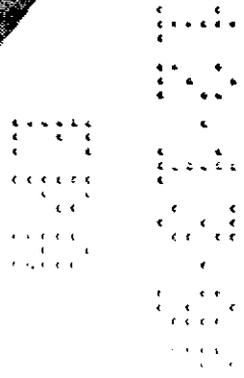
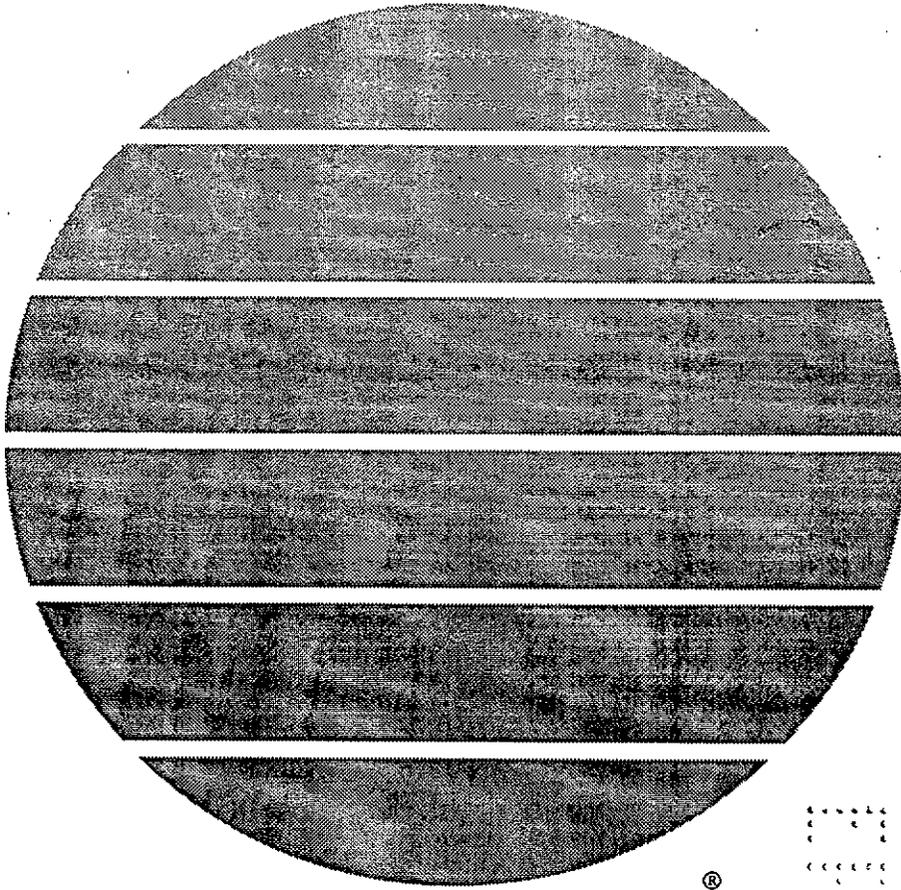




**Ally<sup>®</sup>**

herbicide

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*“..... A Growing Partnership With Nature”*

**"ALLY" HIGHLIGHTS**

- For selective postemergence broadleaf weed control in winter and spring crops of wheat and barley, pastures and rangeland.
- Recommended for land primarily dedicated to long-term production of wheat, barley, pasture or rangeland (see **Crop Rotation** section for information).
- May be applied by ground or by air in selected areas.
- Use rates are 1/10 oz. per acre in wheat and barley
- Use rates are 1/10 to 3/10 oz. per acre as broadcast treatment in pasture or rangeland. Spot treatments allow up to 3/4 oz. per acre.
- No grazing restrictions on wheat, barley, pasture or rangeland.
- Applied one time per season, ALLY can be used in wheat and barley as follows:
  - In dryland crops—apply from 2-leaf stage, but before boot, except on Durum and Wampum varieties.
  - In Durum and Wampum varieties, apply only with 2,4-D at tillering stage but before boot.
  - In irrigated crops—apply at tillering stage but before boot.
- As a harvest aid treatment with surfactant (or with 2,4-D + surfactant) during dough stages up to 10 days before harvest.
- Apply one time per season to pasture or rangeland for annual weed and selective perennial weed and brush control in several varieties of pasture grasses (also see section on **Application Timing**).
- For fallow use in combination with other herbicides in selected areas.
- Consult label text for complete instructions. Always read and follow label **Directions for Use**.

**ACCEPTED**

DEC 18 1996

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 352-435

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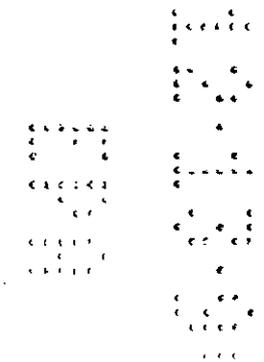
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# Ally<sup>®</sup>

## herbicide

*Dry Flowable*

*For Use on Wheat, Barley, Pastures  
and Rangeland*

<i>Active Ingredient</i>	<i>By Weight</i>
Metsulfuron Methyl	
Methyl 2-[[[(4-methoxy-6-methyl -1,3,5-triazin-2yl)amino]carbonyl] amino]sulfonyl]benzoate	60%
<i>Inert Ingredients</i>	40%
<b>TOTAL</b>	<b>100%</b>

EPA Reg. No. 352-435  
U.S. Pat. 4,383,113

### KEEP OUT OF REACH OF CHILDREN CAUTION

#### STATEMENT OF PRACTICAL TREATMENT

In case of contact with eyes, immediately flush with plenty of water.

If on skin, wash with plenty of soap and water. Get medical attention if irritation persists.

For medical emergencies involving this product, call toll-free 1-800-441-3637.

#### PRECAUTIONARY STATEMENTS

##### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION!** Causes eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist.

##### PERSONAL PROTECTIVE EQUIPMENT

**WPS USES:** Applicators and other handlers who handle this pesticide for any use covered by the Worker Protection Standard [(40 CFR Part 170)] must wear:

Long-sleeved shirt and long pants.

Shoes plus socks.

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.

##### ENVIRONMENTAL HAZARDS

Do not apply directly to water, or 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.

## IMPORTANT INFORMATION

DuPont ALLY® Herbicide is recommended for use on land primarily dedicated to the long-term production of wheat, barley, pasture, and rangeland.

Injury to or loss of desirable trees or vegetation may result from failure to observe the following:

- Do not apply, drain, or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- Do not use on lawns, walks, driveways, tennis courts, golf courses, athletic fields, commercial sod operations, or other high-maintenance, fine turfgrass areas, or similar areas.
- Do not use on grasses grown for seed.

Injury to or loss of adjacent sensitive crops and vegetation may result from failure to observe the following:

- Take all necessary precautions to avoid all direct or indirect contact (such as spray drift) with nontarget plants or areas.
- Carefully observe sprayer cleanup instructions, both prior to and after using this product, as spray tank residue may damage crops other than wheat, barley, pasture, and rangeland.

### PESTICIDE HANDLING

- 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 overfilling of spray tank.
- Do not discharge excess material on the soil at a single spot in the field or mixing/loading station.
- Dilute and agitate excess solution and apply at labeled rates/uses.
- Avoid storage of pesticides near well sites.
- When triple rinsing the pesticide container, be sure to add the rinsate to the spray mix.

### DIRECTIONS FOR USE

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

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.
- Shoes plus socks.

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Weed control in pastures and rangeland is not within the scope of the Worker Protection Standard.

ALLY should be used only in accordance with recommendations on this label or in separate published DuPont recommendations.

DuPont will not be responsible for losses or damages resulting from the use of this product in any manner not specifically recommended by DuPont.

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

### GENERAL INFORMATION

ALLY is recommended for use on wheat and barley in Colorado (except in Alamosa, Conejos, Costilla, Rio Grande, and Saquache counties), Idaho, Kansas, Minnesota, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming.

ALLY is recommended for use on pasture and rangeland in all states, except California.

Note: For definitions of portions of States recommended on this label, see listings of counties or area definitions on Crop Rotation Interval charts of this label.

ALLY is a dry-flowable granule that controls weeds in wheat (including durum), barley, pasture, and rangeland grasses. ALLY is mixed in water or can be pre-slurried in water and added to liquid nitrogen carrier solutions and applied as a

uniform broadcast spray. A surfactant should be used in the spray mix unless otherwise specified on this label. ALLY is, noncorrosive, nonflammable, nonvolatile, and does not freeze.

ALLY controls weeds by postemergence activity. For best results, apply ALLY to young, actively growing weeds. The use rate depends upon the weed spectrum and size of weeds at application. The degree and duration of control may depend on the following factors:

- weed spectrum and infestation intensity
- weed size at application
- environmental condition at and following treatment

**Environmental Conditions and Biological Activity**

ALLY is absorbed through the foliage of broadleaf weeds, rapidly inhibiting their growth. Leaves of susceptible plants appear chlorotic from 1 to 3 weeks after application and the growing point subsequently dies.

Application of ALLY provides the best control in vigorously growing crops that shade competitive weeds. Weed control in areas of thin crop stand or seeding skips may not be as satisfactory. However, a crop canopy that is too dense at application can intercept spray and reduce weed control.

ALLY may injure crops that are stressed from adverse environmental conditions (such as extreme temperatures or moisture), abnormal soil conditions, or cultural practices. In addition, different varieties of the crop may be sensitive to treatment with ALLY under otherwise normal conditions. Treatment of such varieties may injure crops.

In warm, moist conditions, the expression of herbicide symptoms is accelerated in weeds; in cold, dry conditions, expression of herbicide symptoms is delayed. In addition, weeds hardened-off by drought stress are less susceptible to ALLY.

Weed control may be reduced if rainfall or snowfall occurs soon after application.

**APPLICATION INFORMATION**

ALLY can be mixed with water or preslurried in water and added to liquid fertilizer for application. To prepare the tank mix, follow these steps:

1. Add the required amount of water or fertilizer to the tank and turn on the agitator.
2. Add the required amount of ALLY either as a slurry if mixing with fertilizer or directly if mixing with water.
3. Once the ALLY is dissolved, add any companion products.

*Always mix ALLY in the spray solution (water or liquid fertilizer) before adding other products to the same spray tank.*

Use the spray solution within 24 hours to avoid product degradation. If the spray solution is left standing, agitate it thoroughly before reusing.

