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printed 8/12/93

(Editor's Note: Deleted text Indicated by strike-through and added text underlined)

(Container Label)

(Logo) CowElanco

Broadstrike*+Dual** (Formerly NAF-2)

A selective soil applied herbicide for the <u>preemergence</u> control of annual grass and broadleaf weeds in <u>field corn and</u> soybeans

Active Ingredients

SHAKE WELL BEFORE USE

Precautionary Statements

Hazards to Humans and Domestic Animals

Keep Out of Reach of Children

WARNING -

AVISO:

Si us dino 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 Substantial But Temporary Eye Injury • Do Not Get in Eyes, On Skin Or On Clothing • Harmful If Swallowed, Inhaled Or Absorbed Through Skin.

Avoid breathing spray mist. The active ingredient metolachior may cause skin sensitization reactions in certain individuals. Use eye protection such as goggles, face shield or safety glasses and protective clothing such as coveralis, a long-sleeved shirt and impermeable gloves when handling this product. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

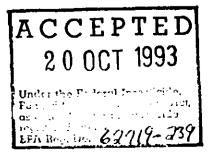
Personal Protective Equipment (PPE)

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

Applicators and other handlers must wear:

- · Coveralls over short-sleeved shirt and short pants
- · Chemical-resistant cloves such as Barrier Laminate, or Viton
- Chemical-resistant footwear plus socks
- Protective evewear
- · Chemical-resistant headcear for overhead exposure
- Chemical-resistant aoron 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.



User Salety 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 Ald

If in eyes: Hold eyelids open and flush with a steady stream of water for 15 minutes. Cail a physician.

If on skin: Immediately wash with plenty of soap and water. 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 help immediately.

Note to Physician: If swallowed, there is no specific antidote. Stomach lavage and immediate administration of activated charcoal (6-8 heaping teaspoonfuls) with water should be considered. Treatment is otherwise symptomatic and supportive.

Environmental Hazards

For terrestrial uses, do not apply directly to water, 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 or rinsate.

Metolachior, one of the active ingredients in Broadstrike+Dual, has been identified in limited sampling of ground water and there is the possibility that it may leach through the soil to ground water, especially where soils are coarse and ground water is near the surface. Ingredients in this product have been identified in limited sampling of groundwater and there is the possibility that they may leach through the soil to groundwater, especially where soils are coarse and groundwater is near the surface. Following application and during rainfall events that cause runoff, metolachler this product may reach surface water bodies including streams, rivers and reservoirs.

Care must be taken when using this product to prevent: 1) back siphoning into wells: 2) spills: or 3) improper disposal of excess pesticide spray mixtures or wester rinsates. Check-valves or anti-siphoning devices must be used on all mixing equipment.

Refer to attached label booklet for additional precautionary information including Personal Protective Equipment (PPE), and Directions for Use including Agricultural Use Requirements and 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" inside label booklet.

In Case of Emergency endangering health or the environment involving this product, call collect 517/636-14400.

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

EPA Reg. No. 62719-EGO ~

EPA Est. 1471-XX-00

*Trademark of DowElanco

**Trademark of CIBA-GEIGY Corporation

DowElanco · Indianapolls, Indiana 46268, USA

Herbicide

Net Contents __ Gal



(Label Booklet)

(Logo) DowElanco

Broadstrike*+Dual** (Formerly_NAF-2)

A selective soil applied herbicide for the <u>preemergence</u> control of annual grass and broadleaf weeds in <u>field corn and</u> soybeans

Contains 7.47 pounds of metolachlor and 0.20 pounds of flumetsularn per gallon.

Keep Out of Reach of Children WARNING

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SHAKE WELL BEFORE USE

Refer to inside of label bookiet for additional precautionary information including Personal Protective Equipment (PPE), and Directions for Use including Agricultural Use Requirements and Storage and Disposal.

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

EPA Reg. No. 62719-EGO

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DowElanco - Indianapolis, Indiana 46268, USA

Herbicide

^{**}Trademark of CIBA-GEIGY Corporation

Precautionary Statements

Hazards to Humans and Domestic Animals Keep Out of Reach of Children WARNING

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Avoid breathing spray mist. The active ingredient metolachior may cause skin sensitization reactions in certain individuals. Use eye protection such as goggles, face shield or safety glasses and protective clothing such as coveralls, a long-sleeved shirt and impermeable gloves when handling this product. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before rouse.

