DuPont™ Glean® XP

HERBICIDE

GROUP	2	HERBICIDE

Dry flowable

For Use on Wheat, Barley, Oat and Triticale

Active Ingredient	*By Weight*
Chlorsulfuron	
2-Chloro-N-[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)aminocarbonyl]benzenesulfonamide	75%
Other Ingredients	25%
TOTAL	100%

EPA Reg. No. 352-653 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 SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything to an unconscious person.

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.

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 swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some of the materials that are chemical-resistant to this product are listed below.

Mixers, loaders, applicators, and other handlers must wear:

Long-sleeved shirt and long pants
Chemical resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride.
Shoes plus socks

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROL STATEMENTS

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

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "Applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.

USER SAFETY RECOMMENDATIONS

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should 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

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

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

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

DuPont™ GLEAN® XP herbicide, referred to below as DuPont™ GLEAN® XP or GLEAN® XP, must be used only in accordance with instructions on this label or in separately published DuPont instructions, Supplemental Labels, Special Local Need Registrations, FIFRA Section 18 exemptions, FIFRA 2(ee) Bulletins, or as otherwise permitted by FIFRA.

Always read the entire label, including the Limitation of Warranty and Liability.

AGRICULTURAL USE REQUIREMENTS

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

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

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

Coveralls.
Chemical resistant gloves made of any waterproof material.
Shoes plus socks.

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

PRODUCT INFORMATION

GLEAN® XP is a dry-flowable granule and when applied according to the instructions on this label, will control many broadleaf weeds. GLEAN® XP can be used on the crops wheat, barley, oat, and triticale.

GLEAN® XP is noncorrosive, nonflammable, nonvolatile, and does not freeze.

GLEAN® XP controls weeds by both preemergence and postemergence activity.

Environmental Conditions and Biological Activity

GLEAN® XP is absorbed through the roots and foliage of broadleaf weeds, rapidly inhibiting their growth. One to three weeks after application to weeds, leaves of susceptible plants appear chlorotic, and the growing point subsequently dies.

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

GLEAN® XP may injure crops that are stressed from adverse environmental conditions (such as extreme temperatures or moisture), abnormal soil conditions, insect pressure, or cultural practices. In addition, different varieties of the crop may be

sensitive to treatment with DuPont™ GLEAN® XP under otherwise normal conditions. Treatment of such varieties may result in crop injury.

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

Rainfall is needed to move GLEAN® XP into the soil for preemergence weed control, but postemergence weed control may be reduced if rainfall occurs soon after application.

RESTRICTIONS

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

- Do not store pesticides near well sites.
- Do not discharge excess material on the soil at a single spot in the field or mixing/loading station.
- Injury to or loss of desirable trees or vegetation may result from failure to observe the following:
  - Do not apply, drain or flush equipment on or near desirable trees or other plants or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
  - Do not use on lawns, walks, driveways, tennis courts, or similar areas. Prevent drift of spray to desirable plants.

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

- Only make one application of GLEAN® XP per crop season
- Do not make more than one application of this product per growing season.
- Take all necessary precautions to avoid all direct or indirect contact (such as spray drift) with non-target plants or areas.
- Carefully observe sprayer cleanup instructions, both prior to and after using this product, as spray tank residue may damage crops other than wheat, barley, or oat.

Do not apply GLEAN® XP to crops that are stressed by severe weather conditions, drought, low fertility, water-saturated soil, disease or insect damage, as crop injury may result. Severe winter stress, drought, disease, or insect damage following application may also result in crop injury.

Do not apply to crops mixed with legumes, as injury to the legumes will result.

Do not apply to frozen ground where surface runoff may result.

Do not apply to snow-covered ground.

Do not apply to irrigated land where tailwater will be used to irrigate other cropland.

Only make one application of the active ingredient chlorsulfuron per crop season.

In far-western Kansas (last tier of counties along the Colorado/Kansas border), Western Nebraska, Eastern New Mexico, and the Oklahoma and Texas panhandles, take the following precautions:

- Do not use a tank mix containing DuPont™ ALLY® herbicide within 22 months of GLEAN® XP application.
- Do not use GLEAN® XP in continuous cereals or cereal/fallow/cereal rotations.
- GLEAN® XP in a tank mix at 0.17 to 0.33 oz per acre may be used only as a fallow treatment in corn or sorghum stubble in wheat/sorghum/fallow, or wheat/corn/fallow rotations where other residual broadleaf herbicides having different modes of action are used.

In California, Northern Idaho, Oregon, and Washington, take the following precautions:

- Do not make an early season treatment where a tank mix cannot be made.
- Do not apply GLEAN® XP during fallow.

Wheat, Barley, Oat and Triticale

Do not apply GLEAN® XP preemergence to barley or triticale.

Do not apply GLEAN® XP preemergence if cold or dry weather conditions exist. Wait until the weather improves and the crop is growing vigorously before making the application (See Postemergence).

In areas with severe winter weather, do not apply postemergence GLEAN® XP during late fall, winter, or early spring unless crop is well established and has started to tiller or crop injury may result.

Do not use GLEAN® XP postemergence within 60 days of crop emergence where organophosphate insecticides have been used as an in-furrow treatment or crop injury may result.

Do not use GLEAN® XP as a preemergence application where organophosphate insecticides have been used as an in-furrow treatment or crop injury may result.

Wherever DuPont™ GLEAN® XP is used on land previously treated with DuPont™ FINESSE®, DuPont™ ALLY®, "Amber", "Assert", or other longer residual herbicides with the same mode of action, read the rotational guidelines on both labels and follow the one with the longest interval stated for your situation before choosing to rotate to crops other than wheat or barley.

