

8/11/97

2217-703

PM 02

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Mr. Craig Martens
PBI/Gordon Corporation
P.O. Box 14090
1217 West 12th Street
Kansas City, MO 64101

AUG 11 1997

Dear Mr. Martens:

SUBJECT: Label Amendment: Sub-Labeling with Revised Application Rates for
Pasture/Rangeland and Turf
Acme Hi-Dep Herbicide
EPA Reg. No.: 2217-703
Your Submission Dated July 28, 1997

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable, provided you make the following change:

1. Revise the statement prohibiting application directly to water in the second paragraph under "ENVIRONMENTAL HAZARDS" in accordance with PR Notice 93-3. The revised statement should read as follows:

"For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark."

Please make the above change and the changes submitted in the draft labeling at the next label printing and submit one copy of the final printed labeling before you release the product for shipment.

We are reviewing the labeling of the 2,4-D products you cited as having application rates which exceed the allowable rates for 2,4-D on pasture and rangeland. We will take appropriate action to bring these products into compliance with the 2,4-D Exposure Reduction Agreement if they are determined to have unacceptable rates. Thank you for bringing this matter to our attention.

Sincerely yours,



Joanne I. Miller
Product Manager (23)
Herbicide Branch
Registration Division (7505C)

Enclosure

RD:STANTON:PM Team 23:Rm. 237:CM-2:305-5218:Disk #6:S527821.LET

CONCURRENCES

SYMBOL ▶	7505C							
SURNAME ▶	S. Stanton							
DATE ▶	Aug 11, 1997							

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ACME[®]

HI-DEP[®] HERBICIDE

Sublabel of pasture and rangeland and noncropland turfgrass. Proposed text is in response to an Agency letter dated July 14, 1997.

Hi-Dep[®] consists of the dimethylamine and diethanolamine salts of 2,4-D especially formulated for low volume applications with aerial and ground equipment.

ACTIVE INGREDIENTS:

Dimethylamine Salt of 2,4-Dichlorophenoxyacetic acid 33.2%

Diethanolamine Salt of 2,4-Dichlorophenoxyacetic acid..... 16.3%

INERT INGREDIENTS..... 50.5%

TOTAL 100.0%

This Product Contains:

3.8 lbs. 2,4-Dichlorophenoxyacetic acid equivalent per gallon or 38.6%

Isomer Specific by AOAC Methods.


KEEP OUT OF REACH OF CHILDREN

DANGER - PELIGRO

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

See side panel for additional Precautionary Statements and Statement of Practical Treatment.

KEEP FROM FREEZING

NET CONTENTS	U.S. GALLONS
808/ APXXXXXX	
EPA REG. NO. 2217-703	
EPA EST. NO. 2217-KS-1	
MANUFACTURED BY:	
 pbi/gordon	
corporation	
<small>KANSAS CITY, MO 64101</small>	
ACCEPTED with COMMENTS In EPA Letter Dated	
AUG 11 1997	
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.	
<u>2217-703</u>	



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**READ THE ENTIRE LABEL FIRST. OBSERVE ALL PRECAUTIONS
AND FOLLOW DIRECTIONS CAREFULLY.**

PRECAUTIONARY STATEMENTS

Hazards To Humans And Domestic Animals:

DANGER: Corrosive. Causes eye damage and skin irritation. Do not get in eyes, on skin or on clothing. Harmful if swallowed, absorbed through skin or inhaled. Avoid breathing vapor or spray mist.

Personal Protective Equipment (PPE):

Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, shoes plus socks, and protective eyewear.

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

Engineering Control Statements:

Containers over 1 gallon and less than 5 gallons in capacity: Mixers and loaders who do not use a mechanical system (probe and pump) to transfer the contents of this container must wear coveralls or a chemical-resistant apron in addition to the other required PPE.

Containers of 5 gallons or more in capacity: Do not open pour from this container. A mechanical system (probe and pump or spigot) must be used for transferring the contents of this container. If the contents of a nonrefillable pesticide container are emptied, the probe must be rinsed before removal. If the mechanical system is used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)], the handler PPE requirements may be reduced or modified as specified in the WPS.

When handlers use 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 requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations:

Users should:

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

Statement of Practical Treatment

IF IN EYES: In case of eye contact, immediately flush eyes with plenty of water for 15 minutes. Call a physician at once.

