Specimen Label

Dow AgroSciences™

GrazonNext® HL

Specialty Herbicide

®Trademark of Dow AgroSciences LLC

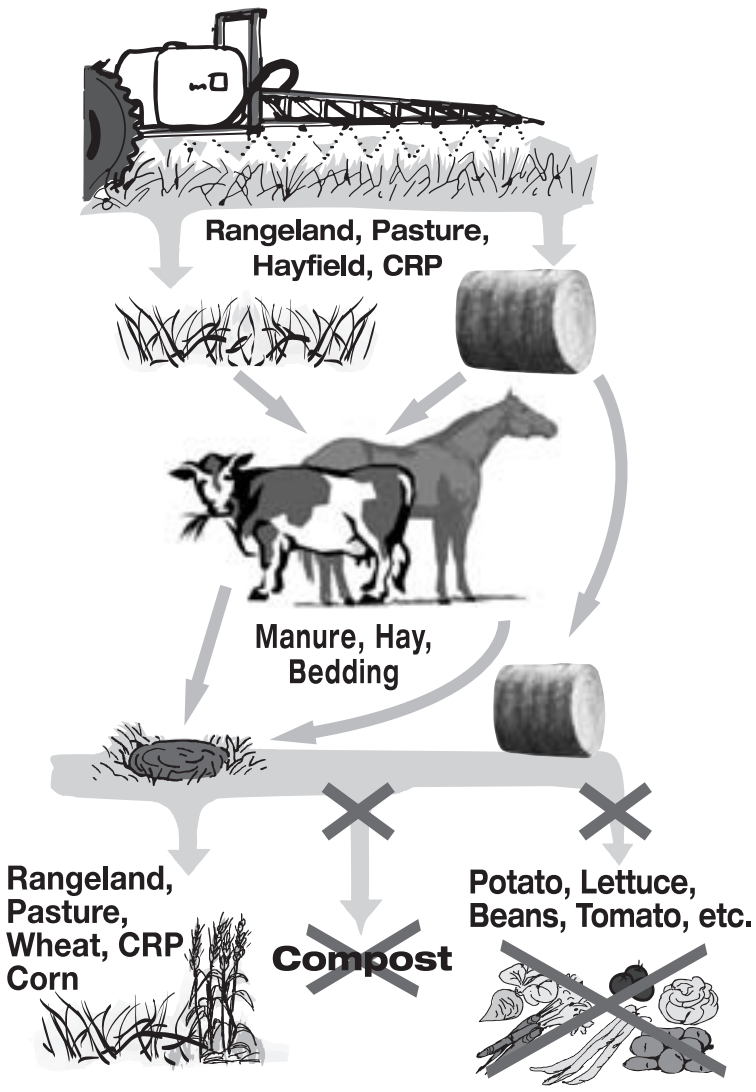
For control of broadleaf weeds and certain woody plants on rangeland, permanent grass pastures (including grasses grown for hay*), Conservation Reserve Program (CRP) acres and wildlife management areas in these sites.

***Hay can only be used on the farm or ranch where the product is applied unless allowed by supplemental labeling**

IMPORTANT USE PRECAUTIONS AND RESTRICTIONS TO PREVENT INJURY TO DESIRABLE PLANTS

- Carefully read the section ***"Restrictions in Hay or Manure Use ."***
- It is mandatory to follow the ***"Use Precautions and Restrictions"*** section of this label.
- Manure and urine from animals consuming grass or hay treated with this product may contain enough aminopyralid to cause injury to sensitive broadleaf plants.
- Hay can only be used on the farm or ranch where product is applied unless allowed by supplemental labeling.
- Consult with a Dow AgroSciences representative if you do not understand the "Use Precautions and Restrictions". **Call [1-(800) 263-1196] Customer Information Group**.

Forage and Manure Management



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-	8.24%
Dimethyl amine salt of (2,4-dichlorophenoxy) acetic acid	41.26%
Other Ingredients	50.50%
Total	100.00%

Acid Equivalents:

aminopyralid (2-pyridine carboxylic acid, 4-amino-3,6-dichloro-) – 4.28% - 0.41 lb/gal (50 g/L)

2,4-D [(2,4-dichlorophenoxy) acetic acid] – 34.25% - 3.33 lb/gal (400 g/L)

Precautionary Statements

Hazard to Humans and Domestic Animals

EPA Reg. No. 62719-628

DANGER

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.

