

GROUP 4 & 14 HERBICIDE



Panther[®] D

HERBICIDE

Not Intended For Residential Use.

ACTIVE INGREDIENTS:

Flumioxazin*	2.53%
2,4-Dichlorophenoxyacetic acid**	38.87%

OTHER INGREDIENTS	58.60%
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TOTAL:	100.00%
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*2-[7 -fluoro-3, 4-dihydro-3-oxo-4-(2-propynyl) -2H-1 • 4-benzoxazin-6-yl]-4.5.6.
7-tetrahydro-1 H-isindole-1.3(2H)-dione
Panther D contains 0.26 pounds flumioxazin per gallon.

**Contains 4.0 pounds per gallon 2,4-Dichlorophenoxyacetic acid.
Isomer specific by AOAC method No. 978.05

**KEEP OUT OF REACH OF CHILDREN
DANGER / PELIGRO**

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

**SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL
PRECAUTIONARY STATEMENTS**

**For ≤ 5 Gallon Containers:
Shake Well Before Use
For > 5 Gallon Containers:
Shake Well, Agitate or
Recirculate Before Use**

For Chemical Spill, Leak, Fire,
or Exposure, Call CHEMTREC
(800) 424-9300
For Medical Emergencies Only,
Call (877) 325-1840

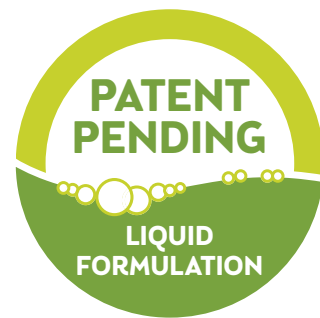
EPA Reg. No. 71368-115

Manufactured for
Nufarm Inc.
11901 S. Austin Ave.
Alsip, IL 60803



Nufarm

Grow a better tomorrow.



PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER / PELIGRO

Causes irreversible eye damage. Harmful if swallowed. Do not get in eyes or on clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

All applicators must wear:

- long-sleeved shirt and long pants,
- shoes and socks,
- chemical-resistant gloves, and
- protective eyewear (goggles, face shield or safety glasses).

All mixers, loaders, and other handlers must wear:

- long-sleeved shirt and long pants,
- shoes and socks,
- chemical-resistant gloves,
- chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate, and
- protective eyewear (goggles, face shield or safety glasses).

For aerial application to Sugarcane mixers / loaders must also wear:

- chemical-resistant boots and coveralls.

For aerial application to Wheat mixers / loaders must also wear:

- filtering face piece respirator (N95, R95 or P95).

See engineering controls for additional requirements.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS STATEMENTS:

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

USER SAFETY RECOMMENDATIONS

Users Should:

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

FIRST AID

IF IN EYES	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 to 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	<ul style="list-style-type: none"> • 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 the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.

(continued on next page)

FIRST AID (continued)

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.

NOTE TO PHYSICIANS

This product contains a phenoxy herbicidal chemical. There is no specific antidote. All treatments should be based on observed signs and symptoms of distress in the patient. Probable mucosal damage may contraindicate the use of gastric lavage. Overexposure to materials other than this product may have occurred.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish, non-target plants and aquatic invertebrates.

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff may be hazardous to non-target plants and aquatic organisms in neighboring areas. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters.

This pesticide is toxic to plants and should be used strictly in accordance with the drift and run-off precautions on this label in order to minimize off-site exposures.

Under some conditions this product may have a potential to run-off to surface water or adjacent land. Where possible, use methods which reduce soil erosion, such as no till, limited till and contour plowing; these methods also reduce pesticide run-off. Use of vegetation filter strips along rivers, creeks, streams, wetlands or on the downhill side of fields where run-off could occur will minimize water run-off and is recommended.

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

Do not contaminate water used for irrigation or domestic purposes especially in areas where grapes, cotton, tomatoes or other susceptible plants are grown.

Do not apply this product directly to, or permit to drift onto cotton, okra, grapes, tomatoes, fruit trees, vegetables, flowers or other desirable crop or ornamental plants which are susceptible to 2,4-D herbicide. Do not apply near susceptible plants since very small quantities of the 2,4-D will cause severe injury during the growing or dormant periods. Crops contacted by this product sprays or spray drift may be killed or suffer significant stand loss with extensive quality and yield reduction.

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

PHYSICAL AND CHEMICAL HAZARDS

Do not mix or allow to come in contact with oxidizing agents. Hazardous chemical reaction may occur.

DIRECTIONS FOR USE

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

Read entire label before using this product.

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

AGRICULTURAL USE REQUIREMENTS

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

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is: coveralls, chemical-resistant gloves made of any water-proof material, shoes plus socks, protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow people (or pets) to enter the treated area until sprays have dried.

USE RESTRICTIONS

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

Do not use in or near a greenhouse.

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.

Do not apply to frozen or snow covered soil.

Do not apply to farm alleys or roads where traffic may result in treating dust settling onto crops or other desired vegetation.

Do not apply within 300 yards of non-dormant pears.

Post directed and layby application of this product should only be applied to healthy growing crops.

Do not apply to powdery soils that are susceptible to wind displacement unless irrigation can be applied immediately after application.

Read and follow all directions, restrictions and precautions on this label and on the labels of any products for which a tank mixture is being considered.

PRODUCT INFORMATION

INJURY TO CROPS FROM THIS HERBICIDE MAY OCCUR. IF YOU ARE NOT PREPARED TO ACCEPT SOME DEGREE OF CROP INJURY DO NOT USE THIS PRODUCT.

Crop varieties vary in response to 2,4-D and some are easily injured. Apply this product only to varieties known to be tolerant to 2,4-D. If you are uncertain concerning tolerant varieties or local use situations that may affect crop tolerance to 2,4-D, consult your seed company, State Agricultural Extension Service or qualified crop consultant for advice.

Be sure that use of this product conforms to all applicable laws, rules and regulations. Certain states have restrictions pertaining to application distances from susceptible crops. The applicator should become familiar with these laws, rules or regulations and follow them exactly.

MIXING INSTRUCTIONS

Add about one-half the water to the mixing tank, then add this product with agitation and finally the rest of water with continuing agitation.

NOTE: Adding oil, wetting agent, or other surfactants to the spray may increase effectiveness on weeds but also may reduce selectivity to crops, resulting in crop damage.

COMPATIBILITY

If this product is to be tank mixed with fertilizers or with other pesticides, compatibility should be tested prior to mixing. To test for compatibility, use a small container and mix a small amount (0.5 to 1 quart) of spray, combining all ingredients in the same ratio as the anticipated use. If any indications of physical incompatibility develop, do not use this mixture for spraying. Indications of incompatibility usually will appear within 5 to 15 minutes after mixing.

APPLICATION PROCEDURES

Apply by air or ground equipment in sufficient gallonage to obtain adequate coverage, except as otherwise directed on this label. Use 2 or more gallons of water per acre for aerial application and 10 or more gallons of water per acre for ground application.