Personal Protective Equipment (PPE)

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

Applicators and other handlers must wear:

- · Coveralls over short-sleeved shirt and short pants
- · Chemical-resistant gloves such as Barrier Laminate, or Viton
- Chemical-resistant footwear plus socks
- Protective evewear
- · 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.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- · Remove clothir a immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the surside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

First Ald

If In eyes: Hold eyelids open and flush with a steady stream of water for 15 minutes. Call a physician.

If on skin: Immediately wash with plenty of soap and water. 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 help immediately.

Note to Physician: If swallowed, there is no specific antidote. Stomach lavage and immediate administration of activated charcoal (6-8 heaping teaspoonfuls) with water should be considered. Treatment is otherwise symptomatic and supportive.

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Environmental Hazards

For terrestrial uses, do not apply directly to water, 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 or rinsate.

Metolachlor, one of the active ingredients in Broadstrike+Dual, has been identified in limited sampling of ground water and there is the possibility that it may leach through the soil to ground water, especially where soils are coarse and groundwater and there is the possibility that they may leach through the soil to groundwater, especially where soils are coarse and groundwater is near the surface. Following application and during rainfall events that cause runoff, metolachlor this product may reach surface water bodies including streams, rivers and reservoirs.

Care must be taken when using this product to prevent: 1) back siphoning into wells: 2) spills: or 3) improper disposal of excess pesticide spray mixtures or wastes rinsates. Check-valves or anti-siphoning devices must be used on all mixing equipment.

Directions for Use

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift.

Only protected workers 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 graenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exemptions ourraining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

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

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

- Coveralls over short-sleeved shirt and short pants
- · Chemical-resistant gloves such as Barrier Laminate or Viton
- Chemical-resistant footwear plus socks
- Protective evewear
- Chemical-resistant headgear for overhead exposure



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STORAGE AND DISPOSAL

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

Storage: Do not store below minus 30°F. Store in original container only. Do not store near heat or flame. In case of leak or spill, use absorbent materials to contain liquids and dispose as waste. For minor spills, leaks, etc., follow all precautions on this label and clean up immediately.

Disposal: Wastes resulting from the use of this product may be disposed of on site according to label directions

or at an approved waste disposal facility.

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.

General Information

Broadstrike+Dual is a selective soil applied herbicide for the control of annual grass and broadleaf weeds. Broadstrike+Dual may be preplant surface applied, preplant incorporated or applied as a preemergence treatment in water or liquid fertilizer and can be impregnated on dry bulk fertilizer. Broadstrike+Dual controls broadleaf weeds during germination or soon after emergence and grass weeds during germination. Susceptible weeds exposed to Broadstrike-Dual either die or remain non-competitive with the crop. Because the herbicidal activity of Broadstrike+Dual on broadleaf weeds involves uptake and translocation to weed growing points, adequate soil moisture is necessary for optimal activity. Broadstrike+Dual may provide residual control of susceptible broadleaf weeds which emerge after application.

Safe Pesticide Handling Procedures

- · Calibrate springers only with clean water away from the well site.
- · Make scheduled checks of spray equipment.
- Assure accurate measurement of pesticides by all operation employees.
- Mix only enough product for the lob at hand.
- Avoid over fil ing the spray tank.
- Do not discharge excess material on soil at a single spot in the field or mixing/loading station.
- Dilute and acitate excess solution and apply at labeled rates/uses.
- When triple r nsing the pesticide container, be sure to add the rinsete to the soray mlx.
- Sprayer Cleanup: To avoid injury or exposure to nontarget crops, thoroughly clean all mixing and spray equipment on approved rinse pads or on the field site where an approved crop is to be grown. Do this immediately after application and prior to use on crops other than those registered for use on this label. 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).
- Placement of mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

General Use Precautions

Uneven application or incorporation of Broadstrike-Dual can result in erratic weed control or crop injury. Over application may result in crop injury or rotational crop damage from soll residue. Injury may occur following the use of Broadstrike-Dual under abnormally high soil moisture conditions during early crop development.

When applications are made under adverse (dry or cold) conditions or when less susceptible species are treated, partial weed control may be observed. Partial weed control is a visual reduction in weed competition (reduced population, size, and/or vigor) as compared to an untreated area. If these conditions exist, a cultivation can provide enhanced control.

