# Specimen Label



# **Specialty Herbicide**

™Trademark of Dow AgroSciences LLC

For control of broadleaf weeds and certain woody plants on rangeland, permanent grass pastures (including grasses grown for hay), and Conservation Reserve Program (CRP) acres.

Not For Sale, Distribution, or Use in New York State.

Group	4	HERBICIDE
-------	---	-----------

Active Ingredient:

Triisopropanolammonium salt of 2-pyridine	
carboxylic acid, 4-amino-3,6-dichloro	6.58%
Triisopropanolammonium salt of	
(2,4-dichlorophenoxy) acetic acid	51.06%
Other Ingredients	42.36%
Total	100.00%

# Acid Equivalents:

aminopyralid (2-pyridine carboxylic acid, 4-amino-3,6-dichloro-)  $-\,3.4\%$  - 0.33 lb/gal (40 g/L)

2,4-D [(2,4-dichlorophenoxy) acetic acid] – 27.2% - 2.67 lb/gal (320 g/L)

EPA Reg. No. 62719-524

# Keep Out of Reach of Children

# DANGER PELIGRO

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

# **Precautionary Statements**

**Hazards to Humans and Domestic Animals** 

Corrosive • Causes Irreversible Eye Damage • Harmful if Swallowed

Do not get in eyes or on clothing.

# Personal Protective Equipment (PPE)

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

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- · Protective eyewear
- Chemical-resistant gloves made of any waterproof material such as natural rubber
- Shoes plus socks

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

# **User Safety Recommendations**

Users should:

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

#### First Aid

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

# **Environmental Hazards**

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

Mixing and Loading: Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Care should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

Notice: Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies elsewhere on this label. If terms are unacceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

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

#### **Directions for Use**

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

Read all Directions for Use carefully before applying.

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.

Not For Sale, Distribution, or Use in New York State.

# **Agricultural Use Requirements**

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

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

- Coveralls
- Chemical-resistant gloves made of any waterproof material such as natural rubber.
- Protective eyewear
- 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.

**Entry Restrictions for Non-WPS Uses:** For applications on rangeland and permanent grass pastures, do not enter or allow worker entry into treated areas until sprays have dried.

# Storage and Disposal

Do not contaminate water, food, feed or fertilizer by storage or disposal. Open dumping is prohibited.

**Pesticide Storage:** If this product is exposed to subfreezing temperatures, the active ingredient may crystallize and settle out of solution. Under these conditions the product should be warmed to at least 40°F and agitated well to dissolve any crystallized material prior to use.

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

Container Disposal (Metal): Do not reuse container. Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Container Disposal (Plastic): Do not reuse container. Triple rinse (or equivalent). 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.

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

#### **General Information**

ForeFront™ R&P specialty herbicide controls broadleaf weeds and certain woody plants on rangeland, permanent grass pastures (including grasses grown for hay), and Conservation Reserve Program (CRP) acres.

It is permissible to treat non-irrigation ditch banks, seasonally dry wetlands (such as flood plains, deltas, marshes, swamps, or bogs) and transitional areas between upland and lowland sites. ForeFront R&P can be used to the waters edge. Do not apply directly to water and take precautions to minimize spray drift onto water.

#### **Resistance Management Guidelines**

- Development of plant populations resistant to this herbicide mode of action is usually not a problem on rangeland, permanent grass pastures, or CRP, since these sites receive infrequent pesticide applications.
- Similar looking biotypes of a given weed species occurring in a treated area may vary in their susceptibility to a herbicide.
   Application of a herbicide below its recommended rate may allow more tolerant weeds to survive and a shift to more tolerant biotypes within the treated area.
- Where identified, spreading of resistant weeds to other fields may be prevented by cleaning harvesting and tillage equipment before moving to other areas and by planting weed-free seed.
- Contact your extension specialist, certified crop consultant, or Dow AgroSciences representative for the latest resistance management information.

