



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505P)
Ariel Rios Building
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

EPA Registration
 Number:
 352-766

Date of Issuance:

6-13-11

NOTICE OF PESTICIDE:

- Registration
- Reregistration

(under FIFRA, as amended)

Term of Issuance: **Unconditional**

Name of Pesticide Product: DuPont Lineage
 Clearstand

Name and Address of Registrant (include ZIP Code):

El du Pont de Nemours and Company
 P.O. Box 30
 Newark, DE 19714-0030

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

EPA received a label amendment request submitted on 6-3-11. EPA grants this request under the authority of section 3(c)(5) of the Federal Insecticide, Fungicide and Rodenticide Act, as amended. With this accepted labeling, all requirements set forth in the Reregistration Eligibility Decision (RED) for **imazapyr** have been satisfied. Therefore, EPA reregisters the product listed above. This action is taken under the authority of section 4(g)(2)(c) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended. Reregistration under this section does not eliminate the need for continual reassessment of pesticides. EPA may require submission of data at any time to maintain the registration of your product.

Submit one (1) copy of final printed labeling. Amended labeling will supersede all previously accepted labels. A copy of your label stamped "Accepted" is enclosed for your records. Products shipped after twelve (12) months from the date of this Notice or the next printing of your label, whichever occurs first, must bear the new revised label.

Signature of Approving Official:

Date:

6-13-11

Kable Bo Davis
 Product Manager 25
 Herbicide Branch
 Registration Division (7505P)



DuPont™ Lineage® Clearstand

herbicide

2/24

ACCEPTED

6-13-11

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 352-766

Dispersible Granules

Active Ingredient	By Weight
Imazapyr (2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid)	63.2%
Metsulfuron methyl	
Methyl 2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]-carbonyl]amino]sulfonyl]benzoate	9.5%
Other Ingredients	27.3%
TOTAL	100.0%

EPA Reg. No. 352-766

EPA Est. No. _____

Nonrefillable Container

Net: _____

OR

Refillable Container

Net: _____

KEEP OUT OF REACH OF CHILDREN

CAUTION

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

FIRST AID

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

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 eye. Call a poison control center or doctor for treatment advice.

If swallowed: 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 to an unconscious person. Call a poison control center or doctor for further treatment advice.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-441-3637 for emergency medical treatment information.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION! Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing.

Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are polyethylene and polyvinylchloride. If you want more options, follow the instructions for category A on an EPA chemical-resistant category selection chart.

Mixers, loaders, applicators and other handlers must wear:

Long-sleeved shirt and long pants.

Shoes plus socks.

Chemical resistant gloves for all mixers and loaders, plus applicators using handheld equipment.

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

Engineering Control Statement: Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in Worker Protection 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.

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.

ENVIRONMENTAL HAZARDS

This product is toxic to plants. Drift and run-off may be hazardous to plants in water adjacent to treated areas. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high watermark. Do not contaminate water when disposing of equipment washwater or rinsate. See Directions for Use for additional precautions and requirements.

PHYSICAL AND CHEMICAL HAZARDS

Spray solutions of DuPont™ LINEAGE® CLEARSTAND™ should be mixed, stored, and applied only in stainless steel, fiberglass, plastic, and plastic-lined steel containers.

Do not mix, store, or apply LINEAGE® CLEARSTAND™ or spray solutions of LINEAGE® CLEARSTAND™ in unlined steel (except stainless steel) containers or spray tanks.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

LINEAGE® CLEARSTAND™ must be used only in accordance with the instructions on the label.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

PRODUCT INFORMATION

LINEAGE® CLEARSTAND™ herbicide is a dispersible granule that is mixed in water and applied as a spray by ground or aerial application.

LINEAGE® CLEARSTAND™ is labeled for the control of annual and perennial weeds and unwanted woody plants on conifer plantations (release), private, public and military lands, on rights-of-way, industrial sites, non-agricultural areas, rangeland, pasture, wildlife management areas, ditch banks of dry drainage ditches, and certain types of unimproved turf grass, including grazed areas on these sites. It may also be used to control weeds along the banks of drainage canals or ditches. Only treat up to the outer edge of a drainage ditch or canal when it contains water. Do not apply LINEAGE® CLEARSTAND™ on irrigation ditches or canals. Do not apply LINEAGE® CLEARSTAND™ on dry irrigation canals or dry irrigation ditches.

LINEAGE® CLEARSTAND™ may be applied on conifer plantations, wildlife management areas, rangeland and pasture and non-agricultural areas that contain areas of temporary surface water caused by the collection of water between planting beds, in equipment ruts, or in other depressions created by management activities in these sites, except in the states of California and New York. It is permissible to treat drainage ditches, intermittent drainage sites, intermittently flooded low lying sites, seasonally dry flood plains, and transitional areas between upland and low land sites when no water is present, except in the states of California and New York. It is also permissible to treat marshes, swamps, and bogs after water has receded, as well as seasonally dry flood deltas, except in the states of California and New York.

LINEAGE® CLEARSTAND™ may be applied by ground spray equipment (boom sprayers, backpack sprayers, tree injection, etc.). LINEAGE® CLEARSTAND™ may also be applied by aerial spray equipment.

Aerial equipment designed to minimize spray drift, such as a Helicopter equipped with a "Microfoil" boom, "Thru-Valve" boom or raindrop nozzles, must be used. Except when applying with a "Microfoil" boom, a drift control agent may be added at the specified rate.

LINEAGE® CLEARSTAND™ controls weeds and woody plants primarily by postemergent activity. Although LINEAGE® CLEARSTAND™ has preemergence activity, best results are generally obtained when LINEAGE® CLEARSTAND™ is applied to foliage after emergence or dormancy break. Generally, for the control of annual weeds, LINEAGE® CLEARSTAND™ provides the best results when applied to young, actively growing weeds. For the control of perennial weeds, applications made at the bud/bloom stage or while the target weeds are in the fall rosette stage may provide the best results. The use rate depends upon the weed species and size at the time of application. The degree and duration of control may depend on the following:

- weed spectrum and infestation intensity
- weed size at application

- environmental conditions at and following treatment
- soil pH, soil moisture, and soil organic matter.

Good spray coverage of the target plant is desired. Excessive wetting which causes the spray to run off target plants must be avoided.

Note: Injury or loss of desirable trees or other plants may result if DuPont™ LINEAGE® CLEARSTAND™ is applied on or near desirable trees or other plants, on areas where their roots extend, or in locations where the treated soil may be washed or moved into contact with their roots.

Applying or draining or flushing equipment on or near sensitive desirable plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots may cause severe injury or death to these plants

Do not treat irrigation ditches, or water used for crop irrigation or for domestic uses.

BIOLOGICAL ACTIVITY

LINEAGE® CLEARSTAND™ is quickly taken up by the leaves, stems and roots of plants with accumulations occurring in the growing points of the plant. Growth of treated plants stop soon after treatment. Within one to three weeks after application, the leaves begin to turn yellow (chlorosis) and then gradually become necrotic. Death of the plants may require several more weeks. LINEAGE® CLEARSTAND™ is rain-fast at one hour after application.

TANK MIXTURES

LINEAGE® CLEARSTAND™ herbicide may be tank mixed with other herbicides and /or adjuvants registered for the uses specified in the product label. Refer to the label of the tank mix partner for any additional instructions or use restrictions. Tank mixing with 2,4 -D or products which contain 2,4-D have resulted in reduced performance of LINEAGE® CLEARSTAND™. An anti-foaming agent, spray pattern indicator or drift reducing agent may be applied at the product labeled rate if needed or desired.

ADJUVANTS

For best performance, include a spray adjuvant when making postemergence applications of LINEAGE® CLEARSTAND™.

Non-ionic Surfactants: Use a non-ionic surfactant at a minimum rate of 0.25% v/v (1 quart surfactant per 100 gallons of spray solution). Surfactant products must contain at least 70% non-ionic surfactant with a hydrophilic/lipophilic balance (HLB) of 12 to 17.

Methylated Seed Oils or Vegetable Oils: Under temperature or moisture stress conditions, a methylated seed oil (MSO) or vegetable oil based adjuvant may provide increased leaf absorption of LINEAGE® CLEARSTAND™. For spray volumes of less than 30 gallons per acre use a rate of 1.5 to 2 pints per acre. For higher volume applications, spray volumes greater than 30 gallons per acre, include the MSO or vegetable oil adjuvant at 1% v/v (1 gallon per 100 gallons of spray solution).

Silicone Based Surfactants: Silicone based adjuvants reduce the surface tension of the spray droplet allowing better coverage of the leaf surface compared to some nonionic surfactants. In some cases, the silicone adjuvant may dry to quickly limiting uptake. Refer to the manufacturers instructions for use rates.

Invert Emulsions: LINEAGE® CLEARSTAND™ may be applied as an invert emulsion. The spray solution results in an invert (water-in-oil) spray emulsion designed to minimize spray drift and spray run-off, resulting in more herbicide on the target foliage. The spray emulsion may be formed in a single tank (batch mixing) or injected (in-line mixing). Consult the invert chemical label for proper mixing directions.

Ammonium Nitrogen Fertilizer: In addition to a non-ionic surfactant or seed oil concentrate, ammonium nitrogen fertilizer may be added to the LINEAGE® CLEARSTAND™ spray solution. Use 32 to 48 ounces per acre of a high-quality urea ammonium nitrate (UAN), such as 28% N or 32% N, or a spray-grade ammonium sulfate (AMS).