Do not use ALLY with spray additives that reduce the pH of the spray solution to below 3.0, as rapid product degradation can result.

**Use Rates**

<b>Wheat (including durum) and Barley</b>
Apply 1/10 oz ALLY per acre to wheat or barley.
<b>Pasture and Rangeland</b>
Apply 1/10 to 3/10 oz ALLY per acre as a broadcast treatment to pasture and rangeland. For spot applications, use up to 3/4 oz ALLY per acre.

**Frequency of Application**

The maximum use rates for ALLY are determined based on the soil pH, soil temperature, soil moisture, and soil microbial activity for a region. Based on these factors, ALLY use should be limited to the maximum use rates and minimum application intervals specified below. For more information, see the Crop Rotation section of this label.

Crop	Location	Maximum Application Rate (oz per A)	Minimum Application Intervals (months)
Wheat, Barley	CO, ID, Western KS, Western NE (W. of Hwy. 183), MN, MT, NM, ND, OK Panhandle, OR, SD, TX Panhandle, UT, WA, and WY	1/10	22
	Central KS, Central NE, Central OK, North Central TX	1/10	10
Pasture/Rangeland	U.S.—all locations	3/10	12

**Application Timing—Wheat and Barley**

<b>Dryland Wheat and Barley (Except Durum or Wampum Variety)</b>
Make applications after the crop is in the 2-leaf stage but before boot.
<b>Durum and Wampum Variety Spring Wheat</b>
Make applications after the crop is tillering but before boot. Applications to durum and wampum varieties should be made in combination with 2,4-D.
<b>Irrigated Wheat and Barley</b>
Make applications after the crop begins tillering but before boot. First post-treatment irrigation should be delayed for at least 3 days after treatment and should not exceed 1 in. of water.
<b>Wheat and Barley—Harvest Aid</b>
Make applications after the crop has reached the dough stage, but no later than 10 days before harvest.
See section on 2,4-D tank mixtures and consult 2,4-D labeling for use restrictions.

Do not apply during boot or early heading, as crop injury may result.

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### Application Timing—Pasture Grasses

ALLY may be used on some native grasses such as bluestems and grama, and on other pasture grasses such as bermudagrass, bluegrass, orchardgrass, bromegrass, fescue and timothy. Specific application information on several of these pasture grasses follows:

Pasture Grass	Minimum time from grass establishment to ALLY application
Bermudagrass	2 months
Bluegrass, bromegrass, and orchardgrass	6 months
Timothy	12 months
Fescue	24 months

#### Fescue Precautions:

Note that ALLY may temporarily stunt fescue, cause it to turn yellow, or cause seedhead suppression. To minimize these symptoms, take the following precautions:

- tank mix ALLY with 2,4-D
- use the lowest recommended rate for target weeds
- use surfactant at 1/2 to 1 pt per 100 gal of spray solution (1/16 to 1/8% v/v)
- make application later in the spring or in the fall
- Do not use surfactant when liquid nitrogen is used as a carrier.

The first cutting yields may be reduced due to seedhead suppression resulting from treatment with ALLY.

#### Timothy Precautions:

Timothy should be at least 6" tall at application and be actively growing. Applications of ALLY to timothy under any other conditions may cause crop yellowing and/or stunting. To minimize these symptoms, take the following precautions:

- tank mix ALLY with 2,4-D
- use the lowest recommended rate for target weeds
- use surfactant at 1/2 pt per 100 gal (1/16% v/v)
- make applications in the late summer or fall
- Do not use surfactant when liquid nitrogen is used as a carrier.

#### Ryegrass Pastures (Italian or perennial): Do not apply ALLY as injury to or loss of the pasture may result.

**Other Pastures:** Varieties and species of pasture grasses differ in their tolerance to herbicides. When using ALLY on a particular grass for the first time, limit use to one container. If no injury occurs throughout the season, larger acreage may be treated the following season.

Broadleaf pasture species, such as alfalfa and clover, are highly sensitive to ALLY and will be severely stunted or injured by ALLY.

## WEEDS CONTROLLED

### Cereals/Pasture and Rangeland

1/10 oz per acre

Blue/purple mustard*	Miners lettuce
Bur buttercup (testiculate)	Pigweed (redroot, smooth, tumble)
Coast fiddleneck (tarweed)	Plains coreopsis
Common chickweed	Prickly lettuce†
Common purslane	Russian thistle†
Conical catchfly	Shepherd's purse
Cowcockle	Smallseed falseflax
False chamomile	Smartweed (green, ladysthumb, pale)
Field pennycress (fanweed)	Snow speedwell
Filaree	Tansymustard*
Flixweed*	Treacle mustard (Bushy Wallflower)
Groundsel (common)	Tumble/Jim Hill mustard
Henbit	Volunteer sunflower
Kochia†	Waterpod
Lambsquarters (common, slimleaf)	Wild mustard
Mayweed chamomile	

### Weeds Suppressed<sup>‡</sup>\*

#### Cereals/Pasture and Rangeland

1/10 oz per acre

Canada thistle*	Knotweed (prostrate)*
Common sunflower*	Sowthistle (annual)*
Corn groundwell*	Wild buckwheat*

\* See the Specific Weed Problems section.

† Naturally occurring resistant biotypes of these weeds are known to exist. ALLY will not control these resistant biotypes. See the Resistance section for additional information.

‡ Weed suppression is a reduction in weed competition (reduced population and/or vigor) as visually compared to an untreated area. The degree of suppression varies with the rate used, the size of the weeds, and the environmental conditions following treatment.

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## WEEDS CONTROLLED

### Pasture/Rangeland only

#### 1/10 to 2/10 oz per acre

Bitter sneezeweed	Dandelion
Buttercup	Marestail
Carolina geranium	Plantain
Common broomweed	Wild garlic*
Common mullein	Woolly croton*
Curly dock	

#### 2/10 to 3/10 oz per acre

Annual marshelder	Musk thistle*
Blackeyed-Susan	Pensacola bahiagrass*
Buckbrush†	Purple scabious
Burclover	Serecia lespedeza*‡
Common yarrow	Western snowberry‡
Dogfennel	Wild carrot
Horsemint (beebalm)	

Unless otherwise directed, treat when weeds are less than 4" tall or in diameter and are actively growing.

#### Brush Suppressed‡ at 3/10 oz per acre

Blackberry	Multiflora rose*
Dewberry	

Effectiveness may be reduced if rainfall occurs within 4 hrs after application.

\* See the Specific Weed Problems section.

‡ Weed suppression is a reduction in weed competition (reduced population and/or vigor) as visually compared to an untreated area. The degree of suppression varies with the rate used, the size of the weeds, and the environmental conditions following treatment.

#### Spot Application (Pasture/Rangeland only)

Apply ALLY at 1 oz per 100 gal of water to control the following weeds, making sure to include a surfactant in the spray mix at 1 to 2 qt per 100 gal of spray solution:

Blackberry	Dewberry
Canada thistle	Multiflora rose

Apply as a foliar spray once plant is fully leafed. Apply to runoff, but do not exceed 75 gal of total spray per acre. Complete coverage of all foliage and stems is required for control. On tall, dense stands, it is often necessary to spray from both sides to obtain adequate coverage.

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## Surfactants

Unless otherwise specified, add a DuPont-authorized, nonionic surfactant having at least 80% active ingredient at 1 to 2 qt per 100 gal of spray solution (0.25 to 0.5% v/v).

Exceptions: (1) On all spring wheat and spring or winter barley use 1/2 to 1 qt per 100 gals; (2) on Fescue pastures use 1/4 to 1/2 qt per 100 gals; (3) on Timothy pastures use 1/4 qt per 100 gals.

Consult your agricultural dealer, applicator, or DuPont representative for a listing of approved surfactants.

Antifoaming agents may be used if needed.

Do not use low rates of liquid fertilizer as a substitute for surfactant.

## Ground Application

To obtain optimum spray distribution and thorough coverage, use flat-fan or low-volume flood nozzles.

For flood nozzles on 30" spacings, use at least 10 gallons per acre (GPA), flood nozzles no larger than TK10 (or equivalent), and a pressure of at least 30 pounds per square inch (psi). For 40" nozzle spacings, use at least 13 GPA; for 60" spacings, use at least 20 GPA. It is essential to overlap the nozzles 100% for all spacings.

With Raindrop<sup>1</sup> RA nozzles, use at least 30 GPA and ensure that nozzle spray patterns overlap 100%.

For flat-fan nozzles, use at least 3 GPA for applications to wheat or barley. Use at least 10 GPA for applications to pasture or rangeland.

Use 50-mesh screens or larger.

## Aerial Application

Use nozzle types and arrangements that provide optimum spray distribution and maximum coverage.

Wheat and Barley—use 1 to 5 GPA. Use at least 3 GPA in Idaho, Oregon, or Utah.

Pasture and Rangeland—Use 2 to 5 GPA.

When applying ALLY by air in areas adjacent to sensitive crops, use solid stream nozzles oriented straight back. Adjust the swath to avoid spray drift damage to sensitive crops downwind and/or use ground equipment to treat the border edge of fields. See the Spray Drift Management section of this label.

Note: Aerial application of ALLY for pasture or rangeland use is restricted to Colorado, Idaho, Kansas, Minnesota, Missouri, Montana, North Dakota, Nebraska, New Mexico, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming.

For aerial application in Washington, follow the directions on the Washington special local need label, "ALLY Herbicide Aerial Application to Wheat and Barley", or "Aerial Application to Pasture/Rangeland" in the State of Washington.

### Product Measurement

ALLY is measured using the ALLY volumetric measuring cylinder. The degree of accuracy of this cylinder varies by +/- 7.5%. For more precise measurement, use scales calibrated in ounces.

### Resistance

Biotypes of certain weeds listed on this label are resistant to ALLY and other herbicides with the same mode of action\*, even at exaggerated application rates. Biotypes are naturally occurring individuals of a species identical in appearance but with slightly different genetic compositions; the mode of action of a herbicide is the chemical interaction that interrupts a biological process necessary for plant growth and development.

If weed control is unsatisfactory, it may be necessary to respray problem areas using a product with a different mode of action, such as postemergence broadleaf and/or grass herbicides. If resistant weed biotypes such as kochia and Russian thistle are suspected or known to be present, consider using another herbicide treatment or adjust the use rate of the ALLY tank mix partner to help control these biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative herbicide recommendations available in your area.