## **Use Precautions and Restrictions**

- This product is not intended for reformulation or repackaging into other end-use products.
- Maximum Application Rate: Do not broadcast apply more than 42 fl oz (2.6 pints) per acre of ForeFront R&P per year. The total amount of ForeFront R&P applied broadcast, as a re-treatment, and/or spot treatment per year must not exceed 42 fl oz (2.6 pints) per acre. Spot treatments may be applied at an equivalent broadcast rate of up to 84 fl oz of ForeFront R&P per acre per annual growing season; however, not more than 50% of an acre may be treated at that rate.
- Avoiding Injury to Non-Target Plants: Do not aerially apply ForeFront R&P within 50 feet of a border downwind (in the direction of wind movement), or allow spray drift to come in contact with, any broadleaf crop or other desirable broadleaf plants, including, but not limited to, alfalfa, cotton, dry beans, flowers, grapes, lettuce, potatoes, radishes, soybeans, sugar beets, sunflowers, tobacco, tomatoes or other broadleaf or vegetable crop, fruit trees, ornamental plants, or soil where sensitive crops are growing or will be planted. Avoid application under conditions that may allow spray drift since very small quantities of spray may seriously injure crops. Read and consider the Precautions for Avoiding Spray Drift and Spray Drift Advisory at the end of this label to help minimize the potential for spray drift.
- ForeFront R&P is highly active against many broadleaf plant species. Do not use this product on areas where loss of desirable broadleaf forage plants, including legumes, cannot be tolerated.
- Chemigation: Do not apply this product through any type of irrigation system.
- Do not contaminate water intended for irrigation or domestic purposes. Do not treat inside banks or bottoms of irrigation ditches, either dry or containing water, or other channels that carry water that may be used for irrigation or domestic purposes.
- Forefront R&P should not be applied on residential or commercial lawns or ornamental plantings.
- Trees adjacent to or in a treated area can occasionally be affected by root uptake of ForeFront R&P through movement into the soil.
   Do not apply ForeFront R&P within the root zone of desirable trees unless such injury can be tolerated. Use special caution near roses, and leguminous trees such as locusts, redbud, mimosa, and caragana.
- Crop Rotation: Do not rotate to cropland for one year following an application of ForeFront R&P. Do not plant a broadleaf crop until an adequately sensitive field bioassay shows that the level of aminopyralid present in the soil will not adversely affect that broadleaf crop.

#### • Seeding grasses:

- Preemergence: ForeFront R&P may be applied in the spring or early summer, depending on the target weed species, and grass planted in the fall when conditions are favorable for grass establishment.
- Postemergence: During the season of establishment,
  ForeFront R&P should be applied only after perennial grasses
  are well established (have developed a good secondary root
  system and show good vigor). Most perennial grasses are
  tolerant to ForeFront R&P at this stage of development.
  ForeFront R&P may suppress certain established grasses,
  such as smooth bromegrass (*Bromus inermis*), especially when
  plants are stressed by adverse environmental conditions.
  Plants should recover from this transient suppression with the
  onset of environmental conditions favorable to grass growth
  and upon release from weed competition.
- Seeding Legumes: Do not plant forage legumes until a soil bioassay has been conducted to determine if aminopyralid residues remaining in the soil will adversely affect the legume establishment.
- Grazing and Haying Restrictions: Do not harvest forage for hay
  within 7 days of ForeFront R&P application. Cutting hay too soon
  after spraying weeds can compromise the weed control. Wait
  14 days prior to cutting grass hay to allow for maximum herbicide
  activity. Do not transfer grazing animals from areas treated with
  ForeFront R&P to areas where sensitive broadleaf crop occur
  without first allowing 3 days of grazing on an untreated pasture.
  Otherwise, urine and manure may contain enough aminopyralid to
  cause injury to sensitive broadleaf plants.

