	•	1/1/	
* REGISTRATION DIVISION (75-767) WASHINGTON, DC 20460	TERM OF ISSUANCE		
	NAME OF PESTICIDE PRODUCT	17)	
NOTICE OF PESTICIDE: REGISTRATION REREGISTRATION			
(Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended)	Sing asia PC Agradies N		
AME AND ADDRESS OF REGISTRANT (Include ZIP code)		1	
F	<u> </u>		
•	·	1	
ZENECA Ag Products	•		
P. 0. Box 751		1	
Wilmington, DE 19897	1	1	
_	<b>-</b>		
submitted to and accepted by the Registration Division prio product always refer to the above U.S. EPA registration num	from that accepted in connection with this registration must be or to use of the label in commerce. In any correspondence on this mber,  above named pesticide is hereby Registered/Reregistered under	]	
A copy of the labeling accepted in connection with this Re	egistration/Reregistration is returned herewith.		
••	at or approval of this product by this Agency. In order to protect		
	ame in connection with the registration of a product under this		
Act is not to be construed as giving the registrant a right to by others.  The proceed is construed as giving the registrant a right to by others.	consequence of the name or to its use if it has been covered to the find of the Find of the Act (STESS), since you have agreed in		
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4. You will submit production information (pounds or gallons produced) for this product for the fiscal year in which the product 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 should be submitted to:

U.S. Environmental Protection Agency Office of Pesticide Programs (H7404C) Document Processing Desk (RSB) 401 M Street SW., CM #2 Washington, DC 20460

- 4. You will add the phrase "EPA Registration No. 10182-325" to your label before you release the product for shipment.
- 5. You will submit five (5) copies of your final printed label before you release the product for shipment.

A stamped copy of labeling is enclosed for your records.

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ACCEPTED

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EPA Para vir. 10 | 82325



**ACTIVE INGREDIENT:** Acetochlor 2-chloro-2'-methyl-6'-ethyl-N-ethoxymethylacetarilide INERT INGREDIENTS: .... 29.13%

Contains 6.4 pounds active ingredient per gallon EPA Reg. No. 10182-325 EPA Est. No. 10182-NB-1

# **KEEP OUT OF REACH OF CHILDREN** WARNING

STATEMENT OF PRACTICAL TREATMENT

FIRST AID: Immediately start the procedures below. If further treatment is required, contact a

Poison Control Center, a physician or the nearest hospital.

IF ON SKIN: Wash immediately with plenty of soap and water. Remove contaminated clothing and wash before reuse. Get medical attention if imitation occurs.

IF IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Have eyes examined by medical personnel.

IF SWALLOWED: Immediately give several glasses of water but do not induce vomiting. If vomit-ing occurs, give fluids again. Have a physician determine if condition of patient will permit induc-tion of vomiting or evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person.

IF INHALED: Remove victim to fresh air. Get medical attention if respiratory imitation occurs or if breathing becomes difficult.

FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE, CALL 1-800-F-A-S-TM-E-D (327-8533). FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident call CHEMITREC 1-800-424-9300.

#### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING

CAUSES SKIN AND EYE IMPITATION. HARMFUL IF SWALLOWED, INHALED OR AB-SORBED THROUGH SKIN, Do not get on skin, in eyes, or on clothing. Avoid breathing spray mist.

PERSONAL PROTECTIVE EQUIPMENT

- Applicators and other handlers must wear:
- Long-sleeved shirt and long pants. Weterproof gloves.
- Chemical-resistant footweer plus socks.