IF ON SKIN: Wash promptly with soap and water. Rinse thoroughly. If irritation develops, get medical attention.

IF SWALLOWED: Drink promptly a large quantity of milk, egg white, gelatin solution, or if these are not available, large quantities of water. Avoid alcohol. Call a physician at once.

IF INHALED: Remove victim to fresh air and apply respiration if indicated.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

ENVIRONMENTAL HAZARDS:

Under no circumstances should this herbicide product or any 2,4-D herbicide be used in the vicinity of cotton, tomatoes, garden crops, grapes, ornamentals or other susceptible crops, or severe damage may result. Do not apply on windy days. Do not use equipment used in applying this product or any 2,4-D herbicide to apply insecticides, fungicides, or other material to susceptible crops. Do not use this product through any type of irrigation system. Avoid contamination of water supplies that may be used to irrigate or water susceptible crops, or to be used for domestic purposes.

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. Do not apply directly to water except as specified on this label. Do not contaminate water when disposing of equipment washwaters.

Most cases of groundwater 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 groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

Sublabel of pasture and rangeland and noncropland turfgrass. Proposed text is in response to an Agency letter dated July 14, 1997.

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.

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 and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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

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, wear coveralls, waterproof gloves, shoes plus socks, and protective eyewear.

STORAGE & DISPOSAL

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

STORAGE: Store in original container in a locked storage area inaccessible to children or pets. Keep from freezing.

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 groundwater. 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 DISPOSAL: FOR PLASTIC CONTAINER: - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities by burning. If burned stay out of smoke. FOR METAL DRUMS: - Triple rinse (or equivalent). 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.

PRECAUTION FOR PAINTS AND COATINGS OF AUTOMOBILES AND OTHER VEHICLES:

Undiluted spray droplets may damage the paint, coating, or finish of vehicles. Vehicles should not be sprayed. If accidental exposure does occur, then the vehicle should be washed before the spray droplets dry.

NOTICE TO USER: This product must be applied in compliance with the pesticide regulations of the state in which application is made. Check with local authorities regarding regulations which may affect the application of this product.

USE INSTRUCTIONS:

Hi-Dep® consists of the dimethylamine and diethanolamine salts of 2,4-D especially formulated for low volume applications with aerial and ground equipment.

AERIAL APPLICATION:

Ready-To-Use, not necessary to dilute for application rates of ½ gallon (2 quarts) per acre or higher. For rates lower than ½ gallon, dilute with water for a total solution per acre of not less than ½ gallon.

AIRCRAFT SPECIFICATIONS (FIXED WING OR ROTARY WING):

Boom width should not exceed ¾ the length of the aircraft wingspan. Do not exceed 25 psi nozzle pressure. Number of nozzles required to obtain desired volume per acre is dependent on swath width and speed of aircraft. Nozzles should be positioned between 135° and 175° from direction of flight for fixed wing. DO NOT APPLY THROUGH BECO-MIST NOZZLE SYSTEMS. Maintain aircraft altitude of 10 to 12 feet during application. See manufacturer's technical bulletin regarding nozzles and method of application specifications.

GROUND APPLICATION:

Apply in water, 1 to 10 gallons total solution per acre with conventional equipment. Low spray volumes (1 to 5 gallons per acre) may provide more effective weed control and better economy. Use nozzle systems capable of spraying correct gallonage with boom pressures of 25 psi or less.

WEEDS CONTROLLED - Use Hi-Dep® to control many broadleaf weeds including:**PERENNIAL WEEDS**

Artichoke	Dogfennel	Rushes
Aster	Goldenrod	Sowthistle
Austrian fieldcress	Ground Ivy	St. Johnswort
Bindweed	Healall	Stinging nettles
Blackeyed susan	Hemlock	Strawberry (wild)
Blue lettuce	Ironweed	Tall buttercup
Canada thistle	Leafy spurge	Tanweed
Catnip	Knapweed	Toad flax
Chicory	(Spotted Russian, Diffuse)	Vervains
Clover (many types)	Locoweed	Whitetop (Hoary cress)
Coffeeweed	Mugwort	Wild garlic
Dandelion	Nettles	Wild onion
Docks	Orange hawkweed	Wild sweet potato
Dogbane	Povertyweed	Yellow rocket