All mixers, loaders, applicators, flaggers, and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Protective eyewear
- Chemical-resistant gloves, when applying with any handheld nozzle or equipment, mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.
- Chemical resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate

See engineering controls for additional requirements

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 exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls Statements

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protections Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protections Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)].

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE 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 and may be toxic to fish. 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 except as permitted on this label. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwater or rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

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.

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: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your state pesticide or environmental control agency, or the hazardous waste representative at the nearest EPA regional office for guidance.

Nonrefillable containers 5 gallons or less:

Container Handling: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment

Storage and Disposal (Cont.)

or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable containers larger than 5 gallons:
Container Handling: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

Nonrefillable containers larger than 5 gallons:
Container Handling: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.
Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Product Information

GrazonNext® HL specialty herbicide controls broadleaf weeds and certain woody plants on rangeland, permanent grass pastures (including grasses grown for hay*), Conservation Reserve Program (CRP) acres and wildlife management areas in these sites.

***Hay can only be used on the farm or ranch where the product is applied unless allowed by supplemental labeling**

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. GrazonNext HL 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 specified 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

Consult with a Dow AgroSciences representative if you do not understand the "Use Precautions and Restrictions." Call (1-800-263-1196) for more information.

- **Do not use on grasses grown for hay intended for export outside the United States.**
- **GrazonNext HL is PROHIBITED from use on hay that will be distributed or made available for sale off the farm or ranch where harvested unless allowed by supplemental labeling.**
- **GrazonNext HL is PROHIBITED from use on silage, haylage, baylage and green chop unless allowed by supplemental labeling.**
- **Do not move hay made from grass treated with GrazonNext HL off farm unless allowed by supplemental labeling**
- **Do not use hay or straw from areas treated with GrazonNext HL or manure from animals feeding on hay treated with GrazonNext HL in compost.**
- **Do not use on grasses grown for seed production.**
- This product is not intended for reformulation or repackaging into other end-use products.
- Applications made during periods of intense rainfall, to soils saturated with water, surfaces paved with materials such as asphalt or concrete, or soils through which rainfall will not readily penetrate may result in runoff and movement of GrazonNext HL. Injury to crops may result if treated soil and/or runoff water containing GrazonNext HL is washed, or moved onto land used to produce crops. Exposure to GrazonNext HL may injure or kill susceptible crops and other plants, such as grapes, soybeans, tobacco, sensitive ornamentals. Do not treat frozen soil where runoff could damage sensitive plants.
- **Maximum seasonal rate:** Apply no more than 2.1 pints (34 fl oz) (0.87 lbs acid equivalent 2,4-D) per acre per use season.
- Use 2 or more gallons of spray solution per acre
- Do not make more than two applications per year
- Do not apply within 30 days of previous application
- If grass is to be cut for hay, Agricultural Use Requirements for the Worker Protection Standard are applicable
- **Maximum Application Rate:** Do not broadcast apply more than 2.1 pints (34 fl oz) per acre of GrazonNext HL per year. The total amount of GrazonNext HL applied broadcast, as a re-treatment, and/or spot treatment per year must not exceed 2.1 pints (34 fluid oz) per acre. Spot treatments may be applied at an equivalent broadcast rate of up to 4.2 pints (68 fluid oz) per acre of GrazonNext HL per annual growing season; however, not more than 50% of an acre may be treated at that rate.
- **Grazing and Haying Restrictions:** Do not harvest forage for hay within 7 days of GrazonNext HL 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 use this product for impregnation on dry fertilizer, unless specified in a Dow AgroSciences state specific product bulletin.**
- Do not apply this product on lawns, turf, ornamental plantings, urban walkways, driveways, tennis courts, golf courses, athletic fields, commercial sod operations, or other high-maintenance, fine turfgrass areas, or similar areas.
- **Transfer of Animals Feeding on GrazonNext HL Treated Forage**: Do not transfer animals grazing or feeding on hay 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.
- **Restrictions in Hay or Manure Use:**
  - 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, mulch or mushroom spawn.
  - 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 treated areas within the previous 3 days may only be used on pasture grasses, grass grown for seed, wheat and corn.
  - Do not plant a broadleaf crop (including soybeans, sunflower, tobacco, vegetables, field beans, peanuts, and potatoes) 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.
- **Grazing Poisonous Plants:** Herbicide application may increase palatability of certain poisonous plants. Do not graze treated areas until poisonous plants are dry and no longer palatable to livestock.