RESISTANCE MANAGEMENT

This product contains active ingredients in Groups 4 and 14. Any weed population may contain or develop plants that are resistant to this product and other Group 4 and 14 herbicides. Weed species with acquired resistance to Group 4 and 14 herbicides may eventually dominate the weed population if Group 4 and 14 herbicides are used repeatedly in the same application area or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by this product or other Group 4 and 14 herbicides.

To delay or prevent herbicide resistance consider the following practices:

- Avoid the use of more than two consecutive applications of this product or other herbicides that have a similar target site of action.
- Alternate herbicides used for weed control.
- Base herbicide use on a comprehensive Integrated Pest Management (IPM) program.
- Monitor treated weed populations for loss of efficacy.
- Contact your local extension specialist, other experts appropriate to aquatic use, and/or manufacturer for resistance and/or integrated weed management practices.

For further information or to report suspected resistance, you may contact Nufarm Inc. at the following toll-free number: 800-345-3330.

SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Droplet Size

When applying sprays that contain 2,4-D mixed with active ingredients that require a Coarse or coarser spray, apply only as a Coarse or coarser spray (ASAE standard 572) or a volume mean diameter of 385 microns or greater for spinning atomizer nozzles.

When applying sprays that contain 2,4-D mixed with other active ingredients that require a Medium or more fine spray, apply only as a Medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition and there are not sensitive areas (including, but not limited to, residential areas, bodies of water, known habitat for nontarget species, nontarget crops) within 250 feet downwind. If applying a Medium spray, leave one swath unsprayed at the downwind edge of the treated field.

Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Susceptible Plants

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), ornamentals, sunflowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

Equipment

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Additional requirements for aerial applications:

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. This requirement does not apply to forestry or rights-of-way applications.

When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this by adjusting the path of the aircraft upwind.

Additional requirements for ground boom application:

Do not apply with a nozzle height greater than 4 feet above the crop canopy.

ROTATIONAL RESTRICTIONS

The following rotational crops may be planted after applying this product at the listed rate. Planting earlier than the labeled rotational interval may result in crop injury.

For the Rotation Restrictions of the following crops, see the associated sections of this label:

- Cotton
- Field Corn
- Soybean
- Sugarcane
- Wheat

- Do not plant any crop, except corn (field), soybean or sugarcane earlier than 30 days after applying this product.

PANTHER D HERBICIDE RATES	CROPS	ROTATION INTERVALS
1- 2 pt/A	Peanut ² , Rice, Sorghum, Sweet Potato, Sunflower and Tobacco	30 days ¹
	Barley, Dry and Snap Beans, Flax, Peas, Rye, Safflower and Sweet Corn	3 months
	Alfalfa, Canola, Clover, Oats, Potato, Sugar Beet and all other crops not listed ²	4 months if soil is tilled prior to planting 8 months if no tillage is performed
	Lentil	6 months
Up to 3 pt/A	Peanut, Sorghum, and Sweet Potato	30 days ¹
	Cotton, Rice, Sunflower and Tobacco	2 months ¹
	Barley, Dry and Snap Beans, Flax, Pea, Rye, Safflower and Sweet Corn	4 months
	Alfalfa, Clover, Oats, Potato, Sugar Beet	5 months if soil is tilled prior to planting 10 months if no tillage is performed
	Canola and all other crops not listed ²	6 months if soil is tilled prior to planting 12 months if no tillage is performed
	Lentil	7 months
Up to 4 pt/A	Peanut, Rice, Sorghum, Sunflower and Tobacco	4 months
	Alfalfa, Canola, Potato, Sugar Beet and all other crops not listed ²	6 months if soil is tilled prior to planting 12 months if no tillage is performed
	Transplanted on raised beds only: melon, pepper and tomato ³	2 months (if the top 4 inches of the beds have been removed)
6 to 8 pt/A	Peanut, Rice, Sorghum, Sunflower and Tobacco	9 months
	Alfalfa, Canola, Sugar Beet and all other crops not listed ² Trees can be transplanted 2 months after an application of this product ⁴	12 months if soil is tilled prior to planting 18 months if no tillage is performed

* See additional restrictions and directions for use in **CORN** and **SOYBEANS** sections of label for 7 day PPI.

¹ At least one inch of rainfall/irrigation must occur between application and planting or crop injury may occur.

² Successful soil bioassay must be performed prior to planting crops.

³ **Arizona, California and Hawaii only.**

⁴ Transplanted apple, apricot, avocado, bushberries (including blueberry), cherry, fig, grape, grapefruit, lemon, nectarine, nut trees (including pistachio), olive, orange, peach, pear, plum (including dried plum), and tangerine can be planted 2 months after application of 2 to 8 pints per acre of this product.

SMALL QUANTITY DILUTION TABLE

To spray small areas use the following dilution table.

If Dosage on Label Shows Following Rate Per Acre	Use this Amount for each Gallon of Water Per 1,000 Square Feet
2 pints (1 quart)	0.73 fluid ounces
3 pints (1-1/2 quarts)	1.10 fluid ounces
4 pints (2 quarts)	1.46 fluid ounces
6 pints (3 quarts)	2.20 fluid ounces

WEED LIST

Table - Weeds Controlled by Postemergence Activity of This Product

Annual and Biennial Weeds

Beggarticks*	Mallow* (venice or little)	Rough fleabane
Bullthistle	Marshelder	Russian thistle*
Coffeeweed	Marestail / Horseweed	Salsify (western or common)
Common cocklebur	Morningglory (common, ivy, woolly)	Shepherd's purse
Common burdock	Musk thistle* (***)	Smartweeds* (annual species)
Cutleaf eveningprimrose	Mustards (except blue mustard)	Sowthistle (annual or spiny)
Common lambsquarters	Pepper weeds (except perennial)	Sunflower
Hairy galinsoga	Pigweeds** (Amaranthus spp.)	Vervains*
Henbit	Prickly lettuce	Vetches
Jimsonweed	Purple deadnettle	Wild carrot
Knotweed*	Ragweed (common or giant)	Wild lettuce
		Wild parsnips

Perennial Weeds

Bindweed* (hedge, field, European)	Goldenrod*	Orange hawkweed*
Blue lettuce	Healall	Plantains
Canada thistle*	Ground ivy*	Sowthistle (perennial)
Catnip	Hoary cress*	Vervains*
Chicory	Ironweed*	Wild garlic*
Dandelion Docks*	Jerusalem artichoke	Wild onion*
Dogbane*	Many flowered aster	
	Nettles* (including stinging)	

*These species may require repeated applications, when permissible by label restrictions, and/or use of the higher rate labeled on this product label even under ideal conditions for application.

