US ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (TS-767) WASHINGTON, DC 20460

NOTICE OF PESTICIDE: REGISTRATION REREGISTRATION

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

EPA REGISTRATION NO.

MAY 2.5 1934

62719-253 TERM OF ISSUANCE

Committional Expires April Du, 1965

DATE OF ISSUANCE

NAME OF PESTICIDE PRODUCT

reconstruction and test to the

NAME AND ADDRESS OF REGISTRANT (Inclus- ZIP code)

\_

Nowelanco 9330 Zionsville koad Indianapolis, IN 46266-1054

L

\_1

NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

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

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

This groduct is conditionally registered to accordance with riban section 3(c)(7)(A) provided that you:

- Submit and/or cite all data required for registration/reredistration of this product ander allow sec. 3(2)(1) when the my regulars allowing registrants of smaller products to submit such data; and submit acceptable responses required for rere istration or your product who a alread sec. 4.
- 2. Add the intase "LPA Registration No. 02719-200" to the label perore you release the product for shipschip.
- 3. On page 7, revise the two statement that starts: "Broadstrike Plus Corn Pre/PPI" has been tested on only a limited .....", to read as follows: "The following II corn lines are tolerent to Broadstrike Plus Corn Pre/PPI: #6532II, #705II and 522FI. All other II corn lines should be thoroughly tested for creatolerance before applying to these varieties."
- 4. Submit rive (b) copies of the final printed labeling before you release the product for snipment.

In these conditions are not compared with, the result will a subject to concellation in accordance with elementarial of the ground constitutes acceptance on the element of the crossest constitutes acceptance on the element of the level of

# BEST AVAILABLE COPY

HOTOSATE ATTACHMENT IS APPLICABLE

construction ();
c

I	IGH/	ATURE	OF	APPRO	VING	OFF	ICIAL

Prance No Miller

MAY 25 1994

PA Ferm 8570-6 (Rev. 5-76)

PREVIOUS EDITION MAY HE HEED HATEL MINON WILL

Printed 5/16/94

[Editor's note: Added text, compared to EPA-accepted text for EUP label, is underlined and deleted text indicated by strike-through.]

(Container Label)

ACCEPTED
with COMMENTS
In EPA Letter Dated

(Logo) DowElanco

# Broadstrike\* Plus Corn Pre/PPI

Under the Federal Insecticide. Fundicide, and Rodenticide Act as unrended, for the pesticide registered under EPA Reg. No. 62719-253

For Experimental Use Only

A selective soil applied herbicide for preemeryence control of broadleaf weeds in field corn. For use only at an application site of a cooperator and in accordance with the terms and conditions of the experimental use permit. Not for sale to any person other than a participant or cooperator of the EPA-approved experimental use program. This Experimental Use Permit is being conducted on a crop destruction basis. Plants treated with Broadstrike Plus - Corn Pre/PPI may not be harvested for food or animal feed.

Active Ingredients:

**Precautionary Statements** 

Hazards to Humans and Domestic Animals

Keep Out of Reach of Children DANGER

**PELIGRO** 

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

Causes irreversible Eye Damage • Do Not Get in Eyes Or On Clothing • Harmful if Swallowed, Inhaled Or Absorbed Through The Skin • May Cause Skin Sensitization Reactions in Certain Individuals. Avoid Breathing Vapors Or Spray Mist And Contact With Skin, Eyes Or Clothing.

Personal Protective Equipment (PPE)
Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- 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.

### **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.

Printed 5/16/94

#### First Ald

If in eyes: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

If swallowed: Do not induce vomiting. Call a physician or Poison Control Center. If available, administer activated charcoal (6-8 heaping teaspoonfuls) with a large quantity of water. Do not give anything by mouth to an unconscious person. Immediately transport to a medical care facility and see a physician. If Inhaled: Remove individual to fresh air. Get medical attention if breathing difficulty occurs. If not breathing, give artificial respiration, preferably cardiopulmonary resuscitation assistance, and get medical attention immediately.

If on skin: Immediately wash with plenty of soap and water. Get medical attention if irritation develops.

#### Environmental Hazards

Do not apply directly to water, 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.

The active ingredients in this product are known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this product where soils are permeable, particularly where the water table is shallow, may result in leaching to ground water.

