OFFICE OF PESTICIDES PROGRAMS
REGISTRATION DIVISION (TS-767)
WASHINGTON, DC 20460

REGISTRATION DIVISION
(TS-761)
TERM OF ISSUANCE
Conditional, Expires:
20 APR 1995

WASHINGTON, DC 20460

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

DowElanco
Quad IV
9002 Purdue Road
Indianapolis, IN 46268-1189

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 endorsement 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 product is conditionally registered under section 6(c)(4) provided that you:

1. Submit data required to change this registration to an unconditional FIFRA section 6(a)(5) registration. The required data with deadlines for submitting the required are on the second page of this notice of Pesticide Registration.

2. Add the phase, "EPA Registration No. 62719-22.2" to your label before you release the product for shipment.

3. Submit three (3) copies of your final printed labeling, with the changes referred to above, before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Joanne L. Miller
Product Manager (62)
Fungicide-Herbicide Branch
Registration Division (TS-767)

Signature of Approving Official
DATE

PREVIOUS EDITION MAY BE USED UNTIL SUPPLY IS EXHAUSTED.
U.S. GPO: 1993 3/2 01/18 90030
(Editor's Note: Deleted text indicated by strike-through and added text underlined)

(Container Label)

(Logo) DowElanco

Broadstrike*+ Treflan*
(Formerly XBM-5313)

A Selective Soil Applied Herbicide for Preemergence Control of Annual Grass and Broadleaf Weeds in Soybeans.

Active Ingredients:
- trifluralin: α,α,α-trifluoro-2,6-dinitro-N,N-dipropyl-p-toluidine .................................................. 36.35%
- flumetsulam: N-(2,6-difluorophenyl)-5-methyl-1,2,4-triazolo[1,5-a]pyrimidine-2-sulfonamide ........................................................................ 2.67%

Inert Ingredients .............................................................................................................................. 60.98%

Total ............................................................................................................................................... 100.0%

Contains petroleum distillates.
Contains 3.4 pounds of trifluralin and 0.25 pounds of DE-498 flumetsulam per gallon.

SHAKE WELL BEFORE USE

AVOID FREEZING - STORE ABOVE 40°F

Precautionary Statements

Hazard to Humans and Domestic Animals

Keep Out of Reach of Children

DANGER

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. 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 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 “G” on an EPA chemical resistance category selections chart.

Applicators and other handlers must wear:
- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as Barrier Laminate or Vilon
- 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.

**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.

**Note to Physicians:** This product contains an aromatic hydrocarbon and can be extremely harmful if swallowed. Aspiration of this product may produce a severe pneumonitis. Stomach lavage with a cuffed endotracheal tube in place and immediate administration of activated charcoal, 6-8 heaping teaspoonfuls with water, should be considered. Treatment is otherwise symptomatic and supportive.

**Environmental Hazards**

This pesticide is toxic to fish and aquatic invertebrates. For terrestrial uses, do not apply directly to water, areas where surface water is present or to intermittent areas below the mean high water mark. Drift or runoff from treatment areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinse water.

Flumetsulam has been identified in groundwater sampling from a field research site under vulnerable conditions. There is the possibility that flumetsulam may leach through soil to groundwater, especially where soils are coarse and groundwater is near the surface.

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” elsewhere on this label.

In case of emergency endangering health or the environment involving this product, call collect 517-636-4400.

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

**EPA Reg. No. 62719-EEE**  **EPA Est. 1471-XX-00**

*Trademark of DowElanco

**DowElanco • Indianapolis, Indiana 46268-1189, U.S.A.**

**Herbicide**  **Net Contents _ gal**
(Label Booklet)

(LOGO) DowElanco

Broadstrike*+Treflan*
(Formerly XRM-5313)

A Selective Soil Applied Herbicide for Preemergence Control of Annual Grass and Broadleaf Weeds in Soybeans.

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Inert Ingredients ........................................................................................................... 60.98%
Total ......................................................................................................................... 100.0%

Contains petroleum distillates.
Contains 3.4 pounds of trifluralin and 0.25 pounds of DE-498 flumetsulam per gallon.

