles, screens, and strainers and clean separately in the ammonia solution after completing the above procedures.
8. Rinse the complete spraying system with clean water.

MIXING PROCEDURES

CARRIER

Liquids: Either water or liquid fertilizers, excluding suspension fertilizers, may be used as carriers for preemergence applications. If fluid fertilizers are used, a compatibility test must be done. See Compatibility Test section for compatibility testing. Even if Lumax is physically compatible with a fluid fertilizer, constant agitation is necessary to maintain a uniform mixture during application. Use only water as the carrier when applying Lumax after field corn emergence.

ADDING TO SPRAY TANK

The spray tank must be clean, thoroughly rinsed and decontaminated before adding either Lumax alone or with tank mix partners.. If water is used as the carrier, use clean water.

Used Alone: When Lumax is used alone, add the recommended amount to the spray tank when the tank is half filled, then add the rest of the water or fluid fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform mixture.

Tank Mixed: Refer to the sections on this label for recommended tank mixes. Always refer to labels of the tank mix partners for mixing directions and precautions. Do not exceed label dosage rates, nor combined maximum seasonal doses for mesotrione, S-metolachlor, or atrazine. This product cannot be mixed with any product bearing a label prohibition against such mixing. If a tank mixture is used, a compatibility test must be done. See Compatibility Test section for details on the procedure for such a test.

If the tank mix partner is compatible, fill the tank half full. Start and continue agitation throughout mixing. All return lines to the spray tank must discharge below the liquid level. Prepare the components and add in the following order:

1. If a wettable powder or dry flowable formulation is used, make a slurry with water and add it slowly through the screen into the tank. Agitate during the procedure.
2. If a flowable formulation is used, add slowly through screen into the tank. Mixing and compatibility may be improved when a dry flowable is diluted with water before adding to the tank.
3. Add Lumax next.
4. Add Gramoxone Extra, Gramoxone Max, Touchdown, Roundup Ultra, Roundup UltraMax, Warrior® or 2,4-D and a nonionic surfactant last, if needed.
5. Complete filling the sprayer tank and continue agitation.
6. Apply as soon as possible after spray mixture is prepared. Do not leave mixture in spray tank overnight without agitation or unattended.

VOLUME

Liquid: Use a minimum water volume of 10 gals./A in broadcast boom equipment for ground applications.

PRESSURE

The pressure at the nozzle should be 15-40 psi to ensure uniform distribution in the spray pattern. Use appropriate nozzles and 50-mesh or coarser screens, if needed. Maintain agitation to ensure the mixture is suspended in the spray tank.

COMPATIBILITY TEST

A compatibility test is recommended before tank mixing to ensure compatibility of Lumax with other pesticides. The following test assumes a spray volume of 25 gals./A. For other spray volumes, make appropriate changes in the ingredients.

Note: Nitrogen solutions or complete liquid fertilizers, excluding suspension fertilizers, may replace all or part of the water in the spray. Because liquid fertilizers vary, even within the same analysis, **always check compatibility with pesticide(s) before use.** Incompatibility of tank mixtures is more common with mixtures of fertilizer and pesticides.

Test Procedure

1. Add 1.0 pt. of carrier (fertilizer or water) to each of two 1 qt. jars with tight lids. **Note:** Use the same source of water that will be used for the tank mix and conduct the test at the temperature the tank mix will be applied.
2. To one of the jars, add 1/4 tsp. or 1.2 milliliters of a compatibility agent approved for this use, such as Compex or Unite (1/4 tsp. is equivalent to 2.0 pts./100 gals. spray). Shake or stir gently to mix.
3. To both jars, add the appropriate amount of pesticide(s) in their relative proportions based on recommended label rates. If more than one pesticide is used, add them

separately with dry pesticides first, flowables next, and emulsifiable concentrates last. After each addition, shake or stir gently to thoroughly mix.

4. After adding all ingredients, put lids on and tighten, and invert each jar ten times to mix. Let the mixtures stand 15-30 minutes and then look for separation, large flakes, precipitates, gels, 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 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 pesticide(s) in water before addition, or (b) add 1/2 the compatibility agent to the fertilizer or water and the other 1/2 to the emulsifiable concentrate or flowable pesticide before addition to the mixture. If incompatibility is still observed, do not use the mixture.
5. After compatibility testing is complete, dispose of any pesticide wastes in accordance with the **Storage and Disposal** section in this label.

