

US ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF PESTICIDES PROGRAMS  
REGISTRATION DIVISION (75-767)  
WASHINGTON, DC 20480

NOTICE OF PESTICIDE:

☒ REGISTRATION  
☐ REREISTRATION

(Under the Federal Insecticide, Fungicide,  
and Rodenticide Act, as amended)

EPA REGISTRATION NO.  
10182-362

DATE OF ISSUANCE

APR - 8 1994

TERM OF ISSUANCE

NAME OF PESTICIDE PRODUCT

SURPASS 100 Selective  
Herbicide

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

Zeneca, Inc.  
Zeneca Agricultural Products  
1800 Concord Pike  
Wilmington, DE 19897

NOTE: Changes in labeling formula 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 U.S. 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.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 24(d)(1) and (2) since you have agreed in writing to the following:

1. You will file all data required for registration or reregistration of your product under FIFRA section 24(d)(1) and (2) when the Agency requires all registrants of similar products to submit such data.
2. You will comply with all the terms and conditions as stated in the Acetochlor Registration Partnership (1993) letter dated March 8, 1994 (see attachment).
3. Submit production information (pounds or gallons produced) for this product for the fiscal year in which the this product is conditionally registered, in accordance with FIFRA section 29. The fiscal year begins October 1 and ends September 30. Production information will be submitted to the Agency no later than November 15, following the end of the preceding fiscal year.

This information should be submitted to:

U.S. Environmental Protection Agency  
Office of Pesticide Programs  
Registration Division  
101 M Street, NE  
Washington, DC 20460

☐ ATTACHMENT IS APPLICABLE

**BEST AVAILABLE COPY**

SIGNATURE OF APPROVING OFFICIAL

DATE

APR - 9 1994

4. Make the labeling changes listed below before you release the product for shipment:

a. Add the phrase "EPA Registration No. 10182-363".

5. Submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

If these conditions are not complied with, this 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.

**BEST AVAILABLE COPY**



In EPA Letter Dated

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

10182-363

#### STATEMENT OF PRACTICAL TREATMENT

**EMERGENCY**  
If a person ingests or inhales or is exposed, immediately start the procedures given below. If further treatment is required, contact a Poison Control Center, a physician, or the nearest hospital.  
**SYMPTOMS:** Over exposure may cause dizziness, headache, or nausea, or if these are not available, large quantities of water. Avoid alcohol. Have a physician determine if treatment of patient will permit evaluation of symptoms or determination of stomach. Do not give anything by mouth to an unconscious or convulsing person.  
**ADVICE TO PHYSICIAN:** Possible medical damage may compromise the use of gastric lavage.  
**IF INGESTED:** Call physician. Keep patient open and fresh with a gentle steady stream of water for 15 minutes.  
**IF INHALED:** Wash with plenty of water and soap. Call medical attention. Remove and clean any contaminated clothing and shoes.  
**IF SKINNED:** Remove to fresh air. Seek medical attention if respiratory irritation occurs or breathing becomes difficult.

FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE, CALL 1-800-F-A-S-T-AID-8 (237-6338).  
FOR MEDICAL INFORMATION: Syll, Inc., 10000, or contact call CHEMTEC 1-800-424-9000.

#### PRECAUTIONARY STATEMENTS

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**  
**DANGER**  
POISONOUS. CAUSES PREVENTABLE EYE DAMAGE. CAUSES SKIN IRRITATION. HARMFUL IF ABSORBED THROUGH THE SKIN. Do not get in eyes or on skin or on clothing. Wear goggles, face shield or safety glasses. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Avoid breathing spray mist.  
Frequent or frequently repeated skin contact may cause allergic reactions in some individuals.

**PERSONAL PROTECTIVE EQUIPMENT**  
Appropriate and other barriers must wear:  
• Long-sleeved shirt and long pants  
• Chemical gloves  
• Shoes plus socks  
• Protective eyewear  
• Protective apron when cleaning equipment, mixing, or loading  
Clean clothing and other absorbent materials that have been drenched or heavily contaminated with this product's chemicals. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions, wash thoroughly, use detergent and hot water. Keep and wash PPE separately from other laundry.  
When handling use closed systems, enclosed cills, or enclose in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.245(a)(4)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

**Other Safety Recommendations**  
When using:  
• Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.  
• Remove clothing immediately if potentially contaminated. 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**  
Acute toxicity studies and dermal label rates have been found to result in contamination of water supplies by use of groundwater. Therefore, users are advised to avoid use of atrazine in well-drained soils, particularly in areas with high groundwater tables.  
Groundwater contamination may be reduced by using and storing in permanent liquid bulk storage sites with an impermeable material.  
This product is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment and containers.  
This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the groundwater is shallow, may result in groundwater contamination.  
Consider the properties that may result in surface water contamination via dissolved runoff and runoff erosion. Precautions should be followed to minimize the potential for dissolved runoff and runoff erosion.

**ZENECA Ag Products**

SYLL, INC.  
Millsboro, Delaware 19966

0404002

#### RESTRICTED USE PESTICIDE

(Use on Ground and Surface Water Contaminants and Organisms)

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 pesticide due to ground and surface water contaminants and organisms covering. Users must read and follow all precautionary statements and instructions for use in order to minimize potential for adverse to ground and surface water.