Chemical-resistant rootweer pius sucus.
 Protective syswear.
 Chemical-resistant headgear for overhead exposure.
 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. 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 cabe, or aircraft in a manner that meets the requirements listert in the Worker Protection Sterrier (WPS) for content on the content of the

When handlers use closed systems, enclosed cabe, or aircraft in a manner that meets the requirements fished in the Worker Protection Standard (WPQ) for annial transfer of the content of

# CONDITIONS OF S AND LIMITATION OF WARRANT

NOTICE: Read the entire Directions for Use and C Warranty and Liebility before buying or using this product the product at once, unopened, and the purchase price

The Directions for Use of this product should be follower all risks inherently associated with the use of this product unintended consequences may result because of such it weather or crop conditions, presence of other meterials of the product, which are beyond the control of ZEM associated by Research I. Research II. Research II. Research II. Research III. Research assumed by Buyer and User, and Buyer and User agree for any claims relating to such factors.

ZENECA warrants that this product conforms to the ch research warrants may this product conforms to the chresconably fit for the purposes stated in the Directions reterred to above, when used in accordance with directi warranty does not extend to the use of this product confirmal conditions or under conditions not reasonably forese or ZENECA, and Buyer and User assume the risk of any RANTIES OF MERCHANTABILITY OR OF FITNESS FANY OTHER EXPRESS OR IMPLIED WARRANTY EXPLORED TO THE EXPRESS OR IMPLIED WARRANTY EXPLORED. In no event shall ZENECA or Seller be liable for any incomes resulting from the use or handling of this product USER OR BUYER, AND THE EXCLUSIVE LIABILITY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGE BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, WISE) RESULTING FROM THE USE OR HANDLING RETURN OF THE PURCHASE PRICE OF THE PRECEASE OR SELLER, THE REPLACEMENT OF THE ZENECA and Seller offer this product and Buser and I ZENECA and Seller offer this product, and Buyer and t conditions of sale and limitations of warranty of liability, written agreement signed by a duly authorized represen

DIRECTIONS FOR It is a violation of Federal law to use this product in a Refer to label booklet attached to container for complete Do not apply this product in a way that will contact worl through drift. Only protected handlers may be in the an ment. specific to your State or Tribe, consult the agent

# AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its lebeling and 40 CFR part 170. Refer to supplemental lebeling (i.e., TURAL USE REQUIREMENTS" in the DIRECTIONS F this standard.

# STORAGE AND DIS

PROHIBITIONS: Do not contaminate water, food or fee ing is prohibited. Do not reuse empty contr STORAGE: Store in original conti

for any claims relating to such factors.

the product of orice, disoperior, and the peresided price this or retariated.

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 inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Setter or ZENECA, and Buyer and User assume the risk of any such use. ZENECA MAKES NO WAR-RANTIES 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 of liability, which may not be modified except by written agreement signed by a duty authorized representative of ZENECA.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with this 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 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. Refer to supplemental labeling (i.e., attached booklet) under "AGRICUL-TURAL USE REQUIREMENTS" in the DIRECTIONS FOR USE section for information about this standard.

#### 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: Store in original container only. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with vermiculite, earth or synthetic absorbent.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance. CONTAINER DISPOSAL: Triple rinse (or equivalent); then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

SURPASS\* is a trademark of ZENECA Group Compenies. 01994 ZENECA Inc.



# ZENECA Ag Products

ZENECA Inc.

# KEEP OUT OF REACH OF CHILDREN WARNING

### STATEMENT OF PRACTICAL TREATMENT

FIRST AID: Immediately start the procedures below, if further treatment is required, contact a Polson Control Center, a physician or the nearest hospital.

IF ON SKIN: Wash immediately with plenty of soap and water. Remove contaminated clothing and wash before rouse. Get medical attention if irritation occurs.

IF IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Have eyes examined by medical personnel.

IF SWALLOWED: Immediately give several glasses of water but do not induce vomiting. If vomiting occurs, give fluids again. Have a physician determine if condition of patient will permit induction of vomitting or evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person.

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#### **PRECAUTIONARY STATEMENTS**

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING

CAUSES SKIN AND EYE IRRITATION. HARMFUL IF SWALLOWED, INHALED OR AB-SORBED THROUGH SKIN. Do not get on skin, in eyes, or on clothing. Avoid breathing spray mist. PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Waterproof gloves.
- Chemical-resistant footwear plus socks.
- Protective eyewear.
- Chemical-resistant headgear for overhead exposure.
- 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, Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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

#### **User Safety Recommendations**

Users should:

- · Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- · Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on
- 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**

This product is toxic to fish. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

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.