RESISTANCE

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field. Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different site of action. To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes, it may be necessary to change cultural practices within and between crop seasons such as using a combination of tillage, retreatment, tank-mix partners and/or sequential herbicide applications that have a different site of action. Weed escapes that are allowed to go to seed will promote the spread of resistant biotypes. It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant

biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative cultural practices or herbicide recommendations available in your area.

INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

INVASIVE SPECIES MANAGEMENT

This product may be considered for use on public, private, and tribal lands to treat certain weed species infestations that have been determined to be invasive, consistent with the Federal Interagency Committee for the Management of Noxious and Exotic Weeds (FICMNEW) National Early Detection and Rapid Response (EDRR) System for invasive plants. Effective EDRR systems address invasions by eradicating the invader where possible, and controlling them when the invasive species is too established to be feasibly eradicated. Once an EDRR assessment has been completed and action is recommended, a Rapid Response needs to be taken to quickly contain, deny reproduction, and if possible eliminate the invader. Consult your appropriate state extension service, forest service, or regional multidisciplinary invasive species management coordination team to determine the appropriate Rapid Response provisions and allowed treatments in your area.

PREPARING FOR USE - SITE SPECIFIC CONSIDERATIONS

Understanding the risks associated with the application of DuPont™ LINEAGE® CLEARSTAND™ is essential to aid in preventing off-site injury to desirable vegetation and agricultural crops. The risk of off-site movement both during and after application may be affected by a number of site specific factors such as the nature, texture and stability of the soil, the intensity and direction of prevailing winds, vegetative cover, site slope, rainfall, drainage patterns, and other local physical and environmental conditions. A careful evaluation of the potential for off-site movement from the intended application site, including movement of treated soil by wind or water erosion, must be made prior to using LINEAGE® CLEARSTAND™. This evaluation is particularly critical where desirable vegetation or crops are grown on neighboring land for which the use of LINEAGE® CLEARSTAND™ is not labeled. If prevailing local conditions may be expected to result in off-site movement and cause damage to neighboring desirable vegetation or agricultural crops, do not apply LINEAGE® CLEARSTAND™.

Before applying LINEAGE® CLEARSTAND™ the user must read and understand all label directions, precautions and restrictions completely, including these requirements for a site specific evaluation. If you do not understand any of the instructions or precautions on the label, or are unable to make a site specific evaluation yourself, consult your local agricultural dealer, cooperative extension service, land managers, professional consultants, or other qualified authorities familiar with the area to be treated. If you still have questions regarding the need for site specific considerations, please call 1-888-6-DUPONT.

AGRICULTURAL USES

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
- Protective eyewear
- Shoes plus socks
- Chemical resistant gloves made of any waterproof material

**CONIFER PLANTATIONS
CONIFER SITE PREPARATION**

After consulting the "Weeds Controlled" and "Brush Species Controlled" tables, apply the rate of DuPont™ LINEAGE® CLEARSTAND™ needed to control the most difficult species on the site.

LOBLOLLY AND SLASH PINE

Apply up to 25 ounces per acre for Loblolly and Slash pines. Transplant the following planting season.

For the control of the brush species listed below, apply LINEAGE® CLEARSTAND™ the rates of 8 to 16 ounces per acre.

Loblolly and slash pines may be transplanted the planting season following application. This application controls ash, black gum, cherry, hawthorn, honeysuckle, hophornbeam, persimmon, oaks (red, white and water), sassafras, sweetgum, vaccinium species, and suppresses blackberry, dogwood, elms, myrtle dahoon, hickory, and red maple.

Note: Where burning is desired, burn only after adequate rainfall has occurred to move LINEAGE® CLEARSTAND™ into the soil. Soil disturbance from bedding or plowing may reduce spring herbaceous weed control.

CONTROL OF PINE AND HARDWOOD SEEDLINGS AND SAPLINGS

To control a combination of pine and hardwood seedlings and saplings in site preparation areas, apply a tank mixture of LINEAGE® CLEARSTAND™ at 8 to 16 ounces per acre plus DuPont™ KRENITE® S at 4 to 6 quarts per acre. Use the higher rates when either pine saplings predominate or when high infestations of seedling pines are in the area to be sprayed.

This tank mix may be used for the control of Ash, Blackberry, Blackgum, Black locust, Box elder, Cherry, Dogwood, Elms (winged, slippery), Oaks (red, white), Red maple, Sassafras, and Sourwood.

Douglas fir and Ponderosa pine - Apply up to 13 ounces per acre prior to planting Douglas fir and Ponderosa pine in the coastal range and western slope of the Cascades in Oregon and Washington. The conifer species listed can be planted anytime after application. Other conifer species can be planted providing the user has prior experience indicating acceptable tolerance to LINEAGE® CLEARSTAND™ soil residues.

TANK MIXTURES

Glyphosate (4 pound active per gallon): Tank mix 8 to 16 ounces of LINEAGE® CLEARSTAND™ with 2 to 10 quarts of glyphosate per acre. Refer to the product container for a list of additional species controlled.

CONIFER RELEASE

A broadcast or directed application of LINEAGE® CLEARSTAND™ may be used to control labeled herbaceous, tree or brush species. In all ages of conifer stands, a low volume, directed spray application may be made to the targeted weed species while avoiding contact with the conifer foliage. Make sure to not apply more than the rates listed below as conifer injury may occur. Where infestations of hardwood brush species are competing with the conifers, make a broadcast application of LINEAGE® CLEARSTAND™ at the rate per conifer species listed below. Use the higher herbicide rates for heavy weed/brush infestations, hard to control species and dense hardwood canopies.

<u>Conifer Species</u>	<u>Rate (ounces per acre)</u>
Loblolly pine	9 - 16
Slash pine	9 - 16

MID ROTATION RELEASE:

For broadcast applications underneath the pine canopy in established stands of Loblolly pine, use 13 to 19 ounces per acre. For mid rotation release of Slash pine, use the rates listed above.

Note: In Slash pine stands, to control woody brush, make broadcast over-the-top release applications after August 15th. Only make applications to Slash pines that are 2 to 5 years old. Do not include an adjuvant and use the lower release rates on sandy soils. When release applications are made during periods of active conifer growth, minor stunting (slowing of growth) may occur. In conifers, except loblolly pine, only make broadcast applications of LINEAGE® CLEARSTAND™ after the second season of growth. To reduce the potential for minor stunting, make broadcast release applications late in the growing season.

During the first growing season after planting of loblolly pines or in one year old naturally regenerated loblolly pine sites, LINEAGE® CLEARSTAND™ may be used for release treatments. For release of loblolly pines that are one year old apply LINEAGE® CLEARSTAND™ at 9 to 16 ounces per acre. These applications may only be made after July 15th. Use rates below 13 ounces per acre will provide only suppression of hardwood brush and some re-sprouting must be expected. A non-ionic surfactant at 0.25% v/v may be included with this treatment. For hard to control species or heavy infestations, use the higher labeled rates of LINEAGE® CLEARSTAND™.

Do not apply DuPont™ LINEAGE® CLEARSTAND™ when conifers are under stress from diseases, drought, animal or winter injury or other environmental or mechanical stresses as injury may occur.

SPOT TREATMENT – RELEASE

In all ages of conifers, a directed postemergence or cut stem application of LINEAGE® CLEARSTAND™ may be applied to control unwanted hardwoods or other brush. Injury may also occur to desired hardwoods or conifers where their roots extend into the treated area or if they share the same root system or their roots have become grafted to those of the treated trees.

MIXING AND APPLICATION INFORMATION - CONIFER PLANTATIONS

LINEAGE® CLEARSTAND™ herbicide must be applied at the following use rates depending upon the vegetation to be controlled and the type of application being made. Use the higher spray volumes and herbicide rates for heavy weed/brush infestations, hard to control species and dense hardwood canopies.

<u>Vegetation</u>	<u>Application</u>	<u>Use Rate</u>
Hardwood trees and brush	Directed foliar or spot spray	2.6 to 5.2 ounces per 3 gallons of water
Stump or cut stem		5.2 ounces per gallon of water
Herbaceous weeds	Broadcast	2.6 to 7.8 ounces per acre

See specific use directions in appropriate section.

GROUND OPERATED SPRAY EQUIPMENT

Thoroughly mix and apply the specified amount of LINEAGE® CLEARSTAND™ herbicide in a minimum of 5 gallons of water per acre.

To mix, fill the spray tank with one-half to three-quarters of the desired volume with clean water. Add the required amount of LINEAGE® CLEARSTAND™ to the spray tank while agitating. Add additional water to achieve the desired spray volume and agitate again. A suitable adjuvant (see Adjuvant section) may be added to the spray solution to enhance control of undesirable vegetation. A drift control agent and a foam reducing agent may be added at the specified label rates, if needed. If desired, a spray pattern indicator may be added at the specified label rate.

For best results, uniformly cover the foliage of the vegetation to be controlled with the spray solution.

Side Trimming: Do not side trim with LINEAGE® CLEARSTAND™ unless severe injury or death of the treated tree can be tolerated. LINEAGE® CLEARSTAND™ is readily translocated and can result in death of the entire tree.