**ZENECA Ag Products**

**Surpass<sup>®</sup> 100**  
Selective Herbicide

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

**ACTIVE INGREDIENTS:**  
Atrazine 3.33% (3,3'-diethyl-4-hydroxy-5-methyl-6-nitrophenylamine)  
Atrazine 2.67% (3,3'-diethyl-4-hydroxy-5-methyl-6-nitrophenylamine)  
and related isomers

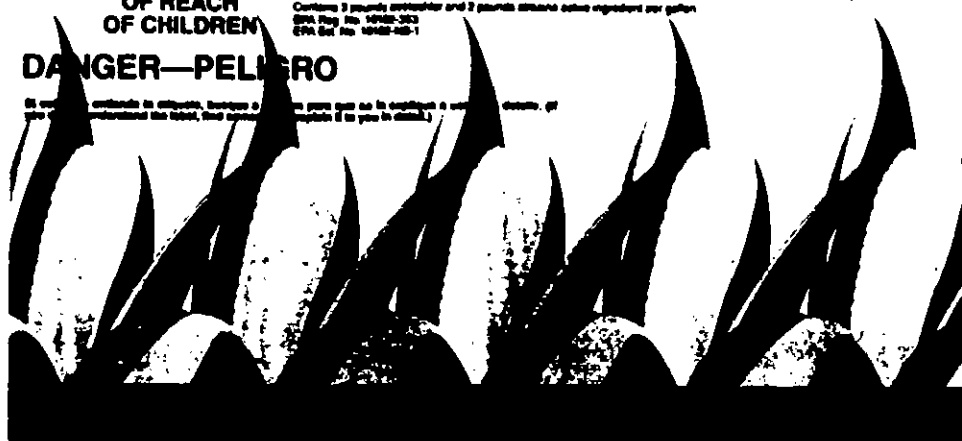
**OTHER INGREDIENTS:**  
Total  
Contains 3 pounds atrazine and 3 pounds atrazine active ingredient per gallon.  
EPA Reg. No. 10182-363  
EPA Est. No. 10182-363-1

31.0%  
31.0%  
32.2%  
94.2%

**KEEP OUT  
OF REACH  
OF CHILDREN**

**DANGER—PELIGRO**

It contains chemicals known to the State of California to cause cancer, birth defects, or reproductive harm. (See www.P66.org for more information.)



#### PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near food or open flames.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with the labeling. Refer to label booklet attached to container for complete directions for use.  
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, consult your State or local 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. Refer to supplemental labeling in "Agricultural Use Requirements" in the DIRECTIONS FOR USE section for information about this standard.

#### STORAGE AND DISPOSAL

**PRECAUTIONS:** Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.  
**STORAGE:** Keep container tightly closed when not in use. Do not store near seeds, fertilizers, or feed stuffs. Can be stored at temperatures as low as minus 30°F.  
**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or residue 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 DISPOSAL:** Triple-rinse or equivalent, then offer for recycling or reconditioning, or purchase 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.

#### 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 Conditions for Use of this product should be followed carefully. It is impossible to eliminate all risks associated with the use of this product. Crop injury, malfeasance or other unintended consequences may result from use of such herbicide as a result of 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 ZENECA or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold ZENECA and Seller harmless for any claims relating to such factors.  
ZENECA 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 various 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 ZENECA and Buyer and User assume the risk of any such use. ZENECA 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 ZENECA 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 ZENECA AND SELLER FOR ANY AND ALL CLAIMS, DAMAGES, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ZENECA OR SELLER, THE REPLACEMENT OF THE PRODUCT. ZENECA 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 ZENECA.

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# Surpass<sup>®</sup> 100

Selective Herbicide

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

## COMPLETE DIRECTIONS FOR USE



USE IN ACCORDANCE WITH DIRECTIONS ON THE SURPASS 100 CONTAINER. THIS WARRANTY DOES NOT EXTEND TO THE USE OF THIS PRODUCT OUTSIDE THE LABEL INSTRUCTIONS, OR UNDER ABNORMAL CONDITIONS OR UNDER CONDITIONS NOT REASONABLY FORESEEABLE TO OR BEYOND THE CONTROL OF ZENECA, AND BUYER AND USER ASSUME THE RISK OF ANY SUCH USE. ZENECA 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 ZENECA 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 ZENECA 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 ZENECA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

ZENECA 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 ZENECA.

GRAMOXONE<sup>®</sup> EXTRA and SURPASS<sup>®</sup> are trademarks of a ZENECA Group Company.

Roundup<sup>®</sup> is a trademark of Monsanto Agricultural Company. Accord<sup>®</sup>, Atrazine<sup>®</sup> 4L, Bladex<sup>®</sup> 4L, and Lorox<sup>®</sup> DF are trademarks of C. I. du Pont de Nemours & Co., Inc.

Baccon<sup>®</sup> and Princep<sup>®</sup> are trademarks of Ciba-Geigy Corporation. Banvel<sup>®</sup> is a trademark of Sandez Crop Protection Corporation.

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**ACCEPTED**

APR - 8 1994

Under the Federal Insecticide,  
Fungicide, and Rodenticide  
Act as amended for the  
registration under  
EPA Reg. No. 10182-363

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## KEEP OUT OF REACH OF CHILDREN DANGER—PELIGRO

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

### ACTIVE INGREDIENTS:

Acetochlor	
2-chloro-2'-methyl-6'-ethyl- N-ethoxymethylacetanilide	31.6%
Atrazine [2-chloro-4-(ethylamino)-6- (isopropylamino)-s-triazine]	
and related triazines	21.1%
INERT INGREDIENTS:	47.3%
Total	100.0%

Contains 3 pounds acetochlor and 2 pounds atrazine active ingredient per gallon.

EPA Reg. No. 10182-363

### STATEMENT OF PRACTICAL TREATMENT FIRST AID

If a known exposure occurs or is suspected, immediately start the procedures given below. If further treatment is required, contact a Poison Control Center, a physician, or the nearest hospital.

**IF SWALLOWED:** Drink promptly a large quantity of milk, egg white, or gelatin mixture, or if these are not available, large quantities of water. Avoid alcohol. Have a physician determine if condition of patient will permit induction of vomiting or evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person.