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

PHYSICAL AND CHEMICAL HAZARDS

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Applicator's certification.

# SURPASS<sup>®</sup> EC Herbicide

For Use Only on Field Corn, Production Seed Corn, Silage Corn and Popcorn

ACCEPTED with COMMENTS EPA Letter Daten:

COMPLETE DIRECTIONS FOR USE

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BEST AVAILABLE COPY

Under the Federal Inserticity Fungicide, and Rodestickie Aug as amended, for the process. MRA-325

# **CONDITIONS OF SALE** registered under EPA ${ m Reg.~No.}$ AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Usean (Concilions) Scientific and Inflation (Concilions) Warrany and kability being buyin octabric instruction in the difficult massic). acceptable, return the project at once althorous and the surchase of the

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 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 inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this 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.

Page 2 SURPASS EC Booklet SURPEC.RSF - RS-021594F

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.

Made in U.S.A.
ZENECA Ag Products
ZENECA Inc.
Wilmington, DE 19897

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832

Page 3 SURPASS EC Booklet SURPEC.RSF - RS-021594F

# **Table of Contents**

<u>Pag</u>	9
STATEMENT OF PRACTICAL TREATMENT	
PRECAUTIONARY STATEMENTS	
HAZARDS TO HUMANS AND DOMESTIC ANIMALS	
PERSONAL PROTECTIVE EQUIPMENT	
ENVIRONMENTAL HAZARDS	
PHYSICAL AND CHEMICAL HAZARDS	
GENERAL INFORMATION	
GENERAL USE PRECAUTIONS	
DIRECTIONS FOR USE	
AGRICULTURAL USE REQUIREMENTS	•
STORAGE AND DISPOSAL	
GENERAL APPLICATION DIRECTIONS	
CARRIERS	
Liquids	
Dry Bulk Fertilizer	
ADDING TO SPRAY TANK	
Used alone	
Tankmixed	
VOLUME	
Liquid	
Dry Bulk Fertilizer	
PRESSURE	
APPLICATION TIMING AND METHODS	
Early Preplant	
Preplant Incorporation	
Preemergence Surface	
Postplant-Preemergence	
Banding-Preemergence	
Sprinkler Irrigation	•
Center Pivot Sprinkler	•
USE PRECAUTIONS	
PLANTING	
CULTIVATION	
SOIL TEXTURE AND ORGANIC MATTER	
USE RATES IN CONVENTIONAL TILLAGE SYSTEMS	
Organic Matter	
Weed Infestation	
USE RATES FOR REDUCED AND NO-TILL SYSTEMS	
BAND APPLICATIONS	• •
WEEDS CONTROLLED	
TANKMIX COMBINATION	• •
SUNFASS EU & MITAZINE, DIAUEX, OF DANVEI	

# Page 4 SURPASS EC Booklet SURPEC.RSF - RS-021594F

	ADDITIONAL T SEQUENTIAL A SURPASS EC	APPLICATIO	NS										
PHYSICAL	DATA			• • • • •			• • •		• • •	• • •		. <b></b>	• •
APPENDIX	for Testing the Co	ompatibility o	of SURP	ASS E	C an	d Ta	nkm	ixes	s W	ith	Flu	biı	
Fertilizers	MATERIALS N	EEDED							• •	• •		• •	
PRO	CEDURE												
EVA	LUATION			• • • • •	• • •		• •	• • •	• •	• •			. • •
APPENDIX													
Dry Bulk Fr	ertilizer Impregnat	ion											

#### KEEP OUT OF REACH OF CHILDREN

#### **WARNING - AVISO**

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 INGREDIENT:**

ACETOCRIOF	
2-chloro-2'-methyl-6'-ethyl-N-ethoxymethylacetanilide	70.87%
INERT INGREDIENTS:	
TOTAL	100.00%

Contains 6.4 pounds active ingredient per gallon

EPA REG. NO. 10182-

#### STATEMENT OF PRACTICAL TREATMENT

FIRST AID: Immediately start the procedures below. If further treatment is required, contact a Poison Control Center, a physician or the nearest hospital.