Preemergence applications of 2,4-D or herbicides containing 2,4-D made within two weeks of planting spring cereals may cause crop injury when used in conjunction with preemergence or early postemergence applications of GLEAN® XP.

The combined effects of the preemergence use of GLEAN® XP plus preemergence wild oat herbicides may cause crop injury to spring wheat when crop stress (soil crusting, planting too deep, prolonged cold, wet weather, or drought) causes poor seedling vigor.

Do not apply GLEAN® XP during boot or early heading as crop injury may result.

Do not harvest grain sooner than 45 days after the application of GLEAN® XP.

In the Pacific Northwest, to prevent crop injury due to cold weather, avoid making preemergence applications or early postemergence applications (2-4 leaf stage) to wheat or barley during late fall or winter when cold weather conditions are unpredictable and can be severe. The combined effects of herbicide stress plus cold weather stress can result in greater crop injury than stress factor alone.

When using GLEAN® XP in tank mixes or sequential applications with other products containing chorsulfuron methyl, do not exceed the following limits:

USE	Active Ingredient	Application Timing	Maximum AI oz/A per Single Application	Maximum Product oz/A per Single Application	Maximum AI oz/A per Use Season	Maximum Number of Applications per Use Season	Pre-Harvest Interval, Days
Wheat, Barley, Triticale, Oats	Chlorsulfuron	Postemergence	0.2475	0.33	0.2475	1	45 (for grain)
Winter Wheat, Winter Oat	Chlorsulfuron	Preemergence	0.2475	0.33	0.2475	1	45 (for grain)
Winter Wheat, Winter Oat North Central Texas, Southern Oklahoma	Chlorsulfuron	Preemergence	0.375	0.5	0.375	1	45 (for grain)
Tall Fescue Grown for Seed KS, OR, and WA	Chlorsulfuron	Fall after harvest	0.1875	0.25	0.1875	1	-
Boarder Area	Chlorsulfuron	All	0.375	0.5	0.375	1	-

PRECAUTIONS

Mix only enough product for the job at hand and avoid overfilling of spray tank.

Calibrate sprayers only with clean water away from the well site.

Make scheduled checks of spray equipment.

Ensure that all operation employees accurately measure pesticides.

When triple-rinsing the pesticide container, be sure to add the rinsate to the spray mix.

Dilute and agitate excess solution and apply at labeled rates or uses.

Preemergence weed control or suppression may be unsatisfactory on soils containing 5% or more organic matter.

Fall applications on coarse textured soils (especially those having a pH of greater than 7.0) may not provide adequate control or suppression of spring germinating weeds.

To reduce the potential for movement of treated soil due to wind erosion, do not apply to powdery dry or light sandy soils until they have been stabilized by rainfall, trashy mulch, reduced tillage or other cultural practices. Injury to immediately adjacent crops may result when treated soil is blown onto land used to produce crops other than cereal grains.

For ground applications applied postemergence to weeds when dry, dusty field conditions exist, control of weeds in wheel track areas may be reduced. The addition of 2,4-D or MCPA should improve weed control under these conditions.

Crop varieties may differ in their response to various herbicides. DuPont recommends that you first consult your state experiment station, university, or extension agent as to crop sensitivity to any herbicide. If no information is available, limit the initial use of GLEAN® XP to a small area.

Wheat, Barley, Oat and Triticale

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

WEED RESISTANCE

DuPont™ GLEAN® XP, which contains the active ingredient chorsulfuron is a Group 2 herbicide based on the mode of action classification system of the Weed Science Society of America.

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.

Naturally occurring weed biotypes that are resistant to "Amber" herbicide, DuPont™ ALLY® herbicide, DuPont™ FINESSE® herbicide, DuPont™ EXPRESS® herbicide or DuPont™ HARMONY® Extra herbicide will also be resistant to GLEAN® XP.

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.

APPLICATION INFORMATION

WHEAT, BARLEY, OAT, AND TRITICALE APPLICATIONS

The following instructions for GLEAN® XP herbicide are intended for use on land primarily dedicated to the long-term production of wheat, barley, triticale or oat. GLEAN® XP is mixed in water or directly into liquid nitrogen fertilizer solutions and applied as a uniform broadcast spray. A surfactant should be used in the spray mix unless otherwise specified on this label.

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

For best preemergence results, apply GLEAN® XP before weed seeds germinate. Use sprinkler irrigation or allow rainfall to move GLEAN® XP 2 to 3 inches deep into the soil profile.

For best postemergence results, apply GLEAN® XP to young, actively growing weeds. The use rate depends upon the weed spectrum and size of weeds at 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.

Frequency of Application

GLEAN® XP can be used as either pre or postemergence application once per crop period, but not both pre and post in the same season.

GLEAN® XP is used for the control or suppression of broadleaf weeds in wheat (including Durum), barley, triticale, and oat.

With Postemergence

Apply GLEAN® XP at 0.17 to 0.33 oz per acre for postemergence weed control in wheat (including Durum*), barley, triticale, and oat.

Use 0.17 oz per acre for short-term control or suppression; use 0.33 oz per acre for contact and residual weed control. Where soil pH is 6.5 or lower, use 0.33 oz per acre where maximum soil residual weed control is desired. Do not use less than 0.17 oz per acre.

Apply in the fall or spring anytime after the crop is in the 2-leaf stage but before boot (before flag leaf for triticale). Applications during or after boot may result in crop injury.

In the Pacific Northwest, apply DuPont™ GLEAN® XP to spring cereals anytime from the 2-leaf stage through the second joint stage but before the flag leaf is visible.