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes.

\* Naturally occurring weed biotypes that are resistant to Amber<sup>2</sup> Herbicide, DuPont EXPRESS<sup>®</sup> Herbicide, DuPont FINESSE<sup>®</sup> Herbicide, DuPont GLEAN<sup>®</sup> FC Herbicide, or DuPont HARMONY<sup>®</sup> Extra Herbicide will also be resistant to ALLY.

### Tank Mixtures

ALLY may be tank mixed with other suitable registered herbicides to control weeds listed under **Weeds Suppressed**, weeds resistant to ALLY, or weeds not listed under **Weeds Controlled**. Read and follow all manufacturer's label recommendations for the companion herbicide. If those recommendations conflict with this label, do not tank mix the herbicide with ALLY.

ALLY can also be mixed with insecticides or liquid fertilizer for use on crops.

Since tank mix partners can interfere with ALLY dispersion, it is recommended that ALLY be slurried in a separate container and added to the tank before adding companion products.

### ALLY Herbicide Tank Mixtures in Cereals (Wheat and Barley)

#### With 2,4-D (amine or ester) or MCPA (amine or ester)

ALLY can be used as a tank-mix treatment with 2,4-D or MCPA (ester formulations provide best results) herbicides after weeds have emerged. For best results, use 1/10 oz of ALLY per acre; add 2,4-D or MCPA herbicides to the tank at 1/4 to 1/2 lb active ingredient. Surfactant may be added to the mixture at 1/2 to 1 qt per 100 gal of spray solution; however, adding surfactant may increase the potential for crop injury.

Apply ALLY plus MCPA after the 3 to 5-leaf stage but before boot (with Durum and Wampum varieties do not apply before tillering). Apply ALLY plus 2,4-D after tillering (refer to appropriate 2,4-D manufacturer's label), but before boot.

### ALLY plus 2,4-D - Harvest Aid

A tank mix of ALLY plus 2,4-D and surfactant will typically aid in dry down of many broadleaved weeds, thereby aiding grain harvest. Use 1/10 oz ALLY plus 1/4 to 1/2 lb active ingredient 2,4-D per acre on moderate weed infestations; higher rates of 2,4-D may be used on large weeds if permitted by the 2,4-D brand labeling. Include 1 to 2 qt surfactant per 100 gal spray solution.

**Note:** Consult and follow 2,4-D manufacturers' use recommendations, precautions and restrictions for this use.

Postemergence application should be made to actively growing weeds after the crop is in the dough stage. If weeds are not dry within 10 days after application, delay harvest until weeds are dry. See weeds listed in **Weeds Controlled** chart of this label - in addition to these, this combination will also dry down common cocklebur, marehail, puncturevine and common and wild sunflower. In areas where 2,4-D use is restricted, apply ALLY with surfactant only; however, this treatment may be less effective.

### With Banvel<sup>®</sup>/"Banvel" SGF

For best results, apply ALLY at 1/10 oz per acre; add 1/16 to 1/8 lb active ingredient "Banvel"/"Banvel" SGF. Surfactant may be added to the mixture at 1/2 to 1 qt per 100 gal of spray solution; however, adding surfactant may increase the potential for crop injury. Also refer to "Banvel"/"Banvel" SGF labels for application timing and restrictions

### Other Tank Mixtures with Cereal Herbicides

ALLY will not control wild oat or other grasses. If broadleaf weeds plus wild oat and/or grasses are present, apply ALLY with a suitable registered product either as a tank mix or sequential treatment. When tank mixing ALLY and Assert<sup>4</sup> herbicide, ALWAYS include another broadleaf herbicide with a different mode of action to control resistant weeds, for example: 2,4-D ester, MCPA ester, Bronate,<sup>5</sup> or Buctril.<sup>5</sup>

Tank-mix applications of ALLY plus "Assert" may cause temporary crop discoloration/stunting or injury if heavy rainfall occurs shortly after application.

DO NOT tank mix with Hoelon<sup>6</sup> 3EC, as control of wild oat or green foxtail may be reduced.

### ALLY Tank Mixtures with Herbicides in Pastures or Rangeland

ALLY can be applied in a tank-mix combination with Grazon<sup>7</sup> P+D, "Grazon" PC/Tordon<sup>7</sup> 22K, 2,4-D, "Banvel", or Weedmaster<sup>3</sup> in states where these products are labeled for postemergence control of the following weeds:

- |                      |                 |
|----------------------|-----------------|
| Annual marshelder    | Common ragweed  |
| Burclover            | Giant ragweed   |
| Carolina horsenettle | Prickly lettuce |
| Common cocklebur     | Sunflower       |
| Common milkweed      | Western ragweed |

For best results, apply ALLY at 1/10 to 2/10 oz per acre with one of the following products:

Product	Rate (oz/A)
"Grazon" P+D	8 to 32
"Grazon" PC / "Tordon" 22K	4 to 16
2,4-D	16 to 32
"Banvel"	4 to 32
"Weedmaster"	8 to 32

**ALLY Tank Mixtures with Insecticides**

ALLY may be tank mixed with insecticides registered for use on wheat and barley. However, under certain conditions (drought stress, cold weather, crop in 2 to 4- leaf stage), tank mixes of ALLY plus organophosphate insecticides (such as methyl or ethyl parathion, Di-Syston<sup>®</sup>, etc.) may produce temporary crop yellowing or, in severe cases, crop injury. The potential for crop injury is greatest when wide fluctuations in day/night temperatures occur just prior to or soon after application. Limit first use to a small area before treating large acreage.

Do not apply ALLY within 60 days of crop emergence where an organophosphate insecticide (such as "Di-Syston") has been applied as an in-furrow treatment, as crop injury may result.

**Do not use ALLY plus malathion as crop injury may result.**

**Tank Mixtures of ALLY with Liquid Fertilizers—Cereals (Wheat or Barley), Pasture and Rangeland**

**Liquid Nitrogen Carrier (Cereal Crops):** Slurry ALLY in water, then thoroughly mix the slurry into the liquid fertilizer. DO NOT add a surfactant. Run a tank-mix compatibility test before mixing ALLY in fertilizer solution. If 2,4-D is included in the ALLY and liquid fertilizer mixture, the ester formulations are generally more compatible.

**Liquid Nitrogen Carrier (Pasture/Rangeland):** Slurry ALLY in water, then thoroughly mix the slurry into the liquid fertilizer. Use 1/4 pt surfactant per 100 gal. Run a tank-mix compatibility test before mixing ALLY in fertilizer solution.

**Note:** When ALLY is applied using liquid nitrogen fertilizer solution as a spray carrier, temporary crop yellowing and stunting may occur.

Do not use ALLY with liquid fertilizers that have a pH of 3.0 or less, as rapid product degradation can result.

**Note:** Liquid fertilizers are significantly heavier than water per gallon of liquid; therefore, to maintain proper spray volumes, adjust the nozzle type and nozzle pressure as necessary. Consult fertilizer solution suppliers and/or sprayer systems company catalogs to determine the appropriate spray nozzles.

**Specific Weed Problems**

**Note:** Thorough spray coverage of all weed species listed below is very important.

**Blue Mustard, Flixweed, and Tansymustard:** For best results, apply ALLY tank mixtures with 2,4-D or MCPA postemergence to mustards, but before bloom.

**Canada Thistle and Sowthistle:** Apply either ALLY plus surfactant or ALLY plus 2,4-D or MCPA in the spring after the majority of thistles have emerged and are small (rosette stage to 6" elongating stems) and actively growing. The application will inhibit the ability of emerged thistles to compete with the crop.

**Corn Gromwell and Prostrate Knotweed:** Apply ALLY plus surfactant when weeds are actively growing, are no larger than 2" tall, and when crop canopy will allow thorough coverage. Tank mixing 2,4-D or MCPA with ALLY usually improves results.

**Sunflower (common/volunteer):** Apply either ALLY plus surfactant or ALLY plus 2,4-D or MCPA after the majority of sunflowers have emerged, are 2" to 4" tall and are actively growing. Use spray volumes of at least 3 gal by air or 5 gal by ground (10 gal by ground in pastures).

**Wild Buckwheat:** For best results, apply ALLY plus 2,4-D or MCPA when plants have no more than 3 true leaves (not counting the cotyledons). If plants are not actively growing, delay treatment until environmental conditions favor active weed growth.

**Specific Weed Problems - Pasture Use Only**

**Note:** Thorough spray coverage of all weed species listed below is very important.

**Musk Thistle:** Apply ALLY at 2/10 to 3/10-oz per acre in the spring or early summer prior to flowering or in the fall after newly emerged plants have reached the rosette stage of growth. Fall applications should be made before the soil freezes.

**Multiflora Rose:** For best control, apply ALLY as a broadcast application when multiflora rose is less than 3' tall. Application should be made in the spring, soon after multiflora rose is fully leafed.

**Pensacola bahiagrass control in established Bermudagrass pasture:** Apply ALLY at 3/10 oz per acre plus surfactant. Apply after green-up in the spring but before bahiagrass seedhead formation. Application should be made when moisture is sufficient to enhance grass growth.

ALLY is very effective for removal of bahiagrass from bermudagrass pastures. In highly infested pastures, the use of ALLY can clear the areas of useful forage until the bermudagrass has time to cover the area. Therefore, ALLY treatments should be spread out over a period of years. Do not apply to an entire farm or ranch in one year. Fertilization (particularly with nitrogen and potassium) and/or replanting may accelerate the process of reestablishment of bermudagrass.

Under heavy bahiagrass pressure, grazing pressure, or adverse weather conditions (heat and drought), some regrowth may occur.

**Note:** ALLY should not be used for the control of common or Argentine bahiagrass. Also, ALLY should not be applied in liquid fertilizer solutions for Pensacola bahiagrass control, as poor control and/or regrowth may occur.

**Serecia lespedeza:** Apply ALLY at 2/10 to 3/10 oz per acre plus a surfactant at 1 to 2 qt per 100 gal of total spray solution. To increase the level of suppression and/or broaden the spectrum of weeds controlled, ALLY may be tank mixed with "Grazon" P+D, "Grazon" PC/"Tordon" 22K, 2,4-D, "Banvel", or "Weedmaster" in states where these products are labeled for use in pastures or rangeland. For best results, make applications to serecia lespedeza beginning at flower bud initiation through the full bloom stage of growth.

