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352-509 SUPPLEMENTAL LABELING



# EXPRESS® HERBICIDE

WEED CONTROL FOR FALLOW

ACCEPTED

**Products** 

**DuPont Agricultural** 

"..... À Growing Partnership With Nature"

MAY 2 1 1997

Under the Federal Insecticide Fungicide, and Rodenticide Act. as amonded for the pesticide registe of

# **EXPRESS® HERBICIDE**

EPA Reg. No. 352-509

WEED CONTROL FOR FALLOW

# **DIRECTIONS FOR USE**

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

In the states of CO, IN, KS, MT, ND, NE, NJ, NM, OH, OK, PA, SD, TX and WY, DuPont "Express" Herbicide is recommended as a postemergence tank mix treatment to control or suppress certain broadleaf weeds in fallow and for the replacement of some, but not all, tillage operations during the fallow period.

Do not use this product in the following counties of CO: Alamosa, Conejos, Costilla, Rio Grande and Saguache.

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

# **GENERAL INFORMATION**

"Express" provides postemergence activity and offers potential for shortterm control or suppression of labeled weeds. Degree of control and duration of effect depend on weed spectrum and density, weed size and variability, amount of canopy cover, growing conditions prior to, at and following application, amount and timing of precipitation, and spray coverage.

Reduced tillage fallow applications of "Express" are to be made in the spring or after cereal grain harvest. Do not plant any crops for 60 days following an "Express" application.

Use "Express" for weed control on fallow ground as a postemergence herbicide applied in combinations with other suitable registered fallow herbicides such as Landmaster II', Fallow Master', Roundup' plus 2,4-D (ester formulations work best), "Roundup" plus Banvel"/Banvel" SGF, 2,4-D, "Banvel"/"Banvel" SGF, DuPont Bladex® 4L/"Bladex" 90 DF Herbicide and DuPont Lexone® DF Herbicide, Susceptible weeds should be actively growing at time of application. Unless otherwise directed, always include

Do not apply "Express" alone to fallow. Do not apply "Express" to fallow that will not be tilled at least once prior to planting the subsequent crop. Some naturally-occurring weed biotypes\* resistant to this product are known to exist. If weeds listed on this label are not satisfactorily controlled, respray problem areas in a timely and effective manner using a broadleaf herbicide having a different mode of action, such as 2,4-D or "Banvel" / Banvel" SGF, or use a tillage operation. Do not let weeds or weed escapes go to seed.

\* Biotypes are naturally-occurring individuals of the species which have a slightly different genetic makeup. Resistant biotypes may look exactly the same as susceptible biotypes. Herbicide-resistant biotypes are able to survive a use rate several times higher than needed to control susceptible biotypes.

#### **Application Rates**

The application use rate for "Express" is from 1/6 to 1/3 oz/A. If a cereal crop is planned for after the fallow period, do not treat the cereal crop with DuPont Ally Herbicide, DuPont Glean FC Herbicide, or DuPont Finesse® Herbicide. Instead treat the cereal crop with another herbicide having a different mode of action either alone or in combination with "Express" or DuPont Harmony Extra Herbicide.

# Timing of Fallow Applications

"Express" is to be applied in the spring 60 days prior to planting crops or after a cereal crop is harvested to reduce tillage in the stubble field. However, do not use "Express" if the preceding cereal crop was treated with "Glean" FC, "Finesse", "Ally", or Amber2.

Apply "Express" combinations to emerged, actively growing weeds. Thorough coverage is essential. When stubble is dense and/or weeds are stressed (drought and/or cold weather), use higher spray volumes to insure better coverage and control. Any preapplication tillage should leave the soil surface relatively free of large clods or deep furrows. Tillage immediately after application can reduce activity, so only shallow tillage should be employed. "Express" combinations should never be used to replace all tillage operations during the fallow period.

#### WEED CONTROL

For best weed control performance, use "Express" in a tank mix with "Roundup" plus 2,4-D (ester formulations perform best) or "Banvel"/"Banvel" SGF. These tank mixes work best where weed biotypes resistant to "Ally", "Glean" FC, "Harmony" Extra, "Express" or "Amber" Herbicides are not suspected or known to occur.

Where resistant weed biotypes, such as kochia and Russian thistle, are suspected (land which has had 2 or more previous applications of "Glean" FC or is immediately adjacent to land where "Glean" FC has been used 2 or more times) or known to be present, select the most effective tank mix partner labeled for the control of kochia and/or Russian

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thistle and adjust the rate so that it alone will control the resistant biotype(s).

NOTE: If resistant blotypes are present, degree of control will depend solely on the effectiveness of the tank mix partner.

