



Reg # 10182-260

PM-23

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

SEP 7 1993

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Cheryl Bohenic
ZENECA INC.
ZENECA AG PRODUCTS
New Murphy Road & Concord Pike
Box 751
Wilmington, DE 19897

SUBJECT: Label Amendment Submission of 05/19/93 in Compliance
with PR Notice 93-7
EPA Reg. No. 10182-260
ARROSOLO 3-3E

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the comments listed below.

Based on your certification, the Agency has accepted only those changes to your labeling which are necessary to comply with PR Notices 93-7 and 93-11, which reflect the WPS labeling requirements of 40 CFR part 156, subpart K. Any other labeling changes submitted in connection with this amendment application and not directly related to compliance with PR Notice 93-7 or 93-11 have neither been reviewed nor accepted by the Agency. If you wish to make any such changes, you must submit a separate amendment application proposing them. If your product registration is currently suspended, acceptance of this labeling amendment does not affect the suspension in any way.

A copy of your proposed labeling stamped "Accepted with comments" is attached. Make any required changes described in the attached and send three copies of final labeling as soon as it is available to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs (H-7504C)
U.S. Environmental Protection Agency
401 M Street SW
Washington, DC 20460-0001

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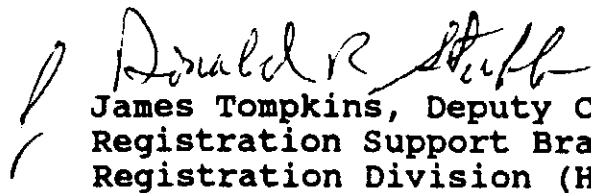
Hand or courier deliveries of final labels may be made to:

Document Processing Desk (FIN-LABEL)
Room 266A Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Please correct the typographical errors circled on the draft before printing final labeling.

In your final labeling the "Agricultural Use Requirements" text" must be contained in a clearly separate box. This box may be set apart by a line, by another graphical device, by a different color background, or in any other way that clearly distinguishes it from surrounding text.

Sincerely,


James Tompkins, Deputy Chief
Registration Support Branch
Registration Division (H7505W)

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ARROSOLO® 3-3E

**Emulsifiable Liquid Herbicide For Use on Rice Grown in the
Southern United States Only**

ACTIVE INGREDIENTS:

S-ethyl hexahydro-1H-azepine-1-carbothioate 33.1%
N-(3,4-dichlorophenyl) propanamide 33.1%

INERT INGREDIENTS: 33.8%
Total 100.0%

Contains 3 Pounds of ORDRAM® and 3 pounds of PROPANIL (Active Ingredients) Per Gallon

EPA Reg. No. 10182-260
EPA Est. No.

Net Contents:

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.)

See Side Panel for Statement of Practical Treatment and Precautionary Statements

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

ACCEPTED
with COMMENTS
In EPA Letter Dated

7 1002
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.

4914

STATEMENT OF PRACTICAL TREATMENT

CALL A POISON CONTROL CENTER OR PHYSICIAN IMMEDIATELY

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

NOTE: Be sure to advise the person contacted that the product is a weak cholinesterase inhibitor in experimental animals. Describe the type and extent of exposure, the victim's symptoms, and follow the advice given.

NOTE TO MEDICAL PERSONNEL: If cholinesterase inhibition is suspected, atropine by injection is antidotal. It has not been determined if pralidoxime chloride (2-PAM, protopam) is antidotal for the product.

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.

IF IN EYES: Immediately flush eyes with large amounts of water for at least 15 minutes. Hold eyelids apart during flushing to ensure rinsing of the entire surface of the eye and lids with water. Get medical attention immediately.

IF ON SKIN: Flush affected areas with plenty of water for several minutes. Remove contaminated clothing and shoes. Get medical attention if irritation occurs.

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 (1-800-327-8633).