Keep Out of Reach of Children
Danger

SHAKE WELL BEFORE USE
AVOID FREEZING - STORE ABOVE 40°F

Refer to Inside of 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" elsewhere on this label.

In case of emergency endangering health or the environment involving this product, call collect 517-636-4400
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Herbicide
Precautionary Statements

Hazard to Humans and Domestic Animals
Keep Out of Reach of Children

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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. Use eye protection, such as goggles, a long-sleeved shirt 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 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 "G" on an EPA chemical resistance category selections chart.

Applicators and other handlers must wear:
- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as Barrier Laminate or Viton
- 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.

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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.

Note to Physicians: This product contains an aromatic hydrocarbon and can be extremely harmful if swallowed. Aspiration of this product may produce a severe pneumonitis. Stomach lavage with a cuffed endotracheal tube in place and immediate administration of activated charcoal, 6-8 heaping teaspoonfuls with water, should be considered. Treatment is otherwise symptomatic and supportive.
Environmental Hazards
This pesticide is toxic to fish and aquatic invertebrates. For terrestrial uses, do not apply directly to water, areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff from treatment areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

Flumetsulam has been identified in groundwater sampling from a field research site under vulnerable conditions. There is the possibility that flumetsulam may leach through soil to groundwater, especially where soils are coarse and groundwater is near the surface.

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 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, decontaminating, notification, and emergency assistance. It also contains specific instructions and exemptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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

Exception: If the product is soil-applied or soil incorporated, the Worker Protection Standard under certain circumstances allows workers to enter the treated areas 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
- Chemical-resistant gloves such as Narine Laminate or Viton
- Shoes plus socks
- Protective eyewear

STORAGE AND DISPOSAL
Do not contaminate water, food or feed by storage or disposal.
- Storage: Avoid freezing. Store above 40°F. If frozen, poor weed control may result. 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.
- Disposal: Wastes resulting from the use of this product may be disposed of on site according to label directions described herein 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, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.
General Information

Broadstrike+ Treflan is a selective soil applied herbicide for preemergence control of annual grasses and broadleaf weeds in soybeans. Broadstrike+ Treflan may be applied in water, liquid fertilizer or impregnated on dry bulk fertilizer. To prevent loss of herbicidal activity, Broadstrike+ Treflan must be soil incorporated within 24 hours after application. Broadstrike+ Treflan controls broadleaf weeds during germination or soon after emergence and grass weeds during germination. Susceptible weeds exposed to Broadstrike+ Treflan either die or remain non-competitive with the crop. Because herbicidal activity of Broadstrike+ Treflan on broadleaf weeds involves uptake and translocation to weed growing points, adequate soil moisture is necessary for optimal activity. Broadstrike+ Treflan may provide residual control of susceptible broadleaf weeds which emerge after application. This product will not harm the crop when applied according to label directions.

When applications are made under adverse conditions or when less susceptible species are treated, 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.

Broadstrike+ Treflan may be tank-mixed or followed by overlay or postemergence treatments with other herbicides registered for use on soybeans to broaden the spectrum of weeds controlled unless tank mixing or sequential use is specifically prohibited by the tank mix product manufacturer.