**Control of pigweeds in the High Plains area of Texas and Oklahoma may not be satisfactory with this product.

***Not registered for control of musk thistle in California.

Table - Broadleaf Weeds Controlled by Residual Activity of This Product

BROADLEAF WEED SPECIES

SECTION A		ORGANIC MATTER	SOIL TYPE	PANTHER D HERBICIDE RATE
COMMON NAME	SCIENTIFIC NAME			
Carpetweed	<i>Mollugo verticillata</i>	Up to 5%	All Soil Types	2 pt/A
Chickweeds,				
Common	<i>Stellaria media</i>			
Mouseear	<i>Cerastium vulgatum</i>			
Dandelion	<i>Taraxacum officinale</i>			
Eclipta	<i>Eclipta prostrata</i>			
Eveningprimrose, Cutleaf	<i>Oenothera laciniata</i>			
Field Pennycress	<i>Thlaspi arvense</i>			
Florida Pusley	<i>Richardia scabra</i>			
Henbit	<i>Lamium amplexicaule</i>			
Lambsquarters, Common	<i>Chenopodium album</i>			
Little Mallow	<i>Malva parviflora</i>			
Marestail/Horseweed	<i>Conyza canadensis</i>			
Mayweed/False Chamomile	<i>Matricaria maritima</i>			
Nightshades,				
Black	<i>Solanum nigrum</i>			
Eastern Black	<i>Solanum ptycanthum</i>			
Hairy	<i>Solanum sarrachoides</i>			
Pigweeds,				
Redroot	<i>Amaranthus retroflexus</i>			
Smooth	<i>Amaranthus hybridus</i>			
Spiny Amaranth	<i>Amaranthus spinosus</i>			
Tumble	<i>Amaranthus albus</i>			
Prickly Lettuce	<i>Lactuca serriola</i>			
Prickly Sida (Teaweed)	<i>Sida spinosa</i>			
Puncturevine	<i>Tribulus terrestris</i>			
Purslane, Common	<i>Portulaca oleracea</i>			
Radish, Wild	<i>Raphanus raphanistrum</i>			
Redmaids	<i>Calandrinia ciliata</i> var. <i>menziessii</i>			
Shepherd's-purse	<i>Capsella bursa-pastoris</i>			
Smallflower Morningglory	<i>Jacquemontia tamnifolia</i>			
Sowthistle, Prickly	<i>Sonchus asper</i>			
Spotted Spurge	<i>Euphorbia maculata</i>			
Venice Mallow	<i>Hibiscus trionum</i>			

Table - Broadleaf Weeds Controlled by Residual Activity of This Product (continued)

SECTION B		ORGANIC MATTER	SOIL TYPE	PANTHER D HERBICIDE RATE
All weeds listed in Section A plus:				
COMMON NAME	SCIENTIFIC NAME			
Coffee Senna	<i>Cassia occidentalis</i>	Up to 3%	All Soil Types	2.5 pt/A all labeled crops
Common Ragweed	<i>Ambrosia artemisiifolia</i>			
False Chamomile	<i>Tripleurospermum maritima</i>			
Florida Beggarweed	<i>Desmodium tortuosum</i>			
Golden Crownbeard	<i>Verbesina encelioides</i>			
Hairy Indigo	<i>Indigofera hirsuta</i>			
Hemp Sesbania	<i>Sesbania exaltata</i>	3 to 5%	Coarse and Medium Soils (sandy loam, loamy sand, loamy, silt-loam, silt, sandy clay, sandy clay loam)	2 pt/A Cotton 2.5 pt/A Soybean 3 pt/A all other labeled crops
Jimsonweed	<i>Datura stramonium</i>			
Kochia	<i>Kochia scoparia</i>			
London Rocket	<i>Sisymbrium irio</i>			
Morningglories, ¹				
Entireleaf	<i>Ipomoea hederacea</i> var. <i>integriuscula</i>			
Ivyleaf	<i>Ipomoea hederacea</i>			
Red/Scarlet	<i>Ipomoea coccinea</i>			
Tall	<i>Ipomoea purpurea</i>			
Mustard, Wild	<i>Brassica kaber</i>		Fine Soils: (silty clay, silty clay, loam, clay, clay loam)	2 pt/A Cotton 3 pt/A Soybean, and all other labeled crops
Palmer Amaranth	<i>Amaranthus palmeri</i>			
Spurred Anoda	<i>Anoda cristata</i>			
Tropic Croton	<i>Croton glandulosus</i>			
Waterhemp,				
Common	<i>Amaranthus rudis</i>			
Tall	<i>Amaranthus tuberculatus</i>			
Wild Poinsettia	<i>Euphorbia heterophylla</i>			
Yellow Rocket	<i>Barbarea vulgaris</i>			

¹ Morningglory species are not adequately controlled on fine soils or soils with greater than 3% organic matter.

Table - Weeds Suppressed by Residual Activity of This Product

BROADLEAF WEED SPECIES		ORGANIC MATTER	PINTS PER ACRE
COMMON NAME	SCIENTIFIC NAME		
Bristly Starbur	<i>Acanthospermum hispidum</i>	Up to 5%	2.0 to 3.0
Copperleaf, Hophornbeam	<i>Acalypha ostryifolia</i>		
Ragweed, Giant	<i>Ambrosia trifida</i>		
Russian Thistle	<i>Salsola iberica</i>		
Smartweeds,			
Ladysthumb	<i>Polygonum persicaria</i>		
Pennsylvania	<i>Polygonum pennsylvanicum</i>		
Smellmelon*	<i>Cucumis melo</i>		
Velvetleaf	<i>Abutilon theophrasti</i>		
Wild Buckwheat	<i>Polygonum convolvulus</i>		
Wormwood, Biennial	<i>Artemisia biennis</i>		
GRASS WEED SPECIES			
Barnyardgrass	<i>Echinochloa crus-galli</i>		
Bluegrass, Annual	<i>Poa annua</i>		
Crabgrass, Large	<i>Digitaria sanguinalis</i>		
Foxtail, Giant	<i>Setaria faberi</i>		
Goosegrass	<i>Eleusine indica</i>		
Lovegrass, California	<i>Eragrostis diffusa</i>		
Panicums,			
Fall	<i>Panicum dichotomiflorum</i>		
Texas	<i>Panicum texanum</i>		
Ryegrass, Italian	<i>Lolium multiflorum</i>		
Signalgrass, Broadleaf	<i>Brachiaria platyphylla</i>		
Cheat	<i>Bromus secalinus</i>	Up to 5%	1.5 to 3
Downy Brome	<i>Bromus tectorum</i>		

* Not Registered for use on Smellmelon in California.