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

**IF IN EYES:** Call physician. Keep eyelids open and flush with a gentle steady stream of water for 15 minutes.

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IF ON SKIN: Wash with plenty of soap and water. Get medical attention. Remove and clean any contaminated clothing and shoes.

IF INHALED: Remove to fresh air. Seek medical attention if respiratory irritation occurs or breathing becomes difficult.

**FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE, CALL 1-800-F-A-S-T-M-E-D (327-8633).**

**FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300.**

#### PRECAUTIONARY STATEMENTS

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
DANGER**

**CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE. CAUSES SKIN IRRITATION. HARMFUL IF ABSORBED THROUGH THE SKIN.** Do not get in eyes or on skin or on clothing. Wear goggles, face shield or safety glasses. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Avoid breathing spray mist.

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.
- Waterproof gloves.
- Shoes plus socks.
- Protective eyewear.
- Chemical-resistant apron when cleaning equipment, mixing, or loading.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

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IF ON SKIN: Wash with plenty of soap and water. Get medical attention. Remove and clean any contaminated clothing and shoes.

IF INHALED: Remove to fresh air. Seek medical attention if respiratory irritation occurs or breathing becomes difficult.

**FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE, CALL 1-800-F-A-S-T-M-E-D (327-8633).**

**FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300.**

#### PRECAUTIONARY STATEMENTS

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
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Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Waterproof gloves.
- Shoes plus socks.
- Protective eyewear.
- Chemical-resistant apron when cleaning equipment, mixing, or loading.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

5

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

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-8)), 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

Atrazine leaches readily and accepted label rates have been found to result in contamination of water supplies by way of groundwater. Therefore, users are advised to avoid use of atrazine in well-drained soils, particularly in areas having high groundwater tables.

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

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

This chemical demonstrates the properties and characteristics associated with chemicals detected

6

in groundwater. The use of this chemical in areas where soils are permeable, particularly where the groundwater is shallow, may result in groundwater contamination.

Acetochlor has properties that may result in surface water contamination via dissolved runoff and runoff erosion. Practices should be followed to minimize the potential for dissolved runoff and/or runoff erosion.

#### PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near heat or open flames.

### GENERAL INFORMATION

For use only on field corn, silage corn, popcorn. Corn in this label refers to all three types: field corn, silage corn and popcorn.

SURPASS® 100 is a unique combination of the herbicides acetochlor and atrazine plus the antidote or safener dichlormid. While the acetochlor provides weed control, the dichlormid safens corn against herbicide injury. SURPASS 100 may be applied to the surface or incorporated into the top 1-2 inch layer of soil. It is recommended for control alone, or in tankmix combinations as indicated, for the weeds listed in the "TARGET WEEDS" section of these use directions. SURPASS 100 controls weeds by interfering with normal germination and seedling development. SURPASS 100 does not control established or germinated weeds present at application.

### USE RESTRICTIONS

- Do not apply to coarse soils classified as sands with less than 3% organic matter (as determined by soil tests, if not known) where depth to groundwater is 30 feet or less.
- This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does

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

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-8)), 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

Atrazine leaches readily and accepted label rates have been found to result in contamination of water supplies by way of groundwater. Therefore, users are advised to avoid use of atrazine in well-drained soils, particularly in areas having high groundwater tables.

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

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

This chemical demonstrates the properties and characteristics associated with chemicals detected

6

in groundwater. The use of this chemical in areas where soils are permeable, particularly where the groundwater is shallow, may result in groundwater contamination.

Acetochlor has properties that may result in surface water contamination via dissolved runoff and runoff erosion. Practices should be followed to minimize the potential for dissolved runoff and/or runoff erosion.

#### PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near heat or open flames.

### GENERAL INFORMATION

For use only on field corn, silage corn, popcorn. Corn in this label refers to all three types: field corn, silage corn and popcorn.

SURPASS® 100 is a unique combination of the herbicides acetochlor and atrazine plus the antidote or safener dichlormid. While the acetochlor provides weed control, the dichlormid safens corn against herbicide injury. SURPASS 100 may be applied to the surface or incorporated into the top 1-2 inch layer of soil. It is recommended for control alone, or in tankmix combinations as indicated, for the weeds listed in the "TARGET WEEDS" section of these use directions. SURPASS 100 controls weeds by interfering with normal germination and seedling development. SURPASS 100 does not control established or germinated weeds present at application.

### USE RESTRICTIONS

- Do not apply to coarse soils classified as sands with less than 3% organic matter (as determined by soil tests, if not known) where depth to groundwater is 30 feet or less.
- This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does

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- not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas.
- Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an 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 washwater, and rainwater 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 the 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 wellhead setbacks and operational containment.
- Do not apply this product through any type of irrigation system.
- Do not use flood irrigation to apply or incorporate this product.

- acre per calendar year. Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or higher setbacks) which are different from the label, the more restrictive/protective requirements apply.
- This product contains atrazine and thus may not control weeds that are known or suspected to be triazine resistant.
  - SURPASS 100 may not be used on any crop other than corn.
  - SURPASS 100 should not be used on corn seed stock such as Breeders, Foundation, or Increase.
  - SURPASS 100 can be used on production seed corn.
  - Do not contaminate irrigation water used for crops other than corn or water used for domestic purposes.
  - Do not apply SURPASS 100 before pre-irrigation in irrigated areas.
  - Do not allow SURPASS 100 to contaminate feed or food.
  - SURPASS 100 should not be stored near seeds, fertilizers, or foodstuffs.
  - All containers of SURPASS 100 should be kept tightly closed when not in use.
  - Applied according to directions and under normal growing conditions, SURPASS 100 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 create abnormal conditions that weaken crop seedlings. SURPASS 100 used under these abnormal conditions could result in crop injury.