Safe Pesticide Handling Procedures
- Calibrate sprayers 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 job at hand.
- Avoid over filling the spray tank.
- Do not discharge excess material on soil at a single spot in the field or mixing/loading station.
- Dilute and agitation excess solution and apply at labeled rates/uses.
- When triple rinsing the pesticide container, be sure to add the rinsate to the spray mix.
- Sprayer Cleanup: To avoid injury or exposure to non-target 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 grassland 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
- Do not exceed a total application rate of 2.25 pints per acre (0.07 lb ai Broadstrike + 0.96 lb ai Treflan) in a single crop year.
- Use the lowest 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.
- Preharvest Interval: An interval of at least 85 days is required between application of Broadstrike+ Treflan and soybean harvest.
- Uneven application or improper incorporation of Broadstrike+ Treflan can result in erratic weed control or crop injury. Overapplication may result in crop injury or rotational crop damage from soil residue. Conditions such as seedling disease, cold weather, deep planting, excessive moisture, high soil salinity or drought may weaken crop seedlings and increase the possibility of damage from Broadstrike+ Treflan. Under these conditions, delayed crop development or reduced yields may result.
- Do not apply Broadstrike+ Treflan to soils that are saturated or are subject to prolonged periods of flooding as poor weed control may result.
- Do not use Broadstrike+ Treflan on any crop grown in Pocos county or Reeves county, Texas.
- Do not apply to areas where the soil pH is greater than 7.8 as this may result in decreased crop tolerance.
- 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 graze or feed treated soybean forage, hay, or straw to livestock.
- Chemigation: Do not apply Broadstrike+ Treflan through any type of irrigation system.
Avoid injurious spray drift. Do not allow sprays containing Broadstrike® + Treflan® to come in contact with crops or vegetation other than soybeans. Avoid application when winds are greater than 10 mph or under conditions of temperature inversion.

- Do not apply Broadstrike® + Treflan® to non-target areas. Do not apply near desirable vegetation and allow adequate distance between target area and desirable plants.

- Do not apply Broadstrike® + Treflan® 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 Broadstrike® + Treflan® when weather conditions favor drift to non-target areas. 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

Do not rotate to any crop other than soybeans for a minimum of 4 months after application of Broadstrike® + Treflan®. The following rotational crops may be planted at the indicated interval following application of Broadstrike® + Treflan®:

<table>
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<th>Crop</th>
<th>Group 1: all states except groups 2 and 3</th>
<th>Group 2: MN, ND, and SD</th>
<th>Group 3: AZ, CA, CO, ID, MT, NV, NM, OR, UT, WA, and WY</th>
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Note: Rotation to all other crops requires a 22-26 month rotation interval or a successful field bioassay.
Field 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+Treflan. Plant the strips perpendicular to the direction Broadstrike+Treflan 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.

Mixing Directions

Mixing - Broadstrike+Treflan Alone
Fill spray tank 1/3 to 1/2 full with clean water or liquid fertilizer. Start agitation. Add correct amount of Broadstrike+Treflan and continue agitation while filling tank to required spray volume.

Precaution: Do not allow water or spray mixture to back siphon into a water source.

Mixing - Broadstrike+Treflan Tank Mixes
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. To prevent foaming during filling, keep end of fill pipe below the surface of the liquid in the spray tank.

Mixing Order: Fill the spray tank to 1/4 to 1/3 of the total liquid spray volume required. 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: Dry flowables; wettable powders; aqueous suspensions, flowables and liquids.

Maintain agitation and fill spray tank to 3/4 of total spray volume. Add Broadstrike+Treflan and other emulsifiable concentrates (EC) and any solutions (S).

Finish filling the spray tank. Maintain continuous agitation during mixing, final filling and throughout application. If 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.

Premixing: Dry and flowable formulations may be premixed with water (slurried) 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.

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

Liquid Fertilizer Mixing Instructions

Broadstrike+Treflan can be applied in liquid fertilizer. In all cases, continuous agitation is required. A compatibility agent must be used to ensure that Broadstrike+Treflan mixes properly. The use of appropriate compatibility agents is especially important when tank mixing Broadstrike+Treflan 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.

Testing for Compatibility in Liquid Fertilizers

Broadstrike+Treflan alone or in tank mix combination with dry flowables (DF), wettable powders (WP), aqueous suspensions (AS), flowables (F), liquids (L), or solutions (S) may not combine properly with some
fluid fertilizer materials. Small quantities should always be tested before full-scale mixing. Follow the testing procedure below to determine if a compatibility agent is needed and which one works best in your herbicide/fertilizer mixture. The seven compatibility agents listed at the end of this section have been thoroughly tested. Other surfactants commercially available may or may not be suitable for use with liquid fertilizers.