DIRECTED FOLIAR OR SPOT SPRAY APPLICATIONS

When making directed or spot spray applications with ground spray equipment, or low-volume hand-operated spray equipment, thoroughly mix a solution of LINEAGE® CLEARSTAND™ and include a nonionic surfactant at a minimum of 0.25% by volume.

To mix the spray solution, add the volume of LINEAGE® CLEARSTAND™ and nonionic surfactant indicated in the table below to the desired amount of water. Use the higher spray volumes and herbicide rates for heavy weed/brush infestations, hard to control species and dense hardwood canopies.

<u>SPRAY SOLUTION VOLUME</u>	<u>LINEAGE® CLEARSTAND™</u>	<u>SURFACTANT (fluid ounce)</u>
2.5 gallons	2.6 to 5.2 ounces	0.8
4 gallons	4.2 to 8.3 ounces	1.5
5 gallons	5.2 to 10.7 ounces	1.6
10 gallons	10.7 to 21.4 ounces	3.2
20 gallons	21.4 to 41.6 ounces	6.4

Important: Do not over apply causing run-off from the treated foliage. Avoid direct application to desired plant species as injury may occur. Do not apply on or near desirable non-conifer trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. Do not exceed 25 ounces of LINEAGE® CLEARSTAND™ herbicide per acre.

Application Tips: For low volume, select proper nozzles to avoid over-application. Proper application is critical to ensure desirable results. Best results are achieved when the spray covers the crown and approximately 70 percent of the plant.

Proper Spray Pattern: Moisten but do not drench target vegetation causing spray solution to run off.

Low Volume with Backpacks: For brush up to 4 feet tall, spray down on the crown, covering crown and penetrating approximately 70% of the plant.

For brush 4 to 8 feet tall: Lace the sides of the brush by directing spray to at least two sides of the plant in smooth vertical motions from the crown to the bottom. Make sure to cover the crown when ever possible.

For brush over 8 feet tall: Lace the sides of the brush by directing spray to at least two sides of the target in smooth zigzag motions from crown to bottom.

Low Volume with Hydraulic Handgun Application Equipment: Use same technique as described above for individual stem treatments.

BROADCAST APPLICATIONS

For broadcast applications, simulate a gentle rain near the top of target vegetation, allowing spray to contact the crown and penetrate the target foliage without falling to the understory. Herbicide spray solution which contacts the under story may result in severe injury or death of plants in the under story. Do not exceed 30 ounces of DuPont™ LINEAGE® CLEARSTAND™ herbicide per acre broadcast.

STUMP AND CUT STEM TREATMENTS

LINEAGE® CLEARSTAND™ may be used to control undesirable woody vegetation by applying a solution of the herbicide in water to the cambium area of freshly-cut stump surfaces or to cuts on the stem of the target woody vegetation. Applications can be made at any time of the year except during periods of heavy sap flow in the spring. Tree injection and cut stem treatments are most effective in late summer and early fall.

Mixing: LINEAGE® CLEARSTAND™ herbicide may be mixed and applied as a dilute solution to the surface of the stump or to cuts on the stem of the target woody vegetation. To prepare a dilute solution, thoroughly mix 5 ounces of LINEAGE® CLEARSTAND™ with one gallon of water.

For cut stump treatments: Spray or brush the solution onto the cambium area of the freshly cut stump surface. Insure that the solution thoroughly wets the entire cambium area (the wood next to the bark of the stump).

For tree injection treatments: Using standard injection equipment, apply 1 milliliter of solution at each injection site around the tree with no more than one inch intervals between cut edges. Insure that the injector completely penetrates the bark at each injection site.

For frill or girdle treatments: Using a hatchet, machete, or similar device, make cuts through the bark at intervals around the tree with no more than two-inch intervals between cut edges. Spray or brush the solution into each cut until thoroughly wet.

HERBACEOUS WEED CONTROL TREATMENTS

LINEAGE® CLEARSTAND™ may be applied as a broadcast treatment using ground sprayers or as a directed treatment using backpack or hand-held sprayers for the control of herbaceous weeds. For broadcast treatments apply LINEAGE® CLEARSTAND™ at rates of 2.6 to 7.8 ounces per acre and include a minimum of 0.25% by volume nonionic surfactant.

IMPORTANT PRECAUTIONS AND RESTRICTIONS - CONIFER PLANTATIONS

- Applications of LINEAGE® CLEARSTAND™ made to conifers that are suffering from loss of vigor caused by insects, diseases, drought, winter damage, animal damage, excessive soil moisture, planting shock, or other stresses may injure or kill the trees.
- Applications of LINEAGE® CLEARSTAND™ made for herbaceous release must only be made after adequate rainfall has closed the planting slit and settled the soil around the roots following transplanting.
- Do not apply LINEAGE® CLEARSTAND™ to conifers grown as ornamentals.
- LINEAGE® CLEARSTAND™ applications may result in damage and mortality to other species of conifers when they are present on sites with those listed in the preceding instructions for conifer plantations.

WILDLIFE HABITAT MANAGEMENT

LINEAGE® CLEARSTAND™ herbicide may be used to control exotic and other undesirable vegetation for purposes of wildlife habitat management and enhancement within forests as well as terrestrial non-agricultural sites. Applications can be made to control undesirable vegetation (see WEEDS CONTROLLED section) prior to planting desirable species and to release desirable plant species. Spot, directed foliar and cut stump and stem treatments can be made to selectively control unwanted plants for wildlife habitat management and enhancement.

**PASTURE AND RANGELAND
SPOT APPLICATIONS**

DuPont™ LINEAGE® CLEARSTAND™ may be used as a spot treatment for weed control in rangelands and grass pastures. Apply with ground equipment at the rate of 0.8 to 10 ounces per acre. Do not treat more than one tenth of the area to be cut for hay or grazed. Do not apply more than 10 ounces per acre per year.

Do not cut forage grass until 7 days after a LINEAGE® CLEARSTAND™ application. There are no restrictions for grazing. For rangeland areas, LINEAGE® CLEARSTAND™ must only be applied to control specific problem weeds. The successful weed management program depends on land management practices that promote the growth and development of desirable plant species.

LINEAGE® CLEARSTAND™ herbicide controls non-native, invasive and noxious weeds in rangeland to aid in maintaining or establishing desirable plant species during normal conditions and following a fire. It is also used to control vegetation that could fuel wildfires or to help wildlife habitat improvement by suppressing/controlling undesirable vegetation or to release existing desirable rangeland plant communities from competing undesirable plants.

Caution must be used to protect threatened and endangered plants when applying LINEAGE® CLEARSTAND™ in rangeland. To identify endangered plants in your area, work with the Fish and Wildlife Service or state conservation agencies to ensure protection of threatened or endangered plants. Federal agencies follow NEPA regulations but other organizations or people must operate under a Habitat Conservation Plan to ensure the protection of threatened and endangered plants.

ROTATIONAL CROP GUIDELINES

When used at the specified rangeland and pasture rates, rotational crops may be planted 12 months after applications of LINEAGE® CLEARSTAND™. Prior to planting any crop a successful field bioassay must be completed -- field bioassay to be completed after the 12 month interval. The field bioassay consists of a test strip of the intended rotational crop planted in the previously treated area in the grass pasture/rangeland sites and grown to maturity. The test strip must include low areas and knolls, and include variations in soil type and pH within the treated area. If no crop injury is evident in the test strip, the intended rotational crop may be planted the following year. LINEAGE® CLEARSTAND™ used in specified label directions can allow for normal growth of rotational crops but environmental and agronomic factors may vary resulting in injury to rotational crops at times.

NON-AGRICULTURAL USES

<p>NON-AGRICULTURAL USE REQUIREMENTS</p> <p>The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard (WPS) 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.</p> <p>Do not enter or allow worker entry into treated areas until sprays have dried.</p>

PRODUCT INFORMATION

LINEAGE® CLEARSTAND™ herbicide is to be mixed with water and a surfactant, unless otherwise directed, and applied as a spray for the control of undesirable vegetation in terrestrial non-agricultural sites and unimproved turf.

LINEAGE® CLEARSTAND™ herbicide is to be applied as a spray solution for general weed and brush control on private, public and military lands as follows: uncultivated non-agricultural areas (including airports, highway, railroad and utility rights-of-way, sewage disposal areas); uncultivated agricultural areas - non-agricultural producing (including farmyards, fuel storage areas, fence rows, non-irrigation ditch banks, barrier strips); industrial sites - outdoor (including lumberyards, pipeline and tank farms) including grazed or hayed areas on these sites. This product may be applied to terrestrial non-agricultural sites and unimproved turf sites that contain areas of temporary surface water caused by collection of water, in equipment ruts, or in other depressions created by management activities. It is permissible to treat intermittently flooded low lying sites, seasonally dry flood plains and transitional areas between upland and lowland sites when no water is present. It is also permissible to treat marshes, swamps and bogs after water has receded, as well as seasonally dry flood deltas. It may also be used to control weeds along the banks of drainage canals or ditches. Only treat up to the outer edge of a drainage ditch or canal when it contains water. Do not apply LINEAGE® CLEARSTAND™ on irrigation ditches or canals. Do not apply LINEAGE® CLEARSTAND™ on dry irrigation canals or dry irrigation ditches.