Broadstrike+Dual may be tank-mixed or followed by overlay or postemergence treatments registered for use on soybeans to broaden the spectrum of weeds controlled. Follow all applicable use directions, precautions, restrictions and limitations on the labels of each product used in tank mixtures. Tank mixtures are permitted only in those states where the tank-mix partner is registered.



Where directions for use in com allow a tank mixture with AAtrex formulations, other brands of atrazine may also be used. Follow the rates, recommendations and ilmitations on the product label for AAtrex or other atrazine product used. Note: Certain states may have established rate limitations for atrazine within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations.

If Broadstrike+Dual is incorporated, any supplemental tillage before planting must not exceed the depth of // incorporation.

Dry weather following preemergence applications of Broadstrike+Dual may reduce effectiveness. Cultivate when weeds develop.

Do not make more than one application of Broadstrike+Dual per year or exceed a total application rate of 2.75 pints / per acre (0.07 lb ai Broadstrike/Acre + 2.57 lb ai-Dual) in a single crop year.

Use the lowes: end of the application rate range in the use directions on treatment sites where soils have a sand or loamy sand texture throughout the soil profile.

Do not apply to areas where (both apply) the soil pH is less than 5.9 and organic matter is greater than 5%.

Do not apply to areas where the soil pH is greater than 7.8 as this may result in increased crop inlury.

Do not apply if crop was or will be treated in the same cropping season with Counter 20 CR applied in-furrow at planting, in a band at planting or over-the-row at cultivation.

Do not apply if the crop was or will be treated with Counter 15G (by any application method) in the same cropping season as severe crop injury may result.

Soil insecticides should be used in a T-band to avoid serious crop injury when Broadstrike+Dual is used for annual orass and broadleaf weed control in corn.

Corn inbred lines grown for hybrid seed production may be injured by Broadstrike+Dual. Therefore, inbred lines > should be thoroughly tested for crop tolerance before treating large acreages.

Do not apply to sweet corn or popcorn, "

Do not use on peat or muck soils.

Do not graze or feed treated soybean torage, hay, or straw to livestock.

To avoid spray drift, do not apply under windy conditions. Avoid spray overlaps as crop injury may result.

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

Preharvest Interval: Do not apply Broadstrike+Dual within 85 days of harvest. <

Do not aerially apply Broadstrike+Dual. Apply using ground equipment only.

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.

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.

Rotation Crop Restrictions

The following crops may be planted after the indicated interval following application of Broadstrike+Dual. <

Crop	Rotational Crop Interval		
scybeans, corn	0 months		
alfalfa, dry beans, peas, peanuts, sweet potatoes	4 months		
barley, oats, rye, wheat	4 1/2 months		
rice	9 months		
grain sorghum, sunflower	18 months		
cotton	22 months		
sugar beets, rapeseed (canola)	22 <u>26</u> months		

Note: Rotation to all other crops requires a 22 26 month rotation interval er and a successful field bioassay.

Fleid 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+Dual. Plant the strips perpendicular to the direction Broadstrike+Dual 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, 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.

Soil Textures and Herbicide Rates

Where rates are based on coarse, medium or fine-textured soils, it is understood that soil textural classes are generally categorized as follows:

COARSE	MEDIUM	FINE
Sand	Loam	Silty Clay Loam, Sandy Clay
Loamy Sand	Silt	Sandy Clay Loam, Clay Loam
Sandy Loam	Silt Loam	Silty Clay, Clay

Within rate ranges, use the lower rates on coarse-textured soils or soils low in organic matter and use the higher rates on soils relatively fine-textured or high in organic matter.



Mixing Instructions

Broadstrike+Dual alone: Fill the spray tank one-half to three-fourths full with water or fluid fertilizer. Add the required amount of Broadstrike+Dual, then add the rest of the water or fluid fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

Tank Mixtures: Fill the spray tank one-fourth full of water and start agitation. Add Broadstrike+Dual followed by the appropriate tank mix product and the remainder of the water. Refer to the label of the product to be tank mixed with Broadstrike+Dual for any special tank mixing instructions. For tank mixtures with liquid fertilizer, always check compatibility with the liquid fertilizer as described below before mixing in spray tank. For all tank mixtures, agitate during mixing and application to maintain a uniform spray mixture.