Testing Procedure:
1. Add 1 pint of the liquid fertilizer to a quart jar.
2. Add 1 to 4 teaspoon(s) of the DF, WP, AS, F, or L formulation (depending on mixing ratio required) to the liquid fertilizer. Close the jar and agitate until the materials are evenly dispersed in the liquid fertilizer. If the materials do not disperse well, it may be necessary to slurry the chemicals in water before adding to the fertilizer.
3. After dispersing the materials (step 2) add 3 to 4 teaspoons of Broadstrike-Trellan to the jar and shake well. Add solution herbicides to the mixture last and agitate. Observe the jar for about 10 minutes. If materials rise to the surface and form a thick oily layer that will not redisperse when agitated, a compatibility agent is needed. If the mixture is easily redispersed with slight agitation, a compatibility agent is not required. Good agitation, however, must be provided to maintain dispersion in the spray tank.
4. If the need for a compatibility agent is demonstrated (step 3) the following procedure is recommended:
   Using a clean quart jar repeat step one above and add 1/2 teaspoon of the compatibility agent to the liquid fertilizer. Mix well and then repeat steps 2 and 3.

An effective compatibility agent will cause the mixture to remain uniformly dispersed with little or no separation (oil rising to the surface) for one half hour or longer. If slight separation occurs, 2 to 3 inversions of the jar should be sufficient to uniformly re-disperse the mixture. If oily layer forms and will not redisperse, additional compatibility agent or an alternative compatibility agent should be tried.

Use a clean jar for each test. A compatible mixture will have a uniform appearance and will be relatively easy to redisperse with gentle agitation of the jar.

Compatibility Agents: The phosphate ester-type surfactants listed below are designed for use with liquid fertilizers and can be mixed at rates as low as 1 1/2 to 2 pints per ton of liquid fertilizer. Add the compatibility agent just before adding pesticides.

1. Sponto 168D (Witco Chemicals Co., Chicago, IL)
2. Compat (Farm Chemicals, Inc., Aberdeen, NC) (Not registered for use in California)
3. Unite (Hopkins Ag Chemical, Madison, WI)
4. T-Multz 734-2 (Thompson-Hayward Chemical Co., Kansas City, MO) (Not registered for use in California)
5. Rigo Compatibility Agent (Rigo Company, Buckner, KY)
6. Amoco Spray Mate™ (Amoco Oil Co., Chicago, IL) (Not registered for use in California)
7. Kem-Link (Universal Coop, Minneapolis, MN)

Compliance with Federal and State regulations relating to liquid fertilizer mixing, registration, labeling and application are the responsibility of the individual and/or company offering the fertilizer or chemical mixture for sale.

Precautions:
- Do not use the compatibility agents listed above for tank mixes applied in water.
- Read the compatibility agent label for use directions and precautions before use.

Application Methods

Ground Application
Apply Broadstrike-Trellan in 10 to 40 gallons of liquid carrier per acre (broadcast basis), using properly calibrated, low pressure ground spray equipment that will apply the spray uniformly. As spray volume decreases, the importance of accurate calibration and uniform application increases. Check calibration and uniformity of spray application daily. To avoid spray drift, do not apply when winds are gusting or when wind speed is greater than 10 mph. Great enough to cause non-uniform application or spray drift. Do not aerially apply.
Application With Dry Bulk Fertilizer

Dry bulk fertilizers impregnated or coated with Broadstrike+Trelan may be applied as a preplant incorporated treatment on approved crops. All relevant Broadstrike+Trelan label recommendations regarding application rates, incorporation directions, special instructions and precautions must be followed. Read and follow all label instructions below concerning Broadstrike+Trelan use with dry bulk fertilizer.

Use the following formula to calculate the amount of Broadstrike+Trelan E.C. required to impregnate a ton of dry bulk fertilizer.

\[
\text{Pints Broadstrike+Trelan Per Acre} \times \frac{2000}{\text{Pounds Fertilizer Per Acre}} = \text{Pints Broadstrike+Trelan Per Ton of Fertilizer}
\]

Limitations: Apply a minimum of 200 pounds per acre of dry fertilizer impregnated with Broadstrike+Trelan at the recommended broadcast rate per acre. Any commonly used dry fertilizer can be used for Broadstrike+Trelan impregnation except coated ammonium nitrate and pure limestone. These materials will not absorb the herbicide. Blends containing mixtures of these materials can be impregnated.