- Product must be used in a manner which will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.
- Do not apply under conditions which favor runoff or wind erosion of soil containing this product to non-target areas. To prevent off-site movement due to runoff or wind erosion:
  - Avoid treating powdery dry or light sandy 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 or frozen or snow covered soils.
  - Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops unless at least 1/4 inch of rainfall has occurred between application and the first irrigation.
- Do not apply this product using aerial application equipment.
- Do not apply when wind conditions favor drift to non-target sites. To minimize spray drift to non-target areas:
  - Use low-pressure application equipment capable of producing a large droplet spray.
  - Do not use nozzles that produce a fine droplet spray.
  - Minimize drift by using sufficient spray volume to ensure adequate coverage with large droplet size sprays.
  - Keep ground-driven spray boom as low as possible above the target surface.
  - Make application when the wind velocity favors on-target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph. Avoid application when gusts approach 15 mph.

- Low humidity and high temperatures increase the likelihood of spray drift to sensitive areas. Avoid spraying during conditions of low humidity and/or high temperatures. Do not apply during inversion conditions.

## GENERAL USE PRECAUTIONS

Read all label directions before using.

- This product is intended for preplant or pre-emergence application only. No postemergence use is permitted.
- Failure to strictly follow label directions may result in exceeding the maximum annual atrazine use rates as stipulated by the Environmental Protection Agency.
- This product may not be applied aerially or by ground within 66 feet of the points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 feet around natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66-foot buffer or setback from runoff entry points must be started to crop, seeded with grass or other suitable crop.
- On highly erodible soils, as defined by the Soil Conservation Service (SCS), if conservation tillage is utilized ( $\geq 30\%$  plant residue), the maximum rate of atrazine is 2 pounds a/A. If plant residue is  $< 30\%$ , the maximum rate of atrazine is 1.6 pounds a/A. On soils not highly erodible, the maximum rate of atrazine is 2 pounds a/A. The maximum application rate for corn is 2.5 pounds atrazine active ingredient per acre per calendar year. Where sequential postemergence treatments with appropriately registered products containing atrazine are necessary, do not exceed a total of 2.5 pounds active ingredient atrazine per

- Do not apply SURPASS 100 after June 10, unless only corn will be planted the following year.
  - ROTATIONAL CROPS: Soybeans or corn may be planted 12 months after application.
  - Do not rotate to crops other than soybeans or corn.
  - Because of atrazine carryover, injury may occur to soybeans the year following corn when planted in north central and northwest Iowa, south central and southwest Minnesota, northern Nebraska and southeast South Dakota on soils having a calcareous surface layer.
- Caution: Following many years of continuous use of atrazine and chemically related products, biotypes of some of the weeds listed above have been reported which cannot be effectively controlled by atrazine and related herbicides. Where this is known or suspected and weeds controlled by atrazine are expected to be present along with resistant biotypes, it is recommended that atrazine be used in combinations or in sequence with other registered herbicides which are not triazines. If only resistant biotypes are expected to be present, use a registered non-triazine herbicide.

## 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 12 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.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls.
- Waterproof gloves.
- Shoes plus socks.
- Protective eyewear.

## STORAGE AND DISPOSAL

**PROHIBITIONS:** Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

**STORAGE:** Keep container tightly closed when not in use. Do not store near seeds, fertilizers, or food stuffs. Can be stored at temperatures as low as minus 30°F.

**PESTICIDE DISPOSAL:** Rinse spray equipment. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or residue 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 DISPOSAL:** Triple rinse (or equivalent); then off 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.

## STORAGE AND DISPOSAL (Cont'd)

**FOR BULK AND MINI-BULK CONTAINERS**  
**Container Disposal:** Re seal container and offer for reconditioning, or triple rinse (or equivalent) and offer for recycling or reconditioning, or clean in accordance with manufacturer's instructions.

**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 SURPASS 100 selective herbicide.** The contents of this container cannot be completely removed by cleaning. Refilling with materials other than SURPASS 100 will result in contamination and may weaken container.

After filling and before transporting, check for leaks.

Do not fill or transport damaged or leaking container.

Circulation before dispensing is required.

**CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.**

## APPLICATION DIRECTIONS—CORN

### CARRIERS

**Liquids:** Either water or liquid fertilizers such as solutions, slurries or suspensions may be used as liquid carriers. If liquid fertilizers are used, a physical compatibility with these must be done before combining in the spray tank. See Appendix I for details of the compatibility testing procedure. Even if SURPASS 100 is physically compatible with a liquid fertilizer, constant agitation is necessary to maintain a uniform mixture during application.

**Dry Bulk Fertilizer:** SURPASS 100 may be impregnated on dry bulk fertilizer and applied as the fertilizer is spread. See Appendix II for details including which fertilizers are compatible.

## ADDING TO SPRAY TANK

The spray tank must be clean, thoroughly rinsed and decontaminated before adding either SURPASS 100 alone or with tankmix combinations. If water is used as the carrier, use clean water.

**Used Alone:** When SURPASS 100 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 emulsion.

**Tankmixed:** If a tank mixture is used it is recommended that a compatibility test be done before actual tank mixing. See Appendix I for details on the procedure for such a test.

Once compatibility is confirmed for the tankmix, fill the tank half full. Start and continue agitation throughout mixing. All return lines to the spray tank must discharge below the liquid level. Add components in the following order of formulation:

- 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.
- Add SURPASS 100 next.
- If a flowable formulation is used, add slowly through screen into the tank. Mixing and compatibility may be improved when the flowable is diluted with water before adding to the tank.
- Complete filling the sprayer tank and continue agitation.
- Batches should be mixed and applied the same day.