Tank Mixtures With 2.4-D or AAtrex For field corn: Fill the spray tank one-fourth full of water and start agitation. Add 2,4-D or AAtrex and allow to become dispersed, add Broadstrike+Dual, then add Gramexone Extra or Reundup if these other products are being used and the rest of the water. For tank mixtures with AAtrex, fluid fertilizers may replace all or part of the water as carrier. For tank mixtures with AAtrex, see additional mixing instructions on the AAtrex label. For tank mixtures with liquid fertilizer, always check compatibility with the liquid fertilizer as described below before mixing in spray tank. For all tank mixtures, agitate during mixing and application to maintain a uniform spray mixture.

Liquid Fertilizer Compatibility Test: Since liquid fertilizers can vary, even within the same analysis, always check compatibility with herbicide(s) each time before use. Be especially careful when using complete suspension or fluid fertilizers as serious compatibility problems are more likely to occur. Commercial application equipment may improve compatibility in some instances. The following test assumes a spray volume of 25 gallons per acre. For other spray volumes, make appropriate changes in the ingredients. Check compatibility using this procedure:

- 1. Add 1 pint of fertilizer to each of 2 one-quart jars with tight lids.
- 2. To one of the jars add 1/4 teaspoon or 1.2 milliliters of a compatibility agent approved for this use, such as Compex or Unite (1/4 teaspoon is equivalent to 2 pints per 100 gallons spray). Shake or stir gently to mix.
- 3. To both jars add the appropriate amount of herbicide(s). If more than one herbicide is used, add them separately with dry herbicides first, flowables next, and emulsifiable concentrates last. After each addition, shake or stir gently to thoroughly mix. The appropriate amount of herbicides for this test follows:

Dry Herbicides - For each pound to be applied per acre. and 1.5 level teaspoons to each jar.

Liquid Herbicides - For each pirit to be applied per acre, add 3.5 teaspoon or 2.5 milliliters to each jar. <

4. After adding all ingredients, put lids on and tighten, and invert each jar ten times to mix. Let the mixtures stand 15 minutes and then look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if the compatibility agent is needed in the spray mixture by comparing the two jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility: (a) slurry the dry herbicide(s) in water before addition, or (b) add 1/2 of the compatibility agent to the fertilizer and the other 1/2 to the emulsifiable concentrate or flowable herbicide before addition to the mixture. If incompatibility is still observed, do not use the mixture.



Application Instructions

Application Timing

Application times for Broadstrike+Dual are indicated below. Broadstrike+Dual may also be applied in tank mix combination with other pesticides provided the label of the companion product allows such application timing. Refer to the tank mix product label to determine if the application times listed below are permitted.

Preplant Su-face-Applied: For minimum-tillage or no-tillage systems only, Broadstrike+Dual alone and certain Broadstrike+Dual tank 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: Apply Broadstrike+Dual to the soil and incorporate into the top 2 inches of soil within 40-14 days before planting using a finishing disk, harrow, rolling cultivator, or similar implement capable of providing uniform 2 inch incorporation. Use a preplant incorporated application if furrow irrigation is used or when a period of dry weather after application is expected. If crop is to be planted on beds, apply and incorporate Broadstrike+Dual after bed formation unless specified otherwise.

Preemergence: Apply Broadstrike+Dual during <u>planting</u> (behind the planter) or after planting, but before weeds or crops emerge.

Ground Application

Apply Broadstrike+Dual alone or in tank mixtures by ground equipment in a minimum of 10 gallons of spray mixture per acre unless otherwise specified.

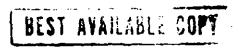
Use sprayers that provide accurate and uniform application. For Broadstrike+Dual tank mixtures with wettable powder or dry flowable formulations, screens and strainers should be no finer than 50-mesh. Rinse sprayer thoroughly with clean water immediately after use.

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

Low Carrier Application (Broadcast Ground Application Only)

Use sprayers such as Melroe Spra-Coupe, Hagie, John Deere Hi-CycleTM or Williams Willmar Air Ride[®] that provide accurate and uniform application. Only water may be used as a carrier. Screens in suction and in-line strainers should be 50-mesh. Manufacturers may require that tip screens as fine as 100-mesh be used with some nozzles. Use a pump with capacity to (1) maintain up to 35-40 psi at the nozzles, and (2) provide sufficient agitation in tank to keep mixture in suspension. Use a minimum of 5 gallons of spray mixture per acre. Maximum recommended sprayer speed is 15 mph. Rinse sprayer thoroughly with clean water immediately after each use.