- **Seeding grasses**:
  - **Preemergence:** In general, GrazonNext HL may be applied in the spring or early summer, depending on the target weed species, and grasses planted after 4 months when conditions are favorable for grass establishment.
  - With fall applications, do not plant grasses the following spring.
  - Do not overseed ryegrass for 4 months after treatment.
  - **Postemergence:** During the season of establishment, GrazonNext HL 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 GrazonNext HL at this stage of development. GrazonNext HL 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
- **Crop Rotation:** Do not rotate to cropland for one year following an application of GrazonNext HL. Cereals and corn can be planted one year after treatment. Most broadleaf crops are more sensitive and can require **at least** 2 years depending on the crop and environmental conditions. 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.
- **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 starting a minimum of one year after herbicide application nad following harvest of the treated 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.
- **GrazonNext HL 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.
- Trees adjacent to or in a treated area can occasionally be affected by root uptake of GrazonNext HL through movement into the soil. Do not apply GrazonNext HL 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.
- **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.

Restrictions for Non-Irrigation Canal Ditchbank Application

Postemergence:
Limited to 1 application per season.
Maximum of 2.1 pints (34 fluid oz)(0.87 lbs ae)/acre per application.
Minimum of 30 days between applications
Spot treatments may be applied at an equivalent broadcast rate of up to 4.2 pints (68 fluid oz) of GrazonNext HL (1.75 lbs acid equivalent) per acre per annual growing season; however, not more than 50% of an acre may be treated at that rate.

Do not use on small canals with a flow rate less than 10 cubic feet per second (CFS) where water will be used for drinking purposes. CFS may be estimated by using the formula below. The approximate velocity needed for the calculation can be determined by observing the length of time that it takes a floating object to travel a defined distance.
Divide the distance (ft.) by the time (sec.) to estimate velocity (ft. per sec.). Repeat 3 times and use the average to calculate CFS.

Average Width (ft.) x Average Depth (ft.) x Average Velocity (ft. per sec.) = CFS

For ditchbank weeds:
Do not allow boom spray to be directed onto water surface.
Do not spray across stream to opposite bank.

For shoreline weeds:
Allow no more than 2 foot overspray onto water.

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 GrazonNext HL 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 have been removed by thorough cleaning of equipment.

Equipment used to apply GrazonNext HL should be thoroughly cleaned before reusing to apply any other chemicals as follows.
1. Rinse and flush application equipment thoroughly after use. Dispose of rinse water away from water supplies.
2. 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.
4. Rinse the system twice with clean water, recirculating and draining each time.
5. Spray nozzles and screens should be removed and cleaned separately.

Application Methods

Apply the specified rate of GrazonNext HL 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 specified 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 a maximum of 2.1 pints (34 fl oz) 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 4.2 pints (68 fl oz) 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 GrazonNext HL applied must not exceed 2.1 pints (34 fl oz) per acre per year (see comments in the Use Precautions and Restrictions section above on Maximum Application Rate).

Table 1: Amount of GrazonNext HL herbicide **(in fl oz)** to mix in **3 gallon of water**

GrazonNext HL Amount (In fluid oz) To Mix In 3 Gal Of Water With Various Application Rates

GPA	19 fl oz/A	24 fl oz/A	34 fl oz/A
20	2.9	3.6	5.1
30	1.9	2.4	3.4
40	1.4	1.8	2.6
50	1.1	1.4	2.0
60	1.0	1.2	1.7
70	0.8	1.0	1.4
80	0.7	0.9	1.3
90	0.6	0.8	1.1
100	0.6	0.7	1.0