Chemicals in this product can travel (seep or leach) through soil and under certain conditions contaminate groundwater which may be used for irrigation or drinking purposes. Users are advised not to apply clopyralid where soils have a rapid to very rapid permeability throughout the profile (such as loamy sand to sand) and the water table of an underlying aquifer is shallow, or to soils containing sinkholes over limestone bedrock, severely fractured surfaces, and substrates which would allow direct introduction into an aquifer. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

Caution should be exercised when handling this product at mixing and loading sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

Do not contaminate water used for domestic purposes.

#### Agricultural Use Requirements

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

Refer to label booklet for additional precautionary information including Personal Protective Equipment (PPE) and User Safety Recommendations, and Directions for Use including Storage and Disposal.

Notice: Read the entire label before using. Use only according to label directions. Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" elsewhere on this label.

In case of emergency endangering health or the environment involving this product, call collect 517-636-4000.

Agricultural chemical: Do not ship or store with food, drugs or clothing.

EPA Reg. No. 62719-ELG

EPA Est. 00000-XY-00

\*Trademark of DowElanco BEST AVAILABLE COPY

DowElanco - Indianapolis, IN 46268

**Broadleaf Blend Herbicide** 

Net Weight \_\_ lb

(Contains \_\_, 8 oz Water Soluble Packets)

[Editor's note: Added text, compared to EPA-accepted text for EUP label, is underlined and deleted text indicated by strike-through.]

(Label Booklet)

(Logo) DowElanco

# Broadstrike\* Plus Corn Pre/PPI

For Experimental Use Only

A selective soil applied herbicide for preemergence control of broadleaf weeds in field corn. For use only at an application site of a cooperator and in accordance with the terms and conditions of the experimental use permit. Not for sale to any person other than a participant or cooperator of the EPA-approved experimental use program. This Experimental Use Permit is being conducted on a crop destruction basis. Plants treated with Broadstrike Plus - Corn Pre/PPI may not be harvested for food or animal feed.

**Active ingredients:** 

# Keep Out of Reach of Children DANGER PELIGRO:

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

#### Agricultural Use Requirements

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

Refer to inside of label booklet for additional precautionary information including Personal Protective Equipment (PPE) and User Safety Recommendations, and Directions for Use including Storage and Disposal.

Notice: Read the entire label before using. Use only according to label directions. Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" elsewhere on this label.

In case of emergency endangering health or the environment involving this product, call collect 517-636-4000.

Agricultural chemical: Do not ship or store with food, drugs or clothing.

EPA Rea. No. 62719-ELG

EPA Est. 60000-XX-00

DowElanco • Indianapolis, IN 46268

# BEST AVAILABLE COPY

# Broadleaf Blend Herbicide

Net Weight \_\_ lb

(Contains \_\_, 8 oz Water Soluble Packets)

<sup>\*</sup>Trademark of DowElanco

504/4

### **Precautionary Statements**

Hazards to Humans and Domestic Animals

Keep Out of Reach of Children

DANGER

**PELIGRO** 

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

Causes irreversible Eye Damage • Do Not Get in Eyes Or On Clothing • Harmful if Swallowed, Inhaled Or Absorbed Through The Skin • May Cause Skin Sensitization Reactions in Sertain Individuals. Avoid Breathing Vapors Or Spray Mist And Contact With Skin, Eyes Or Clothing.

## Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- Waterproof gloves
- 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.

#### 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.

#### First Aid

If In eyes: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

If swallowed: Do not induce vomiting. Call a physician or Poison Control Center. If available, administer activated charcoal (6-8 heaping teaspoonfuls) with a large quantity of water. Do not give anything by mouth to an unconscious person. Immediately transport to a medical care facility and see a physician. If Inhaled: Remove individual to fresh air. Get medical attention if breathing difficulty occurs. If not breathing, give artificial respiration, preferably cardiopulmonary resuscitation assistance, and get medical attention immediately.

If on skin: Immediately wash with plenty of soap and water. Get medical attention if irritation develops.

#### **Environmental Hazards**

Do not apply directly to water, 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.

The active ingredients in this product are known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this product where soils are permeable, particularly where the water table is shallow, may result in leaching to ground water.

Chemicals in this product can travel (seep or leach) through soil and under certain sond travel contaminate groundwater which may be used for irrigation or drinking purposes. Users are advised not to apply clopyralid where soils have a rapid to very rapid permeability throughout the profile (such as loarry car'd to sand) and the water table of an underlying aquifer is shallow, or to soils containing sinkholes over limestone bedrock, severely fractured surfaces, and substrates which would allow direct introduction into an aquifer. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

Caution should be exercised when handling this product at mixing and loading sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will

page 6 Printed 5/16/94

reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

Do not contaminate water used for domestic purposes.