Table – Grass Weeds Controlled by Residual Activity of This Product

GRASS WEED SPECIES		ORGANIC MATTER	SOIL TYPE	PINTS PER ACRE
Barnyardgrass	<i>Echinochloa crus-galli</i>	Up to 5%	All Soil Types	4.0
Bluegrass, Annual	<i>Poa annua</i>			
Crabgrass, Large	<i>Digitaria sanguinalis</i>			
Foxtail, Giant	<i>Setaria faberi</i>			
Goosegrass	<i>Eleusine indica</i>			
Lovegrass, California	<i>Eragrostis diffusa</i>			
Panicums,				
Fall	<i>Panicum dichotomiflorum</i>			
Texas	<i>Panicum texanum</i>			
Ryegrass, Italian	<i>Lolium multiflorum</i>			
Signalgrass, Broadleaf	<i>Brachiaria platyphylla</i>			

SPECIFIC USE DIRECTIONS

DIRECTIONS FOR USE IN FALL AND SPRING PREPLANT BURNDOWN AND FALLOW SEEDBED PROGRAMS (Preplant to Crop)

RESTRICTIONS AND LIMITATIONS

- Do not apply to frozen or snow covered soil.
- Do not perform any tillage operation after application or residual weed control will be reduced.
- Observe all rotational intervals prior to planting as listed in the **Rotational Restrictions** section of the label.

FALL BURNDOWN AND FALLOW SEEDBED PROGRAMS

This product, at 2 to 3 pints per acre can be used in the fall to provide residual weed control in fields that will be planted the following spring (refer to **Rotational Restrictions** table for rates and rotational intervals prior to planting). Weeds controlled by residual activity are listed in Table - **Broadleaf Weeds Controlled by Residual Activity of This Product** (sections A and B), Broadleaf Weeds Controlled by Residual Activity of This Product; Table - **Weeds Controlled by Fall and Spring Preplant Burndown Programs**. If weeds have emerged at the time of application, use this product in combination with a labeled burndown herbicide. Application must be made no earlier than October 15 in Region 2 or November 15 in Region 1 or when soil temperature falls below 50°F at a 2 inch depth to maintain residual weed control into the spring (April 1 in Region 1 and May 1 in Region 2) or up until planting, whichever comes first. This product can be used in a fall burndown or fallow seedbed program outside of Regions 1 and 2, however the length of residual control may be variable.

Abnormally warm or wet winters will reduce the length of weed control observed in the spring.

Fall Application Regions:

Region 1: Alabama, Arkansas, Georgia, Kentucky, Mississippi, Oklahoma, Tennessee and Virginia

Region 2: Delaware, Kansas, Illinois, Indiana, Iowa, Maryland, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Pennsylvania, South Dakota, West Virginia and Wisconsin

Applications of this product at rates less than 2 pints per acre will provide burndown of labeled weeds, but residual control should not be expected.

SPRING BURNDOWN PROGRAMS

This product may be used alone or in combination with labeled preplant burndown herbicides to assist in the postemergence burndown of emerged weeds and provide residual weed control prior to crop emergence. Weeds controlled by residual activity are listed in Table **Broadleaf Weeds Controlled by Residual Activity of This Product**.

No-till planters that incorporate the soil during planting may result in decreased weed control in the row. Apply this product after planting soybeans when these types of planters are used. See **SOYBEAN** section of label for soybean preplant interval. This product cannot be applied after planting field corn.

This product can be used at 1 to 3 pints per acre alone or with labeled preplant burndown herbicides to enhance the speed of burndown and increase weed spectrum.

This product can be used at 1 to 3 pints per acre in field corn and soybean burndown programs.

Weeds controlled by postemergence and / or residual activity are listed in Table - **Weeds Controlled by Fall and Spring Preplant Burndown Programs**. Preplant burndown treatment tank mixes and rates are:

Herbicide	Rate
Program 1¹	
Panther D	2 to 3 pt/A
Plus	
COC	1 pt/A
or	
Program 2¹	
Panther D	2 to 3 pt/A
Plus	
Glyphosate	0.5 to 1.0 lb ai/A (equivalent to 1 to 2 pt/A of Credit® 41 Extra or Roundup Original®)
Plus	
NIS	0.5% v/v
or	or
COC + AMS	1pt/A + 17 lbs/100 gals of water
or	
Program 3¹	
Panther D	1 pt/A
Plus	
COC	1 pt/A
or	
Program 4¹	
Panther D	1 pt/A
Plus	
Glyphosate	1.0 lb ai/A (equivalent to 2 pt/A of Credit® 41 Extra or Roundup Original®)
Plus	
NIS	0.5% v/v
or	or
COC + AMS	1 pt/A + 17 lbs/100 gals of water

¹ Dicamba (Clash®, Banvel® or Diablo®), at 0.188 pounds AI per acre (6 fluid ounces per acre of Banvel 4 or Diablo) can be added to assist in the control of emerged broadleaves. Refer to dicamba label for rotational restrictions.

Table - Weeds Controlled by Fall and Spring Preplant Burndown Programs

WEEDS CONTROLLED ¹		POSTEMERGENCE & RESIDUAL	
		Program 1	Program 2
COMMON NAME	SCIENTIFIC NAME	Weeds 3 inches or less	
Annual Bluegrass	<i>Poa annua</i>	No	Yes
Chamomile, False	<i>Matricaria maritime</i>	No	Yes
Cheatgrass	<i>Bromus tectorum</i>	No	Yes
Chickweed, Common	<i>Stellaria media</i>	No	Yes
Chickweed, Mouseear	<i>Cerastium vulgatum</i>	No	Yes
Dandelion	<i>Taraxacum officinale</i>	Yes	Yes
Deadnettle, Purple	<i>Lamium purpureum</i>	Yes	Yes
Groundsel, Cressleaf	<i>Senecio glabellus</i>	-	Yes
Henbit	<i>Lamium amplexicaule</i>	Yes	Yes
Kochia	<i>Kochia scoparia</i>	Yes	Yes
Marestail/Horseweed	<i>Conyza canadensis</i>	Yes	Yes
Mallow, Common	<i>Malva neglecta</i>	No	Yes
Prickly Lettuce	<i>Lactuca serriola</i>	Yes	Yes
Wormwood, Biennial	<i>Artemisia biennis</i>	Yes	Yes
Weeds 12 inches or less			
Canola, Volunteer	<i>Brassica napus</i>	Yes	Yes
Carolina Geranium	<i>Geranium carolinianum</i>	Yes	Yes
Eveningprimrose, Cutleaf	<i>Oenothera laciniata</i>	Yes	Yes
Flixweed	<i>Descurainia sophia</i>	Yes	Yes
Mustard, Tansy	<i>Descurainia pinnata</i>	Yes	Yes
Mustard, Wild	<i>Brassica kaber</i>	Yes	Yes
Shepherd's-purse	<i>Capsella bursa-pastoris</i>	Yes	Yes

¹ Refer to glyphosate labels for additional weeds controlled.