Apply "Express" postemergence to small actively growing weeds before they exceed 4" in height or diameter. For all postemergence applications, add a surfactant at the rate of 1 to 2 quarts/100 gallons of spray solution, unless otherwise directed on tank mix partner product label. The use of surfactants having less than 80% active ingredient may result in reduced weed control.

"Express" will not provide residual weed control, therefore, insure that the majority of weeds have emerged prior to the application.

Avoid postemergence applications to weeds which are not actively growing due to adverse weather conditions. Weeds hardened-off by cold weather or drought stress may not be adequately controlled.

#### WEED CONTROL

Use 1/3 oz/A "Express" when the weed infestation is heavy and predominantly consists of those weeds listed as suppressed, or when application timing and environmental conditions are marginal.

Use 1/6 to 1/4 oz/A "Express" when weed infestation is light and predominantly consists of those weeds listed as controlled and when optimum application conditions occur.

Weeds Controlled or Suppressed\* at 1/6 to 1/3 Ounce per Acre "Express"

Blue/purple mustard Canada thistle\* Common purslane Common sunflower\* Flixweed Henbit +Kochia

Lambsquarters

(common, slimleaf)
Pigweed (redroot, tumble)

+Prickly lettuce +Russian thistle Smallseed falseflax

Tansymustard Volunteer sunflower Wild buckwheat\*

\*Weed suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Degree of suppression will vary with tank mix herbicide used, rate used, size of weeds and environmental conditions following treatment.

+Naturally-occurring resistant biotypes of these weeds are known to occur in the Central Plains and Pacific Northwest. See "Specific Weed Problems" section of label for additional information.

# TANK MIXTURES

The following tank mixtures are recommended in combination with "Express": "Landmaster" II, "Fallow Master", "Roundup" plus 2,4-D, "Roundup" plus "Banvel"/"Banvel" SGF, "Roundup" plus 2,4-D plus "Banvel"/"Banvel" SGF, 2,4-D, "Banvel"/"Banvel" SGF, "Bladex" 4L"Bladex" 90 DF, "Lexone" DF, or other grass and/or broadleaf weed herbicides registered for use on fallow.

"Express" plus "Landmaster" III"Fallow Master", "Express" plus "Roundup" plus 2,4-D or "Banvel"/"Banvel" SGF - Use for control of broadleaf weeds, volunteer cereals and grassy weeds. For best results, apply chosen combination to actively growing broadleaf and volunteer

cereals/grassy (6 inch tall or less) weeds. These combinations should be applied in 3 to 10 GPA with ground equipment or 3 to 5 GPA by air. Ammonium sulfate (2% by weight) may be added when using "Roundup", "Landmaster" If or "Fallow Master". When using "Roundup" tank mixes, include a nonionic surfactant of at least 80% active, at 2 quarts per 100 gallons of spray volume.

When using the lowest labeled rates of "Roundup" in combination with "Express" for both grassy and broadleaf weeds, you must add either 2,4-D or "Banvel"/"Banvel" SGF for Improved broadleaf weed control.

These combinations should never be used to replace all tillage operations during the fallow period.

In tank mixtures, "Express" must be in suspension before adding the companion herbicide(s) or spray adjuvants.

Consult "Bladex" 4L/"Bladex" 90 DF or "Lexone" DF labels for information on fallow weed control.

#### Specific Weed Problems

Kochia, Russian thistle and Prickly lettuce - Only apply "Express" as a tank mix treatment with either 2,4-D and/or "Banvel"/"Banvel" SGF or in combinations with premixes containing either of these herbicide. Use the higher labeled rate of the companion herbicide. Consult companion herbicide product label for rates to be used.

If resistant weed are known to be present, consider using another herbicide treatment or adjust the use rate of the companion herbicide so that it alone will control the resistant species.

Use tillage operations to control subsequent flushes of these weeds. Do not let these weed escapes go to seed.

Read and follow all use instructions, warnings and precautions for companion herbicides.

## SPRAY PREPARATION, EQUIPMENT, SPRAY VOLUMES AND APPLI-CATION

Mix the proper amount of "Express" into the necessary volume of water in the spray tank with the agitator running. Agitation is required for uniform mixing and application. If spray preparation is left standing, thoroughly reagitate before using. "Express" must be added to the spray tank first, followed by other tank mix chemicals and surfactants. If spray tank contains part of previous spray mix, slurry "Express" in a bucket of water before adding to spray tank.

"Express" should be applied in sufficient spray volume to obtain thorough coverage of the target area and existing weed foliage. Include 1-2 quarts of 80% (minimum concentration) active ingredient surfactant for every 100 gallons of spray mix when weeds are present at application. Do not use liquid fertilizer as a substitute for a surfactant.