IF ON SKIN: Wash immediately with plenty of soap and water. Remove contaminated clothing and wash before reuse. Get medical attention if irritation occurs.

IF IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Have eyes examined by medical personnel.

IF SWALLOWED: Immediately give several glasses of water but do not induce vomiting. If vomiting occurs, give fluids again. 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.

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# **PRECAUTIONARY STATEMENTS**

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

### WARNING

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CAUSES SKIN AND EYE IRRITATION. HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. Do not get on skin, in eyes, or on clothing. Avoid breathing spray mist.

#### PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
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- Chemical-resistant headgear for overhead exposure.
- Chemical-resistant apron when cleaning equipment, mixing, or loading.

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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**

This product is toxicate fish. Example apply directly to water, or to areas where surface water is present onto intenticallargast below; the meanthigh water marks. Do not contaminate water when classification of equipment washwaters:

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the ground water is shallow, may result in ground water 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.

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#### **GENERAL INFORMATION**

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

SURPASS® EC is a unique combination of the herbicide acetochlor and the antidote or safener dichlormid. While the acetochlor provides weed control the dichlormid safens corn against herbicide injury. SURPASS EC 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 EC controls weeds by interfering with normal germination and seedling development. SURPASS EC will not control established or germinated weeds present at application.

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# **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 takes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad of properly diked mixing/loading areas.
- Operations that involve mixing, loading, rinsing, or washing of this product into or from pasticide handling or application equipment or containers within 50 test 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 withe 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 wellhead setbacks and operational containment.
- Do not apply this product through any type of irrigation system.

1453

# Page 9 SURPASS EC Booklet SURPEC.RSF - RS-021594F

Do not use flood irrigation to apply or incorporate this product.

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 rupoff or wind erosion of soil containing this product to non-target areas. To preventibilishes hovement due to runoff or wind erosion:

- Avoid treating powdery dry or light sandy solls when conditions are favorable for whod erosion. Under these conditions, the soil surface must first be settled by rainfall or irrigation.
- Do not apply to impervious substrates such as peved or highly compacted surfaces or frozen or snow covered soils.
- Do not use tallwater from the first flood or furrow intigation of treated fields to treat non-target crops unless at least ½ 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 nozzies that product 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.

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- Do not use SURPASS EC on any crop other than com.
- Do not allow SURPASS EC to contaminate feed or food.
- SURPASS EC should not be stored near seeds or fertilizers.
- · All containers of SURPASS EC should be kept tightly closed when not in use.
- · Do not overdose or use rates higher than specified on this label.
- If crop treated with SURPASS EC is lost, com may be replanted immediately. Do not make a second application of SURPASS EC.
- ROTATIONAL CROPS: Soybeans or com may be planted 12 months after application.
- · Do not rotate to crops other than soybeans or corn.

Page 10 SURPASS EC Bookiet SURPEC.RSF - RS-021594F

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#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with this labelling.

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:

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- Waterproof gloves.
- Chemical-resistant footwear plus socks.
- Protective eyewear.
- Chemical-resistant headgear for overhead exposure.

# STORAGE AND DISPOSAL

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

STORAGE: Store in original container only. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with vermiculite, earth or synthetic abosrbent.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

# **CONTAINER DISPOSAL:**

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

Plastic Containers: Tiple rinse (or equivalent); then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by incineration or, if allowed by state and local authrorities, by burning. If burned, stay out of smoke.

# **GENERAL APPLICATION DIRECTIONS**

#### **CARRIERS**

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

Dry Bulk Fertilizer: SURPASS EC 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 EC alone or in tankmix combinations. If water is used as the carrier, use clean water.