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 GrazonNext HL (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 GrazonNext HL per 1000 sq ft to Equal Broadcast Rate			
Broadcast Rate		Amount of GrazonNext HL per 1000 sq ft	
(fl oz/acre)	(pt/acre)	(fl oz)	(mL)
19	1.2	0.44	13
24	1.5	0.55	16
34	2.1	0.78	23

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

To calculate the amount of GrazonNext HL 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 specified amount of GrazonNext HL 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
GrazonNext HL at rates of up to 2.1 pints (34 fl oz) per acre may be mixed with labeled rates of other labeled herbicides (such as Remedy® Ultra, Reclaim®, Surmount®, Tordon® 22K or PastureGard®) to broaden the spectrum of weeds and brush controlled or to improve control of certain weeds. GrazonNext HL 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 specified 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 GrazonNext HL 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
GrazonNext HL is usually compatible with liquid fertilizer solutions. It is anticipated that GrazonNext HL will not require a compatibility agent for mixing with fertilizers; however, a compatibility test (jar test) should be made prior to large scale batch 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 could be used to help obtain and maintain a uniform spray solution during mixing and application. When mixing GrazonNext HL in liquid fertilizer, mix GrazonNext HL in water (in a 1:1 ratio at the minimum) and add to the spray tank first, then add the liquid fertilizer to the spray tank. **Note**: The lower the temperature of the liquid fertilizer, the greater the likelihood of mixing problems. **Mixing GrazonNext HL 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.

Suggested Mixing Procedure:

1. With continuous vigorous agitation dilute herbicide with water (1 part herbicide to 2 parts water) before adding to liquid nitrogen fertilizer solution.
2. Apply as soon as mixing is complete, maintaining continuous, vigorous agitation throughout mixing and application without interruption.
3. Application during very cold (near freezing) weather is not advisable. The likelihood of mixing or compatibility problems with liquid fertilizer increases under cold conditions.
4. Do not store the spray mixture.

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 GrazonNext HL if loss of legumes species or other broadleaf species cannot be tolerated.

GrazonNext HL 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.

For most species, 2 hours between application and rainfall provides a sufficient amount of time to avoid loss in weed control due to herbicide wash-off of the treated foliage.

GrazonNext HL 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 GrazonNext HL application will depend upon application rate, season of application, and growing condition.

GrazonNext HL 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.

GrazonNext HL 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 GrazonNext HL, 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, GrazonNext HL 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

Early to mid-spring applications. GrazonNext HL can be applied at rates between 0.8 and 1.2 pints (13 to 19 fluid oz) product per acre in early to mid-spring when weeds are less than 2 inches tall; applications in this rate range are most effective when conditions are favorable for plant growth.

The following weeds will be controlled at 1.2 to 2.1 points (19 to 34 fluid oz) product per acre. For best results, apply when weeds are actively growing and conditions are favorable for plant growth. Use a higher rate in the rate range when growing conditions are less than favorable, when weeds are mature, when weed foliage is tall and dense or when residual control is important. GrazonNext HL also provides preemergence control of germinating seeds or seedlings of susceptible weeds that emerge following application. Increasing application rate to the high end of the rate range specified will extend period of residual control.