In areas with severe winter weather, do not apply GLEAN® XP during late fall, winter, or early spring unless crop is well established and has started to tiller or crop injury may result.

Do not use GLEAN® XP within 60 days of crop emergence where organophosphate insecticides have been used as an in-furrow treatment or crop injury may result.

*Note: Apply to Vic durum after early tillering but before boot.

With Preemergence

Apply GLEAN® XP at 0.33 oz per acre for preemergence weed control in winter oat and winter wheat.

In North Central Texas and Southern Oklahoma, apply GLEAN® XP at 0.50 oz per acre for suppression of annual ryegrass in winter oat and winter wheat.

Apply GLEAN® XP after planting seed, but before the crop emerges. Rainfall or sprinkler irrigation following treatment is necessary to activate GLEAN® XP before weed seeds germinate and develop an established root system. Wheat and oat seeds should be planted at least 1“ deep.

Do not apply GLEAN® XP preemergence if cold or dry weather conditions exist. Wait until the weather improves and the crop is growing vigorously before making the application (See Postemergence). Do not use GLEAN® XP as a preemergence application where organophosphate insecticides have been used as an in-furrow treatment or crop injury may result.

TANK MIXTURES

GLEAN® XP may be tank mixed with other suitable registered herbicides to control weeds listed under **Weeds Partially Controlled**, weeds resistant to GLEAN® XP, or weeds not listed under **Weeds Controlled**. GLEAN® XP may also be tank mixed with other suitable registered insecticides, fungicides, and liquid fertilizers. Read and follow all manufacturer’s label instructions for the companion product. If those instructions conflict with this label, do not tank mix with GLEAN® XP.

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

GLEAN® XP may be tank mixed with 2,4-D or MCPA (preferably ester formulations) herbicides after weeds have emerged. For best results, use 0.17 to 0.33 oz of GLEAN® XP per acre; add 2,4-D or MCPA herbicides to the tank at 0.25 to 0.5 lb active ingredient. Surfactant may be added to the mixture at 0.5 to 1 qt per 100 gal of spray solution; however, adding surfactant may increase the potential for crop injury. Do not add a surfactant when GLEAN® XP plus 2,4-D or MCPA is applied with liquid fertilizer.

Apply GLEAN® XP plus MCPA after the 3- to 5-leaf stage but before boot. Apply GLEAN® XP plus 2,4-D after tillering (refer to appropriate 2,4-D’s manufacturer’s label), but before boot. Applying a tank mixture of GLEAN® XP and 2,4-D or MCPA, with liquid fertilizer when temperatures are below freezing or when the crop is stressed from cold weather just prior to winter dormancy can result in severe foliar burn and/or crop injury. Do not apply GLEAN® XP plus 2,4-D or MCPA in combination with organophosphate insecticides.

With diuron

In the Pacific Northwest where prickly lettuce, corn gromwell, annual ryegrass and annual bluegrass are the main weed problems, apply 0.4 to 1.2 lb ai diuron with GLEAN® XP. Apply preemergence or postemergence to actively growing weeds less than 2” tall or 2” across. One-half to 1” rainfall is needed within 1 to 2 weeks after application.

With fluroxypyr containing products (such as Starane, Starane NXT, Starane + Salvo, Starane + Sword)

For improved control of kochia, Russian thistle, mustards, and wild buckwheat, GLEAN® XP may be tank mixed with 0.33 to 1.33 pints per acre of Starane, 14 to 21 ounces per acre of Starane NXT, 0.67 to 2.67 pints per acre of Starane + Salvo, or 0.75 to 2.75 pints per acre of Starane + Sword.

With “Everest”

GLEAN® XP may be tank mixed with Everest herbicide for improved control of grassy weeds in wheat. For Winter Wheat, apply in the fall or spring any time after the crop has two leaves on the main stem but before jointing begins. To reduce the potential for crop injury, treat late-seeded winter wheat after the crop has started to tiller but before jointing. For Spring Wheat, apply any time after emergence but before the majority of plants have 4 total leaves on the main stem plus 2 tillers. Do not apply after jointing begins. Do not apply to durum wheat. The addition of 0.25 to 0.75 pints per acre of 2,4-D (4 lbs per gal) or 2 to 4 fl oz per acre of dicamba (4 lbs per gal) to the GLEAN® XP plus Everest tank mix is required when applying to spring wheat.

With "Maverick"

DuPont™ GLEAN® XP may be tank mixed with Maverick herbicide for improved control of grassy weeds in wheat. Apply GLEAN® XP with 0.67 oz per acre of Maverick herbicide with 0.5% volume/volume (2 quarts per 100 gal of spray solution) of non-ionic surfactant (NIS). This tank mix may also include bromoxynil or fluroxypyr products for greater spectrum broadleaf control.

With metribuzin

Use 0.17 to 0.33 oz per acre of GLEAN® XP with 1 to 10.67 oz of metribuzin per acre. Metribuzin is recommended to control downy brome and cheatgrass in winter wheat in Kansas, Idaho, Oklahoma, Oregon, Texas, and Washington or to broaden the spectrum of weeds controlled. Use GLEAN® XP with low rates of metribuzin (1 to 4 oz) when winter wheat is at the 2-leaf to 3 tiller stage.

With Other Herbicides

For broader spectrum weed control, GLEAN® XP can be tank mixed with other herbicides including products containing bomoxynil, dicamba, and clopyralid. When tank mixing GLEAN® XP and "Assert", **always** include another broadleaf herbicide having a different mode of action (such as 2,4-D, MCPA, or bromoxynil). Tank mix applications of GLEAN® XP plus "Assert" may cause temporary discoloration/stunting or injury to the crop when heavy rainfall occurs shortly after the application.