**Note:** Do not make applications if drought conditions exist at intended time of application.

**Wild Garlic:** Apply 1/10 to 2/10 oz per acre of ALLY in the early spring when wild garlic is less than 12" tall with 2" to 4" of new growth.

**Woolly Croton:** Apply 1/10 to 2/10 oz per acre of ALLY in the late spring or early summer at preemergence through 2 true leaf stage.

**CROP ROTATION**

Before using ALLY, carefully consider your crop rotation plans and options. For rotational flexibility, do not treat all of your wheat, barley, fallow, pasture, or rangeland acres at the same time.

**Minimum Rotational Intervals**

Minimum rotation intervals\* are determined by the rate of breakdown of ALLY applied. ALLY breakdown in the soil is affected by soil pH, presence of soil microorganisms, soil

temperature, and soil moisture. Low soil pH, high soil temperature, and high soil moisture increase ALLY breakdown in soil, while high soil pH, low soil temperature, and low soil moisture slow ALLY breakdown.

Of these 3 factors, only soil pH remains relatively constant. Soil temperature, and to a greater extent, soil moisture, can vary significantly from year to year and from area to area. For this reason, soil temperatures and soil moisture should be monitored regularly when considering crop rotations.

\* The minimum rotation interval represents the period of time from the last application to the anticipated date of the next planting.

**Soil pH Limitations**

ALLY should not be used on soils having a pH above 7.9, as extended soil residual activity could extend crop rotation intervals beyond normal. Under certain conditions, ALLY could remain in the soil for 34 months or more, injuring wheat and barley. In addition, other crops planted in high-pH soils can be extremely sensitive to low concentrations of ALLY.

**Checking Soil pH**

Before using ALLY, determine the soil pH of the areas of intended use. To obtain a representative pH value for the test area, take several 0" to 4" samples from different areas of the field and analyze them separately. Consult local extension publications for additional information on recommended soil sampling procedures.

**Rotation Intervals for Cereals**

All Areas - Following Use of ALLY at 1/10 oz per Acre

Crop	Soil pH	Minimum Cumulative Precipitation (inches)	Minimum Rotation Interval (months)
Winter and spring wheat	7.9 or lower	No restrictions	1
Durum wheat, barley, spring/winter oat	7.9 or lower	No restrictions	10

**Rotation Intervals For Crops in Non-Irrigated Land**

Following Use of ALLY at 1/10 oz per Acre on Wheat, Barley or Pasture

Location		Crop	Soil pH	Minimum Cumulative Precipitation (inches)	Minimum Rotation Interval (months)
State	County or Area				
Colorado	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	Generally N. of I-70	Field corn	7.9 or lower	15	12

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**Rotation Intervals For Crops in Non-Irrigated Land (continued)**  
**Following Use of ALLY at 1/10 oz per Acre on Wheat, Barley or Pasture**

Location		Crop	Soil pH	Minimum Cumulative Precipitation (inches)	Minimum Rotation Interval (months)
State	County or Area				
Idaho	Southern Idaho	Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
Kansas	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	Generally N. of I-70 and W. of Hwy. 183	Field corn	7.9 or lower	15	12
		Soybeans	7.5 or lower	22	22
			7.6-7.9	33	34
	Central Kansas; generally E. of Hwy. 183 and W. of the Flinthills	Field corn, Soybeans	7.9 or lower	15	12
Montana	Statewide	Grain sorghum, Proso millet, Field corn	7.9 or lower	22	22
		Alfalfa (hay only)	7.6-7.9	No restrictions	34
			7.5 or lower	No restrictions	22
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
Nebraska	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	Generally W. of Hwy. 77 and E. of the Panhandle	Field corn	7.9 or lower	15	12
		Soybeans	7.5 or lower	22	22
			7.6-7.9	33	34
New Mexico	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	Eastern New Mexico	Cotton (dryland only)	7.9 or lower	30	22

Continued on next page

**Rotation Intervals For Crops in Non-Irrigated Land (continued)**  
**Following Use of ALLY at 1/10 oz per Acre on Wheat, Barley or Pasture**

Location		Crop	Soil pH	Minimum Cumulative Precipitation (inches)	Minimum Rotation Interval (months)
State	County or Area				
North Dakota	W. of Hwy. 1	Grain sorghum, Proso millet, Field corn, Dry beans, Flax, Safflower, Sunflower	7.9 or lower	22	22
	E. of Hwy. 1	Grain sorghum, Proso millet, Field corn, Dry beans, Flax, Safflower, Sunflower	7.9 or lower	34	34
Oklahoma	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
		Field corn	7.9 or lower	15	12
	Panhandle	Cotton (dryland only)	7.9 or lower	30	22
	E. of the Panhandle	Cotton (dryland only)	7.9 or lower	25	14
South Dakota	Statewide	Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	S. of Hwy. 212 & E. of the Missouri River, & S. of Hwy. 34 & W. of Missouri River	Grain sorghum, Proso millet	7.9 or lower	13	12
	Generally E. of Missouri River & S. of Hwy. 14, & W. of Missouri River	Field corn	7.9 or lower	15	12
Texas	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	Panhandle	Field corn	7.9 or lower	15	12
		Cotton (dryland only)	7.9 or lower	30	22
	N. Central Texas*	Field corn	7.9 or lower	15	12
		Cotton (dryland only)	7.9 or lower	25	14
<p>* The counties of N. Central Texas are: Archer, Baylor, Bell, Bosque, Bowie, Callahan, Camp, Cass, Clay, Collin, Cooke, Coryell, Dallas, Delta, Denton, Eastland, Ellis, Falls, Fannin, Foard, Franklin, Grayson, Hardeman, Haskell, Hill, Hood, Hopkins, Hunt, Jack, Johnson, Kaufman, Knox, Lamar, Limestone, McLennan, Milam, Montague, Morris, Nafarro, Palo Pinto, Parker, Rains, Red River, Robertson, Rockwall, Shackelford, Somervell, Stephens, Tarrant, Throckmorton, Titus, Upshur, Van Zandt, Wilbarger, Wichita, Williamson, Wise, Wood, Young.</p>					

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**Rotation Intervals For Crops in Non-Irrigated Land (continued)**  
**Following Use of ALLY at 1/10 oz per Acre on Wheat, Barley or Pasture**

Location		Crop	Soil pH	Minimum Cumulative Precipitation (inches)	Minimum Rotation Interval (months)
State	County or Area				
Utah	Statewide	Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
Wyoming	Statewide	Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	Southern Wyoming	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
	Southern Wyoming (Goshen, Laramie, and Platte counties only)	Field corn	7.9 or lower	15	12
	Northern Wyoming	Grain sorghum, Proso millet, Field corn	7.9 or lower	22	22

*Rotation Interval for Crops Not Listed - The minimum rotation interval for crops not listed is at least 34 months with at least 28" of cumulative precipitation during the period. For unlisted crops not meeting these criteria, a field bioassay must be completed before rotation. See section on Bioassay for further information.*

**Rotation Intervals in Pasture or Rangeland for Overseeding and Renovation**

Location	Crop	Maximum ALLY Rate on Pasture (oz per A)	Minimum Rotation Interval (months)
AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV	Alfalfa, red clover, white clover, sweet clover, bermudagrass, bluegrass, orchardgrass, bromegrass, ryegrass, fescue, timothy	1/10 to 3/10	4
	Wheat (except durum)	1/10 to 3/10	1
	Durum, barley, oat	1/10 to 3/10	10
ALL AREAS NOT INCLUDED ABOVE*	Red clover, white clover, and sweet clover	1/10 to 2/10	12
	Bermudagrass, bluegrass, orchardgrass, bromegrass, ryegrass, timothy	1/10 to 2/10	6
	Fescue	1/10 to 2/10	18
	Wheat (except durum)	1/10 to 2/10	1
	Durum, barley, oat	1/10 to 2/10	10

*Rotation Interval for Crops Not Listed - The minimum rotation interval for crops not listed is at least 34 months with at least 28" of cumulative precipitation during the period. For unlisted crops not meeting these criteria, a field bioassay must be completed before rotation. See section on Bioassay for further information.*

*\* Note: If ALLY is used on pastures at rates above 2/10 oz per acre in states not listed, then a field bioassay must be completed before rotation.*

## GRAZING

There are no grazing restrictions on ALLY.

## REDUCED TILLAGE FALLOW

ALLY may be used as a fallow treatment in combination with other fallow herbicides in Western and Panhandle Areas of KS, NE, OK and TX, and in CO and WY.

### Weed Control in Wheat/Fallow/Wheat and Ecofallow Rotations

In areas where conservation tillage is practiced in wheat/fallow/wheat rotations, ALLY may be used as a fallow treatment preceding wheat planting.

Apply ALLY at 1/10 oz per acre in a planned herbicide rotation program where other residual broadleaf herbicides having different modes of action are used. Do not apply ALLY or a residual herbicide having the same mode of action as ALLY (such as "Amber", "Finesse" or "Glean" FC) to the same field more than once in a 22-month period.

To control escaped weeds when using ALLY in these types of rotations, use either tillage, sequential herbicide applications with a different mode of action than ALLY, or tank mixes. Do not let weed escapes go to seed.

## SPRAY EQUIPMENT

For specific application equipment, refer to the manufacturer's recommendations for additional information on GPA, pressure, speed, nozzle types and arrangements, nozzle heights above the target canopy, etc.

Be sure to calibrate air or ground equipment properly before application. Select a spray volume and delivery system that will ensure thorough coverage and a uniform spray pattern with minimum drift. Use higher spray volumes to obtain better coverage when the crop canopy is dense. Avoid swath overlapping, and shut off spray booms while starting, turning, slowing, or stopping to avoid crop injury.

Do not make applications using equipment and/or spray volumes or under weather conditions that might cause spray to drift onto nontarget sites. For additional information on spray drift, refer to the **Spray Drift Management** section of the label.

Continuous agitation is required to keep ALLY in suspension.

## SPRAYER CLEANUP

Spray equipment must be cleaned before ALLY is sprayed. Follow the cleanup procedures specified on the labels of previously applied products. If no directions are provided, follow the six steps outlined in **After Spraying ALLY** section of this label.