#### Directions for Use

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read all directions before applying.

Handling Precautions for Water Soluble Packets: Do not remove water soluble packet from overpack except for immediate use. Do not allow water soluble packet to come into contact with water prior to use. Do not handle water soluble packet with wet hands or wet gloves. Carefully reseal package containing unopened water soluble packets and protect package from moisture.

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 48 hours.

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

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

- Coveralls
- Waterproof gloves
- Shoes plus socks
- Protective evewear

#### Storage And Disposal

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

Storage: Store in original container only. In case of leak or spill, contain material with absorbent materials and dispose as waste. Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Do not store above 122°F for extended periods of time. If container is damaged or spill occurs, use product immediately or contain with absorbent materials and dispose as waste. Packets may become brittle when stored below 32°F. Handle carefully when frozen to avoid breakage or allow package to warm above 32°F before handling.

Disposal: Wastes resulting from the use of this product may be disposed of on site according to label use directions or at an approved waste disposal facility.

Container Disposal: Triple rinse (or equivalent). Then dispose of in a sanitary landfill or by invinsention if permitted by State and local authorities. If burned, stay out of smoke. When all packets are used, dispose of empty package in a sanitary landfill or by incineration or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

General: Consult federal, state, or local disposal authorities for approved alternative procedures.

# 70/14

## General Information

Broadstrike Plus - Corn Pre/PPI is a selective herbicide for broadleat weed control in field corn.

Broadstrike Plus - Corn Pre/PPI may be applied as a preplant surface, preplant incorporated or preemergence treatment. Treatments may be applied in water or liquid fertilizer or impregnated on dry fertilizer. Absorption of Broadstrike Plus - Corn Pre/PPI occurs through both the foliage and root uptake. Susceptible weeds exposed to Broadstrike Plus - Corn Pre/PPI stop growing and either die or remain non-competitive with the crop. Broadstrike Plus - Corn Pre/PPI provides residual control of weeds that may emerge after application. Adequate soil moisture is necessary for optimal activity because uptake and translocation of Broadstrike Plus - Corn Pre/PPI involves uptake by both roots and/or foliage - adequate soil moisture is necessary for optimal activity.

When applications are made under adverse (dry or cold) conditions, weed suppression may be observed. Weed suppression is a visual reduction in weed competition (reduced population, size, and/or vigor) as compared to an untreated area. Degree of control can be increased by applying Broadstrike Plus - Corn Pre/PPI under favorable growing conditions (i.e., adequate moisture and temperature), and by using a higher rate in the specified rate range.

#### General Use Precautions

- Do not exceed 1 application per year.
- Do not exceed a total application rate of 0.30 lb/acre of Broadstrike Plus Corn Pre/PPt (0.07 lb flumetsulam) in a single crop year.
- Preharvest Interval: An interval of at least 85 days is required between application of Broadstrike Plus Corn Pre/PPI and field corn harvest.
- Do not apply Broadstrike Plus Corn Pre/PPI to sweet corn or popcorn.
- Corn inbred lines grown for hybrid seed production may be injured by Broadstrike Plus Corn Pre/PPI.
   Inbred lines should be thoroughly tested for crop tolerance before treating large acreages.
- Broadstrike Plus Corn Pre/PPI has been tested on only a limited number of IT corn lines including 8532IT. 8692IT. 8708IT and 522PT. Therefore IT corn lines should be thoroughly tested for crop tolerance before treating large acreages.
- Do not use on IT corn lines.
- Do not apply where (both apply) Preview or Canopy herbicide was applied the previous year and where soils have a pH greater than 6.8.
- If Preview or Canopy were applied the previous crop year, apply Broadstrike Plus Corn Pre/PPI to corn, only if the rotational restrictions to corn for these products have been met.
- Crop injury may occur on soils having a calcareous surface layer or a pH of 8.0 or higher. Do not apply to
  a soil which has both a areas where (both apply) the soil pH is greater than 8.0 and organic matter is less
  than 3.0 percent unless the risk of potential crop injury is acceptable (both must apply).
- Do not apply to areas where (both apply) the a soil having a pH is less than 5.9 and organic matter is greater than 5% (both must apply).
- · Do not use on peat or muck soils.
- Soil Insecticides: Soil insecticides should be used applied in T-band-or a band to avoid potential serious crow injury when Broadstrike Plus Corn Pre/PPt is used for broadleaf weed control in corn.
- Do not apply when air temperature is near freezing or when freezing conditions are expected for several days following application.
- Do not aerially apply Broadstrike Plus Corn Pre/PPI.
- Chemigation: Do not apply this product through any type of irrigation system.
- Avoid all direct or indirect contact with non-target plants. Do not apply near desirable
  vegetation, and Allow adequate distance between target area and desirable plants under conductors of
  application to minimize potential exposure.
- Crop residues from treated areas: Crop residues from treated areas cannot be used for composting or mulching on ground where susceptible crops may be grown the following season. To promote herbicide decomposition, plant material should be evenly incorporated or burned. Adequate moisture is also required to promote breakdown of plant residues which contain clopyralid.
- Do not move treated soil: Avoid situations where soil particles may blow into areas where susceptible crops are grown. The hazard of movement of this product on dust is reduced if treated fields are irrigated or if rain occurs shortly after application.
- Do not apply under conditions which favor runoff or wind erosion of soil containing Broadstrike to non-target areas. To prevent off-site movement due to runoff or wind erosion:
  - Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.