#### Aminopyralid in Plant Residues or Manure:

- Do not use aminopyralid-treated plant residues, including hay
  or straw from treated areas, or manure from animals that have
  grazed forage or eaten hay harvested from treated areas within
  the previous 3 days, in compost or mulch that will be spread
  to areas where commercially grown mushrooms or broadleaf
  plants may be grown.
- Do not spread manure from animals that have grazed or consumed forage or hay from treated areas within the previous 3 days on land used for growing broadleaf crops.
- Manure from animals that have grazed forage or eaten hay harvested from aminopyralid-treated areas within the previous 3 days may only be used on pasture grasses, grass grown for seed, and wheat.
- Do not plant a broadleaf crop in fields treated in the previous year with manure from animals that have grazed forage or eaten hay harvested from aminopyralid-treated areas until an adequately sensitive field bioassay is conducted to determine that the aminopyralid residues in the soil is at level that is not injurious to the crop to be planted.
- To promote herbicide decomposition, plant residues should be evenly incorporated in the surface soil or burned. Breakdown of aminopyralid in plant residues or manure is more rapid under warm, moist soil conditions and may be accelerated by supplemental irrigation.

• Field Bioassay Instructions: In fields previously treated with this product, plant short test rows of the intended rotational crop across the original direction of application in a manner to sample variability in field conditions such as soil texture, soil organic matter, soil pH, rainfall pattern or drainage. The field bioassay can be initiated at any time between harvest of the treated crop and the planting of the intended rotational crop. Observe the test crop for symptoms of herbicidal activity, such as poor stand (effect on seed germination), chlorosis (yellowing), and necrosis (dead leaves or shoots), or stunting (reduced growth). If herbicidal symptoms do not occur, the test crop can be grown. If there is apparent herbicidal activity, do not plant the field to the intended rotational crop; plant only to wheat, forage grasses, native grasses or grasses grown for hay.

## **Sprayer Clean-Out Instructions**

It is recommended that separate spray equipment be used on highly sensitive crops such as tobacco, soybeans, peanuts, and tomatoes. Do not use spray equipment used to apply ForeFront R&P for other applications to land planted to, or to be planted to, crops or desirable sensitive plants, unless it has been determined that all residues of this herbicide has been removed by thorough cleaning of equipment.

Equipment used to apply ForeFront R&P should be thoroughly cleaned before reusing to apply any other chemicals as follows.

- Rinse and flush application equipment thoroughly after use.
   Dispose of rinse water away from water supplies.
- Rinse a second time, adding 1 quart of household ammonia or tank cleaning agent for every 25 gallons of water. Circulate the solution through the entire system so that all internal surfaces are contacted (15 to 20 minutes). Let the solution stand for several hours, preferably overnight.
- 3. Flush the solution out of the spray tank through the boom.
- Rinse the system twice with clean water, recirculating and draining each time.
- Spray nozzles and screens should be removed and cleaned separately.

## **Application Methods**

Apply the recommended rate of ForeFront R&P as a coarse low-pressure spray. Do not apply this product with mist blower systems that deliver very fine spray droplets. Use of mist blower equipment can reduce weed control and increase spray drift potential.

Spray volume should be sufficient to uniformly cover foliage. Increase spray volume to ensure thorough and uniform coverage when target vegetation is tall and/or dense. To enhance foliage wetting and coverage, an approved non-ionic agricultural surfactant may be added to the spray mixture as recommended by the surfactant label.

**Ground Broadcast Application:** Higher spray volumes (greater than 10 gallons per acre) generally provides better coverage and better control, particularly in dense and/or tall foliage.

**Aerial Broadcast Application:** Do not apply less than 2 gallons per acre total spray volume. Five gallons per acre or greater will generally provide better coverage and better control, particularly in dense and/or tall foliage.

**High-Volume Foliar Application:** High volume foliar treatments may be applied at rates equivalent to broadcast up to a maximum of 42 fl oz (2.6 pints) per acre per annual growing season. Use sufficient spray volume to thoroughly and uniformly wet foliage and stems.

**Spot Application:** Spot treatments may be applied at rates equivalent to broadcast-applied rate of up to a maximum of 84 fl oz (5.2 pints) on 50% of the treated field. Spray volume should be sufficient to thoroughly and uniformly wet weed foliage. Repeat treatments may be made, but the total amount of ForeFront R&P applied must not exceed 42 fl oz (2.6 pints) per acre per year (see comments in the Use Precautions and Restrictions section above on Maximum Application Rate).