With Insecticides

GLEAN® XP may be tank mixed with insecticides. However, under certain conditions (stress from drought, cold weather or warm days and cold nights following application, or crops in the 2-4 leaf stage), tank mixtures or sequential treatments of GLEAN® XP and organophosphate insecticides (such as methyl or ethyl parathion, "Di-Syston", etc.) may produce temporary crop yellowing or, in severe cases, crop injury. Test these mixtures in a small area first. If no symptoms of crop injury occur 14 days after treatment, treat the rest of the acreage. **Do not use GLEAN® XP plus Malathion, as crop injury may result.** Do not apply GLEAN® XP within 60 days of crop emergence where an organophosphate insecticide (such as "Di-Syston") has been applied as an in-furrow treatment, as crop injury may result.

With Fungicides

GLEAN® XP may be tank mixed with other fungicides whenever the proper timing for herbicide and fungicide treatments coincide.

With Liquid Fertilizer

GLEAN® XP may be tank mixed with liquid fertilizer for application to crops. Note that adding surfactant to tank mixtures of GLEAN® XP and liquid fertilizer increases the risk of crop injury. Therefore, before mixing GLEAN® XP with fertilizer, check the compatibility of the tank mix on a small area before treating the entire crop. Do not use GLEAN® XP with liquid fertilizers having a pH of 3.0 or less, as rapid product degradation can result. Note: Liquid fertilizers are significantly heavier than water per gallon of liquid; therefore, to maintain proper spray volumes, adjust the nozzle type and nozzle pressure as necessary. Consult fertilizer solution suppliers and/or sprayer systems company catalogs to determine the appropriate spray nozzles.

TALL FESCUE GROWN FOR SEED APPLICATIONS

GLEAN® XP is for control of broadleaf weeds in Tall Fescue grown for seed in KS, OR, and WA. Apply GLEAN® XP at 0.25 oz per acre in late summer to early fall after harvest. If weeds are present, add a non-ionic surfactant at 1 qt. per 100 gallons of spray solution. To maximize crop safety, add 0.5 to 1.0 lb. active ingredient of 2,4-D, and apply when Tall Fescue has less than 6" new foliar growth.

Treatment with GLEAN® XP may reduce the height of Tall Fescue. In areas of spray overlap, crop height and yields may be reduced significantly. Applications made in the spring while Tall Fescue is actively growing can result in very significant crop damage. Spring germinating wild carrot may not be controlled by a fall application of GLEAN® XP. Do not mix GLEAN® XP with an organophosphate insecticide as severe crop injury may occur.

BORDER AREA APPLICATIONS

GLEAN® XP is for control of broadleaf weeds in field border areas and fence lines. Apply GLEAN® XP at 0.25 to 0.5 oz per acre.

WEED CONTROL INFORMATION

WEEDS CONTROLLED

DuPont™ GLEAN® XP effectively controls the following weeds when applied at the rates shown:

0.17 to 0.25 oz per acre

- Blue mustard
- Conical catchfly
- Curly dock
- Cutleaf evening primrose
- Field pennycress
- Flixweed[2]
- Hempnettle
- Henbit
- Mayweed
- Miners lettuce
- Pineappleweed
- Prostrate pigweed
- Redroot pigweed
- Shepherd's purse
- Smooth pigweed
- Tansymustard[2]
- Treacle mustard
- Tumble mustard (Jim Hill)
- Waterpod
- Wild mustard

0.33 oz per acre

- Bur beakchervil
- Buttercup
- Coast fiddleneck (tarweed)
- Common chickweed
- Common groundsel
- Corn spurry
- Cow cockle
- False chamomile
- Falseflax
- Ladysthumb
- Lambsquarters[2]
- Mouseear chickweed
- Purslane (common)
- Redstem filaree
- White cockle
- Wild carrot
- Wild turnip

WEEDS PARTIALLY CONTROLLED

GLEAN® XP partially controls the following weeds when applied at the rates shown:

0.33 oz per acre

- Annual ryegrass[2]
- Bedstraw
- Canada thistle[2]
- Corn gromwell
- Downy brome[2, 5]
- Green foxtail (pigeongrass)[5]
- Kochia[3, 4]
- Pennsylvania smartweed
- Persian Darnel[2, 5]
- Prickly lettuce[3]
- Prostrate knotweed[2]
- Russian thistle[3, 4]
- Sunflower[2]
- Speedwell
- Wild buckwheat[2]
- Wild garlic/Wild onion[2]
- Wild radish[2]
- Yellow foxtail[2, 5]

1 Partially controlled weeds exhibit a visual reduction in numbers as well as a significant loss of vigor. For better results, use 0.33 oz GLEAN® XP per acre and include a tank-mix partner (refer to Tank Mixtures).

2 See Specific Weed Problems for more information.

3 Naturally occurring resistant biotypes of these weeds are known to occur in the Central Plains and the Pacific Northwest. See Tank Mixtures and Resistance for additional information.

4 Use GLEAN® XP to control these weeds in Central Kansas, Central Nebraska, Central Oklahoma, and North Central Texas only.

5 Use GLEAN® XP to suppress these weeds in MT, ND, SD and WY only.

SPECIFIC WEED INSTRUCTIONS

Annual Ryegrass (Southeast Oklahoma, Central and North Central Texas)**:** Apply GLEAN® XP preemergence at 0.5 oz per acre. One-half to 1" of rainfall is needed to move GLEAN® XP into the root zone of weeds prior to ryegrass emergence. Under abnormally wet conditions, fall applications may not adequately control ryegrass and/or broadleaf weeds that germinate in the spring.