- Do not apply to impervious substrates such as paved or highly compacted surfaces or frozen or snow covered ground.
- Do not apply to soils when saturated with water.
- Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non target crops unless at least 1/2-inch of rainfall has occurred between application and the first irrigation.
- Do not apply when weather conditions favor drift to non target sites. To minimize spray drift to non target areas:
  - Use low pressure application equipment capable of producing a large droplet spray.
  - Do not use nozzles that produce a fine-droplet spray.
  - Minimize drift by using sufficient spray volume to ensure adequate coverage with large droplet size sprays.
  - Keep ground-driven spray boom as low as possible above the target surface.
  - Spray when conditions are calm or wind speed is low. Do not spray when wind is gusting or steady wind speed is greater than 10 mph.
- Sprayer Cleanup: To avoid injury to or exposure of nontarget crops, thoroughly clean and drain spray equipment used to apply Broadstrike Plus Corn Pre/PPI after use. Cleaning should occur as soon as possible after Broadstrike Plus Corn Pre/PPI application. All rinsate material should be collected in a suitable container and disposed of according to label directions (applied to cropland to be planted to crops recommended in this label) or in a locally approved manner (see "Storage and Disposal" section). Spray equipment should be cleaned after use with Broadstrike Plus Corn Pre/PPI by the following procedure:
  - 1. Drain any remaining Broadstrike Plus Com Pre/PPI from the spray tank and dispose of according to label disposal instructions.
  - 2. Hose down the interior surfaces of the tank. Flush tank, hoses, boom and nozzles with clean water for 10 minutes. Fill the tank with water and recirculate for 15 minutes. Spray part of the mixture through the hoses, boom and nozzles and drain the tank. All rinse water must be disposed of in compliance with local. State and Federal guidelines.
  - 3. Remove the nozzles and screens and clean separately.
  - 4. If the spray equipment will be used on crops other than field corn those registered for use on this label, repeat steps 1 and 2 again and thoroughly wash the spray mixture from the outside of spray tank and the boom.

Placement of mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

#### Rotational Crop Restrictions:

When tank mixing with companion herbicides, follow the most restrictive crop rotation guidelines on the label of each product used.

The following rotational crops may be planted at <u>after</u> the indicated interval following application of rates up to 0.30 lb/acre of Broadstrike Plus - Corn Pre/PPI:

Crop <sup>1</sup>	interval (Months)
barley, oats, rye, wheat	4
rice	6
alfalfa	10 1/2
dry beans <sup>2</sup>	10_1/2
soybean <sup>2</sup>	10 1/2
sweet com	10 1/2
pop com	10 1/2
grain sorghum	12
peas	18
peanuts	18
sunflowar	18
cotton	<del>22</del> <u>18</u>
sugar beets	26
rapeseed (canola)	26

Printed 5/16/94

Fletd Bioassay Instructions: Using typical tillage, seeding practices, and timings for the particular crop, plant several strips of the desired crop variety across the field previously treated with Broadstrike Plus - Corn Pre/PPI. Plant the strips perpendicular to the direction Broadstrike Plus - Corn Pre/PPI was applied. The strips should also be located so that different field conditions are encountered, including differences in soil texture, pH, and drainage. If the crop does not show visible symptoms of injury, or stand reduction, or yield reduction, the field can be seeded with the test crop in the growing season following the bioassay. If visible injury, stand reduction, or yield reduction occurs, the test crop should not be seeded, and the bioassay must be repeated the next growing season.