Table 1: Amount of ForeFront R&P herbicide (in fl oz) to mix in 3 gallon of water

Forefront R&P Amount (In fl oz) To Mix In 3 Gal Of Water With Various Application Rates

GPA	24 fl oz/A	32 fl oz/A	42 fl oz/A
20	3.6	4.8	6.3
30	2.4	3.2	4.2
40	1.8	2.4	3.2
50	1.4	1.9	2.5
60	1.2	1.6	2.1
70	1.0	1.4	1.8
80	0.9	1.2	1.6
90	0.8	1.1	1.4
100	0.7	1.0	1.3

**Table 2:** Application rates in the table below are based on treating an area of 1000 sq ft. An area of 1000 sq ft is about 10.5 by 10.5 yards in size. Mix the amount of ForeFront R&P (fl oz or milliliters) corresponding to the desired broadcast rate in 0.5 to 2.5 gallons of water, depending upon the spray volume required to treat 1000 sq ft. A delivery volume of 0.5 gallons per 1000 sq ft is equivalent to 22 gallons per acre and 2.5 gallons per 1000 sq ft is equivalent to 109 gallons per acre.

Amount of ForeFront R&P per 1000 sq ft to Equal Broadcast Rate			
Broadcast Rate		Amount of ForeFront R&P per 1000 sq ft	
(fl oz/acre)	(pt/acre)	(fl oz)	(mL)
24	1.5	0.55	16.3
32	2	0.74	21.7
42	2.6	0.96	28.5

**Note:** 1 mL = 1cc and 1 fluid ounce (fl oz) = 29.6 milliliters (mL) = 2 tablespoons = 6 teaspoons

To calculate the amount of ForeFront R&P for areas larger than 1000 sq ft: Multiply the table value (fl oz or milliliters) by the area to be treated in "thousands" of square feet. For example, if the area to be treated is 3500 sq ft, multiply the table value by 3.5 (3500 sq ft divided by 1000 sq ft = 3.5).

# **Mixing Instructions**

# **Mixing with Water**

To prepare the spray, add about half the required amount of water in the spray tank. Then, with agitation, add the recommended amount of ForeFront R&P and other registered tank mix herbicides. Finally, with continued agitation, add the rest of the water and additives such as surfactants or drift control and deposition aids.

Addition of Surfactants or Adjuvants on All Labled Use Sites: The addition of a high quality non-ionic surfactant (of at least 80% active ingredient) at 0.25 to 0.5 % volume per volume (1 to 2 quarts per 100 gallons of spray) is recommended to enhance herbicide activity under adverse environmental conditions (such as, high temperature, low relative humidity, drought conditions, dusty plant surfaces) or when weeds are heavily pubescent or more mature.

#### **Tank Mixing with Other Herbicides**

ForeFront R&P at rates of up to 42 fl oz (2.6 pints) per acre may be mixed with labeled rates of other labeled herbicides to broaden the spectrum of weeds controlled or to improve control of certain weeds. ForeFront R&P may be applied in tank mix combination with labeled rates of other herbicides provided: (1) the tank mix product is labeled for the timing and method of application for the use site to be treated and (2) mixing is not prohibited by the label of the registered tank mixed products, and (3) that the tank mix combination is physically compatible (see tank mix compatibility testing below). When tank mixing, use only in accordance with the restrictions, precautions and limitations on the respective product labels

- Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels.
- Do not exceed recommended application rates. If products containing the same active ingredient are mixed, do not exceed the maximum allowable active ingredient use rates.
- For direct injection or other spray equipment where the product formulations will be mixed in undiluted form, special care should be taken to ensure tank mix compatibility.
- Always perform a jar test to ensure the compatibility of products to be used in tank mixture.

#### **Tank Mixing Precautions:**

- For products packaged in water soluble packaging, do not tank mix with products containing boron or mix in equipment previously used to apply a product mixture containing boron unless the tank and spray equipment has been adequately cleaned. (See Sprayer Clean-Out instructions.)
- Always perform a (jar) test to ensure the compatibility of products to be used in tank mixture.

