

Reg # 19713-79

PM-25

19 10

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

JUN 30 1992

Barbara Brown  
Labeling Specialist  
Drexel Chemical Company  
2487 Pennsylvania Street / P.O. Box 9306  
Memphis, Tennessee 38109

Dear Ms. Brown:

Subject: Atrazine Plus Linuron  
EPA Reg. No. 19713-79  
RE: Amended Labeling (Risk Reduction Measures)  
Your Submission Dated June 5, 1992

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the comments listed below. Please submit 5 copies of the final printed labeling before releasing the product for shipment.

Please amend "wetlands" statement to read as follows: "Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high-water mark".

Sincerely yours,

Robert J. Taylor  
Product Manager (25)  
Fungicide-Herbicide Branch  
Registration Division (H7505C)

CONCURRENCES

SYMBOL	H7505C						
SURNAME	M/11/1						
DATE	6/29/92						

29/11

RESTRICTED USE PESTICIDE  
(GROUND AND SURFACE WATER CONCERNS)

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

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

**ACCEPTED**  
with COMMENTS  
in EPA Letter Dated:

Drexel

ATRAZINE PLUS LINURON  
WETTABLE POWDER

Weed Killer for Selective Weed Control in Corn

See the Pesticide Use Guide,  
for a complete list of uses.  
For more information, please  
contact the EPA Reg. No.  
7713-74

ACTIVE INGREDIENTS:	
Linuron 3-(3,4-dichlorophenyl)-1-methoxy-1-methylurea . . . . .	30.8%
Atrazine 2-chloro-4-(ethylamino)-6-isopropylamino)-s-triazine . . . . .	29.3%
Related Compounds . . . . .	1.5%
INERT INGREDIENTS: . . . . .	38.4%
TOTAL . . . . .	100.0%

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

Statement of Practical Treatment  
IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.  
IF SPLASHED IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes and get medical attention.  
IF SPILLED ON SKIN: Immediately remove contaminated clothing, INCLUDING SHOES, and wash skin with soap and plenty of water. If irritation develops, send for a physician.

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

**BEST AVAILABLE COPY**

39 10  
2

EPA Reg. No. 19713-79  
EPA Est. No. 19713

Net Contents. \_\_\_\_\_ Lbs. \_\_\_\_\_ Kilograms

06-02-92

Manufactured by: Drexel Chemical Company  
P. O. Box 9306  
Memphis, TN 38109

### PRECAUTIONARY STATEMENTS

#### HAZARD TO HUMAN AND DOMESTIC ANIMALS

CAUTION: Avoid application directly to animals or humans. Flagmen or loaders should avoid inhalation of spray mist or contact with skin and should wash thoroughly before eating and at the end of each day's operation.

HARMFUL OR FATAL IF SWALLOWED: Avoid Breathing of Spray. Do Not Take Internally. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling and before eating or drinking. Users are required to wear long sleeve shirts and long pants or equivalent, chemical resistant gloves, and boots (waterproofed). In addition, persons involved in mixing/loading operations are required to use heavy-duty chemical resistant rubber or neoprene gloves and a face shield or goggles. Change to clean clothing daily.

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

#### ENVIRONMENTAL HAZARDS

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

**BEST AVAILABLE COPY**

This pesticide is toxic to aquatic invertebrates. Do not apply directly to water or wetlands. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

Avoid contamination of food, feed, water supplies, streams and ponds when cleaning equipment. Toxic to fish and wildlife. Birds and other wildlife in treated areas may be killed.

This product may not be mixed/loaded, or used within 50 feet of all wells including abandoned wells, drainage wells, and sink holes. This product may not be mixed or loaded within 50 feet of intermittent streams and rivers, natural or impounded lakes and reservoirs. 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 ft. around natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66 foot buffer or set-back from runoff point must be planted to crop or seeded with grass or other suitable crop.

**FARMWORKER SAFETY STATEMENT**

Do not enter treated areas without protective clothing until sprays have dried.

Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must inform workers of areas or fields that may not be entered without specific protective clothing until sprays have dried, and appropriate actions to take in case of accidental exposure, as described under Precautionary Statements on this label. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. CAUTION. Area treated with Atrazine on (date of application). Do not enter without appropriate protective clothing until sprays have dried. In case of accidental exposure, flush eyes or skin with plenty of water. Call physician if irritation persists. Remove and wash contaminated clothing before reuse.