For ground applications minimum spray volume is 3 GPA (gallon per acre). Flat fan nozzles are recommended. Volumes exceeding the minimum should be used as weed populations or canopy cover increases.

For aerial applications use nozzle types and arrangements that will provide for optimum spray distribution and maximum coverage at 3 to 5 GPA

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#### CAUTION - AVOID SPRAY DRIFT

THE MINIMIZATION OF PESTICIDE DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR. Interactions between weather conditions and land configurations may contribute to unpredictable drift patterns of all crop protection products. Responsibility for plant injury caused by spray drift lies with the applicator. As an aid for applying any crop protection product, follow these practices to minimize spray drift.

Do not allow spray from either ground or aerial equipment to drift onto neighboring crops or land, as even small amounts can injure susceptible plants. When spraying near adjacent sensitive crops or plants, do everything possible to reduce spray drift. This includes:

- o Stop spraying if wind speed becomes excessive. DO NOT SPRAY IF WIND SPEED IS 10 MPH OR GREATER. Spray drift can occur at wind speeds less than 10 MPH. If sensitive crops or plants are downwind, extreme caution must be used even in relatively low wind conditions! DO NOT SPRAY IF WINDS ARE GUSTY.
- High temperatures, drought and low relative humidity increase the possibility of harmful spray drift. EXTREME CAUTION MUST BE USED WHEN THESE CONDITIONS ARE PRESENT AND SENSITIVE CROPS OR PLANTS ARE NEARBY, REGARDLESS OF WIND SPEED.
- o Do not apply when a temperature inversion exists. An inversion is characterized by low air movement and an increase in air temperature with an increase in altitude. In humid regions, a fog or mist may form. An inversion may be detected by producing a smoke column and checking for a layering effect. Smoke-producing devices on aircraft are recommended. If not sure whether inversion conditions are present, consult with local weather services before making an application.
- o Drift from aerial or ground equipment may be further reduced by:
  - 1. Using large droplet size sprays to minimize drift. DO NOT APPLY WITH HOLLOW-CONE INSECTICIDE NOZZLES ON GROUND EQUIPMENT. Do not use nozzles that produce small droplets, such as Sprayfoil or airblast-type nozzles. Nozzles should be oriented at an angle between straight down and straight back for ground applications.

For aerial applications, orient nozzles straight back along the windstream using straight stream orifices (such as disk with no swirl plate). If using flood-type nozzles on aircraft, orient them so spray is produced in direction of the airstream. Use the lowest number of nozzles practical with the largest orifice size per nozzle to obtain minimum of 1 GPA. Application height should not exceed 1/2 length of wing span, to minimize drift potential. Boom length must not exceed 2/3 of wing span.

- Increasing volume of spray mix per acre (for example, minimum 5 GPA by air, 10 GPA by ground) by using higher flow-rate nozzles.
- Reducing pressure (PSI). DO NOT EXCEED 40 PSI when applying "Express". (Vehicle speed must also be reduced to maintain spray mix volume per acre). Consult manufacturer's catalogs for details on correct calibration.
- Apply as close to target plants as possible while still maintaining a good spray pattern.

NOTE: Do not allow spray to drift onto neighboring crops as injury to the crop may occur. Extreme care must be taken to prevent drift onto susceptible nontarget plants or nontarget land.

#### SPRAYER CLEANUP

Consult "Express" product label for recommendations concerning cleanup of application equipment.

#### **PRECAUTIONS**

- Do not apply more than 1/3 oz/A of "Express" on fallow.
- Do not apply "Express" more than once in a given fallow period.
- Do not tank mix "Express" with any other sulfonylurea herbicide labeled for weed control during crop fallow periods.
- Do not plant any crop for 60 days after an "Express" application. Read and follow companion product label directions for crop rotation guidelines and other restrictions.
- For ground applications applied to weeds that are stressed due to dry conditions, control of weeds in wheel track areas may be reduced.
- Do not use "Express" as a replacement for all tillage operations during fallow period.

# **IMPORTANT**

BEFORE USING "EXPRESS", READ AND FOLLOW ALL APPLICABLE DIRECTIONS, RESTRICTIONS AND PRECAUTIONS ON THE EPA-REGISTERED LABEL.

This bulletin contains new or supplemental instructions for use of this product which do not appear on the EPA-registered package label. Follow the Instructions carefully.

This labeling must be in the possession of the user at the time of pesticide application.

Registered trademark of:

'Monsanto Company

<sup>2</sup>Novartis

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3D. and W. Industries

(Replaces H-43021)

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