ANNUAL AND BIENNIAL WEEDS

Beggarticks	Henbit	Primrose
Bitterweed	Jewelweed	Puncturevine
Black medic	Jimsonweed	Radish (wild)
Broomweed	Jim Hill mustard	Ragweed
Bull thistle	(Tumble mustard)	Russian thistle
Burdock	Knotweed	Scotch thistle
Carpetweed	Lambsquarters	Shepherdspurse
Catchweed bedstraw	Lettuce (wild)	Sneezeweed
Chickweed	Mallow	Sow thistle (common)
Cinquefoil	Marestail (Horseweed)	Spanishneedles
Cockle	Marshelder	Sunflower
Cocklebur	Marijuana	Tansy mustard
Croton	Mediterranean sage	Tansy ragwort
Devilsclaw	Miners lettuce	Tumbleweed
Falseflax	Morningglory (annual)	Tumble pigweed
Fleabane (Daisy)	Musk Thistle	Velvetleaf
Flixweed	Mustard	Vetch
Frenchweed	Parsnip	Wild carrot
Galinsoga	Pennycress	Wild parsnip
Goatsbeard	Pepperweed	Wild turnip
Goosefoot	Pigweed (redroot)	Witchweed
Groundsel	Plantains	Wormwood
Gumweed	Prickly lettuce	Yellow starthistle

ALSO CERTAIN 2,4-D SUSCEPTIBLE WOODY PLANTS SUCH AS:

Big sagebrush	Locust	Rabbitbrush
Buckbrush	Manzanita	Sagebrush
Cedars	Macartney rose	Sand shinnery oak
Chamise	Multiflora rose	Sumac
Cherokee rose	Pines	Tropical soda apple
Coastal sage	Poison ivy	Tules (Bulrush)
Elderberry	Poison oak	Willow
Hazel		

To convert local recommendations into terms of Hi-Dep® use the following table:

2,4-D acid equivalent	1 lb.	¾ lb.	½ lb.	⅓ lb.	¼ lb.	⅛ lb.	1/16 lb.
Hi-Dep®	2 pt.	1½ pt.	1 pt.	¾ pt.	½ pt.	⅓ pt.	¼ pt.

- PASTURE AND RANGELAND -

~~Annual weeds~~ Use 1 to 2 quarts/acre. Apply when weeds are actively growing.

~~Perennial weeds~~ Use 2 to 4 quarts/acre when perennial weeds are translocating carbohydrates, i.e. Canada thistle (late bud to early bloom), bull thistle (bud stage), musk thistle (spring or fall in rosette or early bud stage), leafy spurge (4 quarts) (early to late bloom), field bindweed (80% or greater bloom). High rates for spot treatments may cause temporary yellowing of grasses.

BROADCAST APPLICATIONS WITH GROUND AND AERIAL EQUIPMENT:

Dosage Rates - Refer to Table 1 for the broadcast rates of Hi-Dep® applied with ground and aerial equipment.

Table 1. Broadcast Rates per Acre for Pasture and Rangeland.			
Weed Types	Amount of Hi-Dep®, Quarts/Acre	Pounds of 2,4-D a.e./Acre	When to Apply
Annual Broadleaf	1.0 - 2.0 quarts	1.0 - 2.0 pounds	Spring or fall during active growth.
Biennial	1.0 - 2.0 quarts	1.0 - 2.0 pounds	Spring or fall during seedling to rosette stage.
Perennial	1.0 - 2.0 quarts	1.0 - 2.0 pounds	Spring or fall during bud to bloom stage.

The maximum application rate to pasture and rangeland is 2 pounds 2,4-D acid equivalent per acre per application per site.

On pasture and rangeland, the maximum seasonal rate is 6 quarts of product (5.7 pounds acid equivalent) per acre per season.

Do not use on bentgrass, alfalfa, clover, or other legumes. Do not use on newly seeded areas until grass is well established. Do not use from early boot to milk stage where grass seed production is desired.

Spray Volumes -

- For ground application of Hi-Dep® alone, use a total spray volume of 1.0 to 10.0 gallons per acre (gpa).
- For ground application of the tank mixtures, use a minimum spray volume of 10.0 gallons per acre.
- For aerial application of Hi-Dep® alone, use a total spray volume of 0.5 to 4.0 gallons per acre.
- For aerial application of the tank mixtures, use a minimum spray volume of 2.0 gallons per acre.