Remove grazing cattle when fields are wet (muddy) to avoid disturbing the herbicide barrier.

Canada Thistle: Apply GLEAN® XP with surfactant after the majority of thistles have emerged and while they are small (rosette stage to 4"-6" tall) and actively growing. For maximum long-term effect, yearly treatment may be required.

Downy Brome (MT, ND, SD and WY): Apply GLEAN® XP at 0.33 oz per acre in the fall for suppression of downy brome. Application before downy brome germinates is preferred. After emergence, best results are obtained if application is made before downy brome is more than 1" tall or beyond the 2 leaf stage. 0.50 to 1" of rainfall is needed to move GLEAN® XP into the weed root zone before the downy brome establishes a 2" root system.

Flixweed, Tansymustard (Northern Idaho, Oregon and Washington)**:** For best postemergence results, tank mix GLEAN® XP at 0.33 oz per acre with another herbicide that is effective on these weeds, such as 2,4-D.

In all other areas, apply GLEAN® XP at 0.17 to 0.33 oz per acre when weeds are small and actively growing. If weeds are inactive due to cold, dry weather before and/or after treatment, delay application until moisture and temperature conditions are favorable for active weed growth, or use a tank-mix treatment with 2,4-D or MCPA.

Foxtail/Pigeongrass (green and yellow) (ND, SD and Southern WY): Apply GLEAN® XP at 0.33 oz per acre in the fall or spring for suppression of these foxtail species. Application before the foxtail germinates is preferred. After emergence, best results are

obtained if application is made before the foxtail is more than 1" tall or beyond the 2 leaf stage. 0.5 to 1" of rainfall is needed to move DuPont™ GLEAN® XP into the weed root zone before the foxtail reaches the 3 leaf stage.

Lambsquarters: For best results, apply 0.33 oz per acre GLEAN® XP in the fall.

For best postemergence suppression, apply GLEAN® XP plus either 2,4-D or MCPA after the majority of weeds have emerged (less than 2" tall or 2" across) and are actively growing. Soil moisture should be adequate, and daily temperatures should reach at least 60°F. Add surfactant at 0.50 to 1 qt per 100 gal of spray solution. Ensure thorough spray coverage.

Persian Darnel (MT, ND, SD and WY): Apply GLEAN® XP at 0.33 oz per acre in the fall or spring for suppression of Persian darnel. Application before the Persian darnel germinates is preferred. After emergence, best results are obtained if application is made before the Persian darnel is beyond the 2 leaf stage. 0.5 to 1" of rainfall is needed to move GLEAN® XP into the weed root zone before the Persian darnel reaches the 3 leaf stage.

Prostrate Knotweed: For best results, apply in the fall.

Sunflower (New Mexico, Oklahoma Panhandle, and Texas): For best results, apply GLEAN® XP after the majority of sunflowers have emerged, are actively growing, and are not more than 2" tall. Add surfactant at 2 qt per 100 gal of water. For preemergence applications, apply GLEAN® XP in early spring to allow rainfall to move GLEAN® XP into the weed root zone before weeds germinate or develop an established root system.

Wild Buckwheat: For best results, apply GLEAN® XP preemergence to wild buckwheat. For postemergence applications, tank mix with either 2,4-D, MCPA, dicamba, or bromoxynil and a surfactant and apply after the majority of seedlings have emerged and are actively growing.

Wild Garlic/Wild Onion: GLEAN® XP provides aerial bulblet control only.

Wild Radish: For best results, apply postemergence.

SPRAY ADJUVANTS - ALL CROPS OR USES

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

The higher rate is particularly useful with spray volumes of 5 GPA or less and when using low rates of GLEAN® XP. Consult your Agricultural dealer or applicator for recommended surfactants.

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

Antifoaming agents may be used if needed.

CROP ROTATION

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

MINIMUM RECROPPING INTERVALS

Minimum recropping intervals* are determined by the rate of breakdown of GLEAN® XP applied. GLEAN® XP breakdown in the soil is affected by soil pH, soil temperature, and soil moisture. Low soil pH, high soil temperature, and high soil moisture increase GLEAN® XP breakdown in soil, while high soil pH, low soil temperature, and low soil moisture slow GLEAN® XP breakdown.

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

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

SOIL PH LIMITATIONS

GLEAN® XP should not be used on soils having a pH above 7.9, as extended soil residual activity could extend crop rotation intervals beyond normal, and under certain conditions, could injure wheat, barley, or oat. In addition, other crops planted in high-pH soils can be extremely sensitive to low concentrations of GLEAN® XP.

Checking Soil pH

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

BIOASSAY

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

To conduct a field bioassay, grow test strips of the crop or crops you plan to grow the following year in fields previously treated with DuPont™ GLEAN® XP. Crop response to the bioassay will indicate whether or not to rotate to the crop(s) grown in the test strips.

If a field bioassay is planned, check with your local agricultural dealer, state cooperative extension service, or DuPont representative, for information detailing field bioassay procedure.