LINEAGE® CLEARSTAND™ provides preemergence and postemergence control of the broadleaf weeds, perennial and annual grasses, vines and brush species found on the label. For perennial species on the label, a postemergence application may be used. For best performance, an adjuvant may be included to the spray solution (see Adjuvants section for specific instructions). Applications may be made by ground or air. Use a sufficient volume of water to ensure thorough coverage of the target vegetation with the application equipment being used.

Excessive wetting which causes the spray to run off target plants must be avoided. DuPont™ LINEAGE® CLEARSTAND™ may be applied by either ground or aerial spray equipment. Note: Injury or loss of desirable trees or other plants may result if LINEAGE® CLEARSTAND™ is applied on or near desirable trees or other plants, on areas where their roots extend, or in locations where the treated soil may be washed or moved into contact with their root.

APPLICATION INFORMATION - BRUSH

AERIAL APPLICATIONS

LINEAGE® CLEARSTAND™ may be applied by either fixed wing aircraft or helicopter spray equipment. Fixed wing aircraft and helicopters can be used to apply LINEAGE® CLEARSTAND™, however, do not make applications by fixed wing aircraft unless appropriate buffer zones can be maintained to prevent spray drift out of the target area or, when treating open tracts of land, spray drift as a result of fixed wing aircraft application can be tolerated. Aerial equipment designed to minimize spray drift, such as a helicopter equipped with a “Microfoil” boom, “Thru-Valve” boom or raindrop nozzles, must be used and calibrated. Except when applying with a “Microfoil” boom, a drift control agent may be added at the specified rate.

For brush sites, apply the specified amount of LINEAGE® CLEARSTAND™ in a sufficient spray volume to provide uniform coverage of the treated area and to avoid spray drift. Include a nonionic surfactant or methylated seed oil or a silicone based surfactant in the spray solution (see **Adjuvant** section). A foam reducing agent may be added at the specified label rate, if needed. Side trimming is not advised with LINEAGE® CLEARSTAND™ unless death of the treated tree can be tolerated. All precautions must be taken to minimize or eliminate spray drift.

Important: Thoroughly clean application equipment, including landing gear, immediately after use of this product. Prolonged exposure of this product to uncoated steel (except stainless steel) surfaces may result in corrosion and failure of the exposed part. The maintenance of an organic coating (paint) may prevent corrosion.

GROUND APPLICATIONS

LOW VOLUME APPLICATIONS

Apply LINEAGE® CLEARSTAND™ in a minimum of 5 gallons of spray solution per acre. Prepare the spray solution by thoroughly mixing in water a sufficient quantity of LINEAGE® CLEARSTAND™ to apply 5 to 10 ounces per acre of LINEAGE® CLEARSTAND™ plus an adjuvant (see the Adjuvant section). Do not apply more than 25 ounces per broadcast acre of LINEAGE® CLEARSTAND™. Good plant coverage is necessary for best results. The spray solution must cover the crown and at least 75% of the plant. Use adequate spray volume to help provide uniform distribution of spray droplets over the treated area and to avoid spray drift. Use the higher rates for hard to control brush species.

Important: Use 6 to 19 ounces LINEAGE® CLEARSTAND™ per acre in combination with other tank mixes when treating rights-of-way corridors that may have roots of desired trees extending into the treated area. Do not use more than 19 ounces per acre of LINEAGE® CLEARSTAND™ in these areas as death to desired trees may occur. Add a spray pattern indicator, if desired, at the specified label rates. Clean application equipment after using this product by thoroughly flushing with water.

Side Trimming: Side trimming with LINEAGE® CLEARSTAND™ can cause severe injury or death to the treated tree. Do not make side trimming applications unless death of the tree is acceptable.

Application Tips: For low volume, select proper nozzles to avoid over-application. Proper application is critical to ensure desirable results. Best results are achieved when the spray covers the crown and approximately 70 percent of the plant.

Proper Spray Pattern: Moisten but do not drench target vegetation causing spray solution to run off.

Low Volume with Backpacks: For brush up to 4 feet tall, spray down on the crown, covering crown and penetrating approximately 70% of the plant.

For brush 4 to 8 feet tall: Lace the sides of the brush by directing spray to at least two sides of the plant in smooth vertical motions from the crown to the bottom. Make sure to cover the crown when ever possible.

For brush over 8 feet tall: Lace the sides of the brush by directing spray to at least two sides of the target in smooth zigzag motions from crown to bottom.

Low Volume with Hydraulic Handgun Application Equipment: Use same technique as described above for individual stem treatments.

BACKPACK SPRAYERS

For backpack manual sprayer applications, spray down on the crown and ensure coverage of 70% of the brush plant for plants up to 4 feet tall. When the plants are up to 8 feet tall, treat at least two sides of the plant. Make swipes vertically from the crown to the base of the plant, covering the crown. If brush plants are over 8 feet tall, lace at least two sides of the plants with back and forth movements starting at crown and moving downward to base.

HYDRAULIC HANDGUN EQUIPMENT

When making broadcast applications, apply near the tops of the brush plants in a light drizzle pattern. The spray solution must reach the crown of the plants and trickle down into the canopy but not reach the under-story plant growth as severe injury or death of the under-story plants could occur.

HIGH VOLUME APPLICATIONS

When treating medium to high infestations of brush, apply DuPont™ LINEAGE® CLEARSTAND™ at up to 100 gallons of spray solution per acre (GPA). Mix LINEAGE® CLEARSTAND™ at 13 to 25 ounces per acre plus a surfactant. Add a foam reducing agent if needed. Use the higher rate for hard to control brush species but do not apply more than 25 ounces per acre. Apply evenly to cover brush foliage but don't over apply causing run-off.

Note: Spray applications exceeding 100 GPA may cause injury to the under-story or ground cover due to spray runoff.

Important: Do not over apply causing run-off from the treated foliage. Avoid direct application to desired plant species as injury may occur. Do not apply on or near desirable non-conifer trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. Do not exceed 25 ounces of LINEAGE® CLEARSTAND™ herbicide per acre.

INVERT EMULSIONS APPLICATIONS

LINEAGE® CLEARSTAND™ can be applied as an invert emulsion (water in oil). This can be done in a batch mixing (single tank) or inline-mixing (injected) process. Follow the directions on the invert chemical guide.

APPLICATION TIMING

Make a foliar application of the specified rate of LINEAGE® CLEARSTAND™ during the period from full leaf expansion in the spring until the development of full fall coloration on deciduous species to be controlled. Coniferous species may be treated at anytime during the growing season.

SPOT TREATMENT

LINEAGE® CLEARSTAND™ is labeled for the control of many species of weeds including noxious/invasive weeds in certain established grasses growing on non-agricultural areas. Refer to the "Brush and Weeds Controlled" sections for a listing of susceptible weed species and the application rate per acre per the target weed.

BRUSH SPECIES CONTROLLED

Species		High Volume Rate (oz/100 gal)	Broadcast Rate (oz/acre)
Salmonberry	<i>Rubus spectabilis</i>	3 - 6	6 - 19
Snowberry	<i>Symphoricarpos albus</i>	3 - 6	6 - 19
Thimbleberry	<i>Rubus parviflorus</i>	3 - 6	6 - 19
Wild roses	<i>Rosa spp.</i>	3 - 6	6 - 19
Willow	<i>Salix spp.</i>	3 - 6	6 - 19
Yellow poplar	<i>Liriodendron tulipifera</i>	3 - 6	6 - 19
Ash	<i>Fraxinus spp.</i>	6 - 13	6 - 19
Aspen	<i>Populus spp.</i>	6 - 13	6 - 19
Blackberry	<i>Rubus spp.</i>	6 - 13	6 - 19
Blueberry	<i>Vaccinium spp.</i>	6 - 13	13 - 19
Camelthorn	<i>Alhagi maurorum</i>	6 - 13	6 - 19
Cherry	<i>Prunus spp.</i>	6 - 13	6 - 19
Cottonwood, black	<i>Populus trichocarpa</i>	6 - 13	13 - 19
Cottonwood, eastern	<i>Populus deltoides</i>	6 - 13	13 - 19
Dogwood	<i>Cornus spp.</i>	6 - 13	13 - 19
Elder	<i>Sambucus nigra</i>	6 - 13	13 - 19
Elm	<i>Ulmus spp.</i>	6 - 13	6 - 19
Grape, wild	<i>Vitis spp.</i>	6 - 13	13 - 19
Gum, black	<i>Nyssa sylvatica</i>	6 - 13	13 - 19
Hawthorn	<i>Crataegus spp.</i>	6 - 13	6 - 19
Hickory	<i>Carya spp.</i>	6 - 13	13 - 19
Honeysuckle	<i>Lonicera spp.</i>	6 - 13	6 - 13
Hophornbeam	<i>Ostrya virginiana</i>	6 - 13	6 - 19
Locust, black	<i>Robinia pseudoacacia</i>	6 - 13	6 - 19
Mulberry	<i>Morus spp.</i>	6 - 13	13 - 19
Myrtle dahoon	<i>Ilex myrtifolia</i>	6 - 13	13 - 19
Oaks	<i>Quercus spp.</i>	6 - 13	6 - 19
Ocean Spray	<i>Holodiscus</i>	6 - 13	13 - 19
Osage orange	<i>Maclura pomifera</i>	6 - 13	13 - 19
Persimmon	<i>Diospyros virginiana</i>	6 - 13	13 - 19
Red cedar, eastern	<i>Juniperus virginiana</i>	6 - 13	13 - 19
Red maple	<i>Acer rubrum</i>	6 - 13	13 - 19
Rose, MacCartney	<i>Rosa bracteata</i>	6 - 13	6 - 19
Rose, multiflora	<i>Rosa multiflora</i>	6 - 13	6 - 19
Sassafras	<i>Sassafras albidum</i>	6 - 13	13 - 19
Sparkleberry	<i>Vaccinium arboreum</i>	6 - 13	13 - 19
Sweetgum	<i>Liquidambar styraciflua</i>	6 - 13	13 - 19
Tree of heaven	<i>Ailanthus altissima</i>	6 - 13	6 - 13
Vaccinium spp		6 - 13	13 - 19
Firs	<i>Abies spp.</i>	19	13 - 19