Note: Low pressure nozzles are recommended to reduce drift and increase application accuracy. Care should be taken when using automatic rate controlling devices to spray the material within the rated working pressure and flow ranges of the nozzles selected. Nozzle screens should be used when recommended by the manufacturer. All nozzles should be placed on 20-inch centers, except flooding types; which should be placed on 40-inch centers. When flat fan type nozzles are used, angles of 80° to 110° are recommended. Always read and follow the manufacturer's directions for optimum setup and performance of their nozzles to tips.



Application With Dry Bulk Granular Fertilizers

Many dry bulk granular fertilizers may be impregnated or coated with Broadstrike+Dual alone or selected Broadstrike+Dual tank mixtures which are registered for preplant incorporated or preplant-surface application to control weeds in crops on the Broadstrike+Dual label and are not prohibited from use on dry bulk-granular fertilizers for preplant incorporated or preplant surface application to control weeds in crops on the Broadstrike + Dual label.

When applying Broadstrike+Dual or Broadstrike+Dual mixtures with dry bulk granular fertilizers, follow all applicable directions for use and precautions on the respective product labels including target crops, rates per acre, soil texture, application methods (including timing of application), and rotational crops: this label.

Compliance with applicable Federal and State laws and regulations relating to blending, registration, labeling, and application of pesticides mixed with dry bulk granular fertilizer is the responsibility of the individual and/or company distributing or offering the herbicide/fertilizer mixture for sale.

Prepare the granular herbicide/fertilizer/herbicide mixtures by using any closed drum, belt, ribbon, or other commonly used dry bulk fertilizer blender. Nozzles used to spray Broadstrike+Dual and Broadstrike+Dual mixtures onto the fertilizer must be placed to provide uniform spray coverage.

If the fertilizer/herbicide mixture is too wet, add a highly absorptive material, such as Agsorb or similar granular clay material to obtain a dry free-flowing mixture. Avoid using more than 5% absorptive material by weight.

Calculate amounts of Broadstrike+Dual by the following formula:

2,000	v	Pints/ acre of liquid	_	Pints of liquid or flowable
Pounds of fertilizer per acre	·	or flowable product	=	product per ton of fertilizer
2,000				
Pounds of fertilizer per acre	X	Pounds/acre of dry product	=	Pounds of dry product per ton of fertilizer

Pneumatic (Compressed Air) Application (Broadstrike+Dual Alone)
High humidity, high urea concentrations, low fertilizer use rates, and dusty fertilizer may cause fertilizer mixture to build up or plug the distributor head, air tubes, or nozzle deflector plates. To minimize buildup, premix Broadstrike+Dual with a non combustible/nonflammable mineral seal oil, at 1 to 2 pints of mineral seal oil per acre and spray mixture uniformly onto fertilizer. Mineral seal oil additive may be used either in a fertilizer blender or through direct injection systems. Use only those oils recommended by CIBA-GEIGY Ciba Plant Protection, i.e., Kermac-600TM Solvent or CV-600 or a similar mineral seal oil. Drying agents should not be used when using oil additives.

Notes: (1) Some separation of the Broadstrike+Dual + mineral seal oil mixture may occur in temperatures below 40°F. To assure uniform application, use either in-tank agitation to keep the products mixed or keep the products heated above 40°F before mixing. (2) When impregnating Broadstrike+Dual in a blender before application, a drier mixture can be attained by substituting a drying agent for mineral seal oil. The use of Agsorb granules is recommended over other types of absorptive materials. (3) Drying agents are not recommended for use with On-The-Go impregnation equipment.

Precautions: To avoid potential for explosion, (1) Do not impregnate Broadstrike+Dual or Broadstrike+Dual mixtures on ammonium nitrate, potassium nitrate or sodium nitrate either alone or in blends with other fertilizers. (2) Do not use Broadstrike+Dual or Broadstrike+Dual mixtures on straight limestone since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated.



Application of Dry Bulk Fertilizer: 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 herbicide/fertilizer/herbicide mixture on crops where bedding occurs.