**Used Alone:** If SURPASS EC is used alone, add the recommended amount to the spray tank before the tank is half filled. The addition of the remaining water or fluid fertilizer carrier can aid in the thorough agitation and mixing of the spray solution.

**Tankmixed:** If a tankmixture is used it is recommended that a small scale test of compatibility be done before actual tankmixing. 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 the tankmix components in the following order:

- Mix and disperse wettable powders or dry flowables first. Premix wettable powders
  or dry flowables in a little water in a pail or bucket before adding to the spray tank
  to improve the compatibility of the final tankmix. Thoroughly disperse them in the
  tank before adding SURPASS EC.
- Add SURPASS EC to the tank last.
- · Finish filling spray tank with liquid carrier while at the same time providing agitation.
- Tankmix combinations should not be left in the spray tank for prolonged periods as settling may occur. Batches should be mixed and applied the same day.

#### VOLUME

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

**Dry Bulk Fertilizer:** Use at least 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 of the spray pattem. Consult spray tip manufacturer's recommendation on appropriate pressure for the nozzles you are using.

# **APPLICATION TIMING AND METHODS**

In reduced or no-till systems, a bumdown herbicide such as GRAMOXONE® EXTRA or Roundup® may be tankmixed with SURPASS EC if emerged weeds are present at the time of application.

Early Preplant: SURPASS EC and certain tank mixtures may be applied up to 30 days before planting.

Preplant Incorporation: SURPASS EC and certain tankmixes may be mechanically incorporated in the top 2 inches of the soil by mechanical means such as field cultivators, finishing discs, rotary hoes, spring tooth harrows, or power driven cultivation equipment. Do not apply more than 14 days before planting. Improper incorporation, excessive crop residues, or poor soil tilth may result in erratic, streaked

or otherwise unsatisfactory weed control. If two passes are used to incorporate SURPASS EC, the second pass should be shallower and at an angle to the first pass.

Preemergence Surface: SURPASS EC and certain tankmixes may be applied to the soil surface as a broadcast or banded application. Existing soil moisture, irrigation or rain is necessary to bring SURPASS EC 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. Care should be taken not to remove SURPASS EC from the weed control zone such as the band. The device used should be run at a shallow depth to prevent disturbing the corn seed.

Postplant-Preemergence: SURPASS EC and certain tankmixes may be applied immediately after planting but prior to come mergence. SURPASS EC should not be applied to emerged com. 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 incorporated the herbicide. Care should be taken not to remove SURPASS EC from the weed control zone. The device used should be run at a shallow depth to prevent disturbing the germinating corn.

Banding-Preemergence: SURPASS EC 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. Be careful not to move SURPASS EC from the band or dilute it with untreated soil. Do not disturb the germinating corn.

Sprinkler Irrigation: Do not apply SURPASS EC by sprinkler irrigation. Use a sprinkler system only to incorporate SURPASS EC after applying by ground equipment. After SURPASS EC has been applied, a sprinkler irrigation system set to deliver ¼ to ¾ inches of water per acre may be used to activate the product. Using more than ¾ inches 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 activate SURPASS EC.

# **PLANTING**

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Planting should be done within 30 days of application of SURPASS EC. This allows SURPASS EC to provide effective weed control during the time it is most critical in the production of com. Applications of SURPASS EC can be made after planting but prior to emergence.

#### **CULTIVATION**

If rotary hoeing is necessary due to soil crusting or compaction, adjust equipment to run shallow and minimize soil movement. This will decrease the possibility of diluting

Page 15 SURPASS EC Booklet SURPEC.RSF - RS-021594F

or moving the herbicide from the weed control zone. Should weeds develop, a shallow cultivation or rotary hoeing will generally result in improved weed control.

# **SOIL TEXTURE AND ORGANIC MATTER**

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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 EC Use Rate Selection.

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

The soil texture and organic matter of the field on which the application is to be made must be known prior to application to select the correct rate. The use rate of SURPASS EC 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 EC is to be applied should be determined prior to selecting the rate from Table 2.