Grazing Restrictions and Harvest Intervals -

Observe these intervals:

- 1) A 7 day pregrazing interval for dairy cattle.
- 2) A 30 day preharvest interval for grass cut for hay.
- 3) A preslaughter interval for meat animals of 3 days.

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CONTROL OF SOUTHERN WILD ROSE:

On rangelands, roadsides, and fencerows, use 1 gallon and spray thoroughly as soon as foliage is well developed. Two or more treatments may be required. On pastures and rangelands, the maximum seasonal rate is 6 quarts of product (5.7 pounds acid equivalent) per acre per season. See grazing restrictions in pasture and rangeland section above.

TANK MIXTURES FOR PASTURE AND RANGELAND:

Hi-Dep®, a mixed amine salt of 2,4-D, can be applied as a tank mixture with Banvel® Herbicide or Tordon® 22K to broaden the spectrum of weed control. To assure maximum safety and weed control, follow all precautions and limitations on this label and the labels of products used in tank mixtures with Hi-Dep®.

Products	Rates
Hi-Dep® + Banvel®	1 to 2 quarts/A + 1 to 2 pints/A
Hi-Dep® + Tordon®	1 to 2 quarts/A + ¼ to 2 pints/A

SPOT TREATMENTS WITH GROUND EQUIPMENT:

High Volume Leaf Stem Treatments of Individual Plants or Small Areas with Backpack Sprayers, Knapsack Sprayers, Power Sprayers, Sprayguns, or Other Ground Equipment - This method is appropriate for sparse infestations of brush or woody species, for small areas, or for areas where broadcast applications are not feasible. Woody species including multiflora rose, Macartney rose, southern wild rose, and willow baccharis may be controlled with spot treatments. Perennial weeds including Canada thistle (late bud to early bloom), bull thistle (bud stage), musk thistle (spring or fall in rosette or early bud stage), leafy spurge (early to late bloom), and field bindweed (80% or greater bloom) may be effectively controlled with spot treatments of Hi-Dep®.

For Hi-Dep® alone, mix 2.0 gallons of Hi-Dep® per 100 gallons of water (2.0% spray concentration). Spray volumes will depend upon the height, density, and type of weeds/brush. Thorough coverage of the leaves, stems, trunks, and root collars is essential. Apply as a spray-to-wet application for the best results. Coverage should be thorough for individual plants and use sufficient pressure to penetrate the center of large clumps (e.g. multiflora rose).

On pasture and rangeland, the maximum seasonal rate is 6 quarts of product (5.7 pounds acid equivalent) per acre per season.

Do not use on bentgrass, alfalfa, clover, or other legumes. Do not use on newly seeded areas until grass is well established. Do not use from early boot to milk stage where grass seed production is desired.

Grazing Restrictions and Harvest Intervals -

Observe these intervals for Hi-Dep® treatments:

- 1) A 7 day pregrazing interval for dairy cattle.
- 2) A 30 day preharvest interval for grass cut for hay.
- 3) A preslaughter interval for meat animals of 3 days.

MESQUITE MANAGEMENT IN PERMANENT GRASS PASTURES AND RANGELANDS:

Hi-Dep® and three (3) tank mixtures have proven effective on mesquite in pastures and rangelands in Texas, Oklahoma, Arizona, and New Mexico. Hi-Dep® can be tank mixed with Reclaim® Herbicide, Remedy® Range and Pasture Herbicide, and Grazon® PC Herbicide for use on pastures and rangelands in accordance with the most restrictive of label limitations and precautions. No label dosages should be exceeded.

Hi-Dep®, Reclaim® Herbicide, and Remedy® Range and Pasture Herbicide are classified as *General Use Pesticides*. However, Grazon® PC Herbicide is classified as a *Restricted-Use Pesticide*. Two terms of the restrictions include the following:

- 1) For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicators certification.
- 2) Commercial Certified Applicators must also ensure that all persons involved in these activities are informed of the precautionary statements.