Spruce, black	<i>Picea mariana</i>	19	13 - 19
Spruce, white	<i>Picea glauca</i>	19	13 - 19
Alder	<i>Alnus spp.</i>	25	25
Alder, red	<i>Alnus rubra</i>	25	25
Beech, American	<i>Fagus grandifolia</i>	25	25
Birch	<i>Betula spp.</i>	25	25
Boxelder	<i>Acer negundo</i>	25	25
Ceanothis	<i>Ceanothis spp.</i>	25	25
Chinaberry	<i>Melia azadarach</i>	25	25
Chinquapin	<i>Castanopsis chrysophylla</i>	25	25
Cypress	<i>Taxodium spp.</i>	25	25
Cypress, bald	<i>Taxodium distichum</i>	25	25
Eucalyptus	<i>Eucalyptus spp.</i>	25	25
Fetterbush	<i>Lyonia lucida</i>	25	25
Lyonia bush	<i>Lyonia spp.</i>	25	25
Madrone	<i>Arbutus menziesii</i>	25	25
Maple, bigleaf	<i>Acer macrophyllum</i>	25	25
Melaleuca	<i>Melaleuca quiquenervia</i>	25	25
Mulberry ²	<i>Morus spp.</i>	25	25
Poison oak	<i>Rhus diversiloba</i>	25	25
Popcorn tree	<i>Sapium sebiferum</i>	25	25
Poplar	<i>Populus spp.</i>	25	25
Privet	<i>Ligustrum vulgare</i>	25	25
Olive, autumn	<i>Elaeagnus umbellata</i>	25	25
Olive, Russian	<i>Elaeagnus angustifolia</i>	25	25
Saltcedar	<i>Tamarix ramosissima</i>	25	25
Sourwood ¹	<i>Oxydendrum arboreum</i>	25	25
Staggerbush	<i>Lyonia mariana</i>	25	25
Sumac	<i>Rhus spp.</i>	25	25
Sycamore	<i>Platanus occidentalis</i>	25	25
Tallowtree, Chinese	<i>Sapium sebiferum</i>	25	25
Tanoak	<i>Lithocarpus densiflorus</i>	25	25
TiTi	<i>Cyrilla racemiflora</i>	25	25

1 - Best control prior to fall leaf color.

2 - Degree of control may be species dependent.

NOTE: For low volume and ultra-low volume ground applications, add 25 ounces of DuPont™ LINEAGE® CLEARSTAND™ per 100 gallons of spray solution.

MIXING AND APPLICATION INFORMATION

LINEAGE® CLEARSTAND™ herbicide must be applied at the following use rates depending upon the vegetation to be controlled and the type of application being made. Use the higher spray volumes and herbicide rates for heavy weed/brush infestations, hard to control species and dense hardwood canopies.

<u>Vegetation</u>	<u>Application</u>	<u>Use Rate</u>
Hardwood trees and brush	Directed foliar or spot spray	2.6 to 5.2 ounces per 3 gallons of water
Stump or cut stem		5.2 ounces per gallon of water
Herbaceous weeds	Broadcast	2.6 to 7.8 ounces per acre

See specific use directions in appropriate section.

Ground Operated Spray Equipment: Thoroughly mix and apply the specified amount of LINEAGE® CLEARSTAND™ herbicide in a minimum of 5 gallons of water per acre. To mix, fill the spray tank with one-half to three-quarters of the desired volume with clean water. Add the required amount of LINEAGE® CLEARSTAND™ to the spray tank while agitating. Add additional water to achieve the desired spray volume and agitate again. A suitable adjuvant (see Adjuvant section) may be added to the spray solution to enhance control of undesirable vegetation. A drift control agent and a foam reducing agent may be added at the specified label rates, if needed. If desired, a spray pattern indicator may be added at the specified label rate. For best results, uniformly cover the foliage of the vegetation to be controlled with the spray solution.

Side Trimming: Do not side trim with LINEAGE® CLEARSTAND™ unless severe injury or death of the treated tree can be tolerated. LINEAGE® CLEARSTAND™ is readily translocated and can result in death of the entire tree.

TOTAL VEGETATION CONTROL

BAREGROUND

LINEAGE® CLEARSTAND™ may be used in sites for bareground (total vegetation control) weed control. Preemergence or postemergence applications of LINEAGE® CLEARSTAND™ provides control of many annual and perennial broadleaf and grass weeds. It may be used alone at 10 to 25 ounces per acre or in tank mixes with other products registered for use on bareground sites. Consult the manufacturer's labels for specific rates, weeds controlled and use restrictions. Make applications using a spray volume of up to 100 gallons per acre and include an adjuvant.

Apply at any time of the year. Make a thorough and uniform application with calibrated spray equipment per label specifications. Use the higher rates of LINEAGE® CLEARSTAND™ for fall applications and in previously untreated areas or areas with high

weed infestations. For postemergence applications always include a spray adjuvant. For faster brown-out or burn down results, add glyphosate or similar products to the tank.

As above for postemergence applications, the addition of glyphosate or similar products may be added for faster brown-out or burndown of the escaped weeds. For added residual weed control or to broaden the weed control spectrum, tank mix with other residual products registered for use on bareground sites. The level and length of control will depend on the herbicide(s) rate applied, amount of rainfall, the soil texture and other environmental and applications conditions.

DIRECTED OR SPOT APPLICATIONS

When making directed or spot spray applications with ground spray equipment, or low-volume hand-operated spray equipment, thoroughly mix a solution of DuPont™ LINEAGE® CLEARSTAND™ and include a nonionic surfactant at a minimum of 0.25% by volume. To mix the spray solution, add the volume of LINEAGE® CLEARSTAND™ herbicide and nonionic surfactant indicated in the table below to the desired amount of water.

<u>SPRAY SOLUTION</u> <u>VOLUME</u>	<u>LINEAGE® CLEARSTAND™</u>	<u>SURFACTANT</u> <u>(fluid ounce)</u>
2.5 gallons	2.6 to 5.2 ounces	0.8
4 gallons	4.2 to 8.3 ounces	1.5
5 gallons	5.2 to 10.7 ounces	1.6
10 gallons	10.7 to 21.4 ounces	3.2
20 gallons	21.4 to 41.6 ounces	6.4

BROADCAST APPLICATIONS

For broadcast applications, simulate a gentle rain near the top of target vegetation, allowing spray to contact the crown and penetrate the target foliage without falling to the understory. Herbicide spray solution which contacts the under story may result in severe injury or death of plants in the under story. Do not exceed 30 ounces of LINEAGE® CLEARSTAND™ herbicide per acre broadcast.

STUMP AND CUT STEM TREATMENTS

LINEAGE® CLEARSTAND™ may be used to control undesirable woody vegetation by applying a solution of the herbicide in water to the cambium area of freshly-cut stump surfaces or to cuts on the stem of the target woody vegetation. Applications can be made at any time of the year except during periods of heavy sap flow in the spring. Tree injection and cut stem treatments are most effective in late summer and early fall.

Mixing: LINEAGE® CLEARSTAND™ herbicide may be mixed and applied as a dilute solution to the surface of the stump or to cuts on the stem of the target woody vegetation. To prepare a dilute solution, thoroughly mix 5 ounces of LINEAGE® CLEARSTAND™ with one gallon of water.

For cut stump treatments: Spray or brush the solution onto the cambium area of the freshly cut stump surface. Insure that the solution thoroughly wets the entire cambium area (the wood next to the bark of the stump).

For tree injection treatments: Using standard injection equipment, apply 1 milliliter of solution at each injection site around the tree with no more than one inch intervals between cut edges. Insure that the injector completely penetrates the bark at each injection site.

For frill or girdle treatments: Using a hatchet, machete, or similar device, make cuts through the bark at intervals around the tree with no more than two-inch intervals between cut edges. Spray or brush the solution into each cut until thoroughly wet.

INDUSTRIAL TURF APPLICATIONS

UNIMPROVED BERMUDAGRASS TURF

LINEAGE® CLEARSTAND™ may be used in non-agricultural industrial sites, such as, utility rights-of-way and roadsides, for general weed control where common bermudagrass or coastal bermudagrass is the established turf. **Do not apply to bahiagrass.** Applications to bermudagrass will cause stunting and seed head inhibition. Apply LINEAGE® CLEARSTAND™ by ground equipment only. Use a minimum of 10 gallons of spray solution per acre and a spray pressure of 20 to 50 pounds per square inch (psi). Do not apply in the first growing season of bermudagrass. Do not apply LINEAGE® CLEARSTAND™ to grass under stress from disease, insects, drought, or other causes.