Cereal Crops -- Recropping Intervals

State	Crop	Soil pH	Application Rate (oz/A)	Rotation Interval (months)
AR, CO, DE, GA, KS, MD, MO, NC, NE, NM, OK, PA, SC, TX, VA, Southeastern WY	wheat, rye, triticale	7.9 or lower	0.17 to 0.33	0
			0.50 (TX/OK only)	4
	oat	7.9 or lower	0.17 to 0.5	10
	barley	7.9 or lower	0.17 to 0.33	10
MN, MT, ND, SD, WI, Northern WY	wheat, rye, triticale	7.9 or lower	0.17 to 0.33	0
	oat	7.9 or lower	0.17 to 0.33	10
	barley	6.5 or lower	0.17 to 0.33	10
		6.6 to 7.9	0.17 to 0.33	16
CA, ID, OR, UT, WA	wheat, rye, triticale	7.5 or lower	0.17 to 0.33	0
		7.6 to 7.9	0.17 to 0.33	4
	oat	7.5 or lower	0.17 to 0.33	10
		7.6 to 7.9	0.17 to 0.33	16
	barley	6.5 or lower	0.17 to 0.33	10
		6.6 to 7.5	0.17 to 0.33	16
		7.6 to 7.9	0.17 to 0.33	24

Noncereal Crops -- Recropping Intervals -- Non Irrigated Land

Location		Crop	Soil pH	Application Rate (oz/A)	Cumulative Precipitation (Inches)	Rotation Interval (Months)
State	**County or Area**					
Arkansas	all areas	Cotton, Grain Sorghum, Soybeans	7.9 or lower	0.17 to 0.33	25	14
		BOLT™ technology soybeans**	7.5 or lower	0.17 to 0.33	--	4
		STS soybeans**	7.5 or lower	0.17 to 0.33	--	6
Colorado	All areas	BOLT™ technology soybeans** STS soybeans**, IR Corn**	7.5 or lower***	0.17 to 0.33	--	4
		Grain Sorghum†	7.2 or lower	0.17 to 0.25	--	4
			7.3 to 7.5***	0.17 to 0.25	--	6
	Adams, Arapahoe, Logan	Field Corn, Millets	7.5 or lower	0.17 to 0.33	30	24
	Morgan, Phillips, Sedgwick, Washington, Yuma	Field Corn, Millets	7.6 to 7.9	0.17 to 0.33	45	36
	Eastern, CO	Grain Sorghum	7.5 or lower	1/4 to 1/3	45	36
			7.6 to 7.9	0.17 to 0.33	60	48
Georgia	all areas	BOLT™ technology soybeans**	7.5 or lower	0.17 to 0.33	--	4
		STS soybeans**	7.5 or lower	0.17 to 0.33	--	6
Idaho*	Northern counties	Pea (dry)	6.5 or lower	0.17 to 0.33	35	24
	(Benewah, Bonner, Boundary, Clearwater, Idaho, Koontenai, Letah, Lewis and Nez Perce)	Lentils	6.5 or lower	0.17 to 0.33	50	36
Kansas	all areas	BOLT™ technology soybeans** STS soybeans**, IR Corn**	7.5 or lower***	0.17 to 0.33	--	4
	Western (W. of Hwy 183)	Grain Sorghum†	7.2 or lower	0.17 to 0.25	--	4
			7.3 to 7.5***	0.17 to 0.25	--	6
	Eastern (E. of Hwy 183)	Grain Sorghum†	7.5 or lower	0.17 to 0.33	--	4
	W. Central & Western	Grain Sorghum	7.5 or lower	0.17 to 0.33	21	14
	(generally West of Hwy. 183 to the Western edge of Grant, Kearny, Logan Rawlings, Stevens Thomas and Wichita counties		7.6 to 7.9	0.17 to 0.33	42	26
	Far Western (In the last	Grain Sorghum	7.5 or lower	0.17 to 0.33	36	26
	tier of counties along the KS/CO border-- (Cheyenne, Greeley, Hamilton, Morton, Sherman, Stanton, and Wallace)		7.6 to 7.9	0.17 to 0.33	60	48
Maryland	all areas	BOLT™ technology soybeans**	7.5 or lower	0.17 to 0.33	--	4
		STS soybeans**	7.5 or lower	0.17 to 0.33	--	6
Montana	all areas	Safflower	7.9 or lower	0.17 to 0.33	39	34
Nebraska	all areas	BOLT™ technology soybeans** STS soybeans**, IR Corn**	7.5 or lower***	0.17 to 0.33	--	4
	Western (W. of Hwy. 183)	Grain Sorghum†	7.2 or lower	0.17 to 0.25	--	4
			7.3 to 7.5***	0.17 to 0.25	--	6
		Field Corn, Millets,	7.5 or lower	0.17 to 0.33	40	24
		Grain Sorghum, Soybeans	7.6 to 7.9	0.17 to 0.33	60	36
	Eastern (E. of Hwy. 183)	Grain Sorghum†	7.5 or lower	0.17 to 0.33	--	4
	S. Central (Franklin,	Grain Sorghum	7.9 or lower	0.17 to 0.33	25	14
	Nuckolls, Thayer	Soybeans	7.5 or lower	0.17 to 0.33	25	14
	and Webster counties)		7.6 to 7.9	0.17 to 0.33	46	26
New Mexico	all areas	Grain Sorghum	7.9 or lower	0.17 to 0.33	30	25
North Carolina	all areas	BOLT™ technology soybeans**	7.5 or lower	0.17 to 0.33	--	4
		STS soybeans**	7.5 or lower	0.17 to 0.33	--	6