### At the End of the Day

When multiple loads of ALLY herbicide are applied, it is recommended that at the end of each day of spraying, the interior of the tank be rinsed with fresh water and then partially filled, and the boom and hoses flushed. This will prevent the buildup of dried pesticide deposits that can accumulate in the application equipment.

## After Spraying ALLY and Before Spraying Crops Other Than Wheat, Barley, Pasture, or Rangeland

To avoid subsequent injury to desirable crops, thoroughly clean all mixing and spray equipment immediately following applications of ALLY as follows:

1. Drain tank; thoroughly rinse spray tanks, boom, and hoses with clean water. Loosen and physically remove any visible deposits.
2. Fill the tank with clean water and 1 gal of household ammonia\* (contains 3% active) for every 100 gal of water. Flush the hoses, boom, and nozzles with the cleaning solution. Then add more water to completely fill the tank. Circulate the cleaning solution through the tank and hoses for at least 15 min. Flush the hoses, boom, and nozzles again with the cleaning solution, and then drain the tank.
3. Remove the nozzles and screens and clean separately in a bucket containing cleaning agent and water.
4. Repeat step 2.
5. Rinse the tank, boom, and hoses with clean water.
6. If only Ammonia is used as a cleaner, the rinsate solution may be applied back to the crop(s) recommended on this label. Do not exceed the maximum labeled use rate. If other cleaners are used, consult the cleaner label for rinsate disposal instructions. If no instructions are given, dispose of the rinsate on site or at an approved waste disposal facility.

\* Equivalent amounts of an alternate-strength ammonia solution or a DuPont-approved cleaner can be used in the cleanout procedure. Carefully read and follow the individual cleaner instructions. Consult your agricultural dealer, applicator, or DuPont representative for a listing of approved cleaners.

### Notes:

1. **Caution:** Do not use chlorine bleach with ammonia, as dangerous gases will form. Do not clean equipment in an enclosed area.
2. Steam-cleaning aerial spray tanks is recommended prior to performing the above cleanout procedure to facilitate the removal of any caked deposits.
3. When ALLY is tank mixed with other pesticides, all required cleanout procedures should be examined and the most rigorous procedure should be followed.
4. In addition to this cleanout procedure, all precleanout guidelines on subsequently applied products should be followed as per the individual labels.
5. Where routine spraying practices include shared equipment frequently being switched between applications of ALLY and applications of other pesticides to ALLY-sensitive crops during the same spray season, it is recommended that a sprayer be dedicated to ALLY to further reduce the chance of crop injury.

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## SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

### AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR

#### IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets (>150 - 200 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. **APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS!** See **Wind**, **Temperature and Humidity**, and **Temperature Inversions** sections of this label.

#### Controlling Droplet Size - General Techniques

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. **WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.**
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles.

#### Controlling Droplet Size - Aircraft

- **Number of Nozzles** - Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations.
- **Nozzle Type** - Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.
- **Boom Length** - The boom length should not exceed 3/4 of the wing or rotor length - longer booms increase drift potential.
- **Application Height** - Application more than 10 ft above the canopy increases the potential for spray drift.

#### BOOM HEIGHT

Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

## WIND

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. **AVOID GUSTY OR WINDLESS CONDITIONS.**

**Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

## TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

## TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

## SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

## AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring.

**Note:** Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the application equipment section of this label to determine if use of an air assisted sprayer is recommended.

## BIOASSAY

A field bioassay must be completed before rotating to crops not listed on this label or when rotating at intervals shorter than those listed in the **Crop Rotation** section of this label.

### Field Bioassay

A field bioassay is necessary if crops other than wheat, barley, pasture, rangeland, or those listed on this label are to be planted on land previously treated with ALLY. To conduct a field bioassay, grow test strips of the crop or crops you plan to grow the following year in fields previously treated with ALLY. Crop response to the bioassay will indicate whether or not to rotate to the crop(s) grown in the test strips.

If a field bioassay is planned, check with your local DuPont representative or call toll-free 1-800-574-4769 for a fact sheet detailing field bioassay procedure.

## PRECAUTIONS

- Wherever ALLY is used on land previously treated with "Glean" FC, "Finesse", "Amber", "Assert", or other longer residual herbicides with the same mode of action, read the rotational guidelines on both labels and follow the one with the longest interval stated for your situation before choosing to rotate to crops other than wheat or barley.
- Do not apply to irrigated land where tailwater will be used to irrigate crops other than wheat and barley.
- Do not apply to frozen ground as surface runoff may occur.
- Do not apply to snow-covered ground.
- Varieties of wheat and barley differ in their tolerance to herbicides. When using ALLY for the first time on a particular variety, limit initial use to one container. If no crop injury occurs throughout the season, larger acreage may be treated the following season.
- Do not apply ALLY to wheat or barley that is stressed by severe weather conditions, drought, low fertility, water-saturated soil, disease, or insect damage, as crop injury may result. Severe winter stress, drought, disease, or insect damage following application also may result in crop injury.
- Under certain conditions such as heavy rainfall, prolonged cold weather or wide fluctuations in day/night temperatures occur just prior to or soon after treatment, temporary discoloration and/or crop injury may occur. Risk of injury is greatest when crop is in the 2 to 5- leaf stage.
- The combined treatment effects of ALLY postemergence preceded by preemergence wild oat herbicides may cause crop injury to spring wheat when crop stress (soil crusting, planting too deep, prolonged cold weather, or drought) causes poor seedling vigor.
- In the Pacific Northwest, to prevent cold weather-related crop injury, avoid making applications during winter months when weather conditions are unpredictable and can be severe.
- Do not apply to wheat, barley or pastures undersown with legumes, as injury to the forage may result.

- To reduce the potential for movement of treated soil due to wind erosion, do not apply to powdery dry or light sandy soils until they have been stabilized by rainfall, trashy mulch, reduced tillage, or other cultural practices. Injury to immediately adjacent crops may occur when treated soil is blown onto land used to produce crops other than cereal grains or pasture/rangeland.
- For ground applications applied to weeds when dry, dusty field conditions exist, control of weeds in wheel track areas may be reduced. The addition of 2,4-D or MCPA should improve weed control under these conditions.
- Preplant or preemergence applications of 2,4-D or herbicides containing 2,4-D made within 2 weeks of planting spring cereals may cause crop injury when used in conjunction with early postemergence applications of ALLY. For increased crop safety, delay ALLY treatment until crop tillering has begun.

## STORAGE AND DISPOSAL

**STORAGE:** Store product in original container only. Do not contaminate water, other pesticides, fertilizer, food or feed in storage.

**PRODUCT DISPOSAL:** Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. Wastes resulting from the use of this product may be disposed of on site 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 by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**NOTICE TO BUYER:** Purchase of this material does not confer any rights under patents of countries outside of the United States.

**NOTICE OF WARRANTY**

DuPont warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of DuPont. In no case shall DuPont be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the buyer. DUPONT MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

**Registered trademark of:**

- 1 Delevan Corp.
- 2 Ciba-Geigy
- 3 Sandoz Crop Protection Company
- 4 American Cyanamid Company
- 5 Rhone-Poulenc Agriculture Company
- 6 AgrEvo Company
- 7 DowElanco
- 8 Miles Company

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# Ally<sup>®</sup>

## herbicide

*Dry Flowable*

*For Use on Pastures*

<i>Active Ingredient</i>	<i>By Weight</i>
Metsulfuron Methyl	
Methyl 2-[[[(4-methoxy-6-methyl -1,3,5-triazin-2yl)amino]carbonyl] amino]sulfonyl]benzoate	60%
<i>Inert Ingredients</i>	40%
TOTAL	100%

EPA Reg. No. 352-435

U.S. Pat. 4,383,113

**ACCEPTED**

DEC 18 1996

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under  
EPA Reg. No. 352-435

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

**STATEMENT OF  
PRACTICAL TREATMENT**

In case of contact with eyes, immediately flush with plenty of water.

If on skin, wash with plenty of soap and water. Get medical attention if irritation persists.

For medical emergencies involving this product, call toll-free 1-800-441-3637.

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS  
AND DOMESTIC ANIMALS**

**CAUTION!** Causes eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist.

**PERSONAL PROTECTIVE EQUIPMENT**

**WPS USES:** Applicators and other handlers who handle this pesticide for any use covered by the Worker Protection Standard [(40 CFR Part 170)] must wear:

Long-sleeved shirt and long pants.

Shoes plus socks.

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.

**ENVIRONMENTAL HAZARDS**

Do not apply directly to water, or 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.

## IMPORTANT INFORMATION

DuPont ALLY® Herbicide is recommended for use on land primarily dedicated to the long-term production of pasture and rangeland.

Injury to or loss of desirable trees or vegetation may result from failure to observe the following:

- Do not apply, drain, or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- Do not use on lawns, walks, driveways, tennis courts, golf courses, athletic fields, commercial sod operations, or other high-maintenance, fine turfgrass areas, or similar areas.
- Do not use on grasses grown for seed.

Injury to or loss of adjacent sensitive crops and vegetation may result from failure to observe the following:

- Take all necessary precautions to avoid all direct or indirect contact (such as spray drift) with nontarget plants or areas.
- Carefully observe sprayer cleanup instructions, both prior to and after using this product, as spray tank residue may damage crops other than wheat, barley, pasture, and rangeland.

### PESTICIDE HANDLING

- 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 overfilling of spray tank.
- Do not discharge excess material on the soil at a single spot in the field or mixing/loading station.
- Dilute and agitate excess solution and apply at labeled rates/uses.
- Avoid storage of pesticides near well sites.
- When triple rinsing the pesticide container, be sure to add the rinsate to the spray mix.

### DIRECTIONS FOR USE

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

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.

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Weed control in pastures and rangeland is not within the scope of the Worker Protection Standard.

ALLY should be used only in accordance with recommendations on this label or in separate published DuPont recommendations.

DuPont will not be responsible for losses or damages resulting from the use of this product in any manner not specifically recommended by DuPont.

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

### GENERAL INFORMATION

ALLY is not recommended for use in California nor in Alamosa, Conejos, Costilla, Rio Grande, and Saquache counties of Colorado.

ALLY is recommended for use on pasture and rangeland in all states, except California.