Weeds Controlled by Soil Applied Broadstrike+Dual

Grass Weeds:

barnyardgrass (watergrass) crabgrass crowlootgrass cupgrass, prairie cupgrass, Southwestern fall panicum foxtail, giant green millet yellow goosegrass johnsongrass (seedling)† millet, wild proso† nutsedge, yellow panicum, Texast red rice sandburt shattercane† signalgrass sorghum, volunteert witchgrass

Broadleaf Weeds:

anoda, spurred amaranth, palmer beggarweed, Florida carpetweed chickweed cocklebur, common†† goosefoot henbit jimsonweed†† kochia lambsquarters, common ladysthumb mallow, Venice mustard, wild morningglory spp.†† nightshade, black nightshade, cutleaf nightshade, Eastern black nightshade, hairy pigweed, smooth pigweed, redroot



puncturevine
purslane, common
pusley, Florida
ragweed, common††
Russian thistle
sicklepod††
sida, prickly
smartweed, Pennsylvania
spurge, spotted
sunflower, wild
velvetleaf
waterhemp, tail

†Weeds partially controlled: Control of these weeds may be improved by following the suggested procedures in 1-4 below.

††Control of light to moverate Infestations: Control may vary according to weed density and soil conditions at the time of application. Control of these weeds may be improved by following the suggested procedures in 1-6 below.

- Thoroughly till moist soil to destroy germinating and emerged weeds. This tillage may be used to incorporate Broadstrike+Dual in preplant incorporated situations when uniform 2" incorporation is achieved.
- 2. Plant crop into moist soil immediately after tillage. If Broadstrike+Dual is to be applied preemergence, apply at planting or immediately afterwards.
- 3. If available, sprinkle-irrigate within 2 days after application. Apply 1/2 to 1 inch of water, depending on soil texture.
- 4. If irrigation is not possible and rain does not occur within 2 days after planting and application, weed control may be decreased. Under these situations a uniform shallow cultivation is recommended as soon as weeds emerge.
- Common cocklebur and common ragweed are best controlled by preplant incorporated treatments.
- 6. Enhanced control of light to moderate infestations of cocklebur, jimsonweed, morningglory, common ragweed and sicklepod may be achieved by using the upper end of the rate range for the soil texture class to be treated, or with tank mixes.

Note: Triazine resistant weeds on this label are controlled by Broadstrike+Dual.

Approved Uses

CORN - FIELD, SILAGE AND SEED (Do not apply to sweet corn or popcorn)

Preplant Surface Applied Treatments

Broadstrike+Dual may be surface applied as an early preplant treatment in mimimum or no tillage systems in the states of CO, DE, IA, IL, IN, KS, KY, MD, MI, MN, MO, MT, ND, NE, NY, OH, PA, SD, TN, VA, WI, WV and WY. On medium and fine textured soils, early preplant treatments may be applied 10 up to 30 days before planting. On coarse textured soils, do not apply more than 14 days before planting.

Broadcast application rates:

	pt/acre	
Soll Texture	<3% O.M.	>3% O.M.
Coarse	2.00 - 2.50†	2.00 - 2.50†
Medium	2.25 - 2.50†	2.50 - 2.75†
Fine	2.50 - 2.75†	2.50 - 2.75†

†Note: Control of common ragweed, cocklebur, <u>morningglory</u>, jimsonweed and <u>sicklepod</u> may be enhanced by using the upper end of the rate range <u>or by adding up to 1.5 lb al/acre of atrazine to the mixture.</u>



Prepiant Incorporated or Preemergence Treatments

Broadstrike+Dual may be applied as a preplant incorporated up to 14 days before planting or preemergence treatment up to 10 days before planting during planting (behind the planter) or after planting before emergence of weeds or crop.

Broadcast application rates:

	pt/a	pt/acre	
Soli Texture	<3% O.M.	>3% O.M.	
Coarse	1.75 - 2.00†	1.75 - 2.00†	
Medium	2.00 - 2.25†	2.25 - 2.50†	
Fine	2.25 - 2.5†	2.25 - 2.50†	

†Note: Control of common ragweed, cocklebur, morningglory, jimsonweed and sicklepod may be enhanced by using the upper end of the rate range or by adding up to 1.5 lb ai/acre of atrazine to the mixture.

Corn (Field, Silage and Seed) - Tank Mixes

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

1. Broadstrike+Dual plus AAtrex

Broadstrike+Dual may be applied in tank mix combination with 1 to 2 1.5 to 3 pints/acre of AAtrex 4L or equivalent rates of AAtrex Nine-O or AAtrex 80W to improve the contro! of cocklebur, morningglories, ragweed, jimsonweed and sicklepod. When applied in combination with Broadstrike+Dual, do not exceed 1 to ai/acre of Aatrex per acre per year.