SPECIFIC USE DIRECTIONS

LUMAX TANK MIX COMBINATIONS

Use of Spray Adjuvants

When Lumax is used as a preemergence herbicide, and before weeds have emerged, spray adjuvants have little or no influence on performance. However, in burndown situations where the weeds have emerged and the corn has not, an adjuvant may be used with Lumax applied alone or when applied in tank mixture with a burndown herbicide as allowed on the individual product labels. Use only those adjuvants approved for agricultural crop use.

Preemergence Tank Mix Combinations (Applied Before the Crop has Emerged)

The tank mix partners listed below may be used in either conventional, reduced, or no-till systems and be applied by the same methods and at the same timings as Lumax unless otherwise specified in the tank mix product label. Follow all tank mix product labels for use rates and restrictions. Perform a compatibility test.

Conventional Tillage

Tank Mix	Rate (Max.)	Objective
AAtrex or other solo Atrazine products	0.5-1.3 lbs. a.i./A	Improved broadleaf weed control
Princep®	0.5-1.3 lbs. a.i./A	Improved broadleaf weed control
Warrior	3.84 fl. ozs./A	To control insects, such as cutworm

Reduced or No-Till Corn

Tank Mix	Rate (Max)	Objective
Gramoxone Max	2.7 pts./A	Burndown existing weeds
Touchdown	2 qts./A	Burndown existing weeds
Roundup Ultra	2 qts./A	Burndown existing weeds
Roundup Ultra Max	1.6 qts./A	Burndown existing weeds
2,4 D	See Label	Burndown existing weeds
Warrior	3.84 fl. ozs./A	To control insects, such as cutworm

LUMAX , GRAMOXONE MAX, TOUCHDOWN, 2,4-D

In reduced or no-till corn, Gramoxone Max, Gramoxone Extra, Touchdown, and/or 2,4-D will burndown existing weeds. Gramoxone Max or Gramoxone Extra should be applied to emerged weeds when they are small. Best results are achieved when weeds are 1-6 inches in height. Consult the Gramoxone Max, Gramoxone Extra, Touchdown, or 2,4-D product label for further information on weeds controlled.

Early Postemergence Tank Mix Combinations (Applied After the Crop has Emerged)

The tank mix partners listed below may be used in either conventional, reduced or no-till systems and can be applied by the same methods and at the same timings as Lumax unless otherwise specified in the tank mix product label. Follow all tank mix product labels for use rates and restrictions. Perform a compatibility test.

Tank Mix Recommendations for Early Postemergence

Tank Mix	Rate (Max)	Objective
AAtrex or other solo Atrazine products	0.5-1.3 lbs. a.i./A	Improved broadleaf and annual grass weed control
Warrior	3.84 fl. ozs./A	To control insects, such as cutworm

This product is protected by U.S. Patent Nos. 5,006,158 and 5,698,493. Other patents pending. No license granted to prepare any tank mixtures other than those expressly provided herein.

AAtrex®, Bicep II MAGNUM®, Bicep Lite II MAGNUM®, Dual II MAGNUM®, Dual MAGNUM®, Gramoxone® Extra, Gramoxone® Max, Princep®, Lumax™, Touchdown®, Warrior®, and the Syngenta logo are trademarks of a Syngenta Group Company.

Counter® is a trademark of BASF Corporation

Inter 8E II and Inter Plus II are brand names of TRI Chemicals, Inc.

Lorsban® is a trademark of Dow AgroSciences

Roundup® Ultra, Roundup® UltraMax are trademarks of Monsanto Company

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For non-emergency information (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481

Syngenta Crop Protection, Inc.
Greensboro, North Carolina 27409
www.syngenta-us.com

SCP xxxx

L:\Work in Progress\Lumax Clean 7-12-02 - pd - 07/12/02

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Base/Container Label
2.5, 120, 220, 330 Gallon and Bulk

**RESTRICTED USE PESTICIDE
(GROUND AND SURFACE WATER CONCERNS)**

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION, AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

THIS PRODUCT IS A RESTRICTED-USE HERBICIDE DUE TO GROUND AND SURFACE WATER CONCERNS. USERS MUST READ AND FOLLOW ALL PRECAUTIONARY STATEMENTS AND INSTRUCTIONS FOR USE IN ORDER TO MINIMIZE POTENTIAL FOR ATRAZINE TO REACH GROUND AND SURFACE WATER.