Impregnation: Use any closed drum, belt, ribbon or other commonly used dry bulk fertilizer blender. Nozzles used to apply Broadstrike+Trelan to dry bulk fertilizer should be placed to provide uniform spray coverage. Add water to the Broadstrike+Trelan to give a total volume of at least six (6) pints per ton of fertilizer.

Application and Incorporation: Spread the fertilizer/chemical mixture with properly calibrated application equipment. Be certain the material is applied uniformly to the soil surface. Broadstrike+Trelan should be incorporated 2 times when impregnated on dry bulk fertilizer. The first incorporation should occur within 24 hours after application. The second incorporation should be delayed 3 to 5 days after the first and be completed prior to planting.

Compliance with Federal and State Regulations: Compliance with 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 or chemical mixture for sale.

Soil Preparation and Incorporation

General Soil Conditions: Ground cover, such as crop residues or existing weeds, can interfere with uniform soil incorporation of Broadstrike+Trelan. A manageable level of ground cover will allow uniform incorporation into the top 2 to 3 inches of soil. Ground cover and crop residues, if excessive, should be reduced by appropriate soil tillage prior to application.

The soil surface should be smooth enough to allow for uniform application and efficient thorough incorporation. Break up clods using tillage equipment prior to application or apply when soil moisture is sufficient to allow the breakup of large clods and uniform mixing during the incorporation process. Soil compaction and/or non uniform incorporation may occur if soil is excessively moist.

Soil Incorporation: Broadstrike+Trelan must be incorporated within 24 hours after application. Use incorporation equipment that thoroughly and uniformly mixes Broadstrike+Trelan into the top 2 to 3 inches of the seedbed, or erratic weed control and/or crop injury may result.

Application Prior to Bedding
Apply Broadstrike+Trelan and thoroughly mix into the top 2 to 3 inches of soil. The bedding operation provides additional mixing. Do not expose untreated soil.
Application After Bedding

Knock off beds to planting height before applying Broadstrike+Trelan. Apply and incorporate Broadstrike+Trelan with recommended equipment that will conform to the shape of the bed. Do not expose untreated soil.

Cultivation After Planting

Adequate soil moisture is required for optimal weed control. Sufficient water to moisten the soil to a depth of 2 inches is generally adequate. If dry conditions persist following a Broadstrike+Trelan application, a shallow cultivation is recommended. Limit depth of cultivation to the zone of treated soil (2 to 3 inches) to avoid moving untreated soil to the surface. Exposure of untreated soil may result in loss of weed control.

Incorporation Equipment

Use incorporation equipment capable of thoroughly mixing Broadstrike+Trelan uniformly into the top 2 to 3 inches of the final seedbed. Use of inappropriate equipment or improper use of recommended equipment may result in erratic weed control and/or crop injury. Incorporation equipment such as a tandem disc will mix Broadstrike+Trelan approximately half as deep as the equipment is set to operate. For example, a disc set to cut four inches deep will mix most of the Broadstrike+Trelan within the top 2 inches of soil. Any recommended incorporation implement may be used alone or in combination with any other recommended implement. Two incorporations are required under conditions which prevent optimum soil mixing such as excessive trash, roughness, high clay content or soil moisture.

Tandem Disc: Set equipment to cut 4 to 6 inches deep and operate at 4 to 6 mph

Field Cultivator: Set equipment to cut 3 to 4 inches deep and operate at a minimum of 5 mph. A field cultivator is defined as an implement with 3 to 4 rows of sweeps, spaced at intervals of 7 inches or less and staggered so that no soil is left unturned. Chisel points should not be used.

Combination Seedbed Conditioners: These implements are defined as three or more tillage devices combined to operate as a single tillage unit. For example, 2 to 3 rows of field cultivator C- or S-shaped shanks with an effective sweep spacing of 6 to 9 inches, (staggered so that no soil is left unturned), followed by a spike-tooth or flexine harrow, followed by a ground driven reel or basket. Combination implements should be set to cut 3 to 4 inches deep and operate at a minimum of 6 mph. Broadstrike+Trelan can be incorporated with one pass when using a combination seedbed conditioner. Two incorporations are required under conditions which prevent optimum soil mixing such as excessive trash, roughness, high clay content or soil moisture.