TABLE 2
SURPASS EC Use Rates by Soil Texture and Organic Matter Content in Conventional Tiliage Systems. Rates are in Pints per acre.

SOIL	SOIL ORG	CONTENT	
TEXTUR E	Less than 3%	3% or Greater	> 7%
Coarse	1 - 21/2 pts.	1½ - 2½ pts.	2 - 3 pts.
Medium	1½ - 2½ pts.	1½ - 2½ pts.	2½ - 3¾ pts.
Fine	1½ - 2¾ pts.	2 - 3 pts.	3 - 3¾ pts.

These rates are for applications from 2 weeks before planting until emergence of the corn. Use Table 3 if applications are made more that 2 weeks prior to planting.

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 texture and organic matter.

### **USE RATES FOR REDUCED AND NO-TILL SYSTEMS**

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SURPASS EC may be used in reduced and 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 weeds emerge. Apply a residual herbicide like AAtrex\*, Bladex\*, or Extrazine\* with SURPASS EC in reduced or no-till systems. If weeds are present at application, a burndown herbicide like GRAMOXONE EXTRA or Roundup may be added to the tank mixture.

TABLE 3
SURPASS EC Use Rates by Soil Texture and Organic Matter Content in Reduced and No-Till Systems. Rates are in pints per acre.

SOIL TEXTUR	SOIL ORGANIC MATTER CONTENT		
E	Less than 3%	> 7%	
Coarse	2 pts.	2 pts.	2 - 3 pts.
Medium	2 - 2½ pts.	2½ pts.	2½ - 3¾ pts.
Fine	3 pts.	3 pts.	3 - 3¾ pts.

# **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 = Amount needed broadcast treatment for a band treatment

#### **WEEDS CONTROLLED:**

SURPASS EC applied as directed in this label will provide control or partial control (reduce competition) of the weeds listed in Table 3. Partially controlled weeds will be severely stunted, or experience reduced height, vigor, or population compared to untreated areas. Depending on the infestation level or density, a follow-up treatment may be needed to provide complete control.

Additional weeds may be controlled with certain tankmixes. See the "Tank Mix Combinations" section for recommended tankmix combinations and the additional weeds controlled. Always consult the tankmix product labels for specific rates and use directions. Always follow the most restrictive label when tankmixing SURPASS EC with another product.

TABLE 4
Weeds Controlled or Partially Controlled by SURPASS EC at Recommended Use Rates.

COMMON NAMES	WEED TYPE'	SCIENTIFIC NAME	C = CONTROL PC = PARTIAL CONTROL
Black nightshade	В	Solanum nigrum	С
Carpetweed	В	Mollugo verticillata	С
Common ragweed	В	Ambrosia elatior	С
Florida beggarweed	В	Desmodium tortuosum	PC
Florida pusley	В	Richardia scabra	С
Galinsoga	В	Galinsoga parviflora	С
Hairy nightshade	В	Solanum sarachoides	С
Kochia	В	Kochia scoparia	C <sub>3</sub>
Lambsquarters, common	В	Chenopodium album	C <sub>3</sub>
Pigweed	В	Amaranthus spp.	С
Prickly sida	В	Sida spinosa	PC
Purslane, common	В	Portulaca oleracea	С
Smartweed spp.	В	Polygonum spp	PC
Tall waterhemp	В	Amaranthus tuberculatos	С
Barnyardgrass	G	Echinochloa crus-galli	С
Bristly foxtail	G	Setaria verticillata	С
Broadleaf signalgrass	G	Brachiaria platyphylla	С
Browntop panicum	G	Panicum fasciculatum	С
Crabgrass	G	Digitaria spp	С
Crowfootgrass	G	Dactyloctenium aegyptium	С
Fall panicum	G	Panicum dichotomiflorum	С
Field sandbur	G	Cenchrus pauciflorus	PC

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# Page 19 **SURPASS EC Booklet** SURPEC.RSF - RS-021594F