Lumax™
Selective Herbicide

A Preemergence Herbicide for Control of Annual Grass and Broadleaf Weeds in Field Corn, Field Production Seed Corn, and Field Silage Corn

Active Ingredients*:

S-Metolachlor: (CAS No. 87392-12-9)	29.40%
Atrazine**: (CAS No. 1912-24-9).....	11.00%
Mesotrione: (CAS No. 104206-82-8).....	2.94%
<u>Other Ingredients:</u>	<u>56.66%</u>
Total:	100.0%

*Active ingredients per gallon: S-Metolachlor 2.68 pounds, Mesotrione 0.268 pounds, Atrazine 1.0 pound.

** Atrazine with a maximum of 0.4% related triazines.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

Net Weight
U.S. Standard Measure

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Causes moderate eye injury. Do not get in eyes or on clothing. Avoid contact with skin or clothing. Wash thoroughly with soap and water after handling and before eating, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse. Wear long-sleeved shirt and long pants, socks plus shoes and gloves. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<p align="center">HOT LINE NUMBER</p> <p align="center">For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire or Accident), Call 1-800-888-8372</p>	

See directions for use in attached booklet. [2.5 Gallon]

To be used in accordance with directions for use in Lumax label booklet. [120/220/330 Gallon, Bulk]

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in Directions for Use section for information about this standard.

Environmental Hazards

Do not apply directly to water, 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. This pesticide contains atrazine, which has been shown to be toxic to aquatic invertebrates. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas.

Ground Water Advisory

Lumax contains the active ingredients *S*-metolachlor, mesotrione and atrazine.

Atrazine can travel (seep or leach) through soil and can enter ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (ground water) is close to the surface and where these soils are very permeable, i.e., well-drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

S-metolachlor has the potential to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

Surface Water Advisory

The active ingredients in this product have the potential to contaminate surface water through ground spray drift. Under some conditions, the active ingredients may also have a high potential for runoff into surface water (primarily via dissolution in runoff water) for several months post-application. These include poorly drained or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

Mixing/Loading Instructions

Care must be taken when using this product to prevent back-siphoning into wells, spills, or improper disposal of excess pesticide, spray mixtures, or rinsates.

Check valves or antisiphoning devices must be used on mixing equipment.

This product may not be mixed/loaded or used within 50 ft. of wells, including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing to this product into or from pesticide handling or application equipment or containers within 50 ft. of any well are prohibited, unless conducted on all impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash water, and rain water that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum, 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site.

States may have in effect additional requirements regarding well head setbacks and operational area containment.

This product may not be mixed or loaded within 50 ft. of perennial or intermittent streams and rivers, natural or impounded lakes and reservoirs. This product may not be applied within 66 ft. of the points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 ft. around natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66 ft. buffer or setback from runoff entry points must be planted to crop, or seeded with grass or other suitable crop.

Tile-Terraced Fields Containing Standpipes

To ensure protection of surface water from runoff through standpipes with tile-outlets in terraced fields, one of the following options may be used:

1. Do not apply this product within 66 ft. of standpipes in tile-outletted terraced fields.
2. Apply this product to the entire tile-outletted terraced field and immediately incorporate it to a depth of 2-3 inches in the entire tile-outletted terraced field.

3. Apply this product to the entire tile-outletted terraced field under a no-till practice only when a high crop residue management practice is practiced. High crop residue management practice is described as a crop management practice where little or no crop residue is removed from the field during and after crop harvest.

Physical and Chemical Hazards

Do not use or store near heat or open flame.

Container Disposal

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

For Bulk and Mini-Bulk Containers

Container Disposal

When this container is empty, replace the cap and seal all openings that have been opened during use; and return the container to the point of purchase or to a designated location named at time of purchase of this product. The container must only be refilled with this pesticide product. **DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE.** Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transporting. Do not transport if this container is damaged or leaking. If the container is damaged, leaking or obsolete, contact Syngenta Crop Protection, Inc. at 1-800-888-8372. If not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling. Disposal of this container must be in compliance with state and local regulations.

Container Precautions

Before refilling, inspect thoroughly for damage such as cracks, punctures, bulges, dents, abrasions, and damaged or worn threads on closure devices.

For Mini-Bulk Containers

REFILL ONLY WITH Lumax herbicide. The contents of this container cannot be completely removed by cleaning. Refilling with materials other than Lumax will result in contamination and may weaken container.

After filling and before transporting, check for leaks.

Do not refill or transport damaged or leaking container.

Circulation before dispensing is required.

DO NOT USE MINI-BULK CONTAINERS FOR THE STORAGE OF FOOD, FEED, OR DRINKING WATER!

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EPA Est.

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