## Mixing and Application

# Mixing Directions

Application Rates for Preplant Surface Applied,
Preplant Incorporated and Postplant Preemergence Treatments

Soli Texture	lb of Broadstrike Plus - Corn Pre/PPI/acre	Packet Factor (acres/packet)
Course	0.20 - 0.25	2.5 - 2.0
Medium or Fine	0.25 - 0.30	2.0 - 1.67

### To calculate the number of packets for your spray mix:

- 1. Determine the number of acres you wish to spray in the desired application.
- 2. Divide the number of acres by the Packet Factor<sup>1</sup> that falls within the rate range you have chosen (<sup>1</sup>Packet factor = acres per packet at a specified application rate). See the above rate table for broadcast application rates and corresponding packet factors.
- 3. The result is the number of packets you are required to add to the spray mix.

#### If the resulting number of packets is not a whole packet:

- 1. Do not open the water soluble packets.
- 2. Round up or down to the nearest whole number of packets and check to make sure that the resulting number of acces/packet falls within the desired rate range for the application.

#### Sample calculations:

- 1. Planned application = 0.2 b/acre (The packet factor for 0.2 b/acre is 2.5.)
- 2. Assuming 17 acres is to be treated, 17 acres divided by the Packet Factor of 2.5 = 6.8 packets (Round up to 7 packets).
- 3. 17 acres divided by 7 packets = a packet factor of 2.43 which is within the desired packet factor range of 2.5 to 2.0 for the application.

#### Spray Preparation:

Broadstrike Plus - Corn Pre/PPI is a water dispersible granule formulation. Thorough mixing is required.

- 1. Fill the tank with 1/2 of the total amount of water or liquid fertilizer required for the load.
- Start agitation system.
- 3. Add required number of water soluble packets (See special pre-mixing instructions below for liquid fertilizer solutions). Open overpack and add the soluble packet (product in transparent film) directly into the spray tank while aditating. Do not open water soluble packets. Water soluble packets will float on the surface until the water soluble film dissolves and releases the product. Handling packets with hands should be minimized.
- 4. Continue aditation and complete filling the tank while the packets dissolve.
- 5. Before spraying, make sure packets have completely disintegrated and product is thoroughly mixed with water. Depending on the water temperature and the degree of apitation, the packet and Broadstrike Plus Corn Pre/PPI should be completely dispersed within 5 minutes from the time they were added to the water.

<sup>&</sup>lt;sup>1</sup>Note: Rotation to <u>sugar beets, canola and all</u> other crops requires a 26 month rotation interval and a successful field bioassay.

<sup>&</sup>lt;sup>2</sup>For low moisture (less than 15 inches annual rainfall) and low organic matter (less than 2 %) areas, dry beans and soybeans should not be planted until 18 months after treatment.

100f14

Fill the spray tank about one half full of water or liquid fertilizer. Start agitation and add the required amounts of Broadstrike Plus - Corn Pre/PPI and companion herbicide (if selected). Continue mixing and agitation while filling the spray tank to the required spray volume. To insure a uniform spray mixture continuous agitation is required during mixing and spraying. Apply within 24 hours after mixing. If product is allowed to settle, thoroughly agitate to resuspend the mixture before spraying.

Pre-mixing (Slurry)

Note: These pre-mixing instructions must be followed when Broadstrike Plus - Corn Pre/PPI will be used in liquid fertilizer or impregnated onto dry granular fertilizer. The film used in water soluble packaging for Broadstrike Plus - Corn Pre/PPI is not soluble in liquid fertilizer solutions. Water soluble packets containing Broadstrike Plus - Corn Pre/PPI should be pre-mixed with water and added to the spray tank through a 20-35 mesh screen. For best results, a minimum of 1 pint of water should be used to sturry each 8 oz packet of Broadstrike Plus - Corn Pre/PPI. The packets can be stirred immediately on addition to water or allowed to dissolve. Stir until the packets are completely dissolved and granules are dispersed. Dry and flowable formulations may be premixed with water (sturried) and added to the spray tank through a 20-35 mesh screen. This procedure assures good initial dispersion of these products in liquid fertilizer or water.

#### Broadstrike Plus - Corn Pre/PPI in Tank Mix

Vigorous, continuous agitation during mixing, filling and throughout application is required for all tank mixes. Sparger pipe agitators generally provide the most effective agitation in spray tanks. To prevent foaming in the spray tank, avoid stirring or splashing air into the spray mixture.