COMMON NAMES	WEED TYPE'	SCIENTIFIC NAME	C = CONTROL PC = PARTIAL CONTROL
Foxtail millet	G	Setaria italica	С
Giant foxtail	G	Setaria faberi	С
Goosegrass	G	Eleusine indica	С
Green foxtail	G	Setaria viridis	С
Prairie cupgrass	G	Eriochloa contracta	С
Red rice	G	Oryza sativa	С
Red sprangletop	G	Leptochloa filiformis	С
Robust foxtail (purple, white)	G	Setaria spp.	С
Seedling johnsongrass	G	Sorghum halepense	PC
Shattercane	G	Sorghum vulgare	PC
Southern sandbur	G	Cenchrus echinatus	С
Southwestern cupgrass	G	Eriochloa gracilis	С
Texas panicum	G	Panicum texanum	С
Wild proso millet	G	Panicum miliaceum	PC
Witchgrass	G	Panicum capillare	С
Woolly cupgrass	G	Eriochloa villosa	PC
Yellow foxtail	G	Setaria lutescens	С
Yellow nutsedge <sup>2</sup>	S	Cyperus esculentus	С

B=Broadleaf, G=Grass, S=Sedge
 Yellow nutsedge requires a minimum of 2½ pints. Incorporation will improve control.
 Light to moderate infestations will be controlled. Heavy infestations may require a tank mixture or sequential herbicide.



#### **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 EC unless otherwise specified in the tankmix product label. Three way or multiple tankmixtures are allowed if not restricted by the respective product labels. Check all tankmix product labels for proper rates for 3 way or multiple tankmixes.

# SURPASS EC & ATRAZINE, BLADEX OR BANYEL®:

Check the atrazine label, county extension office, or state university for the recommended use rate in your area. SURPASS EC is more active on broadleaf weeds and atrazine rates can be reduced up to 30% while maintaining control of target broadleaf weeds.

Tankmixtures with atrazine will increase the spectrum of weeds controlled. Where AAtrex formulations have been specified other brands of atrazine may be used. Read and follow all atrazine label directions and restrictions. Table 5 provides a list of the weeds controlled or partially controlled by atrazine or Bladex in combination with SURPASS EC.

Use Banvel tank mixture on flat-planted field corn (no furrows) in IL, IN, IA, MN, NE, OH, SD, and WI ONLY to control the weeds listed in Table 5. Read and follow all precautions and directions for use on the Banvel label.

Apply SURPASS EC + Banvel preemergence. Tanknix 1 pt/acre Banvel with the recommended rate of SURPASS for medium or fine textured soils. Do not apply this tanknix on coarse textured soils with less than 2% organic matter.

TABLE 5
Weeds Controlled (C) or Partially Controlled (PC) by atrazine or Bladex

COMMON NAME	WEED TYPE*	ATRAZINE	BLADEX	BANVEL
Momingglory spp.	В	С	С	PC
Cocklebur	В	С	PC	PC
Groundcherry spp.	В	С		
Jimsonweed	В	С	С	PG
Kochia	В	С	С	
Mustards	8	С	С	G
Giant Ragweed	В	С	С	C
Sicklepod	В	С	C	PC

Velvetleaf	В	C	PC	PC
	<u> </u>			

#### \* B=Broadleaf, G=Grass

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.

In certain atrazine management areas, atrazine rates are further restricted due to potential groundwater or surface water contamination. If rates in this table exceed the rate of application allowed in your area - use the lower rate. Consult your county extension office or state university for further information.