Tank Mix Compatibility Testing: Perform a jar test prior to mixing in a spray tank to ensure compatibility of ForeFront R&P and other pesticides or carriers. Use a clear glass jar with lid and mix ingredients in the same order and proportions as will be used in the spray tank. The mixture is compatible if the materials mix readily when the jar is inverted several times. The mixture should remain stable after standing for 1/2 hour or, if separation occurs, should readily mix if agitated. An incompatible mixture is indicated by separation into distinct layers that do not readily remix when agitated and/or the presence of flakes, precipitates, gels, or heavy oily film in the jar. Use of an appropriate compatibility agent may resolve mix incompatibility.

#### Mixing with Sprayable Liquid Fertilizer Solutions

ForeFront R&P is usually compatible with liquid fertilizer solutions. It is anticipated that ForeFront R&P will not require a compatibility agent for mixing with fertilizers; however, a compatibility test (jar test) should be made prior to mixing. Jar tests are particularly important when a new batch of fertilizer or pesticide is used, when water sources change, or when tank mixture ingredients or concentrations are changed. Compatibility may be determined by mixing the spray components in the desired order and proportions in a clear glass jar before large scale mixing of spray components in the spray tank. Use of a compatibility agent is recommended to help obtain and maintain a uniform spray solution during mixing and application. Note: The lower the temperature of the liquid fertilizer, the greater the likelihood of mixing problems. Mixing ForeFront R&P in N-P or N-P-K liquid fertilizer solutions is more difficult than mixing with straight nitrogen fertilizer and should not be attempted without first conducting a successful compatibility jar test. Agitation in the spray tank must be vigorous to be comparable with jar test agitation. Apply the spray mixture the same day it is prepared while maintaining continuous agitation. Rinse the spray tank thoroughly after use.

**Note:** Foliar-applied liquid fertilizers themselves can cause yellowing of the foliage of forage grasses and other vegetation.

# **Use Rates and Timing**

Do not use ForeFront R&P if loss of legumes species or other broadleaf species cannot be tolerated.

ForeFront R&P may be applied postemergence as a broadcast spray or as a spot application to control weeds listed on this label; weeds other than those listed may also be controlled by this herbicide. When a rate range is given, use a higher rate in the range to control weeds at advanced growth stages or under less-than-favorable growing conditions (e.g., drought stress) or for longer residual control. Best weed control results are obtained when spray volume is sufficient to provide uniform coverage of treated plants. For optimum uptake and translocation of the herbicide, avoid mowing, haying, shredding, burning or soil disturbance in treated areas for at least 7 days following application.

ForeFront R&P also provides preemergence control of germinating seeds or emerging seedlings of susceptible weeds and re-growth of certain perennial weeds following application. Weed establishment following ForeFront R&P application will depend upon application rate, season of application, and growing condition.

ForeFront R&P can provide long-term control of weeds. The length of control is dependent upon the application rate, condition and growth stage of target weeds, environmental conditions at and following application, and the density and vigor of competing desirable vegetation. Long-term broadleaf weed control is most effective where forage grasses are allowed to recover from overgrazing, drought, etc., and compete with weeds.

ForeFront R&P can be an important component of integrated vegetation management programs designed to renovate or restore desired plant communities. To maximize and extend the benefits of weed control provided by ForeFront R&P, it is important that vegetation management practices, including grazing management, biological control agents, replanting, fertilization, prescribed fire, reseeding with desirable plants, etc., be used to increase the competitiveness of desired forages. Used as part of an integrated management program, ForeFront R&P can serve as a catalyst for rapid improvement of rangeland, permanent grass pasture, and CRP by alleviating the adverse competitive effect of weeds on the yield and quality of forages and other desirable plant species. Agricultural and natural resources specialists with federal and state government agencies

can provide guidance on best management practices and development of integrated vegetation management systems.

#### **Broadleaf Weeds Controlled**

The following weeds will be controlled at 1.5 to 2.6 pint/acre. For best results, apply when weeds are actively growing and conditions favorable for plant growth. Use a higher rate in the rate range when growing conditions are less than favorable, when weeds are mature, or when weed foliage is tall and dense or when residual control is important. ForeFront R&P also provides preemergence control of germinating seeds or emerged seedlings of susceptible weeds following application.