Table - Weeds Controlled by Fall and Spring Preplant Burndown Programs

WEEDS CONTROLLED ¹		BURNDOWN ONLY	
		Program 3	Program 4
COMMON NAME	SCIENTIFIC NAME	Weeds 4 inches or less	
Annual Bluegrass	<i>Poa annua</i>	No	Yes
Buttercup, Smallflower	<i>Ranunculus parviflorus</i>	No	Yes
Chamomile, Mayweed	<i>Anthemis cotula</i>	No	Yes
Chickweed, Common	<i>Stellaria media</i>	No	Yes
Deadnettle, Purple	<i>Lamium purpureum</i>	No	Yes
Evening primrose, Cutleaf	<i>Oenothera laciniata</i>	Yes	Yes
Fleabane, Philadelphicus	<i>Erigeron philadelphicus</i>	No	Yes
Garlic, Wild	<i>Allium vineale</i>	No	Yes
Henbit	<i>Lamium amplexicaule</i>	Yes	Yes
Marestail/Horseweed	<i>Conyza canadensis</i>	No	Yes ¹
Prickly Lettuce	<i>Lactuca serriola</i>	Yes	Yes
Radish, Wild	<i>Raphanus raphanistrum</i>	Yes	Yes
Ragweed, Giant	<i>Ambrosia trifida</i>	No	Yes
Shepherd's-purse	<i>Capsella bursa-pastoris</i>	Yes	Yes
Speedwell, Field	<i>Veronica agrestis</i>	No	Yes

¹ Use higher rates on Marestail/Horseweed populations that are resistant to glyphosate.

APPLES, PEARS, STONE FRUIT AND NUT ORCHARDS (EXCEPT FILBERTS)

WEEDS IN CROPS	AMOUNT OF PANTHER D PER ACRE	DIRECTIONS
Annual broadleaf weeds	3 pints	For control of weeds on the orchard floor, apply using coarse sprays and low pressure in sufficient volume of water to obtain thorough wetting of weeds. Treat when weeds are small and actively growing.

RESTRICTIONS AND LIMITATIONS FOR USE IN APPLES, PEARS, STONE FRUIT AND NUT ORCHARDS (EXCEPT FILBERTS)

- Do not apply to bare ground as injury may result.
- Do not apply immediately before irrigation and withhold irrigation for 2 days before and for 3 days after treatment.
- Do not allow spray to drift onto or contact foliage, fruit, stems, trunks of trees or exposed roots as injury may result.
- Do not apply to newly established or young orchards. Trees must be at least 1 year old and in vigorous condition.
- Do not apply during bloom.
- Do not graze or feed cover crops from treated orchards.
- Do not make more than 2 applications per crop cycle. Maximum of 4.0 pints (2.0 lbs. 2,4-D ae) per acre per application.
- **(PHI)** Do not harvest apples and pears within 14 days of application, stone fruit within 40 days of application and nuts within 60 days of application.
- For apples, pears and stone fruits, allow at least 75 days between applications.
- For tree nuts, allow at least 60 days between applications.
- Do not cut orchard floor forage for hay within 7 days of application.

FILBERTS

WEEDS IN CROPS	AMOUNT OF PANTHER D PER ACRE	DIRECTIONS
Annual broadleaf weeds	2 pints	Apply a maximum of 2 pints (1.0 lb. 2,4-D ae) in 10 to 100 gallons of spray solution per acre.

RESTRICTIONS AND LIMITATIONS FOR USE IN FILBERTS

- Do not apply to bare ground as injury may result.
- Do not use on light sandy soil.
- Do not apply immediately before irrigation and withhold irrigation for 2 days before and for 3 days after treatment.
- Do not allow spray to drift onto or contact foliage, fruit, stems, trunks of trees or exposed roots as injury may result.
- Do not apply to newly established or young orchards. Trees must be at least 1 year old and in vigorous condition.
- Do not apply during bloom.
- Do not graze or feed cover crops from treated orchards.
- Do not make more than 4 applications per crop cycle. Maximum of 2.0 pints (1.0 lbs. 2,4-D ae) per acre per application.
- **(PHI)** Do not harvest filberts with 45 days of application.
- Allow at least 60 days between applications.
- Do not cut orchard floor forage for hay within 7 days of application.

WINTER WHEAT (Preplant to Crop)

WEEDS IN CROPS	AMOUNT OF PANTHER D PER ACRE	DIRECTIONS
Preplant	2 pints	Apply by ground or air at a minimum of 30 days prior to planting winter wheat. See WINTER WHEAT ROTATIONAL RESTRICTIONS for restrictions.

RESTRICTIONS AND LIMITATIONS FOR USE ON WINTER WHEAT

- For aerial application on winter wheat, apply this product in 3 to 10 gallons of water per acre.
- For ground application a minimum of 10 to 15 gallons of water per acre is needed for proper spray coverage.
- Limit to 3.6 pints (1.75 lbs. 2,4-D ae) per acre.
- Do not graze until wheat has reached 5 inches in height.
- For preplant weed control, use only on no-till or minimum tillage fields where the previous year's crop residue has not been incorporated into the soil.
- Apply by ground or air 30 days prior to planting winter wheat.
- Do not use on Durum wheat.
- Do not irrigate between emergence and spike.
- Wheat must be planted a minimum of 1 inch deep.
- Do not graze until wheat has reached 5 inches in height.

WINTER WHEAT ROTATIONAL RESTRICTIONS

Wheat, as a rotational crop, may be planted after applying this product at the listed rate. Planting earlier than the recommended rotational interval may result in crop injury.

See **ROTATION RESTRICTIONS, COTTON, FIELD CORN, SOYBEAN, or SUGARCANE** sections of the label for additional crop rotation restrictions.

Do not plant any crop, except corn (field), soybean or sugarcane earlier than 30 days after applying this product.

PANTHER D HERBICIDE RATES	CROPS	ROTATION INTERVALS
1- 2 pt/A	Wheat	30 days ¹
Up to 3 pt/A	Wheat	2 months ¹
Up to 4 pt/A	Wheat	4 months
6 to 8 pt/A	Wheat	9 months

¹ At least one inch of rainfall/irrigation must occur between application and planting or crop injury may occur.

Burndown Use Directions

This product, applied as part of a burndown program at 2 to 3.6 pints per acre, may be used for residual weed control, as well as to assist in postemergence burndown of many weeds where wheat will be planted directly into the residue of the previous crop. To ensure thorough coverage, use a minimum of 15 gallons of spray solution per acre. Refer to tank mix partner's label for recommended application pressure and recommended adjuvant systems.

CORN (Preplant to Crop)

WEEDS IN CROPS	AMOUNT OF PANTHER D PER ACRE	DIRECTIONS
CORN (Field corn) Preplant	1 to 2 pints	To control emerged broadleaf weed seedlings or existing cover crops prior to planting corn, apply 14 days before planting. Do not use on light, sandy soil, or where soil moisture is inadequate for normal weed growth. Use high rate for less susceptible weeds or cover crops such as alfalfa. Corn can be planted 7 days after an application of 2 pints per acre if a minimum of 25% of the soil surface is covered with the residue of the preceding crop and a minimum of 1/4 inch of rainfall has occurred between application and planting.

CORN (FIELD CORN) RESTRICTIONS

Field Corn Restrictions

- Use only on no-till or minimum tillage fields where last year's crop residue has not been incorporated into the soil.
- Do not irrigate between emergence and 2-leaf corn
- Do not use on popcorn, sweet corn or corn grown for seed.
- Limited to one Preplant application per crop cycle.
- Maximum of 2 pints (2.0 lbs. 2,4-D ae) per acre per crop cycle.