Rolling Cultivator: Set equipment to cut 2 to 4 inches deep and operate at 6 to 8 mph. Generally, rolling cultivators are adequate for use only on coarse and medium soils.

Bed Conditioner (Do-All): Set equipment to cut 2 to 4 inches deep and operate at 4 to 6 mph. One incorporation pass is adequate in bedded culture, while two incorporation passes are required in flat planted culture. The do-all should be used only on coarse and medium textured soils.

Mulch Treader and other similar disc-type implements: Set equipment to cut 3 to 4 inches deep and operate at 5 to 8 mph.

P.T.O-Driven Equipment (tillers, cultivators, hoes): Adjust equipment to incorporate Broadstrike+Trelan into the top 2 to 3 inches of the final seedbed with rotors spaced to provide a clean sweep of the soil. Only one incorporation is necessary. P.T.O. equipment should not be operated more than 4 mph.
# Weeds Controlled by Broadstrike+Treflan

## Grass Weeds:

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>annual bluegrass</td>
<td>Poa annua</td>
</tr>
<tr>
<td>bamyardgrass</td>
<td>Brachycome iberidifolia</td>
</tr>
<tr>
<td>(Watergrass)</td>
<td>Echinochloa crus-galli</td>
</tr>
<tr>
<td>brachiaria</td>
<td>Brachiaria spp.</td>
</tr>
<tr>
<td>(Signalgrass)</td>
<td>Bromus tectorum</td>
</tr>
<tr>
<td>bromegrass</td>
<td>Bromus secalinus</td>
</tr>
<tr>
<td>(Cheatgrass)</td>
<td>Digitaria spp.</td>
</tr>
<tr>
<td>(Downy brome)</td>
<td>Setaria spp.</td>
</tr>
<tr>
<td>cheat</td>
<td>Bromus secalinus</td>
</tr>
<tr>
<td>(Chick)</td>
<td>Digitaria spp.</td>
</tr>
<tr>
<td>crabgrass</td>
<td>Setaria spp.</td>
</tr>
<tr>
<td>(large crabgrass)</td>
<td>Panicum maximum</td>
</tr>
<tr>
<td>(smooth crabgrass)</td>
<td>Sorghum halepense</td>
</tr>
<tr>
<td>foxtail</td>
<td>Echinocloa crus-galli</td>
</tr>
<tr>
<td>(bottlegrass)</td>
<td>Avena fatua</td>
</tr>
<tr>
<td>(bristlegrass)</td>
<td>Panicum dichotomiflorum</td>
</tr>
<tr>
<td>(giant foxtail)</td>
<td>Lolium multiflorum</td>
</tr>
<tr>
<td>(green foxtail)</td>
<td>Panicum texanum</td>
</tr>
<tr>
<td>(foxtail millet)</td>
<td>Panicum texanum</td>
</tr>
<tr>
<td>(pigeongrass)</td>
<td>Panicum texanum</td>
</tr>
<tr>
<td>(robust foxtail)</td>
<td>Panicum texanum</td>
</tr>
<tr>
<td>(yellow foxtail)</td>
<td>Panicum texanum</td>
</tr>
<tr>
<td>guineagrass</td>
<td>Panicum maximum</td>
</tr>
<tr>
<td>Johnsongrass (from seed)</td>
<td>Sorghum halepense</td>
</tr>
<tr>
<td>junglerice</td>
<td>Echinocloa crus-galli</td>
</tr>
<tr>
<td>oats, wild</td>
<td>Avena fatua</td>
</tr>
<tr>
<td>panicum</td>
<td>Panicum dichotomiflorum</td>
</tr>
<tr>
<td>(fall panicum)</td>
<td>Lolium multiflorum</td>
</tr>
<tr>
<td>ryegrass, Italian</td>
<td>Panicum texanum</td>
</tr>
<tr>
<td>(annual ryegrass)</td>
<td>Panicum texanum</td>
</tr>
<tr>
<td>Texas panicum</td>
<td>Panicum texanum</td>
</tr>
<tr>
<td>(buffalograss)</td>
<td>Panicum texanum</td>
</tr>
<tr>
<td>(Coloradograss)</td>
<td>Panicum texanum</td>
</tr>
<tr>
<td>sandbur</td>
<td>Cenchrus incertus</td>
</tr>
<tr>
<td>(burrgrass)</td>
<td>Leptochloa fiiiformis</td>
</tr>
<tr>
<td>sprangletop</td>
<td>Eragrostis cilianensis</td>
</tr>
<tr>
<td>stinking</td>
<td>Sorghum bicolor</td>
</tr>
<tr>
<td>(lovegrass)</td>
<td>Sorghum bicolor</td>
</tr>
<tr>
<td>shartreck</td>
<td>Sorghum bicolor</td>
</tr>
<tr>
<td>(wild cane)</td>
<td>Sorghum bicolor</td>
</tr>
<tr>
<td>woolly cupgrass</td>
<td>Sorghum bicolor</td>
</tr>
</tbody>
</table>