Table 3: Broadleaf Weeds Controlled

Weed Species			
Common Name	Scientific Name	Life Cycle***	Plant Family
	Rate Range: 1.5 to 2 pint	s/acre	
bedstraw	Galium spp.	perennial	Rubiaceae
bedstraw, smooth	Galium mollugo	perennial	Rubiaceae
carrot, wild*	Daucus carota	biennial	Apiaceae
Cinquefoil, hoary	Potentilla argentea	perennial	Rosaceae
cinquefoil, sulfur*.**	Potentilla recta	perennial	Rosaceae
clover, sweet	Melilotus officinalis	biennial	Fabaceae
clover, white	Trifolium repens	perennial	Fabaceae
crownvetch*	Securigera varia	perennial	Fabaceae
daisy, oxeye*.**	Leucanthemum vulgare	perennial	Asteraceae
alsedandelion, Carolina*	Pyrrhopappus carolinianus	annual/biennial	Asteraceae
gumweed, curlycup	Grindelia squarrosa	biennial	Asteraceae
norsenettle, Carolina***	Solanum carolinense	perennial	Solanaceae
ookeweed, common	Phytolacca americana	perennial	Phytolaccaceae
ragweed, common*.**	Ambrosia artemisiifolia	annual	Asteraceae
ragweed, western	Ambrosia psilostachya	perennial	Asteraceae
agwort, tansy*.***	Senecio jacobaea	perennial	Asteraceae
starthistle, yellow****	Centaurea solstitialis	annual	Asteraceae
histle, bull***	Cirsium vulgare	biennial	Asteraceae
histle, musk***	Carduus nutans	biennial	Asteraceae
histle, plumeless***	Carduus acanthoides	biennial	Asteraceae
histle, scotch	Onopordum acanthium	biennial	Asteraceae
vetch, common*	Vicia sativa	annual	Fabaceae
woodsorrel, yellow*	Oxalis stricta	perennial	Oxalidaceae
wormwood. absinth***	Artemisia absinthium	perennial	Asteraceae
	Rate Range: 2 to 2.6 pint		7.10101400440
actinomeris, wingstem	Verbesina alternifolia	perennial	Asteraceae
amaranth, spiny*	Amaranthus spinosus	annual	Amaranthaceae
proomweed, annual*	Amphiachyris dracunculoides	annual	Asteraceae
ourdock, common*.**	Arctium minus	biennial	Asteraceae
outtercup, hairy*	Ranunculus sardous	perennial	Ranunculaceae
outtercup, tall*.**	Ranunculus acris	perennial	Ranunculaceae
camphorweed*	Heterotheca subaxillaris	annual	Asteraceae
chickweed, common*	Stellaria media	annual	Caryophyllaceae
chicory*	Cichorium intybus	perennial	Asteraceae
cocklebur*	Xanthium strumarium	annual	Asteraceae
croton, woolly***	Croton capitatus	annual	Euphorbiaceae
cudweed, purple	Gnaphalium purpureum	annual	Asteraceae
dandelion, common*	Taraxacum officinale	perennial	Asteraceae
dock, broadleaf*	Rumex obtusifolius	perennial	Polygonaceae
acon, produicai	Trainer obtaining	poronniai	i diygoriaddac

<sup>\*</sup> These plants are indicated to be invasive in the USDA-NRCS, PLANTS Database (http://plants.usda.gov/index.html).

<sup>\*\*</sup> Plants designated as noxious weeds in at least one state (PLANTS Database, USDA-NRCS, http://plants.usda.gov/index.html).

<sup>\*\*\*</sup> Spot treatment at rates up to 84 fl oz (5.2 pints) of ForeFront R&P may be particularly effective against dense patches of perennial broadleaf plants.