Soil Texture	AAtrex 4L (pt/acre)	
Coarse	1.5	
Medium	2.0	
Fine	2.5 - 3.0	

(Editor's note: Above table added to label text)

Note: Follow rate restrictions on the AAtrex label if more restrictive than this label. If AAtrex is applied at rates lower than those recommended on this label, broadleaf weed control may be affected reduced.

2. Broadstrike+Dual plus Bladex

Broadstrike+Dual may be applied in tank mix combination with1 to 2 pints/acre of Bladex 4L or equivalent rates of Bladex 80W or Bladex 90DF to improve the control of cocklebur, ragweed, jimsonweed, morningglories and sicklepod (Two pints of Bladex 4L equals 1.25 lbs of Bladex 80W or 1.1 lbs of Bladex 90DF).

Special Mixing Instructions: When tank mixing Broadstrike+Dual with Bladex, use the following special tank-mixing instructions: Fill the spray tank 1/4 full with water or fluid fertilizer and start agitation. When using Bladex in tank mixtures, first add a compatibility agent, such as Unite or Compex at 2 to 3 pints/100 gallons of spray mixture. First Next add the Bladex and allow it to become completely dispersed. Then add Broadstrike+Dual, allowing time for complete dispersion before adding the remainder of the water or fluid fertilizer. Agitate during mixing and application to maintain a uniform suspension. Tank mixtures with Bladex should not be allowed to stand without agitation. Empty the spray tank during the spraying operation. If fluid fertilizer is used as a carrier, check the compatibility of the tank mixture by conducting a jar test as described under "Mixing Instructions" in the "General Information" section of this label.



3. Broadstrike+Dual plus Gramoxone Extra or Roundup for minimum tillage or no-tillage systems

In a minimum-tillage or no-tillage situation where corn 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+Dual.

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

Gramoxone Extra: Use a nonionic surfactant at a rate of 1 or 2 pints/100 gallons in tank mixes with Gramoxone Extra. Use the 1 pint/100 gallon rate for surfactant products with 75% or greater nonionic active ingredient and the 2 pint/100 gallon rate for products containing 50-74% nonionic active ingredient. This treatment will not control weeds more than 6 inches tall. See the Gramoxone Extra label for weeds controlled and recommended rates for specific weeds. Do not apply combinations containing Gramoxone Extra in suspension type fertilizers as the activity of the active ingredient, paraquat, will be reduced.

Roundup: Apply 1.5 quarts/acre for existing annual weeds or 2-4 quarts/acre for existing perennial weeds. See the Roundup label for weeds controlled and recommended rates for specific weeds. Apply in 20-60 gallons of water or fluid fertilizer per acre with ground equipment.

4. Broadstrike+Dual plus 2,4-D for minimum-tillage or no-tillage systems

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

5. Broadstrike+Dual Plus Princep (4L, 80W or Caliber 90)

For enhanced control of heavy infestations of crabgrass or fall panicum in the northeastern U.S. (including the states of PA, NY, VT, NH, ME, MA, RI, CT NJ, DE, MD and VA), add up to 1 quart of Princep 4L (1.25 lb 80W or 1.1 lb Caliber 90) per acre to the recommended rate of Broadstrike+Dual.

Corn - Broadstrike+Dual Followed by Postemergence Treatments

Broadleaf weeds not controlled by Broadstrike+Dual may be treated using postemergence herbicide products such as AAtrex. Banvel, 2,4-D, Marksman, Buctril or Stinger Beacon plus 2.4-D. Annual and perennial grass weeds such as shattercane, quackgrass or rhizome johnsongrass not controlled by Broadstrike+Dual may be treated with Beacon, atrazine or Accent herbicides. Read and follow each manufacturer's label for weeds controlled, applicable use directions, precautions and limitations before use.



SOYBEANS

Preplant Surface Applied Treatments

Broadstrike+Dual may be surface applied as an early preplant treatment in mimimum or no tillage systems in the states of CO, DE, IA, IL, IN, KS, KY, MD, MI, MN, MO, MT, ND, NE, NY, OH, PA, SD, TN, VA, WI, WV and WY. On medium and fine textured soils, early preplant treatments may be applied 10 to 30 days up to 30 days before planting. On coarse textured soils, do not apply more than 14 days before planting.