Table 3: Broadleaf Weeds Controlled

Weed Species			
Common Name	**Scientific Name**	**Life Cycle[c]**	**Plant Family**
Rate Range: 1.2 to 1.5 pints (19 to 24 fluid oz) product per acre			
broomweed, annual[a]	*Amphiachyris dracunculoides*	annual	Asteraceae
carrot, wild[a]	*Daucus carota*	biennial	Apiaceae
clover, sweet	*Melilotus officinalis*	biennial	Fabaceae
clover, white	*Trifolium repens*	perennial	Fabaceae
cocklebur[a]	*Xanthium strumarium*	annual	Asteraceae
croton, woolly[a,b]	*Croton capitatus*	annual	Euphorbiaceae
crownvetch[a]	*Securigera varia*	perennial	Fabaceae
falsedandelion, Carolina[a]	*Pyrrhopappus carolinianus*	annual/biennial	Asteraceae
fleabane, annual[a]	*Erigeron annus*	annual	Asteraceae
horsenettle, Carolina[a,b]	*Solanum carolinense*	perennial	Solanaceae
lettuce, prickly[a]	*Lactuca serriola*	annual	Asteraceae
pokeweed, common	*Phytolacca americana*	perennial	Phytolaccaceae
ragweed, common[a,b]	*Ambrosia artemisiifolia*	annual	Asteraceae
ragweed, western	*Ambrosia psilostachya*	perennial	Asteraceae
sneezeweed, bittera	*Helenium amarum*	annual	Asteraceae
thistle, bull[a,b]	*Cirsium vulgare*	biennial	Asteraceae
thistle, musk[a,b]	*Carduus nutans*	biennial	Asteraceae
thistle, plumeless[a,b]	*Carduus acanthoides*	biennial	Asteraceae
vervain, blue[a]	*Verbena hastata*	perennial	Asteraceae
vervain, hoary[a]	*Verbena stricta*	perennial	Asteraceae
vetch, common[a]	*Vicia sativa*	annual	Fabaceae
Rate Range: 1.5 to 2.1 pints (24 to 34 fluid oz) product per acre			
Beebalm, pony[a,b] (horse mint)	*Monarda pectinata*	annual	Lamiaceae
blackberry spp.[a,†]	*Rubus sp.*	perennial	Rosaceae
Blackbrush[a,†]	*Acacia rigidula*	perennial	Fabaceae
bullnettle, Texas[f]	*Cnidoscolus texanus*	perennial	Euphorbianceae
amaranth, spiny[a]	*Amaranthus spinosus*	annual	Amaranthaceae
burdock, common[a,b]	*Arctium minus*	biennial	Asteraceae
camphorweed[a]	*Heterotheca subaxillaris*	annual	Asteraceae
chickweed, common[a]	*Stellaria media*	annual	Caryophyllaceae
chicory[a]	*Cichorium intybus*	perennial	Asteraceae
Coneflower, upright prairie[g]	*Ratibida columnifera*	perennial	Asterceae
cudweed, purple	*Gnaphalium purpureum*	annual	Asteraceae
dandelion, common[a]	*Taraxacum officinale*	perennial	Asteraceae
dock, broadleaf[a]	*Rumex obtusifolius*	perennial	Polygonaceae
dock, curly[a]	*Rumex crispus*	perennial	Polygonaceae
dogfennel[c]	*Eupatorium capillifolium*	perennial	Asteraceae
evening primrose, cutleaf[a]	*Oenothera laciniata*	annual	Asteraceae
false dandelion, Carolina[a]	*Tragopogon dubius*	biennial	Asteraceae
fleabane, annual[a]	*Erigeron annus*	annual	Asteraceae
goldenrod, Canada[a]	*Solidago canadensis*	perennial	Asteraceae
goldenrod, Missouri[a]	*Solidago missouriensis*	perennial	Asteraceae
goldenrod, rigid	*Solidago rigida*	perennial	Asteraceae
gumweed, curlycup	*Grindelia squarrosa*	biennial	Asteraceae
henbit[a]	*Lamium amplexicaule*	annual/biennial	Lamiaceae
honeylocust	*Gleditsia triacanthos*	perennial	Fabaceae
horehound[†]	*Marrubium vulgare L.*	perennial	Lamiaceae
horseweed[a]	*Conyza canadensis*	annual	Asteraceae
Huisache[a.†]	*Acacia farnesiana*	perennial	Fabaceae
indigo, blue	*Baptisia australies*	perennial	Fabaceae
ironweed, tall	*Vernonia gigantea*	perennial	Asteraceae

Table 3: Broadleaf Weeds Controlled (Cont.)