Weed Species (Cont.)			
Common Name	Scientific Name	Life Cycle***	Plant Family
	Rate Range: 2 to 2.6 pin	ts/acre	
dock, curly*	Rumex crispus	perennial	Polygonaceae
dogfennel***	Eupatorium capillifolium	perennial	Asteraceae
evening primrose, cutleaf*	Oenothera laciniata	annual	Asteraceae
false dandelion, Carolina*	Tragopogon dubius	biennial	Asteraceae
fiddleneck, common	Amsinckia intermedia	annual	Boraginaceae
fireweed	Epilobium angustifolium	perennial	Onagracee
fleabane, annual*	Erigeron annus	annual	Asteraceae
goldenrod, Canada*	Solidago canadensis	perennial	Asteraceae
goldenrod, Missouri*	Solidago missouriensis	perennial	Asteraceae
goldenrod, rigid	Solidago rigida	perennial	Asteraceae
hawkweed, orange*.**	Hieracium aurantiacum	perennial	Asteraceae
hawkweed, yellow***	Hieracium pratense	perennial	Asteraceae
henbit*	Lamium amplexicaule	annual/biennial	Lamiaceae
horseweed*	Conyza canadensis	annual	Asteraceae
ironweed, tall	Vernonia gigantea	perennial	Asteraceae
ironweed, western	Vernonia baldwinii	perennial	Asteraceae
knapweed	Centaurea sp.	biennial	Asteraceae
knapweed, brown	Centaurea jacea	perennial	Asteraceae
knapweed, diffuse***	Centaurea diffusa	biennial	Asteraceae
knapweed, Russian*.**	Acroptilon repens	perennial	Asteraceae
knapweed, spotted***	Centaurea stoebe	biennial	Asteraceae
kudzu*·**	Pueraria montana	perennial	Fabaceae
lambsquarters, common*	Chenopodium album	annual	Chenopodiaceae
lespedeza, annual	Lespedeza striata	annual	Fabaceae
lettuce, prickly*	Lactuca serriola	annual	Asteraceae
locust	Robinia pseudoacacia	perennial	Fabaceae
marshelder, annual*	Iva annua	annual	Asteraceae
mayweed, scentless*	Tripleurospermum perforata	annual	Asteraceae
mayweed, stinking*.**	Anthemis cotula	annual	Asteraceae
medic, black*	Medicago lupulina	perennial	Fabaceae
mexicantea	Dysphania ambrosioides	annual/ perennial	Chenopodiaceae
mullein****	Verbascum spp.	biennial	Scrophulariaceae
partridgepea*	Chamaecrista fasciculata	annual	Fabaceae
plantain, broadleaf*	Plantago major	perennial	Plantaginaceae
plantain, buckhorn*	Plantago lanceolata	perennial	Plantaginaceae
sicklepod*	Senna obtusifolia	annual	Fabaceae
smartweed, Pennsylvania	Polygonum pensylvanicum	annual	Polygonaceae
sneezeweed, bitter*	Helenium amarum	annual	Asteraceae
soda apple, tropical***	Solanum viarum	perennial	Solanaceae
southistle, perennial***	Sonchus arvensis	perennial	Asteraceae
sowthistle, prickly*	Sonchus asper	annual	Asteraceae
Spanish needles	Bidens bipinnata	annual	Asteraceae
starthistle, yellow***	Centaurea solstitialis	annual	Asteraceae
sunflower, common*			
	Helianthus annua	annual biennial	Asteraceae
teasel*	Dipsacus spp.		Dipsacaceae
thistle, Canada*·**	Cirsium arvense	perennial	Asteraceae
vervain, blue*	Verbena hastata	perennial	Asteraceae
vervain, hoary*	Verbena stricta	perennial	Asteraceae
yarrow, common*	Achillea millefolium	perennial	Asteraceae

<sup>\*</sup> These plants are indicated to be invasive in the USDA-NRCS, PLANTS Database (http://plants.usda.gov/index.html).

\*\* Plants designated as noxious weeds in at least one state (PLANTS Database, USDA-NRCS, http://plants.usda.gov/index.html).

\*\*\* Spot treatment at rates up to 84 fl oz (5.2 pints) of ForeFront R&P may be particularly effective against dense patches of perennial broadleaf plants.