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

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

CAUSES SUBSTANTIAL BUT TEMPORARY EYE IRRITATION. ~~Wear goggles or face shield.~~
Harmful if swallowed. Avoid contact with skin, eyes and clothing. ~~Wash with soap and water after use.~~ Avoid breathing spray mist. ~~Remove contaminated clothing and wash before reuse.~~

Personal Protective Equipment

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

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate or butyl rubber ≥14 mils or nitrile rubber ≥14 mils or viton ≥14 mils
- Shoes plus socks
- Protective eyewear

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 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 pesticide is extremely toxic to fish. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water except as specified on this label. Do not contaminate water when disposing of equipment washwaters. Do not contaminate water used for domestic use.

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ARROSOLO 3-3E Container
ARR260C.RSF - RS-051193F

Water drained from treated rice fields must not be used to irrigate other crops or released within 1/2 mile upstream of a potable water intake in flowing water (i.e., river, stream, etc.) or within 1/2 mile of a potable water intake in a standing body of water such as a lake, pond or reservoir.

PHYSICAL AND CHEMICAL HAZARDS

COMBUSTIBLE LIQUID

Do not use or store near heat or open flame.

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.

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

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 protection equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

- ✓ Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.
- ✓ PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:
- Coveralls
 - Chemical-resistant gloves, such as barrier laminate or butyl rubber ≥14 mils or nitrile rubber ≥14 mils or viton ≥14 mils
 - Shoes plus socks
 - Protective eyewear

GENERAL USE PRECAUTIONS

Read all label directions before using. Do not overdose.

ARROSOLO® 3-3E emulsifiable liquid herbicide should be used only for recommended purposes and at recommended rates. ARROSOLO 3-3E may cause crop injury under extreme soil or climatic conditions or if directions are not followed.

Except as specified on this label, the use of fertilizers, oils, surfactants and/or herbicides in tankmixes with ARROSOLO 3-3E may result in crop injury and/or impair the mixing properties of ARROSOLO 3-3E. A small scale physical compatibility test, as outlined in Appendix I, should be conducted on all herbicide tankmixes before combining in the spray tank.

Avoid spray drift to all other crops and non-target areas.

Do not apply carbamate or organophosphorus insecticides in combination with ARROSOLO 3-3E.

Do not apply carbamate or organophosphorus insecticides within 7 days before or after ARROSOLO 3-3E application. Severe injury or kill of rice plants may result from tankmix combination or separate sprays of ARROSOLO 3-3E and certain insecticides.

Do not apply ARROSOLO 3-3E when rice is exhibiting stress from very cold temperatures, drought conditions, or injury from previously applied pesticides, diseases or insects.

ARROSOLO 3-3E should only be applied to fields which have been drained of flood water to expose susceptible weeds.

To avoid injury do not apply when the air temperature is above 100°F.

Weed control may be impaired if ARROSOLO 3-3E is applied when the air temperature is below 70°F.

For best results apply ARROSOLO 3-3E to actively growing weeds in the 1-2 leaf stage.

Do not apply if rainfall is anticipated within 6 hours after application.

Apply only when wind velocity is low, 0-5 mph.

Do not apply more than 9 pounds of active ingredient of ORDRAM® selective herbicide per acre per season.

GENERAL APPLICATION DIRECTIONS

ARROSOLO 3-3E is a selective broad spectrum postemergence rice herbicide for control of annual grasses and broadleaf weeds.

All equipment used in the application of ARROSOLO 3-3E should be carefully calibrated before use and checked frequently during application to be sure the application is uniform. Avoid overlaps that will increase ARROSOLO 3-3E dosage above recommended limits, because crop injury may occur.

Apply ARROSOLO 3-3E in 20 to 50 gallons of water per acre by ground equipment and in 10 to 15 gallons of water per acre by airplane.

Shake well before using.

DIRECTIONS FOR USE AND RECOMMENDATIONS

SOUTHERN UNITED STATES (Arkansas, Louisiana, Mississippi, Missouri [Boot-Heel Region Only] and Texas)

POSTEMERGENCE, PREFLOOD: For use on dry-seeded and water-seeded rice. For control of Barnyardgrass, Sprangletop, Dayflower and Broadleaf Signalgrass, apply ARROSOLO 3-3E at 3 to 4 quarts per acre depending on weed size as shown in the table

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below. For best results, apply ARROSOLO 3-3E when weeds are in the 1-2 leaf stage. Flood the rice within 5 days after application to prevent weed reinfestation.