Weed Species			
Common Name	**Scientific Name**	**Life Cycle[c]**	**Plant Family**
Rate Range: 1.5 to 2.1 pints (24 to 34 fluid oz) product per acre			
ironweed, western	*Vernonia baldwinii*	perennial	Asteraceae
kudzu[a,b]	*Pueraria montana*	perennial	Fabaceae
lambsquarters, common[a]	*Chenopodium album*	annual	Chenopodiaceae
lespedeza, annual	*Lespedeza striata*	annual	Fabaceae
Locust, black	*Robinia pseudoacacia*	perennial	Fabaceae
marshelder, annual[a]	*Iva annua*	annual	Asteraceae
medic, black[a]	*Medicago lupulina*	perennial	Fabaceae
mesquite, honey[a,†]	*Prosopis glandulosa*	perennial	Fabaceae
Mexican-tea	*Dysphania ambrosioides*	annual/ perennial	Chenopodiaceae
mullein[e]	*Verbascum spp.*	biennial	Scrophulariaceae
Nightshade, silverleaf[f]	*Solanum elaeagnifolium*	perennial	Solanaceae
partridgepea[a]	*Chamaecrista fasciculata*	annual	Fabaceae
plantain, broadleaf[a]	*Plantago major*	perennial	Plantaginaceae
plantain, buckhorn[a]	*Plantago lanceolata*	perennial	Plantaginaceae
pricklyash, lime[†]	*Zanthoxylum fagara*	perennial	Fabaceae
ragweed, false	*Parthenium hysterophorus*	annual	Asteraceae
Rose, Macartney[†]	*Rosa bracteata*	perennial	Fabaceae
rose, multiflora[e]	*Rosa multiflora*	perennial	Rosaceae
sicklepod[a]	*Senna obtusifolia*	annual	Fabaceae
sida, prickly[†]	*Sida spinosa*	annual	Malvaceae
smartweed, Pennsylvania	*Polygonum pensylvanicum*	annual	Polygonaceae
snow-on-the-mountain[†]	*Euphorbia marginata Pursh*	annual	Euphorbiaceae
soda apple, tropical[a,b]	*Solanum viarum*	perennial	Solanaceae
Spanish needles	*Bidens bipinnata*	annual	Asteraceae
sumac, smooth	*Rosa glabra*	perennial	Anacardiaceae
sunflower, common[a]	*Helianthus annua*	annual	Asteraceae
thistle, scotch	*Onopordum acanthium*	biennial	Asteraceae
yarrow, common[a]	*Achillea millefolium*	perennial	Asteraceae

[a]These plants are indicated to be invasive in the USDA-NRCS, PLANTS Database (http://plants.usda.gov/index.html).
[b]Plants designated as noxious weeds in at least one state (PLANTS Database, USDA-NRCS, http://plants.usda.gov/index.html).
[c]Spot treatment at rates up to 4.2 pints (68 fl oz) per acre of GrazonNext HL may be particularly effective against dense patches of perennial broadleaf plants.
[d] apply during rosette stage
[e]see specific use directions below for multiflora rose.
[f]apply at flowering stage
[g]apply when actively growing before flowering
[†]Suppression only

Specific Use Directions

Multiflora rose, individual plant treatment - Use 2.1 pints (34 fluid oz) of GrazonNext HL in 100 gal of water with 2 pints (32 fluid oz) or 0.25% v/v of a non-ionic surfactant. Or, 1.5 pints (24 fluid oz) of GrazonNext HL can be tank mixed with Remedy Ultra at 32 fl oz. Apply from full leaf through flowering. For best results, delay treatment for 9-12 months after mowing. Spot treatments may be applied at an equivalent broadcast rate of up to 4.2 points (68 fluid oz) of GrazonNext HL per acre per annual growing season; however, not more than 50% of an acre may be treated at that rate.

Multiflora rose, broadcast treatment: 1.5 to 2.1 points (24 to 34 fluid oz) per acre of GrazonNext HL can be tank mixed with Remedy Ultra at 1 pint (16 fluid oz) per acre. Apply from full leaf through flowering. For best results, delay treatment for 9-12 months after mowing.

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 specified 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:

1. The distance of the outer most operating nozzles on the boom must not exceed 75% of wingspan or 85% of rotor diameter.
2. 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 specified 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: The distance of the outer most operating nozzles on the boom must not exceed 75% of wingspan or 85% of rotor diameter.

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. To the extent permitted by law, 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. To the extent permitted by law, 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. To the extent permitted by law, all such risks shall be assumed by buyer.

Limitation of Remedies

To the extent permitted by law, 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.

To the extent permitted by law, 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. To the extent permitted by law, 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.

Produced for
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

Label Code: D02-392-001
Initial Printing
LOES Number: 010-02251

EPA accepted: 03/10/11