CORN (FIELD CORN) ROTATION RESTRICTIONS

Field Corn, as a rotational crop, may be planted after applying this product at the listed rate. Planting earlier than the recommended rotational interval may result in crop injury.

See **ROTATION RESTRICTIONS, COTTON, SOYBEAN, SUGARCANE** or **WINTER WHEAT** sections of the label for additional crop rotation restrictions.

Do not plant any crop, except corn (field), soybean or sugarcane earlier than 30 days after applying this product.

PANTHER D HERBICIDE RATES	CROPS	ROTATION INTERVALS
3/4- 1 pt/A	Field Corn (minimum and no-till)	7 days ¹
1- 2 pt/A	Field Corn (minimum and no-till)	15 days
	Field Corn (conventional tillage)	30 days ¹
Up to 3 pt/A	Field Corn (minimum and no-till)	15 days
	Field Corn (conventional tillage)	30 days ¹
Up to 4 pt/A	Field Corn	4 months
6 to 8 pt/A	Field Corn	9 months

¹ At least one inch of rainfall/irrigation must occur between application and planting or crop injury may occur.

TANK MIX RESTRICTIONS

Tank mixes with flufenacet (Axiom or Domain), metolachlor or s-metolachlor (Dual Magnum or Dual II Magnum), dimethenamid or dimethenamid-p (Frontier or Outlook), alachlor (Lasso), or acetochlor (Surpass or Harness) may result in injury to field corn when application is followed by prolonged periods of cool wet weather and should not be used with this product, unless supplemental labeling, provided by Nufarm, is followed.

COTTON (Preplant to Crop)

Not currently registered for use in California.

	Amount of Panther D per Acre	Minimum Waiting Interval Before Planting Cotton	Directions
COTTON Preplant	2.0 pints	30 Days ^{Y*}	Apply to control actively growing emerged broadleaf weeds prior to planting cotton. For best performance, apply when weeds are in the 2-4 leaf stage and rosettes are less than 2" across.

COTTON RESTRICTIONS (PREPLANT)

- For use only preplant to cotton.
- Following application, a minimum accumulation of 1" rainfall or overhead irrigation followed by the specified minimum waiting interval, is required before planting cotton.
- Do not apply more than 2.0 pints of this product per application per acre in one season prior to planting cotton.
- Do not apply more than 2 applications per year.
- Do not make a sequential application of this product within 30 days of the first application of this product.
- Do not apply this product prior to planting cotton if you are not prepared to accept the results of cotton injury including possible loss of stand and yield.
- Do not replant fields treated with this product in the same growing season with crops other than those labeled for 2,4-D pre-plant use.
- Mowing or cultivating weeds prior to treatment with this product may result in poor weed control.
- Do not apply this product pre-plant to cotton in fields having a coarse-textured soil where the organic matter is less than 1%.
- Do not allow livestock to feed/graze on treated cover crops.
- Do not cut treated crop for feed, hay, forage, fodder or graze treated cotton to livestock.
- Do not make preplant applications of this product to cotton in geographic areas with average annual rainfall less than 25".

COTTON ROTATIONAL RESTRICTIONS

Cotton, as a rotational crop, may be planted after applying this product at the listed rate. Planting earlier than the recommended rotational interval may result in crop injury.

See **ROTATION RESTRICTIONS, FIELD CORN, SOYBEAN, SUGARCANE** or **WINTER WHEAT** sections of the label for additional crop rotation restrictions.

Do not plant any crop, except corn (field), soybean or sugarcane earlier than 30 days after applying this product.

PANTHER D HERBICIDE RATES	CROPS	ROTATION INTERVALS
1- 2 pt/A	Cotton	30 days ¹
Up to 3 pt/A	Cotton	2 months ¹
Up to 4 pt/A	Cotton	4 months
6 to 8 pt/A	Cotton	9 months

¹ At least one inch of rainfall/irrigation must occur between application and planting or crop injury may occur.

Notes:

- Refer to Table 1 to determine use rates for specific targeted weed species, but do not exceed rate stated for cotton preplant.
- For applications applied 75 or more days^y before planting, follow the directions, restrictions and precautions in **FALLOW LAND AND CROP STUBBLE** section of the container label.

^y*Minimum waiting interval excludes days when ground is frozen.

HOPS

WEEDS IN CROPS	AMOUNT OF PANTHER D PER ACRE	DIRECTIONS
Annual broadleaf weeds	1 pint	Make directed applications to the row middles. Make up to 3 applications at 30-day intervals with the last application before harvest.

RESTRICTIONS AND LIMITATIONS FOR HOPS

- Limited to 3 applications per crop cycle.
- Maximum of 1 pint (0.5 lbs. 2,4-D ae) per acre per application.
- Maximum of 3 pints (1.5 lbs. 2,4-D ae) per acre per crop cycle.
- Minimum of 30 days between applications.
- **(PHI)** Do not harvest within 30 days of application.
- Do not use with an adjuvant.
- Do not allow spray to contact green stem, foliage, flowers or cones or unacceptable injury may occur.
- Do not mow or rake over treated areas, as dust created by mowing may drift onto sensitive crops or vegetation resulting in injury.

SOYBEANS (Preplant Only)

WEEDS IN CROPS	AMOUNT OF PANTHER D PER ACRE	DIRECTIONS
Soybean Preplant Weed Control	3/4 to 1 pint	Apply not less than 7 days prior to planting soybeans, when weeds are small and actively growing. Use the higher rate on larger weeds and when perennials are present.
	>1 to 2 pints	Apply not less than 15 days prior to planting soybeans, when weeds are actively growing.

In addition to those weeds found on the WEED LIST, this product will suppress or control the following broadleaf weeds frequently encountered in reduced tillage soybean production systems: alfalfa*, bullnettle, smallflowered bittercress, Carolina geranium, smallflowered buttercup, common and rough cinquefoil, red clover*, horseweed or marestalk, mouse-tail, wild mustard, field pennycress, cutleaf evening primrose, common purslane, speedwell, velvetleaf, and Virginia copperleaf. * These weeds are only partially controlled.

Apply no more than 2.0 pints of this product in one season prior to planting soybeans. After applying, plant soybean seed as deep as practical or at least 1-1/2 to 2 inches deep. Adjust the planter press wheel, if necessary, to ensure that planted seed is completely covered.

Applications of 2 pints per acre will provide residual control as described in the Table - **Broadleaf Weeds Controlled by Residual Activity of This Product.**

If desired, this product may be applied pre-plant to soybeans in tank mixtures with other herbicides such as Poast®, Poast Plus®, Roundup®, Roundup D-Pak®, Honcho®, Gramoxone Extra®, Prowl®, Pursuit Plus®, Scepter®, Scepter 70 DG, Squadron® and others that are registered for pre-plant soybean use.