## Broadleaf Weeds:

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>anoda, spurred</td>
<td>Anoda cristata</td>
</tr>
<tr>
<td>amaranth, Palmer</td>
<td>Amaranthus palmeri</td>
</tr>
<tr>
<td>beggarweed, florida</td>
<td>Desmodium tortuosum</td>
</tr>
<tr>
<td>carpetweed</td>
<td>Mollugo verticillata</td>
</tr>
<tr>
<td>chickweed</td>
<td>Stellaria media</td>
</tr>
<tr>
<td>cocklebur, common†</td>
<td>Xanthium strumarium</td>
</tr>
<tr>
<td>goosefoot</td>
<td>Chenopodium hybridum</td>
</tr>
<tr>
<td>henbit</td>
<td>Lamium amplexicaule</td>
</tr>
<tr>
<td>jimsonweed†</td>
<td>Datura stramonium</td>
</tr>
<tr>
<td>knotweed</td>
<td>Polygonum aviculare</td>
</tr>
</tbody>
</table>
kochia, fireweed
(Mexican fireweed)
mallow, Venice
morning glory spp.
mustard, wild
nightshade, black
lady’s thumb
lamb’s quarters, Common
pigweed
(careless weed)
(prostrate pigweed)
(redroot)
(rough pigweed)
(spiny pigweed)
puncture vine
(western U.S., only)
caltrop
(toad weed)
purslane, Common
pursley, Florida
(Florida purslane)
(Mexican clover)
pursley
ragweed, common
Russian thistle
(tumbleweed)
sesbania, hemp
sicklepod
sida, prickly
smart weed, Pennsylvania
spurge, nodding
spurge, prostrate
spurge, spotted
stinging nettle
(nettle)
sunflower, wild
velvet leaf
water hemp, tall

Kochia scoparia
Hibiscus trionum
Ipomoea spp.
Sinapis arvensis
Solanum nigrum
Polygonum persicaria
Chenopodium album
Amaranthus spp.

†Control of light to moderate infestations: Control may vary according to weed density and soil conditions at the time of application. Control of these weeds may be improved by the following:
1. Thoroughly till moist soil to destroy germinating and emerged weeds. This tillage may be used to incorporate Broadstrike + Trellan.
2. Plant crop into moist soil immediately after tillage.
3. If irrigation is not possible and rain does not occur after planting, a uniform shallow cultivation is recommended as soon as weeds emerge.