APPLICATION SCHEDULES:

The appropriate growth stage of mesquite for effective control occurs in the spring or early summer after the mesquite has fully leafed out and has turned dark green in color. Do not apply when the mesquite beans are elongating. The best environmental conditions include soil temperatures above 75°F (24°C) at the depth of 12 to 18 inches and adequate soil moisture for plant growth.

BROADCAST APPLICATION WITH AERIAL EQUIPMENT:

Dosage Rates - Refer to Chart 1 for the broadcast rates of Hi-Dep® and tank mixtures applied with aerial equipment.

Spray Volumes -

- For aerial application of Hi-Dep® alone, use a total spray volume of 0.5 to 4.0 gallons per acre (gpa).
- For aerial application of the tank mixtures, use a minimum spray volume of 2.0 gallons per acre. For South Texas mixed brush 4.0 gallons per acre are recommended.
- Refer to Chart 1 for specific instructions.

Spray Preparation - Hi-Dep® diluted with water forms a solution. Agricultural surfactants such as Ortho® X-77 are recommended for tank mixtures with water alone. Drift control additives such as Nalco-Trol® may be used in reducing drift. Refer to Chart 1 for specific instructions.

Oil in water emulsions may increase the effectiveness of the tank mixtures when compared to spray mixtures with water alone. Oil in water emulsions include oil (diesel fuel, kerosene, fuel oil, or mineral oil), an emulsifier, and the herbicides. Prepare an oil-water emulsion with a 1:5 ratio by adding a premix of oil and emulsifier to the total spray mixture at the ratio of 1 part oil to 5 parts of water. Do not use more than one gallon of oil per acre. Always use a jar test to check compatibility before preparing tank mixtures. Emulsifiers such as Sponto® 712, Triton® X-100, or Rangeland Spra-Mate® must be used for adequate stability in oil-water emulsions. Drift control agents such as Nalco-Trol® may be used in reducing drift. Refer to Chart 1 for specific instructions.

Harvest and Grazing Intervals - Refer to Chart 1.

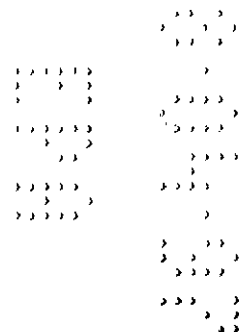


CHART 1. TANK MIXTURE RECOMMENDATIONS FOR FOLIAR BROADCAST TREATMENTS USING AERIAL EQUIPMENT

Product Name	Restricted Use	Approved States	Amount of Product		Spray Volume gpa	Spray Preparations					Grazing and Harvest Intervals
			Quarts per Acre	Pounds a.i./acre		Water Solutions		Oil: Water Emulsions		Drift Control Additives	
						Agricultural Surfactants % vol./vol.	Drift Control Additives	Ratio of Oil to Water	Emulsifiers	Drift Control Additives	
Hi-Dep®	NO	New Mexico Oklahoma Texas Arizona	2.0	1.9	> ½ to 4	-----	-----	-----	-----	-----	See footnote 1
Hi-Dep® plus Reclaim® Herbicide	NO	New Mexico Oklahoma Texas	1.0 0.34-0.67	0.95 0.25-0.50	≥2	0.25%v/v	Nalco-Trol or Equivalent	1:5	Sponto 712 or Triton X-100	Nalco-Trol or Equivalent	See footnotes 1,2
Hi-Dep® plus Remedy® Range and Pasture Herbicide	NO	New Mexico Oklahoma Texas Arizona	1.0 0.50	0.95 0.50	≥2 and ≥4 for South Texas Mixed Brush	0.25%v/v	Nalco-Trol or Equivalent	1:5	Rangeland Spra-Mate, Sponto 712 Triton X-100	Nalco-Trol or Equivalent	See footnotes 1,3
Hi-Dep® plus Grazon® PC Herbicide	YES	New Mexico Oklahoma Texas	1.0 0.5-1.0	0.95 0.25-0.50	≥2 and ≥4 for South Texas Mixed Brush	0.50%v/v	Nalco-Trol or Equivalent	1:5	Sponto 712 or Triton X-100	Nalco-Trol or Equivalent	See footnotes 1,4
<p>1) Observe these intervals:</p> <ul style="list-style-type: none"> • A 7 day pregrazing interval for dairy cattle. • A 30 day preharvest interval for grass cut for hay. • A preslaughter interval for meat animals of 3 days. 											
<p>2) Do not spray pastures containing desirable forbs, especially legumes, unless injury to such plants can be tolerated. Do not treat more than once a year. Fall treatments are not recommended. Do not transfer livestock from treated grazing areas onto sensitive broadleaf crop areas without allowing 7 days of grazing on an untreated pasture.</p>											
<p>3) Do not spray pastures containing desirable forbs, especially legumes such as clover, unless injury or loss of plants can be tolerated. Withdraw livestock from treated forage at least 3 days before slaughter during the year of treatment. Do not graze lactating dairy animals on treated areas for one year following treatment. Do not harvest grass for hay from treated areas for one year following treatment.</p>											
<p>4) Do not transfer livestock from treated areas onto broadleaf crop areas without first allowing 7 days of grazing on untreated grass pasture. Otherwise, urine may contain enough picloram to cause injury to sensitive broadleaf plants. Do not spray pastures if the forage legume component is desired. Grazon® PC Herbicide may injure or kill legumes. Also, new legume seedlings may not be successful if made within 2 years following application of this herbicide. Do not treat with Grazon® PC Herbicide (Picloram) more than once a year. Maximum application rate for Grazon® PC Herbicide is 2 pints per acre per year. (0.5 lbs. ac/A).</p>											
<p>5) Use nonionic agricultural surfactants such as Ortho® X-77 or equivalent products.</p>											