Important: A temporary chlorosis (yellowing) may occur if applications are made after growth begins.

NOTE: Do not include surfactants at a rate greater than 1 (one) ounce per 25 gallons of spray solution.

RATES AND TIMINGS BERMUDAGRASS

In dormant bermudagrass, DuPont™ LINEAGE® CLEARSTAND™ may be applied at 2 to 4 ounces per acre. When bermudagrass has attained the full green-up stage of growth, LINEAGE® CLEARSTAND™ may be applied at 2 to 2.7 ounces per acre. Treatments made prior to the full green-up stage will delay green-up. Use the lower rates on small seedling weeds and a higher rate on larger weeds.

WEEDS CONTROLLED

Barley, little
Bedstraw
Bishopweed
Buttercup
Carrot, wild
Clover, white
Fescue
Foxtail
Johnsongrass, seedling
Geranium, carolina
Woodsorrel, yellow

Hordeum pusillum
Galium spp.
Ptilimum capillaceum
Ranunculus parviflorus
Daucus carota
Trifolium repens
Festuca spp.
Setaria spp.
Sorghum halepense
Geranium carolinianum
Oxalis stricta

GRASS GROWTH AND SEED HEAD SUPPRESSION

For areas of unimproved turf grass, LINEAGE® CLEARSTAND™ may be used for the suppression of grass growth and seed head development. Depending on the environmental conditions at time of treatment, applications to desirable turf grass may cause discoloration or injury. For best results, all applications must be made before stem (culm) elongation. LINEAGE® CLEARSTAND™ applications may be made prior to or after mowing. For applications before mowing, the grass must have had at least 3 days of active growth. Applications made after mowing must also allow time for the grass to recover. LINEAGE® CLEARSTAND™ applications made too soon before or after mowing could result in increased grass injury. Check turf grass conditions first before making LINEAGE® CLEARSTAND™ applications. Do not apply to grass under stress from cold, insects, diseases, drought, damage, etc. or severe injury or death may occur.

Bermudagrass: Apply LINEAGE® CLEARSTAND™ herbicide at 2 to 2.7 ounces per acre from full green-up to prior to seed head initiation. Do not add a surfactant for this application.

IMPORTANT PRECAUTIONS AND RESTRICTIONS - INDUSTRIAL TURF

- An application of LINEAGE® CLEARSTAND™ may cause temporary discoloration (chlorosis) of the grasses. Use the lower specified rates for minimum discoloration.
- Excessive injury may result when LINEAGE® CLEARSTAND™ is applied to turf that is under stress from drought, insects, disease, cold temperatures (winter injury) or poor fertility.
- LINEAGE® CLEARSTAND™ is not labeled for use on bahiagrass.

ADDITIONAL INSTRUCTIONS, PRECAUTIONS, AND RESTRICTIONS FOR AGRICULTURAL AND NONAGRICULTURAL USES

PRECAUTIONS AND RESTRICTIONS

- Do not drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the product may be washed or moved into contact with their roots, as injury or loss of desirable trees or other plants may result
- Treatment of powdery, dry soil or light, sandy soil when there is little likelihood of rainfall soon after treatment may result in off target movement and possible damage to susceptible crops when soil particles are moved by wind or water. Injury to crops may result if treated soil is washed, blown, or moved onto land used to produce crops. Exposure to LINEAGE® CLEARSTAND™ may injure or kill most crops. Injury may be more severe when the crops are irrigated. Do not apply LINEAGE® CLEARSTAND™ when these conditions are identified and powdery, dry soil or light or sandy soils are known to be prevalent in the area being treated.
- Applications made where runoff water flows onto agricultural land may injure crops. Applications made during periods of intense rainfall, to soils saturated with water, to surfaces paved with materials such as asphalt or concrete, or to soils through which rainfall will not readily penetrate may result in runoff and movement of LINEAGE® CLEARSTAND™. Do not treat frozen soil. Leave treated soil undisturbed to reduce the potential for LINEAGE® CLEARSTAND™ movement by soil erosion due to wind or water.
- Do not use on lawns, walks, driveways, tennis courts or similar areas.
- Do not apply through any type of irrigation system.
- When used as directed, there are no grazing restrictions for use rates of 11 ounces per acre and less. At use rates of 11 to 21 ounces per acre, forage grasses may be cut for hay, fodder or green forage and fed to livestock, including lactating animals, 7 days after treatment.

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

WEEDS CONTROLLED

DuPont™ LINEAGE® CLEARSTAND™ provides postemergence control and some residual control of the annual weeds in the following tables. The degree of control is both rate and species dependent. Postemergence applications generally provide best control of established biennials and perennial weeds. All rates in the Weeds Controlled table are expressed in the amount of herbicide required for broadcast applications. Review the weed lists and foot notes for additional application information prior to treating.

GRASSES

13 Ounces per acre

Bluegrass, annual
 Bluegrass, Canada
 Bluegrass, Kentucky
 Brome, downy
 Brome, smooth
 Dropseed, sand
 Fescue
 Foxtail
 Johnsongrass¹
 Lovegrass¹
 Oats, wild
 Orchardgrass
 Paragrass
 Quackgrass
 Ryegrass, Italian
 Sandbur
 Signalgrass, broadleaf
 Vaseygrass
 Witchgrass

Poa annua
Poa compressa
Poa pratensis
Bromus tectorum
Bromus inermis
Sporobolus cryptandrus
Festuca spp.
Setaria spp.
Sorghum halepense
Eragrostis spp.
Avena fatua
Dactylis glomerata
Brachiaria mutica
Agropyron repens
Lolium multiflorum
Cenchrus spp.
Brachiaria platyphylla
Paspalum urvillei
Panicum capillare

19 Ounces per acre

Barnyardgrass
 Beardgrass
 Canarygrass, Reed
 Cheat
 Crabgrass
 Crowfootgrass
 Goosegrass
 Itchgrass
 Junglerice
 Lovegrass
 Maidencane
 Panicum, browntop
 Panicum, fall
 Panicum, Texas
 Reed, giant
 Tthreeawn, prairie
 Sandbur, field

Echinochloa crus-gali
Andropogon spp.
Phalaris arundinacea
Bromus secalinus
Digitaria spp.
Dactyloctenium aegyptium
Eleusine indica
Rottboellia exaltata
Echinochloa colonum
Eragrostis spp.
Panicum hemitomon
Panicum fasciculatum
Panicum dichotomiflorum
Panicum texanum
Arundo donax
Aristida oligantha
Cenchrus incertus

25 Ounces per acre

Bahiagrass
 Bermudagrass
 Bluestem, big
 Cattail
 Cogongrass
 Cordgrass, prairie
 Dallisgrass
 Feathertop
 Guineagrass
 Phragmites
 Saltgrass
 Sprangletop
 Timothy

Paspalum notatum
Cynodon dactylon
Andropogon gerardii
Typha spp.
Imperata cylindrica
Spartina pectinata
Paspalum dilatatum
Pennisetum villosum
Panicum maximum
Phragmites australis
Distichlis stricta
Leptochloa spp.
Phleum pratense

¹ The higher rates may be used where heavy or well established infestations of these grasses occur.

BROADLEAVES

2 to 3 ounces per acre

- Aster
- Bahiagrass
- Beebalm
- Bittercress
- Blackeyed-susan
- Buttercup, bur
- Catchfly, conical
- Chamomile, false
- Chicory
- Chickweed, common
- Clover
- Clover, sweet
- Cocklebur
- Cockle, corn
- Cockle, cow
- Coreopsis, plains
- Crazyweed, silky
- Dandelion
- Dogfennel
- Falseflax, smallseed
- Filaree, redstem
- Fleabane, rough
- Garlic, wild
- Goldenrod
- Groundsel, common
- Lambsquarters
- Lettuce, miners
- Lettuce, wild
- Marestail/horseweed¹
- Mustard, blue
- Mustard, treacle
- Mustard, tumble
- Mustard, wild
- Plantain
- Pigweed, redroot
- Pigweed, smooth
- Purslane, common
- Shepherd's-purse
- Smartweed, Pennsylvania
- Sneezeweed, bitter
- Sowthistle, annual
- Sunflower, Maximilian
- Tansymustard
- Vetch, crown
- Yarrow, common

- Aster spp.*
- Paspalum notatum*
- Monarda spp.*
- Cardamine spp.*
- Rudbeckia hirta*
- Ranunculus testiculatus*
- Silene conica*
- Matricaria maritima*
- Cichorium intybus*
- Stellaria media*
- Trifolium spp.*
- Melilotus alba*
- Xanthium spp.*
- Agrostemma githago*
- Vaccaria hispanica*
- Coreopsis tinctoria*
- Oxytropis sericea*
- Taraxacum officinale*
- Eupatorium capillifolium*
- Camelina microcarpa)*
- Erodium cicutarium*
- Erigeron strigosus*
- Allium canadense*
- Solidago spp.*
- Senecio vulgaris*
- Chenopodium album*
- Claytonia perfoliata*
- Lactuca virosa*
- Conyza canadensis*
- Chorispora tenella*
- Erysimum Cheiranthoides*
- Sisymbrium altissimum*
- Sinapis arvensis*
- Plantago spp.*
- Amaranthus retroflexus*
- Amaranthus hybridus*
- Portulaca oleracea*
- Capsella bursa-pastoris*
- Polygonum pensylvanicum*
- Helenium amarum*
- Sonchus oleraceus*
- Helianthus maximiliani*
- Descurainia pinnata*
- Coronilla varia*
- Achillea millefolium*