#### SURPASS EC ADDITIONAL TANKMIX COMBINATIONS

TANK MIXES	RATE (MAX)	COMMENTS
Extrazine	3 qts/acre	- mixture of Bladex and atrazine
Prowi <sup>®</sup>	1 qt/acre	<ul><li>triazine resistant weeds</li><li>velvetleaf</li><li>preemergence only</li></ul>
ERADICANE® 6.7-E OR SUTAN® + 6.7-E	4 - 5 pts/acre	<ul> <li>tankmix with 1 pint SURPASS EC</li> <li>improved grass control</li> <li>must be incorporated</li> </ul>
Lorox® DF	1 lb/acre	- enhanced lambsquarter and pigweed control
Princep <sup>●</sup> 4L	1 qt/acre	- improved crabgrass or fall panicum control
AMBUSH 2E	12.8 fl oz/acre	- cutworm control
Pursuit <sup>®</sup>	4 oz/acre	- tolerant com hybrids required
GRAMOXONE EXTRA	3 pts/acre	- controls emerged annuals, suppresses perennials
Roundup	4 qts/acre	- controls annuals and some perennials

**SEQUENTIAL APPLICATIONS** 

Sequential herbicide applications may be used to control weeds which escape control. The following herbicides may be used prior to or following a SURPASS EC application. Consult the product label for directions for use and precautions.

- 2,4-D
- Clarity, Marksman<sup>®</sup>
- Buctril®, Buctril/Atrazine
- Laddock<sup>®</sup>, Basagran<sup>®</sup>
- Accent<sup>e</sup>, Beacon<sup>e</sup>
- Pursuit

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#### SURPASS EC & GRAMOXONE EXTRA OR ROUNDUP

In reduced or no-till com, GRAMOXONE EXTRA or Roundup 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. Consult the product label for further information on weeds controlled.

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

### **SURPASS EC PHYSICAL DATA**

- Specific gravity: 1.086 @ 20/20°C
- Flashpoint: 204°F (Setaflash closed cup)

#### **APPENDIX I**

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

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

#### **MATERIALS NEEDED:**

- · SURPASS EC and any tankmix products.
- Fluid fertilizer to be used.
- Adjuvant for fertilizer tankmix: Compex\*, Sponto\* 168-D, Unite\*, or equivalent. 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).

\*Compex, Kalo Laboratories Inc. Kansas City, MO; Sponto 168-D, Witco Chemical Company, Houston, TX; Unite, Hopkins Agricultural Chemical Co., Madison, WI.

#### **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 EC 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.

Page 24 SURPASS EC Booklet SURPEC.RSF - RS-021594F

### **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 EC, SURPASS EC plus atrazine, or SURPASS EC plus Bladex fertilizer mixtures.

When applying SURPASS EC alone or in tankmixes with dry bulk fertilizers, follow all directions for use and precautions on the respective tankmix product labels regarding rates, soil texture, application methods and rotational restrictions.

TABLE 12
Approved Dry Fertilizer Ingredients for Use with SURPASS EC<sup>1</sup>.

FERTILIZER	N	P	К
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
Single Superphosphate	0	20	0
Treble Superphosphate	0	46	0
Urea <sup>2</sup>	45	0	0

<sup>&</sup>lt;sup>1</sup> Do not impregnate on fertilizers containing ammonium nitrate, potassium nitrate, or sodium nitrate.

For impregnating the pesticides on dry fertilizers, use suitable mixers 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 EC 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.

<sup>&</sup>lt;sup>2</sup> Some Ureas may be phytotoxic when high rates are applied to com. Use only urea rates known to be safe for com application.

SURPASS EC may also be impregnated on dry bulk fertilizer in the field while the fertilizer is being spread using a pneumatic applicator equipped to impregnate herbicides.

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 (Manville, 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.

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

FERTILIZER RATE (LB/ACRE)	ACRES COVERED (PER TON)	SURPASS EC PINTS/ACRE			
		2	2.5	3	
		Pints Herbicide/Ton Fertilizer			
200	10.0	20.0	25.0	30.0	
300	6.7	13.4	16.8	20.1	
400	5.0	10.0	12.5	15.0	
500	4.0	8.0	10.0	12.0	
600	3.3	6.6	8.3	9.9	
700	2.9	5.8	7.3	8.7	

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

SURPASS EC (pints/acre) X 2000 pounds fertilizer/acre

Pints of SURPASS EC per ton fertilizer

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