Note: For definitions of portions of States recommended on this label, see listings of counties or area definitions on Crop Rotation Interval charts of this label.

ALLY is a dry-flowable granule that controls weeds in pasture and rangeland grasses. ALLY is mixed in water or can be pre-slurried in water and added to liquid nitrogen carrier solutions and applied as a uniform broadcast spray. A surfactant should be used in the spray mix unless otherwise specified on this label. ALLY is noncorrosive, nonflammable, nonvolatile, and does not freeze.

ALLY controls weeds by postemergence activity. For best results, apply ALLY to young, actively growing weeds. The use rate depends upon the weed spectrum and size of weeds at application. The degree and duration of control may depend on the following factors:

- weed spectrum and infestation intensity
- weed size at application
- environmental condition at and following treatment

### Environmental Conditions and Biological Activity

ALLY is absorbed through the foliage of broadleaf weeds, rapidly inhibiting their growth. Leaves of susceptible plants appear chlorotic from 1 to 3 weeks after application and the growing point subsequently dies.

Application of ALLY provides the best control in vigorously growing crops that shade competitive weeds. Weed control in areas of thin crop stand or seeding skips may not be as satisfactory. However, a crop canopy that is too dense at application can intercept spray and reduce weed control.

ALLY may injure crops that are stressed from adverse environmental conditions (such as extreme temperatures or moisture), abnormal soil conditions, or cultural practices. In

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addition, different varieties of the crop may be sensitive to treatment with ALLY under otherwise normal conditions. Treatment of such varieties may injure crops.

In warm, moist conditions, the expression of herbicide symptoms is accelerated in weeds; in cold, dry conditions, expression of herbicide symptoms is delayed. In addition, weeds hardened-off by drought stress are less susceptible to ALLY.

Weed control may be reduced if rainfall or snowfall occurs soon after application.

### APPLICATION INFORMATION

ALLY can be mixed with water or pre-slurried in water and added to liquid fertilizer for application. To prepare the tank mix, follow these steps:

1. Add the required amount of water or fertilizer to the tank and turn on the agitator.
2. Add the required amount of ALLY either as a slurry if mixing with fertilizer or directly if mixing with water..
3. Once the ALLY is dissolved, add any companion products.

**Always mix ALLY in the spray solution (water or liquid fertilizer) before adding other products to the same spray tank.**

Use the spray solution within 24 hours to avoid product degradation. If the spray solution is left standing, agitate it thoroughly before reusing.

Do not use ALLY with spray additives that reduce the pH of the spray solution to below 3.0, as rapid product degradation can result.

### Use Rates

#### Pasture and Rangeland

Apply 1/10 to 3/10 oz ALLY per acre as a broadcast treatment to pasture and rangeland. For spot applications, use up to 3/4 oz ALLY per acre.

### Frequency of Application

The maximum use rates for ALLY are determined based on the soil pH, soil temperature, soil moisture, and soil microbial activity for a region. Based on these factors, ALLY use should be limited to the maximum use rates and minimum application intervals specified below. For more information, see the Crop Rotation section of this label.

Crop	Location	Maximum Application Rate (oz per A)	Minimum Application Intervals (months)
Pasture/Rangeland	U.S.—all locations	3/10	12

### Application Timing—Pasture Grasses

ALLY may be used on some native grasses such as bluestems and grama, and on other pasture grasses such as bermudagrass, bluegrass, orchardgrass, bromegrass, fescue and timothy. Specific application information on several of these pasture grasses follows:

Pasture Grass	Minimum time from grass establishment to ALLY application
Bermudagrass	2 months
Bluegrass, bromegrass, and orchardgrass	6 months
Timothy	12 months
Fescue	24 months

#### Fescue Precautions:

Note that ALLY may temporarily stunt fescue, cause it to turn yellow, or cause seedhead suppression. To minimize these symptoms, take the following precautions:

- tank mix ALLY with 2,4-D
- use the lowest recommended rate for target weeds
- use surfactant at 1/2 to 1 pt per 100 gal of spray solution (1/16 to 1/8% v/v)
- make application later in the spring or in the fall
- Do not use surfactant when liquid nitrogen is used as a carrier.

The first cutting yields may be reduced due to seedhead suppression resulting from treatment with ALLY.

#### Timothy Precautions:

Timothy should be at least 6" tall at application and be actively growing. Applications of ALLY to timothy under any other conditions may cause crop yellowing and/or stunting. To minimize these symptoms, take the following precautions:

- tank mix ALLY with 2,4-D
- use the lowest recommended rate for target weeds
- use surfactant at 1/2 pt per 100 gal (1/16% v/v)
- make applications in the late summer or fall
- Do not use surfactant when liquid nitrogen is used as a carrier.

**Ryegrass Pastures (Italian or perennial): Do not apply ALLY as injury to or loss of the pasture may result.**

**Other Pastures:** Varieties and species of pasture grasses differ in their tolerance to herbicides. When using ALLY on a particular grass for the first time, limit use to one container. If no injury occurs throughout the season, larger acreage may be treated the following season.

Broadleaf pasture species, such as alfalfa and clover, are highly sensitive to ALLY and will be severely stunted or injured by ALLY.

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**WEEDS CONTROLLED**

1/10 oz per acre

Blue/purple mustard*	Miners lettuce
Bur buttercup (testiculate)	Pigweed (redroot, smooth, tumble)
Coast fiddleneck (tarweed)	Plains coreopsis
Common chickweed	Prickly lettuce†
Common purslane	Russian thistle†
Conical catchfly	Shepherd's purse
Cowcockle	Smallseed falseflax
False chamomile	Smartweed (green, ladysthumb, pale)
Field pennycress (fanweed)	Snow speedwell
Filaree	Tansymustard*
Flixweed*	Treacle mustard (Bushy Wallflower)
Groundsel (common)	Tumble/Jim Hill mustard
Henbit	Volunteer sunflower
Kochia†	Waterpod
Lambsquarters (common, slimleaf)	Wild mustard
Mayweed chamomile	

**Weeds Suppressed\*\***

1/10 oz per acre

Canada thistle*	Knotweed (prostrate)*
Common sunflower*	Sowthistle (annual)*
Corn gromwell*	Wild buckwheat*

- \* See the Specific Weed Problems section.
- † Naturally occurring resistant biotypes of these weeds are known to exist. ALLY will not control these resistant biotypes. See the Resistance section for additional information.
- ‡ Weed suppression is a reduction in weed competition (reduced population and/or vigor) as visually compared to an untreated area. The degree of suppression varies with the rate used, the size of the weeds, and the environmental conditions following treatment.

**WEEDS CONTROLLED**

1/10 to 2/10 oz per acre

Bitter sneezeweed	Dandelion
Buttercup	Marestail
Carolina geranium	Plantain
Common broomweed	Wild garlic*
Common mullein	Woolly croton*
Curly dock	

2/10 to 3/10 oz per acre

Annual marshelder	Musk thistle*
Blackeyed-Susan	Pensacola bahiagrass*
Buckbrush†	Purple scabious
Burclover	Serecia lespedeza*‡
Common yarrow	Western snowberry‡
Dogfennel	Wild carrot
Horsemint (beebalm)	

Unless otherwise directed, treat when weeds are less than 4" tall or in diameter and are actively growing.

**Brush Suppressed‡ at 3/10 oz per acre**

Blackberry	Multiflora rose*
Dewberry	

Effectiveness may be reduced if rainfall occurs within 4 hrs after application.

- \* See the Specific Weed Problems section.
- ‡ Weed suppression is a reduction in weed competition (reduced population and/or vigor) as visually compared to an untreated area. The degree of suppression varies with the rate used, the size of the weeds, and the environmental conditions following treatment.

**Spot Application (Pasture/Rangeland only)**

Apply ALLY at 1 oz per 100 gal of water to control the following weeds, making sure to include a surfactant in the spray mix at 1 to 2 qt per 100 gal of spray solution:

Blackberry	Dewberry
Canada thistle	Multiflora rose

Apply as a foliar spray once plant is fully leafed. Apply to runoff, but do not exceed 75 gal of total spray per acre. Complete coverage of all foliage and stems is required for control. On tall, dense stands, it is often necessary to spray from both sides to obtain adequate coverage.

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### Surfactants

Unless otherwise specified, add a DuPont-authorized, nonionic surfactant having at least 80% active ingredient at 1 to 2 qt per 100 gal of spray solution (0.25 to 0.5% v/v).

Exceptions: (1) On Fescue pastures use 1/4 to 1/2 qt per 100 gals; (2) on Timothy pastures use 1/4 qt per 100 gals.

Consult your agricultural dealer, applicator, or DuPont representative for a listing of approved surfactants.

Antifoaming agents may be used if needed.

Do not use low rates of liquid fertilizer as a substitute for surfactant.

### Ground Application

To obtain optimum spray distribution and thorough coverage, use flat-fan or low-volume flood nozzles.

For flood nozzles on 30" spacings, use at least 10 gallons per acre (GPA), flood nozzles no larger than TK10 (or equivalent), and a pressure of at least 30 pounds per square inch (psi). For 40" nozzle spacings, use at least 13 GPA; for 60" spacings, use at least 20 GPA. It is essential to overlap the nozzles 100% for all spacings.

With Raindrop<sup>1</sup> RA nozzles, use at least 30 GPA and ensure that nozzle spray patterns overlap 100%.

For flat-fan nozzles, use at least 10 GPA for applications to pasture or rangeland.

Use 50-mesh screens or larger.

### Aerial Application

Use nozzle types and arrangements that provide optimum spray distribution and maximum coverage.

Pasture and Rangeland—Use 2 to 5 GPA.

When applying ALLY by air in areas adjacent to sensitive crops, use solid stream nozzles oriented straight back. Adjust the swath to avoid spray drift damage to sensitive crops downwind and/or use ground equipment to treat the border edge of fields. See the Spray Drift Management section of this label.

Note: Aerial application of ALLY for pasture or rangeland use is restricted to Colorado, Idaho, Kansas, Minnesota, Missouri, Montana, North Dakota, Nebraska, New Mexico, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming.

For aerial application in Washington, follow the directions on the Washington special local need label.

### Product Measurement

ALLY is measured using the ALLY volumetric measuring cylinder. The degree of accuracy of this cylinder varies by +/- 7.5%. For more precise measurement, use scales calibrated in ounces.