Location		Crop	Soil pH	Application Rate (oz/A)	Cumulative Precipitation (Inches)	Rotation Interval (Months)
State	**County or Area**					
North Dakota	all areas	Safflower	7.9 or lower	0.17 to 0.33	45	34
Oklahoma	all areas	BOLT™ technology soybeans** STS soybeans**, IR Corn**	7.5 or lower***	0.17 to 0.33	--	4
	panhandle	Grain Sorghum	7.2 or lower	0.17 to 0.25	--	4†
			7.3 to 7.5***	0.17 to 0.25	--	6†
			up to 7.9	up to 0.33	30	25
	all areas except panhandle	Grain Sorghum†	7.5 or lower	0.17 to 0.33	--	4
	Eastern (E. of Hwy 183)	Grain Sorghum, Cotton, Mung, Beans, Soybeans	7.9 or lower	0.17 to 0.5	25	14
	Western (W. of Hwy 183 & E. of the Panhandle	Cotton, Grain Sorghum	7.9 or lower	0.17 to 0.33	25	14
Oregon*	Northeastern counties	Pea (dry)	6.5 or lower	0.17 to 0.33	35	24
	(Baker, Umatilla, Union, and Wallowa)	Lentils	6.5 or lower	0.17 to 0.33	50	36
	West of Cascade Mountains†	Annual ryegrass, perennial ryegrass, crimson clover	6.5 or less	0.17 to 0.25	20	9
		Red clover, snap beans, field corn	6.5 or less	0.17 to 0.25	40	15
South Carolina	all areas	BOLT™ technology soybeans**	7.5 or lower	0.17 to 0.33	--	4
		STS soybeans**	7.5 or lower	0.17 to 0.33	--	6
Texas	all areas	BOLT™ technology soybeans** STS soybeans**, IR Corn**	7.5 or lower***	0.17 to 0.33 lower***	--	4
	panhandle	Grain Sorghum	7.2 or lower	0.17 to 0.25	--	4†
			7.3 - 7.5***	0.17 to 0.25	--	6†
			up to 7.9	up to 0.33	30	25
	all areas except panhandle	Grain Sorghum†	7.5 or lower	0.17 to 0.33	--	4
	Eastern counties	Grain Sorghum, Cotton, Mung Beans, Soybeans	7.9 or lower	0.17 to 0.5	25	14
	The Eastern counties are: Archer, Bell, Bosque, Bowie, Camp, Cass, Clay, Colin, Cooke, Coryell, Dallas, Delta, Denton, Ellis, Falls, Fannin, Franklin, Grayson, Hill, Hood, Hopkins, Hunt, Jack, Johnson, Kaufman, Lamar, Limestone, McLennan, Milam, Montague, Morris, Navarro, Palo Pinto, Parker, Rains, Red River, Robertson, Rockwall, Somervell, Tarrent, Titus, Upshur, Van Zandt, Wichita, Williamson, Wise, Wood and Young.					
	Central counties	Cotton, Grain	7.9 or lower	0.17 to 0.33	25	14
		Sorghum	7.9 or lower	0.5	46	26
	The Central counties are: Baylor, Callahan, Eastland, Foard, Hardeman, Haskell, Knox, Shackelford, Stephens, Throckmorton and Wilbarger.					
Virginia	all areas	BOLT™ technology soybeans**	7.5 or lower	0.17 to 0.33	--	4
		STS soybeans**	7.5 or lower	0.17 to 0.33	--	6
Washington*	Eastern counties (Asotin,	Pea (dry)	6.5 or lower	0.17 to 0.33	35	24
	Columbia, Garfield, Pend Oreille, Spokane, Stevens, Walla Walla, and Whitman)	Lentils	6.5 or lower	0.17 to 0.33	50	36
Wyoming	Southeast	Proso and	7.5 or lower	0.17 to 0.33	30	24
		Setaria Millets	7.6 to 7.9	0.17 to 0.33	45	36

Unless a crop rotation interval is specified, a field bioassay must be completed before rotating to any crop not listed. See Bioassay for information on conducting a field bioassay in target areas.

*A field bioassay is required if soil pH is above 6.5.

**Under certain conditions (such as drought, prolonged cold weather, pH variability in the fields) temporary discoloration and/or crop injury may occur to BOLT™ technology soybeans, STS soybeans or IR corn planted after DuPont™ GLEAN® XP applications. These intervals do not apply to crops grown for seed. These intervals may also be used for irrigated land.

***Where a CATASTROPHIC CROP LOSS has occurred after a GLEAN® XP application due to a natural disaster (such as freezing weather, hail damage, insect damage, disease damage), grain sorghum can be planted at 4 months where the soil pH is 7.3 to 7.5 or BOLT™ technology soybeans, STS soybeans and IR corn where the soil pH is 7.5 to 7.9. These crops will have some level of temporary discoloration and/or crop injury if planted at this reduced interval after GLEAN® XP application. This potential damage and yield loss is accepted by the grower due to the critical need to get a crop planted after this emergency. Growers not willing to accept this level of potential early season crop injury and yield loss should follow the standard rotational guidelines in the table above. In some cases, this injury may be severe and may affect the crop growth, development, and yield. The severity of the injury increases with higher pH levels, higher applied GLEAN® XP rate, drier soil conditions after GLEAN® XP application and prior to planting the rotational crop, and the shorter the rotational interval. **Note**: Do not plant sorghum grown for hybrid seed production.

†These intervals may also be used for irrigated land.

MIXING INSTRUCTIONS

PRODUCT MEASUREMENT

DuPont™ GLEAN® XP is measured using the GLEAN® XP volumetric measuring cylinder. The degree of accuracy of this cylinder varies by ± 7.5 %. For more precise measurement, use scales calibrated in ounces.

MIXING INSTRUCTIONS

1. Fill the tank 0.25 to 0.33 full of water (If using liquid nitrogen fertilizer solution in place of water, see Tank Mixtures sections for additional details).

2. While agitating, add the required amount of GLEAN® XP.

3. Continue agitation until the GLEAN® XP is fully dispersed, at least 5 minutes.

4. Once the GLEAN® XP is fully dispersed, maintain agitation and continue filling tank with water. GLEAN® XP should 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. Apply GLEAN® XP spray mixture within 24 hours of mixing to avoid product degradation.