Note: When tank mixing Broadstrike Plus - Corn Pre/PPI with other products, a compatibility test (jar test) using relative proportions of tank mix ingredients should be conducted prior to mixing ingredients in the spray tank. Pre-mixing of Broadstrike Plus - Corn Pre/PPI to form a slurry is required when applying with liquid fertilizer solutions.

Mixing Order for Tank Mixes: Fill the spray tank to 1/4 to 1/3 of the total spray volume required with water or liquid fertilizer solution. Start agitation. Add different formulation types in the order indicated below, allowing time for complete mixing and dispersion after addition of each product. Allow extra mixing and dispersion time for dry flowable products.

Add different formulation types in the following order: Broadstrike Plus - Corn Pre/PPI (slurried if mixing with liquid fertilizer) and other dry flowables; wettable powders; aqueous suspensions, and flowables and liquids. Maintain agitation and fill spray tank to 3/4 of total spray volume. Then add emulsifiable concentrates and any solutions.

Finish filling the spray tank. Maintain continuous agitation during mixing, final filling and throughout application. It spraying and agitation must be stopped before the spray tank is empty, the materials may settle to the bottom. Settled materials must be resuspended before spraying is resumed. A sparger agitator is particularly useful for this purpose. Settled material may be more difficult to resuspend than when originally mixed.

Line screens in the spray tank should be no finer than 50 mesh (100 mesh is finer than 50 mesh).

Spray Application

Apply Broadstrike Ptus - Corn Pre/PPI in sufficient spray volume to provide uniform coverage using only properly calibrated ground equipment. Apply in a total spray volume of 10 to 40 gallons per acre using low pressure (20 to 40 pounds/square inch). Maintain sufficient agitation during mixing and spraying to ensure a uniform spray mixture. To ensure thorough coverage when applying to minimum or no till field corn, apply in a total spray volume of 20 or more gallons per acre.

Band Application: Calculate the amount of herbicide needed for band treatment by the formula:

Band width in inches

X Broadcast rate = Amount needed row width in inches per acre per acre of field

11214

Liquid Fertilizer Mixing Instructions

Broadstrike Plus - Corn Pre/PPI, ean may be applied in liquid fertilizer. In all cases a slurry (see premixing instructions on this label) of the water soluble packets containing the Broadstrike Plus - Corn Pre/PPI must be made prior to use with liquid fertilizer solutions. This is necessary because the water soluble film is not directly soluble in liquid fertilizer. Continuous agitation is required. When necessary, a compatibility agent can be used to ensure that Broadstrike Plus - Corn Pre/PPI mixes properly. The use of appropriate compatibility agents is especially important when tank mixing Broadstrike Plus - Corn Pre/PPI and other dry flowables, wettable powders, flowables, liquids, aqueous suspensions, or solutions with emulsifiable concentrates in liquid fertilizers. If the emulsifiable concentrate formulation rises to the surface of the fertilizer as an oil ("oils out"), the oil may combine with the wettable powder, flowable, or suspension to form oily curds (viscous phase) which are difficult to disperse. A jar test, utilizing relative proportions of the tank mix ingredients is recommended prior to mixing with liquid fertilizers.

Application with Dry Bulk Fertilizer

Dry bulk fertilizer may be impregnated or coated with Broadstrike Plus - Corn Pre/PPI. Application of dry bulk fertilizer impregnated with Broadstrike Plus - Corn Pre/PPI provides weed control equal to the same rates of Broadstrike Plus - Corn Pre/PPI applied in liquid carriers.

Follow Broadstrike Plus - Corn Pre/PPI label recommendations regarding rates per acre, crops, special instructions, cautions and special precautions. Apply 200-700 pounds of the fertilizer/herbicide mixture per acre. For best results, apply the mixture uniformly to the soil with properly calibrated equipment immediately after blending. Uniform application of the herbicide/fertilizer mixture is essential to prevent possible crop injury. Non-uniform application may also result in unsatisfactory weed control. In areas where conventional tillage is practiced, a shallow incorporation of the mixture into the soil may improve weed control.

Precaution: To avoid crop injury, do not use the fertilizer/herbicide mixture on crops on bedded soil. where bedding occurs.

Compliance with all Federal and State regulations relating to blending pesticide mixtures with dry bulk fertilizer, registration, labeling and application are the responsibility of the individual and/or company offering the fertilizer and chemical mixture for sale.