Broadcast application rates:

Soil Texture	pt/acre		
	<3% O.M.	>3% O.M.	
Coarse	2.00 - 2.50†	2.00 - 2.50†	
Medium	2.25 - 2.50†	2.5 - 2.75†	
Fine	2.5 - 2.75†	2.5 - 2.75†	

†Note: Control of common ragweed, cocklebur, morningglory, jimsonweed and sicklepod may be renanced by using the higher end of the rate range for each soil textural class.

Preplant incorporated or Preemergence Treatments

Broadstrike+Dual may be applied as a preplant incorporated or preemergence treatment up to 10 days before planting, within 14 days before planting. Broadstrike + Dual may be applied as a preemergence treatment during planting (behind the planter) or after planting, but before weeds or crops emerge.

Broadcast application rates:

Soll Texture	pt/acre		
	<3% O.M.	>3% O.M.	
Coarse	1.75 - 2.00†	1.75 - 2.00†	
Medium	2.00 - 2.25†	2.25 - 2.50†	
Fine	2.25 - 2.50†	2.25 - 2.50†	

†Note: Control of common ragweed, cocklebur, <u>morningglory</u>, jimsonweed and <u>sicklepod</u> may be enhanced by using the higher end of the rate range for each soil textural class.

Soybeans - Tank Mixes

Broadstrike + Dual plus Gramoxone Extra. Roundup or 2.4-D for Minimum Tillage or No-Tillage systems. When tank mixing with a companion herbicide, read and follow each manufacturer's label for applicable use directions, precautions and limitations before use in minimum-tillage or no-tillage systems where soybeans are planted directly into a cover crop, stale seedued, established sod or previous crop residues, the contact herbicides Gramoxone Extra, Roundup or 2,4-D should be used in tank mix combination with Broadstrike+Dual. —When tank mixing with a companion herbicide, read and follow each manufacturer's label for applicable use directions, precautions and limitations before use.

Application timing: Apply before, during (behind the planter) or within 2 days after planting but before the crop emerges.

Gramoxone Extra: Use a nonionic surfactant at a rate of 1 or 2 pints/100 gallons in tank mixes with Gramoxone Extra. Use the 1 pint/100 gallon rate for surfactant products with 75% or greater nonionic active ingredient and the 2 pint/100 gallon rate for products containing 50-74% nonionic active ingredient. This treatment will net control weeds mere than 6 inches tall. from 1-6 inches tall. See the Gramoxone Extra label for weeds controlled_end 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: 'Apply 1.5 quarts/acre for existing annual weeds or 2-4 quarts/acre for existing perennial weeds. See the Roundup label for weeds controlled_and recommended rates for specific weeds, and application instructions. Apply in 20-60 gallons of water or fluid fertilizer per acre with ground equipment.

2.4-D: For burndown control of susceptible annual and perennial broadleaf weeds, 2.4-D can be applied in tank mix combination with Broadstrike+Dual prior to planting soybeans in reduced tillage systems.

When tank mixing with 2.4-D, read and follow the manufacturer's label for applicable use directions, application timing, precautions and limitations before use.

Soybeans - Broadstrike+Dual Followed by Postemergence Herbicides

Broadleaf weeds not controlled by Broadstrike+Dual may be treated using postemergence herbicide products such as Basagran, Blazer, Cobra, Galaxy, Reflex or Storm. For enhanced control of sicklepod. Classic herbicide can be applied postemergence following application of Broadstrike+Dual. Consult the manufacturer's labels for application rates, additional weeds controlled, additional 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.

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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.

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Revisions (Beyond approved EUP labeling):

- Placed certain paragraphs within "General Information" section under "General Use Precautions" heading.
- 2) Rotation crop: "Rotation Crop Intervals" for sugar beets and rapeseed (canola) (26 months). Criteria is now 26 months and a successful bioassay.
- 3) Prepared container label.
- 4) Added text required by WPS.
- 5) Minor editing of label text.
- 6) Preplant surface applied, preplant incorporated or preemergence treatments: Added morningglory and sickleped to list of species for which control is enhanced by using the higher end of the rate range.
- 7) Revised recommendations for posternergence applications of herbicides following application of Broadstrike+Dual.
- 8) Added tank mix with Princep for use on corn in states in the northeast U.S.
- 9) Added modifications to wetlands lanugage to comply with PR Notice 93-3
- 10) Added precautions to avoid drift and runoff contact with non-target crops or plants.
- 11) Modified Environmental Hazards advisory for ground water to reflect lanugage agreed upon with EPA.
- 12) Added corn uses.
- 13) Added Safe Pesticide Handling Procedures.