### Resistance

Biotypes of certain weeds listed on this label are resistant to ALLY and other herbicides with the same mode of action\*, even at exaggerated application rates. Biotypes are naturally occurring individuals of a species identical in appearance but with slightly different genetic compositions; the mode of action of a herbicide is the chemical interaction that interrupts a biological process necessary for plant growth and development.

If weed control is unsatisfactory, it may be necessary to respray problem areas using a product with a different mode of action, such as postemergence broadleaf and/or grass herbicides. If resistant weed biotypes such as kochia and Russian thistle are suspected or known to be present, consider using another herbicide treatment or adjust the use rate of the ALLY tank mix partner to help control these biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative herbicide recommendations available in your area.

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes.

\* Naturally occurring weed biotypes that are resistant to Amber<sup>2</sup> Herbicide, DuPont EXPRESS<sup>3</sup> Herbicide, DuPont FINESSE<sup>3</sup> Herbicide, DuPont GLEAN<sup>3</sup> FC Herbicide, or DuPont HARMONY<sup>3</sup> Extra Herbicide will also be resistant to ALLY.

### Tank Mixtures

ALLY may be tank mixed with other suitable registered herbicides to control weeds listed under Weeds Suppressed, weeds resistant to ALLY, or weeds not listed under Weeds Controlled. Read and follow all manufacturer's label recommendations for the companion herbicide. If those recommendations conflict with this label, do not tank mix the herbicide with ALLY.

ALLY can also be mixed with insecticides or liquid fertilizer registered for use on pasture.

Since tank mix partners can interfere with ALLY dispersion, it is recommended that ALLY be slurried in a separate container and added to the tank before adding companion products.

### ALLY Tank Mixtures with Herbicides in Pastures or Rangeland

ALLY can be applied in a tank-mix combination with Grazon<sup>7</sup> P+D, "Grazon" PC/Tordon<sup>7</sup> 22K, 2,4-D, "Banvel", or Weedmaster<sup>3</sup> in states where these products are labeled for postemergence control of the following weeds:

- |                      |                 |
|----------------------|-----------------|
| Annual marshelder    | Common ragweed  |
| Burclover            | Giant ragweed   |
| Carolina horsenettle | Prickly lettuce |
| Common cocklebur     | Sunflower       |
| Common milkweed      | Western ragweed |

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For best results, apply ALLY at 1/10 to 2/10 oz per acre with one of the following products:

Product	Rate (oz/A)
"Grazon" P+D	8 to 32
"Grazon" PC / "Tordon" 22K 2,4-D	4 to 16 16 to 32
"Banvel"	4 to 32
"Weedmaster"	8 to 32

**Tank Mixtures of ALLY with Liquid Fertilizers**

**Liquid Nitrogen Carrier (Pasture/Rangeland):** Slurry ALLY in water, then thoroughly mix the slurry into the liquid fertilizer. Use 1/4 pt surfactant per 100 gal. Run a tank-mix compatibility test before mixing ALLY in fertilizer solution.

**Note:** When ALLY is applied using liquid nitrogen fertilizer solution as a spray carrier, temporary crop yellowing and stunting may occur.

Do not use ALLY with liquid fertilizers that have a pH of 3.0 or less, as rapid product degradation can result.

**Note:** Liquid fertilizers are significantly heavier than water per gallon of liquid; therefore, to maintain proper spray volumes, adjust the nozzle type and nozzle pressure as necessary. Consult fertilizer solution suppliers and/or sprayer systems company catalogs to determine the appropriate spray nozzles.

**Specific Weed Problems**

**Note:** Thorough spray coverage of all weed species listed below is very important.

**Specific Weed Problems**

**Note:** Thorough spray coverage of all weed species listed below is very important.

**Musk Thistle:** Apply ALLY at 2/10 to 3/10 oz per acre in the spring or early summer prior to flowering or in the fall after newly emerged plants have reached the rosette stage of growth. Fall applications should be made before the soil freezes.

**Multiflora Rose:** For best control, apply ALLY as a broadcast application when multiflora rose is less than 3' tall. Application should be made in the spring, soon after multiflora rose is fully leafed.

**Pensacola bahiagrass control in established Bermudagrass pasture:** Apply ALLY at 3/10 oz per acre plus surfactant. Apply after green-up in the spring but before bahiagrass seedhead formation. Application should be made when moisture is sufficient to enhance grass growth.

ALLY is very effective for removal of bahiagrass from bermudagrass pastures. In highly infested pastures, the use of ALLY can clear the areas of useful forage until the bermudagrass has time to cover the area. Therefore, ALLY treatments should be spread out over a period of years. Do not apply to an entire farm or ranch in one year. Fertilization (particularly with nitrogen and potassium) and/or replanting may accelerate the process of reestablishment of bermudagrass.

Under heavy bahiagrass pressure, grazing pressure, or adverse weather conditions (heat and drought), some regrowth may occur.

**Note:** ALLY should not be used for the control of common or Argentine bahiagrass. Also, ALLY should not be applied in liquid fertilizer solutions for Pensacola bahiagrass control, as poor control and/or regrowth may occur.

**Serecia lespedeza:** Apply ALLY at 2/10 to 3/10 oz per acre plus a surfactant at 1 to 2 qt per 100 gal of total spray solution. To increase the level of suppression and/or broaden the spectrum of weeds controlled, ALLY may be tank mixed with "Grazon" P+D, "Grazon" PC/"Tordon" 22K, 2,4-D, "Banvel", or "Weedmaster" in states where these products are labeled for use in pastures or rangeland. For best results, make applications to serecia lespedeza beginning at flower bud initiation through the full bloom stage of growth.

**Note:** Do not make applications if drought conditions exist at intended time of application.

**Wild Garlic:** Apply 1/10 to 2/10 oz per acre of ALLY in the early spring when wild garlic is less than 12" tall with 2" to 4" of new growth.

**Woolly Croton:** Apply 1/10 to 2/10 oz per acre of ALLY in the late spring or early summer at preemergence through 2 true leaf stage.

**CROP ROTATION**

Before using ALLY, carefully consider your crop rotation plans and options. For rotational flexibility, do not treat all of your pasture, or rangeland acres at the same time.

**Minimum Rotational Intervals**

Minimum rotation intervals\* are determined by the rate of breakdown of ALLY applied. ALLY breakdown in the soil is affected by soil pH, presence of soil microorganisms, soil temperature, and soil moisture. Low soil pH, high soil temperature, and high soil moisture increase ALLY breakdown in soil, while high soil pH, low soil temperature, and low soil moisture slow ALLY breakdown.

Of these 3 factors, only soil pH remains relatively constant. Soil temperature, and to a greater extent, soil moisture, can vary significantly from year to year and from area to area. For this reason, soil temperatures and soil moisture should be monitored regularly when considering crop rotations.

\* The minimum rotation interval represents the period of time from the last application to the anticipated date of the next planting.

**Soil pH Limitations**

ALLY should not be used on soils having a pH above 7.5, as extended soil residual activity could extend crop rotation intervals beyond normal. Under certain conditions, ALLY could remain in the soil for 34 months or more, injuring wheat and barley. In addition, other crops planted in high-pH soils can be extremely sensitive to low concentrations of ALLY.

**Checking Soil pH**

Before using ALLY, determine the soil pH of the areas of intended use. To obtain a representative pH value for the test area, take several 0" to 4" samples from different areas of the field and analyze them separately. Consult local extension publications for additional information on recommended soil sampling procedures.

**Rotation Intervals For Crops in Non-Irrigated Land  
Following Use of ALLY at 1/10 oz per Acre**

Location		Crop	Soil pH	Minimum Cumulative Precipitation (inches)	Minimum Rotation Interval (months)
State	County or Area				
Colorado	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	Generally N. of I-70	Field corn	7.9 or lower	15	12
Idaho	Southern Idaho	Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
Kansas	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	Generally N. of I-70 and W. of Hwy. 183	Field corn	7.9 or lower	15	12
		Soybeans	7.5 or lower	22	22
			7.6-7.9	33	34
Central Kansas; generally E. of Hwy. 183 and W. of the Flint Hills	Field corn, Soybeans	7.9 or lower	15	12	
Montana	Statewide	Grain sorghum, Proso millet, Field corn	7.9 or lower	22	22
		Alfalfa (hay only)	7.6-7.9	No restrictions	34
			7.5 or lower	No restrictions	22
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
Nebraska	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	Generally W. of Hwy. 77 and E. of the Panhandle	Field corn	7.9 or lower	15	12
		Soybeans	7.5 or lower	22	22
			7.6-7.9	33	34

Continued on next page

Rotation Intervals For Crops in Non-Irrigated Land (continued)  
 Following Use of ALLY at 1/10 oz per Acre

Location		Crop	Soil pH	Minimum Cumulative Precipitation (inches)	Minimum Rotation Interval (months)
State	County or Area				
New Mexico	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	Eastern New Mexico	Cotton (dryland only)	7.9 or lower	30	22
North Dakota	W. of Hwy. 1	Grain sorghum, Proso millet, Field corn, Dry beans, Flax, Safflower, Sunflower	7.9 or lower	22	22
	E. of Hwy. 1	Grain sorghum, Proso millet, Field corn, Dry beans, Flax, Safflower, Sunflower	7.9 or lower	34	34
Oklahoma	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
		Field corn	7.9 or lower	15	12
	Panhandle	Cotton (dryland only)	7.9 or lower	30	22
	E. of the Panhandle	Cotton (dryland only)	7.9 or lower	25	14
South Dakota	Statewide	Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	S. of Hwy. 212 & E. of the Missouri River, & S. of Hwy. 34 & W. of Missouri River	Grain sorghum, Proso millet	7.9 or lower	13	12
	Generally E. of Missouri River & S. of Hwy. 14, & W. of Missouri River	Field corn	7.9 or lower	15	12

Continued on next page

Rotation Intervals For Crops in Non-Irrigated Land (continued)

Following Use of ALLY at 1/10 oz per Acre

Location		Crop	Soil pH	Minimum Cumulative Precipitation (inches)	Minimum Rotation Interval (months)	
State	County or Area					
Texas	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10	
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22	
	Panhandle	Field corn	7.9 or lower	15	12	
		Cotton (dryland only)	7.9 or lower	30	22	
	N. Central Texas*	Field corn	7.9 or lower	15	12	
		Cotton (dryland only)	7.9 or lower	25	14	
	* The counties of N. Central Texas are: Archer, Baylor, Bell, Bosque, Bowie, Callahan, Camp, Cass, Clay, Collin, Cooke, Coryell, Dallas, Delta, Denton, Eastland, Ellis, Falls, Fannin, Foard, Franklin, Grayson, Hardeman, Haskell, Hill, Hood, Hopkins, Hunt, Jack, Johnson, Kaufman, Knox, Lamar, Limestone, McLennan, Milam, Montague, Morris, Nafarro, Palo Pinto, Parker, Rains, Red River, Robertson, Rockwall, Shackelford, Somervell, Stephens, Tarrant, Throckmorton, Titus, Upshur, Van Zandt, Wilbarger, Wichita, Williamson, Wise, Wood, Young.					
	Utah	Statewide	Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
Wyoming	Statewide	Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22	
	Southern Wyoming	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10	
	Southern Wyoming (Goshen, Laramie, and Platte counties only)	Field corn	7.9 or lower	15	12	
	Northern Wyoming	Grain sorghum, Proso millet, Field corn	7.9 or lower	22	22	

Rotation Interval for Crops Not Listed - The minimum rotation interval for crops not listed is at least 34 months with at least 28" of cumulative precipitation during the period. For unlisted crops not meeting these criteria, a field bioassay must be completed before rotation. See section on Bioassay for further information.