Limitations: Apply a minimum of 200 pounds per acre of dry fertilizer impregnated with Broadstrike Plus - Corn Pre/PPI at the recommended rate. Most dry fertilizers can be used for impregnation with Broadstrike Plus - Corn Pre/PPI. When coated ammonium nitrate and/or limestone are used alone, do not impregnate with Broadstrike Plus - Corn Pre/PPI. These materials will not absorb the herbicide. Fertilizer blends containing coated ammonium nitrate and/or limestone as part of the fertilizer mixture of these materials can be impregnated.

Impregnation: A water sturry (see premixing instructions on this label) of the Broadstrike Plus - Corn Pre/PPI packets must be made and sprayed onto the fertilizer at a minimum volume of 6 pints per ton of fertilizer. Soray nozzles should be placed to provide uniform spray coverage onto the fertilizer. Care should be taken to aim the spray directly onto the fertilizer and avoid spraying the walls of the blender. Use any closed drum, belt, ribbon or other commonly used dry bulk fertilizer blender. Nozzles used to spray the Broadstrike Plus - Corn Pre/PPI onto the fertilizer should be placed to provide uniform spray coverage. Add water to the Broadstrike Plus - Corn Pre/PPI to give a total volume of at least six (6) pints per ton of fertilizer.

Calculate amounts of Broadstrike Plus - Corn Pre/PPI by the following formula:

2,000				
<del></del>	X	Pounds/acre of	#	Pour ds of product
Pounds of fertilizer per acre		Broadstrike Plus - Com Pre/PPI		per ton of fertilizer

Note: Thoroughly clean dry fertilizer blending equipment prior to use with otiles. herbicides. It is important to clean the blender, herbicide spray tank and spraying apparatus thoroughly. Rinse the sides of the blender and the herbicide tank with water. Then, impregnate the rinsate onto a load of dry fertilizer intended for an approved crop. Use a maximum rate of 1 gallon of rins terion of fertilizer. Follow with 1 - 2 loads of unimpregnated fertilizer in the blender before switching hert cides. The tertilizer application equipment must be empty, clean and dry before applying any material to crops other than corn.

# **Approved Uses**

# Field Corn

## Soil Applied Treatments

Broadstrike Plus - Corn Pre/PPI may be soil applied as a preplant surface, preplant incorporated or preemergence treatment. Apply alone or in tank mix combination with a grass herbicide such as Microtech, Dual, Dual II, Eradicane, Sutan+ Frontier, <u>Surpass or Harness Plus</u>.

Note: Broadstrike Plus - Corn Pre/PPI may be tank mixed with other herbicides registered for use on field corn, unless tank mixing is specifically prohibited by the label of the tank mix product. When Broadstrike Plus - Corn Pre/PPI is tank-mixed with a companion herbicide, follow relevant use directions, including precautions, restrictions and limitations listed on the manufacturer's label.

Preplant Surface Applied

For minimum-tillage or no tillage systems, Broadstrike Plus - Corn Pre/PPI alone and with certain \*ank mixtures may be applied up to 30 days before planting. If weeds are present at the time of treatment, apply in a tank mixture combination with a contact herbicide such as Gramoxone Extra or Roundup. Observe directions for use, precautions, and restrictions on the label of the contact herbicide. To the extent possible do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.

Preplant Incorporated Application

Apply and incorporate Broadstrike Plus - Com Pre/PPI from 0 to 30 days before planting. Preplant incorporated treatments may be applied in water or liquid fertilizer. <u>Uniformly incorporate</u> Use incorporation equipment that will uniformly mix the herbicide treatment into the top 2 to 3 inches of the final seedbed.

Preemergence Application

Apply at the time of planting during (behind the planter) or after planting but prior to crop or weed emergence. Adequate soil moisture is required for optimum herbicidal activity. For surface applications, rainfall or overhead sprinkler irrigation is necessary to move Broadstrike Plus - Corn Pre/PPI into the weed germination zone. The amount of rainfall or irrigation required following application depends on existing soil moisture, soil texture, and organic matter content. Sufficient water to moisten the soil to a depth of 2 inches is generally adequate. If adequate soil moisture is not received within 7 to 10 days after a surface applied treatment, a shallow cultivation is recommended to control established weeds and move the herbicide into the weed germination zone. When adequate soil moisture is received following dry conditions, performance may vary with weed species and the depth of the weed root system in the soil.