### VOLUME

**Liquid:** Use a minimum of 10 gallons per acre in broadcast boom equipment for ground applications.

**Dry Bulk Fertilizer:** Use a minimum of 200 pounds of dry bulk fertilizer per acre. See Appendix II for more details.

### PRESSURE

If liquid carriers are used, the pressure at the nozzle should be 15 to 40 psi to ensure good distribution in the spray pattern. Use appropriate nozzles and 50-mesh or coarser screens. Maintain sufficient agitation to ensure the mixture is suspended in the spray tank.

### APPLICATION TIMING AND METHODS

**Early Preplant:** On medium and fine textured soils, SURPASS 100 may be applied up to 30 days prior to planting.

**Preemergence Surface:** SURPASS 100 and certain tankmixes may be applied to the soil surface as a broadcast or banded application. Precipitation or sprinkler irrigation is necessary to bring SURPASS 100 into contact with germinating seeds. If rain or sprinkler irrigation does not occur within 7 days after application, weed control may be improved by using a rotary hoe or similar device, to incorporate the herbicide. Do not remove SURPASS 100 from the weed control zone or dilute it with untreated soil. The device used should be run at a shallow depth to prevent disturbing the corn seed. SURPASS 100 must be applied prior to corn emergence.

**Preplant Incorporation:** SURPASS 100 and certain tankmixes may be mechanically incorporated in the top 2 inches of the soil with field cultivators, discs, or spring tooth harrows at any time within 14 days prior to planting. Improper incorporation, excessive crop residues, or poor soil tillage may result in erratic, streaked or otherwise unsatisfactory weed control.

**Sprinkler Irrigation:** *Do not apply SURPASS 100 by sprinkler irrigation.* Use a sprinkler system only to incorporate SURPASS 100 after application. After SURPASS 100 has been applied, a sprinkler irrigation system set to deliver 1/4 to 3/8 inches of water per acre may be used to incorporate the product. Using more than 1/2 inches of water could result in reduced performance. On sandy soil low in organic matter, use no more than 1/2 inch of water. Do not use flood irrigation to apply or incorporate SURPASS 100.

**Postplant-Preemergence:** SURPASS 100 and certain tankmixes may be applied immediately after planting but prior to corn emergence. SURPASS 100 should not be applied to emerged corn. If rain or sprinkler irrigation does not occur within 7 days after application, weed control may be improved by using a rotary hoe, or similar device, to shallowly incorporate the herbicide. Do not remove SURPASS 100 from the weed control zone or dilute it with untreated soil. Do not disturb the germinating corn.

**Banding-Preemergence:** SURPASS 100 and certain tank mixtures may be applied in a 10 to 14 inch band after corn planting but prior to corn emergence. If rain or sprinkler irrigation does not occur within 7 days after application, weed control may be improved by using a rotary hoe or similar device to incorporate the herbicide. Do not remove SURPASS 100 from the weed control zone or dilute it with untreated soil. Do not disturb the germinating corn.

### PLANTING

Planting should be done as close to the time of application of SURPASS 100 as possible. This allows SURPASS 100 to provide effective weed control during the time it is most critical in the production of corn. Applications of SURPASS 100 can

be made after planting but prior to emergence. The corn must not be emerged when SURPASS 100 is applied.

### CULTIVATION

Cultivation should be delayed as long as possible. Should weeds develop, a shallow cultivation or rotary hoeing will generally result in improved weed control. If SURPASS 100 was incorporated, cultivate less than 1/2 the depth of incorporation.

If cultivation is necessary due to soil crusting, or 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.

### SEQUENTIAL HERBICIDE APPLICATIONS

- Accent® herbicide, Beacon® herbicide  
A sequential treatment with Accent or Beacon is recommended for escapes of Johnsongrass and Shattercane.
- 2,4-D, Banvel®, Clarity bromoxynil, Markman®, Basagran, Laddock  
A sequential treatment with 2,4-D, Banvel, Clarity, bromoxynil, Markman, is recommended for escapes of broadleaves.
- Use sequential herbicides at recommended rates found on the manufacturer's label.
- Products not listed may also be used if desired.

### SOIL TEXTURE AND ORGANIC MATTER

The soils are grouped into three classes, coarse, medium and fine. Once the soil type has been determined, the texture group can be found in the Table 1.



**TABLE 1**  
Soil Texture Groupings for SURPASS 100  
Use Rate Selection.

Coarse	Medium	Fine
Sand	Loam	Silty Clay Loam
Loamy Sand	SW	Sandy Clay Loam
Sandy Loam	Silt Loam	Silty Clay
		Sandy Clay
		Clay Loam
		Clay

The soil texture and organic matter of the field on which the application is to be made must be determined prior to application. The use rate of SURPASS 100 is determined by a combination of these two factors.

#### USE RATES IN CONVENTIONAL TILLAGE SYSTEMS

The soil texture and organic matter level of the field on which SURPASS 100 is to be applied should be determined prior to selecting the rate from Table 2.

**TABLE 2**  
SURPASS 100 Use Rates by Soil Texture and Organic Matter Content in Conventional Tillage Systems. Rates are in Quarts per acre.

SOIL TEXTURE	SOIL ORGANIC MATTER CONTENT	
	Less than 3%	3% or Greater
Coarse	1.6 qts	1.6-2.2 qts
Medium	1.6-2.2 qts	2.2-2.6 qts
Fine	2.2-2.6 qts	2.6-3.3 qts

These rates are for application within 14 days prior to planting and before emergence of the corn. Use Table 3 if no-till applications are made or the product is applied more than 2 weeks prior to planting in conventional tillage.

**Organic Matter:** If the organic matter content of the soil is at the lower end of the range, use the lower rates in the rate range given in Table 2. If the organic matter content is at the upper end of the range, use the higher rates given in the rate range.