### Rotation Intervals in Pasture or Rangeland for Overseeding and Renovation

Location	Crop	Maximum ALLY Rate on Pasture (oz per A)	Minimum Rotation Interval (months)
AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV	Alfalfa, red clover, white clover, sweet clover, bermudagrass, bluegrass, orchardgrass, bromegrass, ryegrass, fescue, timothy	1/10 to 3/10	4
	Wheat (except durum)	1/10 to 3/10	1
	Durum, barley, oat	1/10 to 3/10	10
ALL AREAS NOT INCLUDED ABOVE*	Red clover, white clover, and sweet clover	1/10 to 2/10	12
	Bermudagrass, bluegrass, orchardgrass, bromegrass, ryegrass, timothy	1/10 to 2/10	6
	Fescue	1/10 to 2/10	18
	Wheat (except durum)	1/10 to 2/10	1
	Durum, barley, oat	1/10 to 2/10	10

*Rotation Interval for Crops Not Listed - The minimum rotation interval for crops not listed is at least 34 months with at least 28" of cumulative precipitation during the period. For unlisted crops not meeting these criteria, a field bioassay must be completed before rotation. See section on Bioassay for further information.*

*\* Note: If ALLY is used on pastures at rates above 2/10 oz per acre in states not listed, then a field bioassay must be completed before rotation.*

#### GRAZING

There are no grazing restrictions on ALLY.

#### REDUCED TILLAGE FALLOW

ALLY may be used as a fallow treatment in combination with other fallow herbicides in Western and Panhandle Areas of KS, NE, OK and TX, and in CO and WY.

##### *Weed Control in Wheat/Fallow/Wheat and Ecofallow Rotations*

In areas where conservation tillage is practiced in wheat/fallow/wheat rotations, ALLY may be used as a fallow treatment preceding wheat planting.

Apply ALLY at 1/10 oz per acre in a planned herbicide rotation program where other residual broadleaf herbicides having different modes of action are used. Do not apply ALLY or a residual herbicide having the same mode of action as ALLY (such as "Amber", "Finesse" or "Glean" FC) to the same field more than once in a 22-month period.

To control escaped weeds when using ALLY in these types of rotations, use either tillage, sequential herbicide applications with a different mode of action than ALLY, or tank mixes. Do not let weed escapes go to seed.

#### SPRAY EQUIPMENT

For specific application equipment, refer to the manufacturer's recommendations for additional information on GPA, pressure, speed, nozzle types and arrangements, nozzle heights above the target canopy, etc.

Be sure to calibrate air or ground equipment properly before application. Select a spray volume and delivery system that will ensure thorough coverage and a uniform spray pattern with minimum drift. Use higher spray volumes to obtain better coverage when the crop canopy is dense. Avoid swath overlapping, and shut off spray booms while starting, turning, slowing, or stopping to avoid crop injury.

Do not make applications using equipment and/or spray volumes or under weather conditions that might cause spray to drift onto nontarget sites. For additional information on spray drift, refer to the **Spray Drift Management** section of the label.

Continuous agitation is required to keep ALLY in suspension.

#### SPRAYER CLEANUP

Spray equipment must be cleaned before ALLY is sprayed. Follow the cleanup procedures specified on the labels of previously applied products. If no directions are provided, follow the six steps outlined in **After Spraying ALLY** section of this label.

#### *At the End of the Day*

When multiple loads of ALLY herbicide are applied, it is recommended that at the end of each day of spraying, the interior of the tank be rinsed with fresh water and then partially filled, and the boom and hoses flushed. This will prevent the buildup of dried pesticide deposits that can accumulate in the application equipment.

### After Spraying ALLY and Before Spraying Crops Other Than Pasture, or Rangeland

To avoid subsequent injury to desirable crops, thoroughly clean all mixing and spray equipment immediately following applications of ALLY as follows:

1. Drain tank; thoroughly rinse spray tanks, boom, and hoses with clean water. Loosen and physically remove any visible deposits.
2. Fill the tank with clean water and 1 gal of household ammonia\* (contains 3% active) for every 100 gal of water. Flush the hoses, boom, and nozzles with the cleaning solution. Then add more water to completely fill the tank. Circulate the cleaning solution through the tank and hoses for at least 15 min. Flush the hoses, boom, and nozzles again with the cleaning solution, and then drain the tank.
3. Remove the nozzles and screens and clean separately in a bucket containing cleaning agent and water.
4. Repeat step 2.
5. Rinse the tank, boom, and hoses with clean water.
6. If only Ammonia is used as a cleaner, the rinsate solution may be applied back to the crop(s) recommended on this label. Do not exceed the maximum labeled use rate. If other cleaners are used, consult the cleaner label for rinsate disposal instructions. If no instructions are given, dispose of the rinsate on site or at an approved waste disposal facility.

\* Equivalent amounts of an alternate-strength ammonia solution or a DuPont-approved cleaner can be used in the cleanout procedure. Carefully read and follow the individual cleaner instructions. Consult your agricultural dealer, applicator, or DuPont representative for a listing of approved cleaners.

#### Notes:

1. **Caution:** Do not use chlorine bleach with ammonia, as dangerous gases will form. Do not clean equipment in an enclosed area.
2. Steam-cleaning aerial spray tanks is recommended prior to performing the above cleanout procedure to facilitate the removal of any caked deposits.
3. When ALLY is tank mixed with other pesticides, all required cleanout procedures should be examined and the most rigorous procedure should be followed.
4. In addition to this cleanout procedure, all precleanout guidelines on subsequently applied products should be followed as per the individual labels.
5. Where routine spraying practices include shared equipment frequently being switched between applications of ALLY and applications of other pesticides to ALLY-sensitive crops during the same spray season, it is recommended that a sprayer be dedicated to ALLY to further reduce the chance of crop injury.

### SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

#### AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

#### IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets (>150 - 200 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. **APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS!** See Wind, Temperature and Humidity, and Temperature Inversions sections of this label.

#### Controlling Droplet Size - General Techniques

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. **WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.**
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles.

#### Controlling Droplet Size - Aircraft

- **Number of Nozzles** - Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations.
- **Nozzle Type** - Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.
- **Boom Length** - The boom length should not exceed 3/4 of the wing or rotor length - longer booms increase drift potential.
- **Application Height** - Application more than 10 ft above the canopy increases the potential for spray drift.

#### BOOM HEIGHT

Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

**WIND**

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. **AVOID GUSTY OR WINDLESS CONDITIONS.**

**Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

**TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

**TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

**SHIELDED SPRAYERS**

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

**AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS**

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring.

**Note:** Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the application equipment section of this label to determine if use of an air assisted sprayer is recommended.

**BIOASSAY**

A field bioassay must be completed before rotating to crops not listed on this label or when rotating at intervals shorter than those listed in the **Crop Rotation** section of this label.

**Field Bioassay**

A field bioassay is necessary if crops other than wheat, barley, pasture, rangeland, or those listed on this label are to be planted on land previously treated with ALLY. To conduct a field bioassay, grow test strips of the crop or crops you plan to grow the following year in fields previously treated with ALLY. Crop response to the bioassay will indicate whether or not to rotate to the crop(s) grown in the test strips.

If a field bioassay is planned, check with your local DuPont representative or call toll-free 1-800-574-4769 for a fact sheet detailing field bioassay procedure.

**PRECAUTIONS**

- Do not apply to irrigated land where tailwater will be used to irrigate crops.
- Do not apply to frozen ground as surface runoff may occur.
- Do not apply to snow-covered ground.
- Varieties of pasture and rangeland grasses differ in their tolerance to herbicides. When using ALLY for the first time on a particular variety, limit initial use to one container. If no crop injury occurs throughout the season, larger acreage may be treated the following season.
- Do not apply to pastures undersown with legumes, as injury to the forage may result.
- To reduce the potential for movement of treated soil due to wind erosion, do not apply to powdery dry or light sandy soils until they have been stabilized by rainfall, trashy mulch, reduced tillage, or other cultural practices. Injury to immediately adjacent crops may occur when treated soil is blown onto land used to produce crops other than cereal grains or pasture/rangeland.
- For ground applications applied to weeds when dry, dusty field conditions exist, control of weeds in wheel track areas may be reduced. The addition of 2,4-D or MCPA should improve weed control under these conditions.

**STORAGE AND DISPOSAL**

**STORAGE:** Store product in original container only. Do not contaminate water, other pesticides, fertilizer, food or feed in storage.

**PRODUCT DISPOSAL:** Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. Wastes resulting from the use of this product may be disposed of on site 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 by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**NOTICE TO BUYER:** Purchase of this material does not confer any rights under patents of countries outside of the United States.

**NOTICE OF WARRANTY**

DuPont warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of DuPont. In no case shall DuPont be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the buyer. DUPONT MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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- 5 Rhone-Poulenc Agriculture Company
- 6 AgrEvo Company
- 7 DowElanco
- 8 Miles Company

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