Do not tank mix this product with acetochlor (Warrant®), alachlor (Micro-Tech®), flufenacet (Axiom®, Domain®), metolachlor (Dual® Magnum, Dual® II Magnum, Boundary®) or dimethenamid (Frontier® or Outlook®) within 15 days of planting soybeans, unless soybeans are planted under no-till or minimum tillage conditions on wheat stubble or no-till field corn stubble.

NOTE: Unacceptable injury to soybeans planted in fields previously treated with this product may occur and the extent of injury will depend on weather and agronomic factors such as the amount of weed vegetation and previous crop residue present that may be in effect between the time of application and the emergence of the soybean plant.

RESTRICTIONS AND LIMITATIONS FOR USE IN SOYBEANS (PREPLANT)

- Do not apply this product when weather conditions such as temperature, air inversions, or wind favor drift from treated areas to susceptible plants.
- Apply no more than 2.0 pints (1.0 lb. 2,4-D ae) of this product per acre in one season prior to planting soybeans.
- Only one application per growing season, regardless of the application rate used, is allowed.
- Do not apply this product prior to planting soybeans if you are not prepared to accept the results of soybean injury including possible loss of stand and yield.
- Do not replant fields treated with this product in the same growing season with crops other than those labeled for 2,4-D pre-plant use.
- Do not mow or cultivate weeds prior to treating with this product as poor control may result.
- Do not apply this product pre-plant to soybeans in fields having a coarse-textured soil where the percent organic matter is <1.0%.
- Do not irrigate when soybeans are cracking.
- Do not graze treated fields or feed treated hay to livestock.

SOYBEAN ROTATIONAL RESTRICTIONS

Soybean, as a rotational crop, may be planted after applying this product at the listed rate. Planting earlier than the recommended rotational interval may result in crop injury.

See **ROTATION RESTRICTIONS, COTTON, FIELD CORN, SUGARCANE** or **WINTER WHEAT** sections of the label for additional crop rotation restrictions.

Do not plant any crop, except corn (field), soybean or sugarcane earlier than 30 days after applying this product.

PANTHER D HERBICIDE RATES	CROPS	ROTATION INTERVALS
3/4- 1 pt/A	Soybean	7 days ¹
1- 2 pt/A	Soybean	15 days
Up to 3 pt/A	Soybean	30 days ¹
Up to 4 pt/A	Soybean	4 months
6 to 8 pt/A	Soybean	9 months

¹ At least one inch of rainfall/irrigation must occur between application and planting or crop injury may occur.

This product will provide postemergence burndown of many annual and perennial weeds where soybeans will be planted directly into a stale seedbed, cover crop or in previous crop residues. For control of emerged weeds not on this label, choose the most appropriate tank mix partner from Table - **Tank Mix Partners for Control of Emerged Weeds in Reduced Tillage Soybeans**. This product may be applied with crop oil concentrate or methylated seed oil at 1 to 2 pints per acre or a non-ionic surfactant at 0.25% v/v to broaden the spectrum of activity and increase the speed of control.

Table - Tank Mix Partners for Control of Emerged Weeds in Reduced Tillage Soybeans

TANK MIX PARTNERS	TARGET WEEDS ¹
Paraquat	Annual Grasses
Glyphosate	Burndown

¹ Refer to tank mix product labels for specific directions for control of emerged weeds present.

SUGARCANE

WEEDS IN CROP	AMOUNT OF PANTHER D PER ACRE	DIRECTIONS
Preemergence	4 pints	Apply from 2 weeks prior to planting to before canes appear for control of emerged broadleaf weeds. DO NOT USE IN CALIFORNIA.
Post Directed or Layby	1-1/2 to 4 pints	Apply after cane emerges and through lay-by. DO NOT USE IN CALIFORNIA.

RESTRICTIONS AND LIMITATIONS FOR USE IN SUGARCANE

- Do not apply more than a total of 8 pints (4.0 lb. 2,4-D ae) of this product to sugarcane per acre per growing season.
- Do not make a sequential application within 14 days of the first application.
- Do not apply within 90 days of harvest.
- **Preemergence:** Limited to 1 application per crop cycle. Maximum of 4 pints (2.0 lb. 2,4-D ae) per acre per application.
- **Post Directed or Layby:** Limited to 1 application per crop cycle. Maximum of 4 pints (2.0 lb. 2,4-D ae) per acre per application.

SUGARCANE ROTATIONAL RESTRICTIONS

Sugarcane, as a rotational crop, may be planted after applying this product at the listed rate.

See **ROTATION RESTRICTIONS, COTTON, FIELD CORN, SOYBEAN,** or **WINTER WHEAT** sections of the label for additional crop rotation restrictions.

Do not plant any crop, except corn (field), soybean or sugarcane earlier than 30 days after applying this product.

PANTHER D HERBICIDE RATES	CROPS	ROTATION INTERVALS
1- 4 pt/A	Sugarcane	immediately

For control of emerged weeds not on this label, choose the most appropriate tank mix partner from Table - **Tank Mixes with This Product for Post-Directed or Layby Use in Sugarcane**. Apply this product **before the crop emerges**. Tank mixes of this product applied to assist in the control of emerged weeds may be applied with crop oil concentrate or methylated seed oil at 1 quart per acre or a non-ionic surfactant at 0.25% v/v to broaden the spectrum of activity and increase the speed of control. Some tank mix products, such as Credit 41 Extra or Roundup Original Max (glyphosate), may be formulated with a suitable adjuvant and do not require additional adjuvant.

Post-Directed — Postemergence to Sugarcane, Postemergence to Weeds

Post-directed applications should only be made to upright sugarcane varieties after the sugarcane has exceeded 24 inches in height and has begun to joint. Post-directed applications should not be made to “PINEAPPLE” varieties. Post-directed applications to “PINEAPPLE” varieties or to upright varieties that have not exceeded 24 inches in height and have not begun to joint, may result in unacceptable crop injury. To ensure thorough coverage, use a minimum of 15 gallons of spray solution per acre. Select the proper rate of this product based on weed spectrum and weed height from Table - **Broadleaf Weeds Controlled by Post-Directed or Layby Application of This Product**.

Layby — Postemergence to Sugarcane, Postemergence to Weeds

Layby applications can be made to upright and “PINEAPPLE” varieties after the sugarcane has exceeded 30 inches in height and the spray solution will not contact foliage above 6 inches from the base of the sugarcane. To ensure thorough coverage, use a minimum of 15 gallons of spray solution per acre. Select the proper rate of this product based on weed spectrum and weed height from Table - **Broadleaf Weeds Controlled by Post-Directed or Layby Application of This Product**.