<sup>\*\*\*\*</sup> apply during rosette stage

## **Precautions for Avoiding Spray Drift**

Avoid application under conditions that may allow spray drift because very small quantities of spray, which may not be visible, may seriously injure crops. This product should be applied only when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops and other plants) is minimal (e.g., when wind is blowing away from the sensitive areas. A drift control aid may be added to the spray solution to further reduce the potential for drift. If a drift control aid is used, follow the use directions and precautions on the manufacturer's label. Do not use a thickening agent with Microfoil, Thru-Valve booms, or other spray delivery systems that cannot accommodate thickened spray solutions.

**Ground Equipment:** With ground equipment, spray drift can be lessened by keeping the spray boom as low as possible; by applying 10 gallons or more of spray per acre; by keeping the operating spray pressures at the manufacturer's recommended minimum pressures for the specific nozzle type used (low pressure nozzles are available from spray equipment manufacturers); and by spraying when the wind velocity is low (follow state regulations). Avoid calm conditions which may be conducive to thermal inversions. Direct sprays no higher than the tops of target vegetation and keep spray pressures low enough to provide coarse spray droplets to minimize drift.

**Aerial Application:** Avoid spray drift at the application site. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. Users are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications:

- The distance of the outer most operating nozzles on the boom must not exceed 75% of wingspan or 85% of rotor diameter.
- Nozzles should be pointed backward parallel with the air stream or not pointed downwards more than 45 degrees.

State regulations must be followed.

The applicator should be familiar with and take into account the information covered in the following **Aerial Drift Reduction Advisory**. This information is advisory in nature and does not supersede mandatory label requirements.

## **Aerial Drift Reduction Advisory**

Information on Droplet Size: The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. 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).

#### **Controlling Droplet Size:**

 Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

- Pressure Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of Nozzles Use the minimum number of nozzles that will provide uniform coverage.
- Nozzle Orientation Orienting nozzles so that the spray is released parallel to the airstream produced larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- 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. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

**Boom Length:** For some use patterns, reducing the effective boom length to less than 85% of the wingspan or rotor length may further reduce drift without reducing swath width.

**Application Height:** Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

**Swath Adjustment:** When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

**Wind:** Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **Note:** Local terrain such as valleys and ravines 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 low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions: Applications should not occur during a local, low level temperature inversion because drift potential is high.

Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures 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 the 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.

## **Terms and Conditions of Use**

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies.

# **Warranty Disclaimer**

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

#### **Inherent Risks of Use**

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

#### **Limitation of Remedies**

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

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

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

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

™Trademark of Dow AgroSciences LLC

Dow AgroSciences LLC • Indianapolis, IN 46268 U.S.A.

Label Code: D02-881-002 Replaces Label: D02-881-001 LOES Number: 010-02122

EPA accepted: 01/26/07

#### **Revisions:**

- Marketing claims: added "and certain woody plants" and "including grasses grown for hay;" removed "annual, biennial, and perennial"
- Added clarification of treatment of non-irrigation ditch banks with restriction to prohibit application directly to water
- Use Precautions and Restrictions, added the following: a) not for reformulation statement; b) Maximum Application Rate section; c) restrictions to residential or commercial lawns or ornamental plantings; d) precautions for adjacent trees; e) notation for technical bulletin; f) precautions for seeding grasses (preemergence, postemergence); g) grazing and haying restrictions; and deleted Field Bioassay
- Aminopyralid in Plant Residues or Manure: a) moved Field Bioassay Instructions and Sprayer Clean-Out instructions here;
   b) removed Grazing and Haying Restrictions, and Maximum Application Rate
- 5. Moved Precautoins for Avoiding Spray Drift to end of label
- Application Method: All sections revised; added Table 1 for sprayer outputs
- 7. Moved Mixing Instructions section below Application Method
- 8. Removed Broadleaf Weed Control heading to create a general Use Rates and Timing section
- Weed Species table: a) addition of the following pests: bedstraw, curlycup gumweed, scotch thistle, dogfennel, fireweed, locust, mullein, Pennsylvania smartweed, Spanish needles; b) changed vicia to vetch; c) added footnote to apply during rosette stage
- 10. Removed Site Specific Use Directions
- Added restriction Not For Sale, Distribution, or Use in New York State.