**BEST AVAILABLE COPY**

5710

Users are required to wear long sleeve shirts and long pants or equivalent, chemical resistant gloves, and boots (waterproofed). In addition, persons involved in mixing/loading operations are required to use chemical resistant rubber or neoprene gloves and a face shield or goggles.

Any article worn while applying linuron must be cleaned before reusing. Clothing which has been drenched or has otherwise absorbed concentrated pesticide must be disposed in a sanitary landfill, or incinerated, or if allowed by state and local authorities, by burning.

Instead of clothing and equipment specified above, the applicator can use an enclosed tractor cab which provides a filtered air supply (as described by Taschenberg and Bourkek, 1975).

Do not reenter treated areas for 24 hours following application unless protective clothing is worn.

#### GENERAL INFORMATION

DO NOT APPLY WITH AERIAL EQUIPMENT.

IMPORTANT: Use Atrazine Plus Linuron Weed Killer only as specifically recommended. Over dosage caused by incorrect preparation of spray mixture, improper calibration of equipment, or application at a speed slower than used for calibration should be avoided as injury to the crop may result.

DO NOT apply, drain or flush equipment on or near desirable trees and plants or on areas where their roots may extend or locations where the chemical may be washed or moved into contact with their roots. DO NOT use on lawns, walks, driveways, tennis courts, or similar areas.

Prevent drift of dry powder or spray to desirable plants. Keep from contact with fertilizers, insecticides, fungicides and seeds.

Do not rotate crops used for food or feed, which are not registered for use with linuron onto areas previously treated with this chemical.

**BEST AVAILABLE COPY**

62 10

Atrazine Plus Linuron Weed Killer is a wettable powder to be mixed in water and applied as a spray for the selective control of annual weeds and grasses in field corn. It is non-volatile and non-flammable.

Treatment provides control of germinating annual weed seedlings such as foxtail (including giant foxtail), barnyardgrass, crabgrass, buttonweed, lambsquarters, pigweed, purslane, mustard, ragweed, and smartweed. Treatment will not control established nutgrass, Johnsongrass, Bermudagrass or other perennial weeds.

#### DIRECTIONS FOR USE

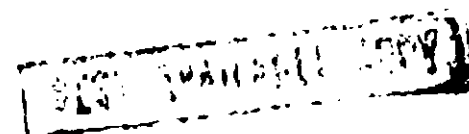
It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Make a single application as a band (over the row) or broadcast spray after planting but before crop emergence. For accuracy and convenience, planting and spraying should be combined in one operation. Apply with a properly calibrated fixed-boom power sprayer, using sufficient water (equivalent to 25 to 40 gallons per acre on a broadcast basis) to provide thorough and uniform coverage of the ground. Avoid overlapping and shut off spray boom while starting, turning, slowing or stopping or injury to the crop may result. Continuous agitation is required to keep the material in suspension.

Best results are obtained when Atrazine Plus Linuron Weed Killer is moved by moisture (rainfall or overhead irrigation into the upper layer of soil within 2 weeks after application). Lack of sufficient moisture (1 to 2 inches is generally sufficient) following treatment will generally result in unsatisfactory weed control.

**DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM.**

Soils should be well prepared and free as possible from trash and clods. Seeds should be planted to a depth of at least 1-3/4 inches or crop injury may result. If soil becomes crusted before corn emerges a shallow rotary hoeing may be made. If rainfall is insufficient to activate the chemical following treatment, rotary hoeing or stand cultivation should be used before weeds become well established; otherwise avoid cultivating or disturbing the sprayed area, such as covering treated band with soil while cultivating middles.



7 9 10

Fields treated with Atrazine Plus Linuron Weed Killer may be planted to the same crop if initial seeding fails to germinate or produce a stand. Thoroughly rework soil before planting. Do not retreat field with a second application during the same crop year as injury to the crop may result.

Postemergence application to corn must be made before corn reaches 12 inches in height.

The maximum application rate for corn is 2.5 lbs. a.i. of Atrazine per acre per calendar year. Applications for quackgrass suppression in corn are restricted to a spring application only. No fall applications are permitted.

Do not replant treated areas with crops other than corn within 6 months after application or crop may be injured.

Do not follow treated corn with sugar beets, tobacco or vegetables in rotation.

Prior to replanting to any crop following treated corn, thorough seedbed preparation including fall or spring plowing is recommended.