8. If GLEAN® XP and a tank mix partner are to be applied in multiple loads, pre-slurry the GLEAN® XP in clean water prior to adding to the tank. This will prevent the tank mix partner from interfering with the dissolution of the GLEAN® XP.

Do not use GLEAN® XP with spray additives that reduce the pH of the spray solution to below 3.0.

SPRAY EQUIPMENT

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

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

BEFORE SPRAYING GLEAN® XP

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

AT THE END OF THE DAY

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

AFTER SPRAYING GLEAN® XP AND BEFORE SPRAYING CROPS NOT LABELLED FOR A GLEAN® XP APPLICATION

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

1. Drain tank; thoroughly rinse spray tanks, boom, and hoses with clean water. Loosen and physically remove any visible deposits.

2. Fill the tank with clean water and 1 gal of household ammonia* (contains 3% active) for every 100 gal of water. Flush the hoses, boom, and nozzles with the cleaning solution. Then add more water to completely fill the tank. Circulate the cleaning solution through the tank and hoses for at least 15 min. Flush the hoses, boom, and nozzles again with the cleaning solution, and then drain the tank.

3. Remove the nozzles and screens and clean separately in a bucket containing cleaning agent and water.

4. Repeat step 2.

5. Rinse the tank, boom, and hoses with clean water.

6. If only Ammonia is used as a cleaner, the rinsate solution may be applied back to the crop(s) recommended on this label. Do not exceed the maximum labeled use rate. If other cleaners are used, consult the cleaner label for rinsate disposal instructions. If no instructions are given, dispose of the rinsate on site or at an approved waste disposal facility.

* Equivalent amounts of an alternate-strength ammonia solution or a cleaner which dissolves and removes sulfonylurea herbicide residues can be used in the cleanout procedure. Carefully read and follow the individual cleaner instructions.

Notes:

1. Caution: Do not use chlorine bleach with ammonia as dangerous gases will form. Do not clean equipment in an enclosed area.

2. Steam-cleaning aerial spray tanks is recommended prior to performing the above cleanout procedure to facilitate the removal of any caked deposits.

3.When DuPont™ GLEAN® XP is tank mixed with other pesticides, all required cleanout procedures should be examined and the most rigorous procedure should be followed.

4. In addition to this cleanout procedure, all precleanout guidelines on subsequently applied products should be followed as per the individual labels.

5.Where routine spraying practices include shared equipment frequently being switched between applications of GLEAN® XP and applications of other pesticides to GLEAN® XP-sensitive crops during the same spray season, it is recommended that a sprayer be dedicated to GLEAN® XP to further reduce the chance of crop injury.

GROUND APPLICATION

To obtain optimum spray distribution and thorough coverage, use flat-fan or low-volume flood nozzles. When using flat-fan nozzles, use a spray volume of at least 3 gal per acre (GPA). When using flood jet or "Raindrop RA" nozzles, use higher spray volume (minimum 20 GPA) to ensure thorough coverage. However, GLEAN® XP may not be applied at less than 10 GPA when using small orifice flooding nozzles such as flood jet TK 5 to TK 7.5 or equivalent. These flooding nozzles must be on a 30-inch spacing or not less than 13 GPA when on a 40-inch spacing. It is essential to overlap the nozzles 100% for all spacings. Use screens that are 50-mesh or larger.

AERIAL APPLICATION

Use nozzle types and arrangements that provide optimum spray distribution and maximum coverage at 1 to 5 GPA. Use at least 3 GPA in Idaho, Oregon, or Utah. When applying GLEAN® XP by air in areas where sensitive crops are nearby, use solid stream nozzles oriented straight back.

SPRAY DRIFT MANAGEMENT

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

IMPORTANCE OF DROPLET SIZE

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

CONTROLLING DROPLET SIZE - GENERAL TECHNIQUES

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

CONTROLLING DROPLET SIZE - AIRCRAFT

- **Number of Nozzles** - Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations.
- **Nozzle Type** - Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.

BOOM LENGTH AND HEIGHT

- **Boom Length (aircraft)** - The boom length should not exceed 3/4 of the wing length, using shorter booms decreases drift potential. For helicopters use a boom length and position that prevents droplets from entering the rotor vortices.
- **Boom Height (aircraft)** - Application more than 10 ft above the canopy increases the potential for spray drift.
- **Boom Height (ground)** - Setting the boom at the lowest height which provides uniform coverage reduces the exposure of droplets to evaporation and wind. The boom should remain level with the crop and have minimal bounce.

WIND

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

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

TEMPERATURE AND HUMIDITY

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

SURFACE TEMPERATURE INVERSIONS

Drift potential is high during a surface temperature inversion. Surface inversions restrict vertical air mixing, which causes 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. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates a surface inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SHIELDED SPRAYERS

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

SENSITIVE AREAS

The pesticide must only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g, when wind is blowing away from the sensitive areas).

DRIFT CONTROL ADDITIVES

Drift control additives may be used with all spray equipment with the exception of controlled droplet applicators. When a drift control additive is used, read and carefully observe cautionary statements and all other information on the label.
It is recommended that drift control additives be certified by the Chemical Producers and Distributors Association (CPDA).

GRAZING

There are no grazing restrictions on DuPont™ GLEAN® XP.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store product in original container only. Store in a cool, dry place.

Pesticide Disposal: Waste 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™ GLEAN® XP herbicide containing chlorsulfuron 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™ GLEAN® XP herbicide containing chlorsulfuron 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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