Table - Broadleaf Weeds Controlled by Post-Directed or Layby Application of This Product in Sugarcane

BROADLEAF WEED SPECIES		WEED HEIGHT (inches)	
COMMON NAME	SCIENTIFIC NAME	3 PINTS PER ACRE	4 PINTS PER ACRE
Bindweed, Field	<i>Convolvulus arvensis</i>	4	8
Carpetweed	<i>Mollugo verticillata</i>	4	4
Cocklebur, Common	<i>Xanthium strumarium</i>	4	4
Florida Beggarweed	<i>Desmodium tortuosum</i>	2	2
Hemp Sesbania	<i>Sesbania exaltata</i>	6	8
Jimsonweed	<i>Datura stramonium</i>	4	4
Lambsquarters, Common	<i>Chenopodium album</i>	4	4
Morningglories,			
Entireleaf	<i>Ipomoea hederacea</i> var. <i>integriuscula</i>	-	4
Ivyleaf	<i>Ipomoea hederacea</i>	4	4
Pitted	<i>Ipomoea lacunosa</i>	4	6
Red	<i>Ipomoea coccinea</i>	-	4
Tall	<i>Ipomoea purpurea</i>	2	4
Mustard, Wild	<i>Brassica kaber</i>	6	6
Pigweeds,			
Palmer Amaranth	<i>Amaranthus palmeri</i>	4	6
Redroot	<i>Amaranthus retroflexus</i>	4	6
Smooth	<i>Amaranthus hybridus</i>	4	6
Plantain, Broadleaf	<i>Plantago major</i>	6	6
Prickly Sida	<i>Sida spinosa</i>	4	6
Purslanes,			
Common	<i>Portulaca oleracea</i>	2	4
Rock	<i>Calandrinia</i> spp.	-	2
Ragweeds,			
Common	<i>Ambrosia artemisiifolia</i>	2	2
Giant	<i>Ambrosia trifida</i>	4	4

(continued)

Table - Broadleaf Weeds Controlled by Post-Directed or Layby Application of This Product in Sugarcane (continued)

BROADLEAF WEED SPECIES		WEED HEIGHT (inches)	
COMMON NAME	SCIENTIFIC NAME	3 PINTS PER ACRE	4 PINTS PER ACRE
Rice Flatsedge	<i>Cyperus iria</i>	2	4
Sicklepod	<i>Senna obtusifolia</i>	4	4
Smartweeds,			
Ladysthumb	<i>Polygonum persicaria</i>	4	4
Pale	<i>Polygonum lapathifolium</i>	4	4
Pennsylvania	<i>Polygonum pensylvanicum</i>	4	4
Spotted Spurge	<i>Euphorbia maculata</i>	4	4
Velvetleaf	<i>Abutilon theophrasti</i>	4	6
Venice Mallow	<i>Hibiscus trionum</i>	2	2
Waterhemp,			
Common	<i>Amaranthus rudis</i>	2	2
Tall	<i>Amaranthus tuberculatus</i>	2	2

Tank mixes of this product will only control the above ground portion of field bindweed. When permissible by label restrictions repeated applications will be needed to control regrowth.

TANK MIXES

This product may be tank mixed with the herbicides listed in Table - **Tank Mixes with This Product for Post-Directed or Layby Use in Sugarcane** for additional weed control in burndown, preemergence, post-directed and layby applications. Refer to tank mix partner's label for adjuvant recommendations.

Table - Tank Mixes with This Product for Post-Directed or Layby Use in Sugarcane

TANK MIX PARTNER ¹	TARGET WEEDS	BURNDOWN	POST-DIRECTED ²	LAYBY
Atrazine	Pigweeds Cocklebur	X	X	X
Asulox ^{®3}	Annual Grasses		X	X
Evik ^{®4}	Annual Grasses		X	X
Glyphosate ⁵	Annual and Perennial Weeds	X		X
Metribuzin ⁶	Broadleaf Panicum Goosegrass		X	X
Sempra [®]	Purple Nutsedge Yellow Nutsedge	X	X	X

¹ Refer to tank mix product labels for specific directions for control of emerged weeds present not listed in Table - **Broadleaf Weeds Controlled by Post-Directed or Layby Application of This Product.**

² Post-directed applications should only be made to upright sugarcane varieties after the sugarcane has exceeded 24 inches in height. Post-directed applications should not be made to "PINEAPPLE" varieties. Post-directed applications to "PINEAPPLE" varieties or to upright varieties that have not exceeded 24 inches in height may result in unacceptable crop injury.

³ Apply to sugarcane at least 24 inches tall.

⁴ Apply before weeds are greater than 6 inches tall.

⁵ Glyphosate applications must be made with a hooded sprayer. Sugarcane must be at least 3 ft. tall. Contact with the sugarcane foliage by either the spray mixture or the treated weed foliage will result in sugarcane injury.

⁶ Refer to metribuzin label for restrictions based on soil type.

ADDITIONAL PREEMERGENCE BROADLEAF CONTROL

This product can be tank mixed with atrazine or diuron for additional preemergence broadleaf control.

ADDITIONAL PREEMERGENCE GRASS CONTROL

This product can be tank mixed with PROWL (or other pendimethalin products) for additional preemergence grass control provided sugarcane has not emerged.

FALLOW LAND AND CROP STUBBLE Idle Land, Postharvest to Crops, or Between Crops

WEEDS	AMOUNT OF PANTHER D PER ACRE	DIRECTIONS
Annual broadleaf weeds	1 to 2 pints	Use the lower rate when weeds are small (2 to 3 inches tall) and actively growing. Use the higher rate on older and drought-stressed plants.
Biennial broadleaf weeds	2 to 4 pints	Spray when musk thistles or other biennial species are in the seedling to rosette stage and before flower stalks become apparent. The lower rate can be used in the spring during rosette stage. Use the highest rate in the fall or after flower stalks have developed.
Perennial broadleaf weeds	2 to 4 pints	Spray weed in the bud to bloom stage or while in good vegetative growth. Do not disturb treated areas for at least 2 weeks after treatment, or until tops are dead.
Wild garlic and onion in crop stubble	4 pints	Apply to new regrowth of wild garlic or onion which occurs in the fall following harvest of small grains, corn or grain sorghum.

RESTRICTIONS AND LIMITATIONS FOR USE IN FALLOW LAND AND CROP STUBBLE

- Limit to two applications per year.
- Maximum single rate application of 4 pints (2.0 lbs. 2,4-D ae) per acre.
- Maximum of 8 pints (4.0 lbs. 2,4-D ae) per acre per year.
- Minimum of 30 days between applications.
- See **Rotation Restrictions** section of label for planting intervals on crops without specific use directions on this label.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in original container in a dry, secured storage area. Keep container tightly closed when not in use. Store at temperature above 32°F. If allowed to freeze, warm to at least 40°F and remix before using. Freezing does not alter this product.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate ground water. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

NOTE: This product is available in multiple containers. Refer to the Net Contents section of this products labeling for the applicable "No refillable" or "Refillable" designation. Follow the container handling instructions below that apply to your container type / size.

Nonrefillable Containers 5 Gallons or Less: 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 and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable Containers Larger than 5 Gallons: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

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

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

WARRANTY DISCLAIMER

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