#### APPLY THE SPRAY AT THE FOLLOWING RATES

Soil Type*	Lbs. of Atrazine Plus Linuron Weed Killer in 25 to 40 gallons water per acre (of ground actually sprayed.)	Example-Band treatment Lbs./Crop Acre 14" Band on 42" Rows.
Light colored-Low organic matter 2% or less		
Sandy Loam	1.6	.5
Silt Loam	2.0	.7
Clay Loam	2.5	.8
Dark colored-moderate		

**BEST AVAILABLE COPY**

organic matter

Silt Loam	4.0	1.3
Clay Loam	5.0	1.7

\*DO NOT USE ON SAND OR LOAMY SAND SOILS AS CROP INJURY MAY RESULT.

**EQUIPMENT**

Use a tractor mounted power sprayer properly calibrated to a constant speed and rate of delivery. (SEE CALIBRATION SECTION). Sprayer should be designed to treat the same number of rows as the planter used.

Make certain spray equipment is clean (free of scale, rust, dirt, oil, and pesticide deposits). Screens should be 50-mesh or coarser. Booms and hoses should be maximum of 1/2" diameter. MATERIAL MUST BE KEPT IN SUSPENSION AT ALL TIMES BY CONTINUOUS AGITATION. Agitate by mechanical or hydraulic means. With hydraulic system, use a separate agitation line in addition to bypass line; both lines should terminate at bottom of tank to minimize foaming. Spray booms must be shut off while starting, turning, slowing or stopping or injury to crop may result.

CALIBRATION: The following is designed for application of indicated number of gallons spray per acre actually sprayed; it is based on width of band treated and is not effected by row spacing.

STEP 1: To calibrate, use tractor gear and throttle setting which will be used for actual application (full throttle is preferred to insure maximum pump capacity). With only water in the tank, determine number of seconds required for tractor to travel in the field the measured distance shown below--opposite desired band width and under proper spray volume.

BAND WIDTH	GALLONS SPRAY PER ACRE OF GROUND ACTUALLY SPRAYED			
	25	30	35	40
10 in.	523 Ft.	436 Ft.	363 Ft.	326 Et.
12 "	436 "	363 "	311 "	272 "
14 "	374 "	311 "	266 "	232 "
16 "	327 "	272 "	233 "	204 "
18 "	291 "	242 "	207 "	181 "
20 "	262 "	218 "	187 "	163 "

**BEST AVAILABLE COPY**



791

Adjust height of boom to obtain desired band width. With only water in the tank and using the same throttle setting as in STEP 1, but with tractor standing still adjust the pressure so that EACH NOZZLE delivers ONE QUART of spray in the exact number of seconds as determined in STEP 1 for the selected band width.

STEP 2: Equipment is now ready to apply the required spray volume, provided nozzle height, gear and throttle settings are not changed.

### EQUIPMENT CLEANING

Thoroughly clean all traces of Atrazine Plus Linuron Weed Killer from application equipment immediately after use otherwise crop injury may result when equipment is used again. Flush tank, pump, hoses and boom with several changes of water after removing nozzle tips and screens (clean these parts separately).

### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage, or disposal.

### STORAGE INSTRUCTIONS

Storage should be under lock and key and secure from access by unauthorized persons and children. Storage should be in a cool dry area away from any heat or ignition source. Do not allow storage in a damp or humid area. Do not stack over 2 pallets high. Move bags carefully so as not to tear or puncture. Do not move from one area to another unless they are securely sealed to prevent dust from escaping. Keep container tightly sealed when not in use. Keep away from any puncture source. Avoid storage near water, supplies, food, feed and fertilizer to avoid contamination. Avoid contamination with acids and alkalies. Store in original containers only. If the contents are leaking or material is spilled, follow these steps while wearing protective equipment:

791

- 9  
10 9 10
1. Collect and place in suitable containers for disposal.
  2. Wash area with water and soap to remove remaining pesticide.
  3. Follow washing with clear water rinse.
  4. Do not allow run off to enter sewer or contaminate water supplies.
  5. Dispose of waste as indicated below:

#### 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:

Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

#### WARRANTY - CONDITION OF SALE:

DIRECTIONS FOR USE of this product are based on field use and tests believed reliable and should be followed carefully. It is however impossible to eliminate all risks associated with use of this product. Because such factors as weather conditions, foreign material and manner of use for application are all beyond the control of the Seller of this product, such things as crop injury, ineffectiveness or other unintended consequences may result.

#### ALL SUCH RISKS ARE ASSUMED BY THE BUYER

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the directions for use. Seller makes no other warranties, express or implied, including FITNESS OR MERCHANTABILITY. In no case shall the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. The foregoing is a condition of sale by Seller and is accepted as such by the Buyer.

**BEST AVAILABLE COPY**