**Weed Infestation:** If the weed infestation is light, use a rate at the lower end of the rate range for the soil texture and organic matter content. If the weed infestation is heavier, use the higher rates in the rate range for the soil.

#### USE RATES FOR REDUCED OR NO-TILL SYSTEMS

SURPASS 100 may be used in reduced or no-till systems. Application can take place from up to 30 days prior to planting or after planting but before the corn emerges. The highest levels of control will be obtained when applications are made as close to planting as possible but before the corn emerges. It is recommended that a burndown herbicide such as GRAMOXONE® EXTRA or Roundup® be tankmixed with SURPASS 100 in reduced or no-till systems.

#### BAND APPLICATIONS

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

Band width in inches	X	Rate per acre for a broadcast treatment	=	Amount needed per acre
Row width in inches				

#### WEEDS CONTROLLED:

SURPASS 100 applied as directed in this label will control or suppress the weeds listed in Table 4. Additional weeds may be controlled with tankmixes. See the "Tank Mix Combinations" section for recommended tankmix combinations. Always consult the tankmix product labels for specific rates and use directions. Always follow the most restrictive label when tank mixing SURPASS 100 with another product. You may tankmix SURPASS 100 with any other registered corn product as long as compatibility is verified and it is not prohibited by the other product label.

(B=Broadleaf, G=Grass, S=Sedge)  
Activity may be reduced under dry conditions or following early (more than 14 days) preplant applications. Sequential herbicides or additional atrazine may be needed for complete control.

TABLE 4 Weeds Controlled or Partially Controlled by SURPASS 100 at Recommended Use Rates.			
COMMON NAMES	WEED TYPE	SCIENTIFIC NAME	PC = PARTIAL CONTROL
Black nightshade	B	Solanum nigrum	C
Caperweed	B	Mollis verticillata	C
Cocklebur	B	Xanthium strumarium	PC
Common ragweed	B	Ambrosia artemisiifolia	C
Florida beggarweed	B	Desmodium illinoense	C
Florida pusley	B	Richardia scabra	C
Gallinule	B	Gallinule peruviana	C
Giant Ragweed	B	Ambrosia artemisiifolia	C
Hairy nightshade	B	Solanum serotense	C

**TABLE 3'**  
SURPASS 100 Use Rates by Soil Texture and Organic Matter Content in Reduced or No-Till Systems. Rates are in Quarts per acre.

SOIL TEXTURE	TIME OF APPLICATION RELATIVE TO PLANTING	
	>14 DAYS BEFORE PLANTING	<14 DAYS BEFORE OR AFTER PLANTING BUT PRIOR TO EMERGENCE
Coarse	Do not apply more than 14 days before planting in coarse textured soils	1.6-2.2
Medium	2.6-3.3	2.2-2.6
Fine	3.3	2.6-3.3

\*Rates are for single applications. SURPASS 100 may be split-applied.

If the rate is split, apply 1/2 of the recommended rate up to 30 days before planting. The remaining 1/2 should be applied at planting.

TABLE 4 (Cont'd) Weeds Controlled or Partially Controlled by SURPASS 100 at Recommended Use Rates.			
COMMON NAMES	WEED TYPE	SCIENTIFIC NAME	PC = PARTIAL CONTROL
Kochia	B	Kochia scoparia	C
Lambsquarters	B	Datura stramonium	C
Lambsquarters	B	Chenopodium album	C
Morning glory	B	Ipomoea spp.	C
Purdy's sedge	B	Sida spirose	C
Purslane, common	B	Portulaca oleraceae	C
Redroot pigweed	B	Amaranthus retrofractus	C
Sicklepod	B	Cassia obtusifolia	C
Smartweed spp.	B	Polygonum spp.	C
Tail waterhemp	B	Amaranthus tuberculatus	C

(B=Broadleaf, G=Grass, S=Sedge)

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**TABLE 4 (Cont'd)**  
Weeds Controlled or Partially Controlled by SURPASS 100 at Recommended Use Rates.

COMMON NAMES	WEED TYPE <sup>1</sup>	SCIENTIFIC NAME	PC = PARTIAL CONTROL	C = CONTROL
Wild proso millet	G	<i>Panicum polyanthemum</i>	PC	
Wild rice	G	<i>Panicum capillare</i>	C	
Woody cupress	G	<i>Eriochloa villosa</i>	PC	
Yellow foxtail	G	<i>Setaria latifolia</i>	C	
Yellow nutsedge <sup>2</sup>	S	<i>Cyperus esculentus</i>	C	

<sup>1</sup>B-Broadleaf, G-Grass, S-Sedge  
<sup>2</sup>Yellow nutsedge requires a minimum of 2% quarts. Incorporation will improve control.  
<sup>3</sup>Activity may be reduced under dry conditions or following early (more than 14 days) preplant applications. Sequential herbicides or additional atrazine may be needed for complete control.

**TABLE 4 (Cont'd)**  
Weeds Controlled or Partially Controlled by SURPASS 100 at Recommended Use Rates.

COMMON NAMES	WEED TYPE <sup>1</sup>	SCIENTIFIC NAME	PC = PARTIAL CONTROL	C = CONTROL
Giant foxtail	G	<i>Setaria faberii</i>	C	
Goosegrass	G	<i>Elymus indica</i>	C	
Green foxtail	G	<i>Setaria viridis</i>	C	
Red rice	G	<i>Oryza sativa</i>	C	
Red sparrowtail	G	<i>Lepochloa filiformis</i>	C	
Robust foxtail (purple, white)	G	<i>Setaria spp.</i>	C	
Seeding johnsongrass	G	<i>Sorghum halepense</i>	PC	
Shattercane	G	<i>Sorghum vulgare</i>	PC	
Southeastern cupress	G	<i>Eriochloa grisea</i>	C	
Texas panicum	G	<i>Panicum texanum</i>	C	