Weeds Controlled by ARROSOLO 3-3E and Rate Chart

Weeds		Maximum Leaf Stage	
		3 Quarts	4 Quarts
Barnyardgrass	<i>Echinochloa</i> spp.	1-2	3-4
Crabgrass, large	<i>Digitaria sanguinalis</i>	—	1-early 4
Croton, woolly	<i>Croton capitatus</i>	—	*
Dayflower, common	<i>Commelina communis</i>	—	1-2
Dock, curly	<i>Rumex crispus</i>	—	*
Foxtail	<i>Setaria</i> spp.	—	1-early 4
Goosegrass	<i>Eleusine indica</i>	—	1-early 4
Gulf Cockspur	<i>Echinochloa crus-pavonis</i>	—	1-early 4
Hemp Sesbania or Coffee Bean	<i>Sesbania exaltata</i>	—	*
Hoorahgrass or Fringerush	<i>Fimbristylis</i> spp.	—	1-early 4
Homed beakrush	<i>Rhynchospora corniculata</i>	—	*
Junglerice	<i>Echinochloa colonum</i>	—	1-early 4
Paragrass	<i>Panicum purpurascens</i>	—	1-early 4
Pigweed, redroot	<i>Amaranthus retroflexus</i>	—	*
Redweed	<i>Melochia corchorifolia</i>	—	*
Signalgrass, broadleaf	<i>Brachiaria platyphylla</i>	1-2	3-4
Spikerush	<i>Eleocharis</i> spp.	—	1-early 4
Sprangletop (maximum 1 in. tall)	<i>Leptochloa</i> spp.	1-2**	1-2
Texas Millet	<i>Panicum Texanum</i>	—	1-early 4
Texasweed	<i>Cyperonia palustris</i>	—	*

*For control of seedling broadleaf weeds.

**Suppression only in the states of Arkansas, Mississippi, Louisiana and Missouri.

APPENDIX I

Procedure for Testing the Compatibility of ARROSOLO 3-3E in Tankmix Combinations

The following procedure is suggested for determining whether or not ARROSOLO 3-3E may be combined with a specific herbicide for spray tank application.

Materials Required:

- ARROSOLO 3-3E
- Tankmix herbicides
- Adjuvant for spray tankmix combinations: Compex™, Sponto 168-D™, Unite™, or equivalent. The adjuvant which provides the best emulsification depends on the specific herbicide under consideration.
- Two one-quart, wide mouth glass jars with lids or stoppers.
- Measuring spoons. A 25 mL pipette or graduated cylinder provides more accurate measurement. 1 tablespoon equals 3 teaspoons equals approximately 5 milliliters.
- Measuring cup, 8 ounces (237 mL).

Procedure:

1. Pour a pint or about 473 mL of water into each quart jar.
2. Add adjuvant to one of the jars and mix. See Table 1 footnote for adjuvant rate.
3. The order of addition of tankmix herbicides is wettable powders first, followed by wettable dispersible granules, followed by flowables, followed by ARROSOLO 3-3E. See Table 2 for rates of tankmix herbicides to add to both jars.
4. If the tankmix herbicide being tested is a wettable powder, premix the wettable powder in 1/8 cup of water prior to addition to the pint of water.
5. Add ARROSOLO 3-3E to both jars. See Table 1 for rate to use.
6. Close both jars with lid or stopper and mix the contents by turning the jars upside down and back upright ten times.
7. Inspect the surface and body of the mixtures:
 - Immediately after completing the jar inversions.
 - After allowing the jars to stand undisturbed for 30 minutes.
 - Again after turning the jars upside down and upright again ten times after the 30 minute wait.