Soil Texture Guide for Application Rates
Broadstrike + Trellan rate recommendations for incorporated treatments are based on “Soil Texture Class” (coarse, medium or fine) and soil organic matter content. A fine textured soil (e.g., clay loam) will require a higher application rate than a coarse textured soil (e.g., loamy sand). In the table below, find the “Soil Texture Class” (coarse, medium or fine) corresponding to the “Soil Texture” to he treated. Choose the proper rate for each application based on the “Soil Texture Class” and specific crop recommendations. Do not exceed recommended rates.
### Soil Texture Class

<table>
<thead>
<tr>
<th>Soil Texture Class</th>
<th>Soil Texture of Soil to be Treated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coarse (Light) Soils:</td>
<td>Sand, loamy sand, sandy loam</td>
</tr>
<tr>
<td>Medium Soils:</td>
<td>Loam, silty clay loam*, silt loam, silt, sandy clay loam*</td>
</tr>
<tr>
<td>Fine (Heavy) Soils:</td>
<td>Clay, clay loam, silty clay loam*, silty clay, sandy clay, sandy clay loam*</td>
</tr>
</tbody>
</table>

* Silty clay loam and sandy clay loam soils are transitional soils and may be classified as either medium or fine textured soils. If silty clay loam or sandy clay loam soils are predominantly sand or silt, they are usually classified as medium textured soils. If they are predominantly clay, they are usually classified as fine textured soils.

#### Approved Uses

**SOYBEANS**

**Soybeans - Broadstrike+Treflan Alone**

Apply Broadstrike+Treflan from 0 to 30 days before planting as a preplant soil incorporated treatment.

**Broadcast Application Rates/Acre:**

<table>
<thead>
<tr>
<th>Soil Texture</th>
<th>Broadstrike+Treflan (pints)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coarse</td>
<td>1.5 - 2.0†</td>
</tr>
<tr>
<td>Medium</td>
<td>2.0</td>
</tr>
<tr>
<td>Fine</td>
<td>2.25</td>
</tr>
</tbody>
</table>

†Use the higher rate in the rate range on coarse soils with greater than 5% organic matter.

**Precautions**

Soybeans should be planted after early season adverse weather conditions have passed. Cool, wet weather early in the growth cycle causes additional stress on the soybean plant which may result in reduced stand, delayed maturity and reduced yield.

**Soybeans - Broadstrike+Treflan Tank Mix, Overlay and Postemergence Recommendations**

**Broadstrike+Treflan Tank-Mixes:**

Broadstrike+Treflan may be tank-mixed with Sencor, Lexone or Vemam and applied as a preplant soil incorporated treatment to control additional weeds in soybeans. When Broadstrike+Treflan is tank-mixed with a companion herbicide, follow all relevant use directions, including precautions, restrictions and limitations listed on the manufacturer's label.

**Soybeans - Broadstrike+Treflan Preplant Incorporated Followed by Overlay Treatments**

(Not For Use In California)

Apply Broadstrike+Treflan as a preplant soil incorporated treatment. Weeds not controlled by Broadstrike+Treflan may be treated using overlay pre-emergence applications of Lexone, Lorox or Sencor. Consult the manufacturer's labels for application rates, additional weeds controlled, additional use directions and precautions before use.
Soybeans - Preplant Incorporated Followed by Postemergence Treatments (Not for Use in California)

Apply Broadstrike+Treflan as a preplant soil incorporated treatment. Broadleaf weeds not controlled by Broadstrike+Treflan may be treated using postemergence herbicide products such as Basagran, Blazer, Cobra, Galaxy, Reflex, Storm, or Tackle. For enhanced control of sicklepod, Classic herbicide can be applied postemergence following application of Broadstrike+Treflan. 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 label instructions (including adverse conditions noted on the label), 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 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 theory), 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.

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Revisions (Beyond approved EUP labeling):
1) Minor editing of label text.
2) Added label statements required by the Worker Protection Standard.
3) Added modifications to wetlands language to comply with PR Notice 93-3
4) Changed rotational crop interval for reapseed (canola) and sugar beets to 26 months.
5) Rotation crop: Criteria is now 26 months and a successful bioassay.
6) Revised recommendations for overlay and postemergence applications of herbicides following application of Broadstrike-Dual.
7) Weeds controlled list: Added nodding spurge and prostrate spurge and deleted hemp sesbania.
8) Added Environmental Hazard advisory for ground water.
9) Added Safe Pesticide Handling procedures.
10) Added precautions to prevent spray drift or runoff.