<sup>1</sup>B-Broadleaf, G-Grass, S-Sedge

**TABLE 4 (Cont'd)**  
Weeds Controlled or Partially Controlled by SURPASS 100 at Recommended Use Rates.

COMMON NAMES	WEED TYPE <sup>1</sup>	SCIENTIFIC NAME	PC = PARTIAL CONTROL	C = CONTROL
Waterhemp	B	<i>Ambrosia theophrasti</i>	PC	
Barnyardgrass	G	<i>Echinochloa crus-galli</i>	C	
Broadleaf signalgrass	G	<i>Brachiaria platyphylla</i>	C	
Broomtop panicum	G	<i>Panicum fasciculatum</i>	C	
Catgrass	G	<i>Digitaria spp.</i>	C	
Crookneckgrass	G	<i>Dactyloctenium aegyptium</i>	C	
Fall panicum	G	<i>Panicum dichotomifolium</i>	C	
Field sandbur	G	<i>Cenchrus plectrocarpus</i>	PC	
Forset millet	G	<i>Setaria italica</i>	C	

<sup>1</sup>B-Broadleaf, G-Grass, S-Sedge  
<sup>2</sup>Activity may be reduced under dry conditions or following early (more than 14 days) preplant applications. Sequential herbicides or additional atrazine may be needed for complete control.

## SURPASS 100 TANKMIX COMBINATIONS

Tankmix combinations may be used in either conventional, reduced or no-till systems and be applied by the same methods and at the same timings as SURPASS 100 unless otherwise specified in the tankmix product label. Three way tank mixtures are allowed if not restricted by the respective product labels. Check all tankmix product labels for proper rates for 3 way tankmixes.

When tank mixing SURPASS 100 with atrazine, do not exceed the maximum allowable rate of atrazine in your county or state. In some atrazine management areas, atrazine is more restricted. Consult your county extension office or state university for further information.

### CONVENTIONAL TILLAGE

TANKMIX EXAMPLES*	RATE (MAX.)	COMMENTS
Atrazine® 4L	1 qt/acre	-longer growing season areas -high rainfall areas -heavy broadleaf weed pressure
Bladex® 4L	2 qts/acre	-high pH soils -Atrazine carryover areas -when injury to rotated soybeans is a concern -field and silage corn only
ERADICANE 6.7-E OR SUTAN® 6.7E	4-5 pts/acre	-tankmix with 1 to 1.5 qt/acre SURPASS 100 for improved grass and broadleaf control -must be incorporated -enhance nutsedge control
Lorox® DF	1 lb/acre	-enhanced lamb-quarter and pigweed control
Princep® 4L	1 qt/acre	-improve crabgrass or fall panicum control
Surpass EC	1 pt/acre	-enhanced grass and nutsedge control

\*Formulations which are not listed may be used. Perform compatibility test and check the product label for directions and precautions.

### REDUCED OR NO-TILL CORN

TANKMIX EXAMPLES*	RATE (MAX.)	COMMENTS
Atrazine 4L	1 qt/acre	-longer growing season areas -high rainfall areas -heavy broadleaf weed pressure
Barvel	1 pt/acre	-burndown existing weeds
Bladex 4L	2 qts/acre	-high pH soils -atrazine carryover areas when rotating to soybeans -field and silage corn only
GRAMOXONE EXTRA	3 pints/acre	-control annuals, suppress perennials
Princep 4L	1 qt/acre	-improved crabgrass or fall panicum control
Roundup	4 qts/acre	-control annuals and some perennials
SURPASS EC	1 pint/acre	-enhanced grass and nutsedge control
2,4-D	see label	-burndown existing weeds

\*Formulations which are not listed may be used. Perform compatibility test and check the product label for directions and precautions.

**SURPASS 100 & GRAMOXONE EXTRA**  
 In reduced or no-till corn, GRAMOXONE EXTRA will burndown existing weeds. GRAMOXONE EXTRA should be applied to emerged weeds when they are small. Weeds 1 to 6 inches in height are

the easiest to control. Large weeds may be more difficult to control. Tankmixes with atrazine and Bladex will often aid in control of difficult weeds.

GRAMOXONE EXTRA is a RESTRICTED USE pesticide. Refer to the GRAMOXONE EXTRA label for further directions, precautions, and limitations relative to its use.

#### GRAMOXONE EXTRA USE RATES

Always add an approved nonionic surfactant containing at least 50% active ingredient or crop oil concentrate at 1% (v/v) to the spray mixture.

TABLE 5

Nonionic Surfactant and Crop Oil Concentrate Use Rates for GRAMOXONE EXTRA.

SURFACTANT % NONIONIC ACTIVE INGREDIENT	Rate of Surfactant Per 100 Gallons of Water
75% or greater	1 pint
50 - 74%	2 pints
Less than 50%	DO NOT USE
Crop Oil Concentrate	1% v/v or 1 gal/100 gal.

TABLE 6

Use Rates in Pints per acre of  
GRAMOXONE EXTRA.

WEED SIZE	GRAMOXONE EXTRA RATE
1" - 3"	1½ - 2
3" - 6"	2 - 2½
6"	2½ - 3

## APPENDIX I

Procedure for Testing the Compatibility of SURPASS 100 and Tankmixes with Fluid Fertilizers.

Since fluid fertilizers vary, the following procedure is suggested for determining whether SURPASS 100 may be combined with a specific fluid fertilizer for spray tank application.