Evaluation:

- If a uniform mixture 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 remixes uniformly with ten additional 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.
- If adjuvant is needed, add to the spray tank first at a rate of 3 pints per 100 gallons of water.
- Foaming can be minimized by using moderate agitation.

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- If nondispersible oil, sludge or clumps of solids form in the mixture, the combination should not be used.

TABLE 1
RATE TABLE FOR ARROSOLO 3-3E AND ADJUVANT*

GALLONS OF SPRAY VOLUME TO BE APPLIED PER ACRE	ARROSOLO 3-3E TO ADD TO 1 PINT OF WATER FOR 3 QUART PER ACRE RATE		ARROSOLO 3-3E TO ADD TO 1 PINT OF WATER FOR 4 QUART PER ACRE RATE	
	mL	tsp.	mL	tsp.
10	34	7-1/2	45-1/2	9-2/3
15	22-3/4	4-3/4	31	6-1/2
20	17	3-2/3	22-3/4	4-3/4
25	13-2/3	3	18-1/4	4
30	11-1/3	2-1/2	15-1/4	3-1/4
40	8-1/2	1-3/4	11-1/3	2-1/2
50	6-1/4	1-1/2	9	2

* Two (2) milliliters or one-half (1/2) teaspoon of adjuvant added to 1 pint of water equals 3 pints of adjuvant per 100 gallons of water.

**TABLE 2
 RATE TABLE FOR OTHER TANKMIX HERBICIDES**

GALLONS OF SPRAY VOLUME TO BE APPLIED PER ACRE	AMOUNT OF DRY HERBICIDE TO ADD FOR EACH POUND TO BE APPLIED PER ACRE	AMOUNT OF LIQUID HERBICIDE TO ADD FOR EACH PINT TO BE APPLIED PER ACRE	
	tsp.	mL	tsp.
10	2/3	1	1/4
15	1	1-1/2	1/3
20	1-1/5	2	2/5
25	1-1/2	2-1/2	1/2
30	1-3/4	3	2/3
40	2-2/5	4	3/4
50	3	5	1

STORAGE AND DISPOSAL

STORAGE: Do not use or store near heat or open flame. Do not store near seeds and fertilizer. Keep container closed when not in use. Open dumping is prohibited. Do not reuse empty container (for non-bulk or mini-bulk containers).

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

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

FOR MINI-BULK CONTAINERS

CONTAINER DISPOSAL: Reseal 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 or worn threads on closure devices. **REFILL ONLY WITH ARROSOLO 3-3E.** The contents of this container cannot be completely removed by cleaning. Refilling with materials other than ARROSOLO 3-3E will result in contamination and may weaken container. After filling and before transporting, check for leaks. Do not refill or transport damaged or leaking container. **CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER!**

IMPORTANT: Read the entire Directions for Use and the Conditions of Sale and Warranty before using this product.

CONDITIONS OF SALE AND LIMITED WARRANTY:

The Directions for Use of this product are believed to be reliable and should be followed carefully. However, 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 timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended or other influencing factors in the use of the product, all of which are beyond the control of the seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Seller harmless for any claims relating to such factors.

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label, subject to the inherent risks referred to above, when used in accordance with directions under normal conditions of use. 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 and Buyer and User assume the risk of any such use. SELLER DISCLAIMS ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING ANY WARRANTY OF FITNESS OR MERCHANTABILITY.

When Buyer or User claims losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability or other legal theories), Buyer or User must promptly notify in writing Seller of any claims to be eligible to receive either of the remedies set forth below. The EXCLUSIVE REMEDY OF BUYER OR USER and the LIMIT OF LIABILITY of Seller will be, at the election of Seller, refund of the purchase price paid for product bought, or replacement of amount of product used. SELLER SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT AND SELLER'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE.

This product is sold only for uses stated on its label. No express or implied license is granted to use or sell this product under any patent in any country except as specified Country: United States of America. Patent No.: 3,573,031.

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Compex™ is a trademark of Kalo, Inc.
Sponto 168-D™ is a trademark of Witco Corporation.
Unite™ is a trademark of HACO, Inc.