3 to 6 ounces per acre

Arrowgrass, seaside
 Barley, little
 Bedstraw
 Bishopweed
 Blackberry, wild
 Buttercup
 Caraway, wild
 Carrot, wild
 Crupina, common
 Daisy, oxeye
 Dewberry
 Dock, curly
 Dyer's woad
 Fescue
 Foxtail
 Gaillardia, rosering
 Geranium, Carolina
 Gorse, common
 Halogeton
 Henbane, black
 Henbit
 Honeysuckle
 Johnsongrass, seedling
 Knotweed, prostrate
 Lespedeza, sericea
 Mustard, garlic
 Plantain, buckhorn
 Ragwort, tansy
 Rose, Macartney
 Rose, multiflora
 Rose, wild
 Snakeweed, broom¹
 Sunflower, common
 Teasel, common
 Thistle, bull
 Thistle, musk³
 Thistle, plumeless

6 to 13 ounces per acre

Bindweed, field
 Bindweed, hedge
 Cinquefoil, sulphur
 Fern, old world climbing
 Greasewood
 Gumweed, curlycup
 Hemlock, poison
 Houndstongue
 Iris, wild
 Loosetrife, purple
 Lupine
 Mullein, common
 Pepperweed, perennial
 Salsify
 Salsify, western
 Scabious, purple
 Scouringrush
 Snowberry
 St. John'swort
 Tansy, common
 Thistle, Scotch
 Whitetop (hoary cress)

8 to 13 ounces per acre

Knapweed, Russian³
 Larkspur, duncecap
 Larkspur, tall
 Parsnip, wild
 Thistle, Canada²
 Toadflax, dalmation²
 Toadflax, yellow²

Triglochin maritima
Hordeum pusillum
Galium spp.
Ptilimnium capillaceum
Rubus fruticosus
Ranunculus parviflorus
Carum carvi
Daucus carota
Crupina vulgaris
Leucanthemum vulgare
Rubus spp.
Rumex crispus
Isatis tinctoria
Festuca spp.
Setaria spp.
Gaillardia puchella
Geranium carolinianum
Ulex europaeus
Halogeton glomeratus
Hyoscyamus niger
Lamium amplexicaule
Lonicera spp.
Sorghum halepense
Polygonum aviculare
Lespedeza cuneata
Alliaria petiolata
Plantago lanceolata
Senecio jacobaea
Rosa bractreata
Rosa multiflora
Rosa spp.
Gutierrezia sarothrae
Helianthus annuus
Dipsacus fullonum
Cirsium vulgare
Carduus nutans
Carduus acanthoides

Convolvulus arvensis
Calystegia sepium
Potentilla recta
Lygodium microphyllum
Sarcobatus vermiculatus
Grindelia cuneifolia
Conium maculatum
Cynoglossum officinale
Iris missouriensis
Lythrum salicaria
Lupinus spp.
Verbascum thapsus
Lepidium latifolium
Tragopogon spp.
Tragopogon dubius
Scabiosa columbaria
Equisetum hyemale
Symphoricarpos albus
Hypericum perforatum
Tanacetum vulgare
Onopordum acanthium
Cardaria draba

Centaurea repens
Delphinium occidentale
Delphinium glaucum
Pastinaca sativa
Cirsium arvense
Linaria dalmatica
Linaria vulgaris

13 ounces per acre

Alligatorweed
Buckwheat, wild
Burdock
Bursage, woollyleaf
Camphorweed
Carpetweed
Goosefoot, nettleleaf
Kochia
Mustard, Indian
Pigweed
Puncturevine
Ragweed, common
Ragweed, western
Thistle, Russian'
Sorrel
Vervain, hoary
Turnip, wild
Woodsorrel, yellow

Alternanthera philoxeroides
Polygonum convolvulus
Arctium spp.
Franseria tomentosa
Heterotheca subaxillaris
Mollugo verticillata
Chenopodium murale
Kochia scoparia
Brassica juncea
Amaranthus spp.
Tribulus terrestris
Ambrosia artemisiifolia
Ambrosia psilostachya
Salsola kali
Rumex spp.
Verbena stricta
Brassica campestris
Oxalis stricta

19 ounces per acre

Burclover
Camelthorn, desert
Chickweed, mouseear
Clover, hop
Cudweed
Dock
Fiddleneck
Greenbriar
Ivy, poison
Knapweed, diffuse
Kudzu
Morningglory
Nettle, stinging
Pokeweed
Pusley, Florida
Redvine
Rocket, London
Saltbush
Skeletonweed, rush
Spurge, annual
Starthistle, yellow
Velvetleaf

Medicago spp.
Alhagi pseudalhagi
Cerastium vulgatum
Trifolium procumbens
Gnaphalium spp.
Rumex spp.
Amsinckia intermedia
Smilax spp.
Rhus radicans
Centaurea diffusa
Pueraria montana
Ipomoea spp.
Urtica dioica
Phytolacca americana
Richardia scabra
Brunnichia cirrhosa
Sisymbrium irio
Atriplex spp.
Chondrilla juncea
Euphorbia spp.
Centaurea solstitialis
Abutilon theophrasti

25 ounces per acre

Arrowwood
Creper, Virginia
Grape, wild
Knotweed, Japanese
Mallow, little
Milkweed
Nightshade, silverleaf
Primrose
Rabbitbrush, grey
Ragweed, giant
Thistle, Canada
Thistle, Texas
Trumpet creeper

Pluchea sericea
Parthenocissus quinquefolia
Vitis spp.
Polygonum cuspidatum
Malva parvilora
Asclepias spp.
Solanum elaeagnifolium
Oenothera kunthiana
Chrysothamnus nauseosus
Ambrosia trifida
Cirsium arvense
Cirsium texanum
Campsis radicans

1 - Certain biotypes of maretail, kochia, and Russian thistle are less sensitive to DuPont™ LINEAGE® CLEARSTAND™ and may be controlled with tank mixes using herbicides with a different mode of action.

2 - Suppression, which is a visual reduction in weed competition (reduced population or vigor) as compared to untreated areas. Apply as a full coverage spray for best performance.

3 - Treatments of LINEAGE® CLEARSTAND™ may be applied from rosette through bloom stages of development.

4 - Apply fall through spring.

SPRAY EQUIPMENT

Low rates of LINEAGE® CLEARSTAND™ can kill or severely injure most crops. Following an LINEAGE® CLEARSTAND™ application, the use of spray equipment to apply other pesticides to crops on which LINEAGE® CLEARSTAND™ is not registered may result in their damage. The most effective way to reduce this crop damage potential is to use dedicated mixing and application equipment. The selected sprayer must be equipped with an agitation system to keep LINEAGE® CLEARSTAND™ suspended in the spray tank.

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Use a sufficient volume of water to thoroughly cover the foliage of undesirable weeds, generally 10 to 40 gallons per acre. Select a spray volume and delivery system that will deliver a uniform spray pattern. Be sure the sprayer is calibrated before use. Avoid overlapping and shut off spray booms while starting, turning, slowing or stopping to avoid injury to desired plants. Refer to the brush control section of this label for information unique to that particular use.

MIXING INSTRUCTIONS

1. Fill the tank 1/4 to 1/3 full of water.
2. While agitating, add the required amount of DuPont™ LINEAGE® CLEARSTAND™.
3. Continue agitation until the LINEAGE® CLEARSTAND™ is fully dispersed, at least 5 minutes.
4. Once the LINEAGE® CLEARSTAND™ is fully dispersed, maintain agitation and continue filling tank with water. LINEAGE® CLEARSTAND™ must be thoroughly mixed with water before adding any other material.
5. As the tank is filling, add tank mix partners (if desired) then add the necessary volume of nonionic surfactant. Always add surfactant last.
6. If the mixture is not continuously agitated, settling will occur. If settling occurs, thoroughly re-agitate before using.
7. LINEAGE® CLEARSTAND™ spray preparations are stable if they are pH neutral or alkaline and stored at or below 100° F.
8. If LINEAGE® CLEARSTAND™ and a tank mix partner are to be applied in multiple loads, pre-slurry the LINEAGE® CLEARSTAND™ in clean water prior to adding to the tank. This will prevent the tank mix partner from interfering with the dissolution of the LINEAGE® CLEARSTAND™.

SPRAYER CLEANUP

Spray equipment must be cleaned before LINEAGE® CLEARSTAND™ is sprayed. Follow the cleanup procedures specified on the labels of previously applied products. If no directions are provided, follow the six steps outlined below.

At the End of the Day

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

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

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

Notes:

1. **Attention:** Do not use chlorine bleach with ammonia, as dangerous gases will form. Do not clean equipment in an enclosed area.
2. Steam-cleaning aerial spray tanks is advised prior to performing the above cleanout procedure to facilitate the removal of any caked deposits.
3. When LINEAGE® CLEARSTAND™ is tank mixed with other pesticides, all required cleanout procedures must be examined and the most rigorous procedure must be followed.
4. In addition to this cleanout procedure, all precleanout guidelines on subsequently applied products must be followed as per the individual labels.

SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions. **AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.**

IMPORTANCE OF DROPLET SIZE

The most effective drift management strategy is to apply the largest droplets which are consistent with pest control objectives. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. **APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS!**

A droplet size classification system describes the range of droplet sizes produced by spray nozzles. The American Society of Agricultural and Biological Engineers (ASABE) provide a Standard that describes droplet size spectrum categories defined by a number of reference nozzles (fine, coarse, etc.). Droplet spectra resulting from the use of a specific nozzle may also be described in terms of volume mean diameter (VMD). Coarser droplet size spectra have larger VMD's and lower drift potential.

CONTROLLING DROPLET SIZE - GROUND APPLICATION

- Nozzle Type - Select a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. The use of low-drift nozzles will reduce drift potential.
- Pressure - The lowest spray pressures recommended for the nozzle produce the largest droplets. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, using a higher-capacity nozzle instead of increasing pressure results in the coarsest droplet spectrum.
- Flow Rate/Orifice Size - Using the highest flow rate nozzles (largest orifice) that are consistent with pest control objectives reduces the potential for spray drift. Nozzles with higher rated flows produce coarser droplet spectra.

CONTROLLING DROPLET SIZE – AIRCRAFT

- Nozzle Type - Solid stream, or other low drift nozzles produce the coarsest droplet spectra.
- Number of Nozzles - Using the minimum number of nozzles with the highest flow rate that provide uniform coverage will produce a coarser droplet spectrum.
- Nozzle Orientation - Orienting nozzles in a manner that minimizes the effects of air shear will produce the coarsest droplet spectra. For some nozzles such as solid stream, pointing the nozzles straight back parallel to the airstream will produce a coarser droplet spectrum than other orientations.
- Pressure – Selecting the pressure that produces the coarsest droplet spectrum for a particular nozzle and airspeed reduces spray drift potential. For some nozzle types such as solid streams, lower pressures can produce finer droplet spectra and increase drift

BOOM LENGTH (AIRCRAFT), AND APPLICATION HEIGHT

- Boom Length (aircraft) - Using shorter booms decreases drift potential. Boom lengths are expressed as a percentage of an aircraft's wingspan or a helicopter's rotor blade diameter. Shorter boom length and proper positioning can minimize drift caused by wingtip or rotor vortices.
- Application Height (aircraft) - Applications made at the lowest height that are consistent with pest control objectives and the safe operation of the aircraft will reduce the potential for spray drift.
- Application Height (ground) - Applications made at the lowest height consistent with pest control objectives, and that allow the applicator to keep the boom level with the application site and minimize bounce, will reduce the exposure of spray droplets to evaporation and wind, and reduce spray drift potential.

WIND

Drift potential is lowest when applications are made in light to gentle sustained winds (2-10 mph), which are blowing in a constant direction. Many factors, including droplet size and equipment type also determine drift potential at any given wind speed. **AVOID GUSTY OR WINDLESS CONDITIONS.**

Local terrain can also influence wind patterns. Every applicator is expected to be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY

Setting up equipment to produce larger droplets to compensate for droplet evaporation can reduce spray drift potential. Droplet evaporation is most severe when conditions are both hot and dry.

SURFACE TEMPERATURE INVERSIONS

Drift potential is high during a surface temperature inversion. Surface inversions restrict vertical air mixing, which may cause small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Surface inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Mist or fog may indicate the presence of an inversion in humid areas.

Inversions may also be identified by producing smoke and observing its behavior. Smoke that remains close to the ground, or moves laterally in a concentrated cloud under low wind conditions indicates a surface inversion. Smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SHIELDED SPRAYERS

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

AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, that it is configured properly, and that drift potential has been minimized.

Note: Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Read the specific crop use and application equipment instructions to determine if an air assisted field crop sprayer can be used.

SENSITIVE AREAS

Making applications when there is a sustained wind moving away from adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is an effective way to minimize the effect of spray drift.

DRIFT CONTROL ADDITIVES

Using product compatible drift control additives can reduce drift potential. When a drift control additive is used, read and carefully observe cautionary statements and all other information on the additive's label. If using an additive that increases viscosity, ensure that the nozzles and other application equipment will function properly with a viscous spray solution. Preferred drift control additives have been certified by the Chemical Producers and Distributors Association (CPDA).

WIND EROSION

Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface must first be settled by rainfall or irrigation.

insert the headers and text below:

SPRAY DRIFT RESTRICTIONS

AERIAL APPLICATIONS:

- Applicators are required to use a coarse or coarser droplet size (ASABE S572.1) or, if specifically using a spinning atomizer nozzle, applicators are required to use a volume mean diameter (VMD) of 385 microns or greater for release heights below 10 feet; Applicators are required to use a very coarse or coarser droplet size or, if specifically using a spinning atomizer nozzle, applicators are required to use a VMD of 475 microns or greater for release heights above 10 feet; Applicators must consider the effects of nozzle orientation and flight speed when determining droplet size.
- Applicators are required to use upwind swath displacement.
- The boom length must not exceed 60% of the wingspan or 90% of the rotor blade diameter to reduce spray drift.
- Applications with wind speeds less than 3 mph and with wind speeds greater than 10 mph are prohibited.
- Applications into temperature inversions are prohibited.

GROUND BOOM APPLICATIONS:

- Applicators are required to use a nozzle height below 4 feet above the ground or plant canopy and coarse or coarser droplet size (ASABE S572.1) or, if specifically using a spinning atomizer nozzle, applicators are required to use a volume mean diameter (VMD) of 385 microns or greater.
- Applications with wind speeds greater than 10 mph are prohibited.
- Applications into temperature inversions are prohibited.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Do not store below 10°F. Store product in original container only. Store in a cool, dry place.

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

Container Handling: Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" or "Refillable Container" designation.

Nonrefillable Plastic and Metal Containers (Capacity Equal to or Less Than 50 Pounds): Nonrefillable container. Do not reuse or refill this container. Triple 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 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. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities

Nonrefillable Plastic and Metal Containers (Capacity Greater Than 50 Pounds): Nonrefillable container. Do not reuse or refill this container. Triple 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. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down): Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying the contents from this container into application equipment or mix tank and before final disposal using the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Paper or Plastic Bags, Fiber Sacks including Flexible Intermediate Bulk Containers (FIBC) or Fiber Drums With Liners: Nonrefillable container. Do not reuse or refill this container. Completely empty paper or plastic bag, fiber sack or drum liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Then offer for recycling if available or dispose of empty paper or plastic bag, fiber sack or fiber drum and liner in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

Refillable Fiber Drums With Liners: Refillable container (fiber drum only). *Refilling Fiber Drum:* Refill this fiber drum with DuPont™ LINEAGE® CLEARSTAND™ containing imazapyr and metsulfuron methyl only. Do not reuse this fiber drum for any other purpose. Cleaning before refilling is the responsibility of the refiller. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. *Disposing of Fiber Drum and/or Liner:* Do not reuse this fiber drum for any other purpose other than refilling (see preceding). Cleaning the container (liner and/or fiber drum) before final disposal is the responsibility of the person disposing of the container. Offer the liner for recycling if available or dispose of liner in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner. To clean the fiber drum before final disposal, completely empty the fiber drum by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Then offer the fiber drum for recycling if available or dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

All Other Refillable Containers: Refillable container. *Refilling Container:* Refill this container with DuPont™ LINEAGE® CLEARSTAND™ containing imazapyr and metsulfuron methyl only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. If damage is found, do not use the container, contact DuPont at the number below for instructions. Check for leaks after refilling and before transporting. If leaks are found, do not reuse or transport container, contact DuPont at the number below for instructions. *Disposing of Container:* Do not reuse this container for any other purpose other than refilling (see preceding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, use the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Outer Foil Pouches of Water Soluble Packets (WSP): Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available or, dispose of the empty outer foil pouch in the trash as long as WSP is unbroken. If the outer pouch contacts the formulated product in any way, the pouch must be triple rinsed with clean water. Add the rinsate to the spray tank and dispose of the outer pouch as described previously.

Do not transport if this container is damaged or leaking. If the container is damaged, leaking or obsolete, or in the event of a major spill, fire or other emergency, contact DuPont at 1-800-441-3637, day or night.

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"Microfoil" is a trademark of Rhone Poulenc Ag.

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LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read this Limitation of Warranty and Liability Before Buying or Using This Product. If the Terms Are Not Acceptable, Return the Product at Once, Unopened, and the Purchase Price Will Be Refunded.

It is impossible to eliminate all risks associated with the use of this product. Such risks arise from weather conditions, soil factors, off target movement, unconventional farming techniques, presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of DuPont. These risks can cause: ineffectiveness of the product, crop injury, or injury to non-target crops or plants. WHEN YOU BUY OR USE THIS PRODUCT, YOU AGREE TO ACCEPT THESE RISKS.

DuPont warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for the purpose stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

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To the extent consistent with applicable law that allows such requirement, DuPont or its Ag Retailer must have prompt notice of any claim so that an immediate inspection of buyer's or user's growing crops can be made. Buyer and all users shall promptly notify DuPont or a DuPont Ag Retailer of any claims, whether based on contract, negligence, strict liability, other tort or otherwise, or be barred from any remedy.

This Limitation of Warranty and Liability may not be amended by any oral or written agreement.

For product information call: 1-888-6-DUPONT [1-888-638-7668]

Internet address: <http://cropprotection.dupont.com/>

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