Printed 5/16/94

# Application Rates and Weeds Controlled by Soil Applied Treatments to Field Corn:

Broadleaf Weeds Controlled By Soil Applied Broadstrike Plus - Corn Pre/PPI

amaranth, Palmer <u>poinsettia, wild</u> anoda, spurred <u>puncturevine</u> beggarweed, Florida . purslane

chickweed ragweed, common cocklebur, common ragweed, giant† henbit Russian thistle horseweed (marestail) shepherd's purse

imsonweed sicklepod sida, prickly smartweed spurge, nodding spurge, prostrate spurge, prostrate sunflower, common spurged reducts.

pigweed, redroot velvetleaf pigweed, smooth velvetleaf waterhemp, tall

### **Broadcast Application Rates**

Preplant Surface Applied, Preplant Incorporated and

Postplant Preemergence Treatments

Soil Texture	ib of Broadstrike Plus - Corn Pre/PPI/acre	Packet Factor (acres/packet)
Course	0.20 - 0.25	2.5 - 2.0
Medium or Fine	0.25 - 0.30	2.0 - 1.67

Note: Use the high end of the rate range on soils with greater than 3.0% organic matter and/or when applications are made 14-30 days before planting.

Conversion Chart For Ib/acre to Ounces/acre or Grams/acre

Lb of Broadstrike Plus - Corn Pre/PPI/acre	Ounces of Broadstrike Plus - Corn Pre/PPI/acre
0.20	3.2
0.25	4
0.30	4.8

#### Tank Mixes

Note: When tank mixing with a companion herbicide, read and follow each manufacturer's label for weeds controlled, applicable use directions, precautions and limitations.

1. Broadstrike Plus - Corn Pre/PPI plus Gramoxone Extra or Roundup for minimumtiliage or no-tiliage systems

In minimum-tillage or no-tillage situations where com is planted directly into a cover crop, state seedbed or previous crop residues, the contact herbicides Gramoxone Extra or Roundup may be tank mixed with Broadstrike Plus - Corn Pre/PPI. Apply in 20 to 60 gallons of water or fluid rentilizer per acre with ground equipment.

Application Timing: Apply before, during (behind the planter) or after planting but before the crop emerges.

<sup>†</sup>Weeds partially controlled.

;)

Printed 5/16/94

140/14

Gramoxone Extra: See the Gramoxone Extra herbicide label for weeds controlled, recommended rates for specific weeds and application instructions. Do not apply combinations containing Gramoxone Extra in suspension type fertilizers as the activity of the active ingredient paraguat will be reduced.

**Roundup:** See the Roundup herbicide label for weeds controlled, recommended rates for specific weeds and application instructions.

## 2. Broadstrike Plus - Corn Pre/PPI plus 2,4-D for minimum-tiliage or no-tillage systems

Where heavy crop residues exist, add 1-2 0.8—1.6 pints/acre of an appropriately labeled 3.8 lb. ae/gallon 2,4-D amine or ester (such as Weeder 64, Weeder 64A, DMA 4 Herbicide or Formula 40) to the spray tank and apply in a minimum of 25 20 gallons of carrier/acre.

As carriers, nitrogen solutions and complete liquid fertilizers applied before corn emergence enhance burndown of existing weeds and, therefore, are recommended instead of water. Add X-77 surfactant at 1.0 to 2.0 quarts/100 gallons diluted spray or another appropriate surfactant at its recommended rate. Apply before weeds exceed 3 inches high. This tank mixture will not control emerged grasses.

## Broadstrike Plus - Corn Pre/PPI Followed By Postemergence Treatments

Broadleaf weeds not controlled by Broadstrike Plus - Com Pre/PPI may be controlled with treated using postemergence herbicide products such as Banvel, Clarity, 2,4-D, Marksman, Buctril or Beacon plus 2,4-D. Read and follow each manufacture's label for weeds controlled, applicable use directions, precautions and limitations before use.

#### Warranty Disclaimer

DowElanco warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. DowElanco makes no other express or implied warranty of merchantability or fitness for a particular purpose or any other express or implied warranty.

#### Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to the label instructions (including adverse conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of DowElanco or the seller. All such risks shall be assumed by the buyer.

#### Limitation of Remedies

The exclusive remedy for losses or damages resulting from the use of this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at DowElanco's election, one of the following:

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used.

DowElanco shall not be liable for losses or damages resulting from handling or use of this product unless DowElanco is promptly notified of such loss or damage in writing, in no case shall DowElanco be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of DowElanco or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

OCopyright 1994 by DowElanco