#### MATERIALS NEEDED:

- SURPASS 100 and any tankmix products.
- Fluid fertilizer to be used.
- Adjuvant for fertilizer tankmix: Use any adjuvant cleared for use on growing crops under 40 CFR 180.1001 to improve the compatibility of SURPASS 100 with fluid fertilizers. The adjuvant which provides the best emulsification depends on the specific fertilizer under consideration.
- Two 1 quart, wide mouth glass jars with lid or stopper.
- Measuring spoons (a 25 mL pipette or graduated cylinder provides more accurate measurement).
- Measuring cup, 8 ounces (257 mL).

#### PROCEDURE:

1. Pour a pint (about 473 mL) of the fluid fertilizer into each of the quart jars.
2. Add ½ teaspoon (2 mL) adjuvant to one of the jars, label it as "with", and mix. The rate of ½ teaspoon per pint is equal to 3 pints of adjuvant per 100 gallons of fluid fertilizer.

3. Add SURPASS 100 and any tankmix combination to the jars. The order of addition is wettable powders first with mixing, followed by flowables with mixing and the EC's last. The rate of wettable powders and dry flowables is 1½ teaspoon per pound of product per acre to be applied. EC's should be added at the rate of ½ teaspoon for each pint per acre to be applied. Premixing the wettable powders in 1 ounce of water before adding to the pint of fluid fertilizer will improve the compatibility of the final mixture.

4. Close both jars with lids or stoppers and mix the contents by turning the jars upside down ten times.

5. Inspect the surface and body of the mixtures—
  - (a) Immediately after completing the jar inversions.
  - (b) After allowing the jars to stand quietly for 30 minutes.
  - (c) And then again after turning the jars upside down 10 times after the 30 minute inspection.

#### EVALUATION:

If a uniform mix cannot be made, the mixture should not be used. If either mixture remains uniform for 30 minutes, the combination may be used. Should either mixture separate after 30 minutes, but readily remix uniformly with 10 jar inversions, the mixture can be used if adequate agitation is maintained in the tank. If the mixture with adjuvant is satisfactory but the one without adjuvant is not, be sure to use the adjuvant in the spray tank. Add the adjuvant first at a rate of 3 pints per 100 gallons of fluid fertilizer. Foaming may be minimized by using moderate agitation. If nondispersible oil, sludge, or clumps of solids form in the mixtures, the combination should not be used.

## APPENDIX II

#### Dry Bulk Fertilizer Impregnation

All individual state regulations relating to dry bulk fertilizer blending, registration, labeling and application are the responsibility of the individual and/or company selling the SURPASS 100, SURPASS 100 plus atrazine or SURPASS 100 plus Bladex.

When applying SURPASS 100 alone or in tankmixes with dry bulk fertilizers, follow all direction for use and precautions on the respective tankmix product labels regarding rates, soil texture, application methods and rotational restrictions. Use a minimum of 200 pounds dry fertilizer per acre.

TABLE 7

Approved Dry Fertilizer Ingredients for  
Use with SURPASS 100.

FERTILIZER	N	P	K
Ammonium Phosphate-Sulfate	16	20	0
Ammonium Sulfate	21	0	0
Diammonium Phosphate	18	46	0
Monoammonium Phosphate	11	56	0
Potassium Chloride	0	0	60
Potassium Sulfate	0	0	52
Urea	45	0	0

Some Ureas may be phytotoxic when high rates are applied to corn. Use only urea rates known to be safe for corn application.

For impregnating the pesticides on dry fertilizers, use an appropriate mixer equipped with suitable spraying equipment. The spray nozzles should be positioned inside the mixer to provide uniform spray coverage of the tumbling fertilizer. The SURPASS 100 should be sprayed uniformly onto the fertilizer using a fine spray pattern. Tankmix

components may be applied as separate ingredients with powders and dry flowables added first or they may be mixed in a slurry in the proper ratio and added jointly. SURPASS 100 may also be impregnated on the go and applied with pneumatic applicators.

The following table provides a reference to determine the amount of SURPASS 100 to be mixed per ton of dry bulk fertilizer for a range of herbicide rates.

Fertilizer Rate (Lbs per Acre)	Acres per Ton	SURPASS 100 (Qts per Acre)		
		Quarts Herbicide per Ton		
		1.6	2.4	3.3
200	10.0	16.0	24.0	33.0
300	6.7	10.7	16.1	22.1
400	5.0	8.0	12.0	16.5
500	4.0	6.4	9.6	13.2
600	3.3	5.3	7.9	10.9
700	2.9	4.6	7.0	9.6

To determine the amount of SURPASS 100 needed for other rates of fertilizer, use this formula:

$$\frac{\text{SURPASS 100 (quarts/acre)}}{\text{pounds fertilizer/acre}} \times 2000 = \frac{\text{SURPASS 100 (qts of)}}{\text{per ton of fertilizer}}$$

If the herbicide/fertilizer mixture is too wet, use of a drying agent is required to provide a dry, free-flowing mixture. For mixtures to be used in spinning-disc applicators, Microcel E calcium silicate powder (Mannville, Filtration & Minerals) is recommended for use as a drying agent. Mixtures to be used in pneumatic applicators should use Microcel E or Agsorb 16/30 RVM-MS granular clay

(Oil-Dri Corporation). The drying agents should be added separately and uniformly to the prepared pesticide/fertilizer mixture, in a quantity that is sufficient to provide a suitable free-flowing mixture. Generally, less than 2% Microcel E or 5% Agsorb 16/30 RVM-MS by weight is required.

#### PRECAUTION:

To avoid potential for explosion, do not impregnate SURPASS 100 on ammonium sorbate nitrate, potassium nitrate, or sodium nitrate fertilizer or fertilizer blends. Do not impregnate on single (0-20-0) or triple (0-46-0) super phosphate. Do not impregnate on straight limestone because the SURPASS 100 will not be absorbed.

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**ZENECA** Ag Products

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