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BROADCAST APPLICATIONS WITH GROUND EQUIPMENT:

Dosage Rates - Refer to Chart 2 for the broadcast rates of Hi-Dep® and tank mixtures applied with ground equipment.

Spray Volumes -

- For ground application of Hi-Dep® alone, use a total spray volume of 1.0 to 10.0 gallons per acre (gpa).
- For ground application of the tank mixtures, use a minimum spray volume of 10.0 gallons per acre. For sites with mixed brush or dense growth 10.0 to 25.0 gallons per acre are recommended.
- Refer to Chart 2 for specific instructions.

Spray Preparation - Hi-Dep® diluted with water forms a solution. Agricultural surfactants such as Ortho® X-77 are recommended for tank mixtures with water alone. Drift control additives such as Nalco-Trol® may be used in reducing drift. Refer to Chart 2 for specific instructions.

Oil in-water emulsions may increase the effectiveness of the tank mixtures when compared to spray mixtures with water alone. Oil in water emulsions include oil (diesel fuel, kerosene, fuel oil, or mineral oil), an emulsifier, and the herbicides. The amount of oil in the spray mixture will range from 5 to 20 percent of the total spray mixture, and the maximum rate of oil should not exceed 1.0 gallon per acre. Emulsifiers such as Sponto® 712, Triton® X-100, or Rangeland Spra-Mate® must be used for adequate stability in oil-water emulsions. Drift control agents such as Nalco-Trol® may be used in reducing drift. Always use a jar test to check compatibility before preparing tank mixtures. Refer to Chart 2 for specific instructions.

Harvest and Grazing Intervals - Refer to Chart 2.

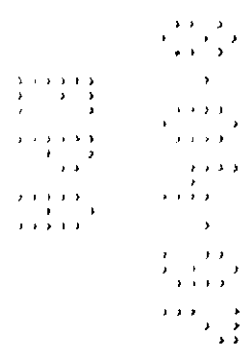


CHART 2. TANK MIXTURE RECOMMENDATIONS FOR FOLIAR BROADCAST TREATMENTS USING GROUND EQUIPMENT

Product Name	Restricted Use	Approved States	Amount of Product		Spray Volume gpa	Spray Preparations					Grazing and Harvest Intervals
			Quarts per Acre	Pounds a.i./acre		Water Solutions		Oil: Water Emulsions		Drift Control Additives	
						Agricultural Surfactants % vol./vol.	Drift Control Additives	Ratio of Oil to Water	Emulsifiers		
Hi-Dep [®]	NO	New Mexico Oklahoma Texas Arizona	2.0	1.9	1 - 10	-----	-----	-----	-----	-----	See footnote 1
Hi-Dep [®] plus Reclaim [®] Herbicide	NO	New Mexico Oklahoma Texas	1.0 0.34-0.67	0.95 0.25-0.50	10 - 20	0.25%v/v	Nalco-Trol or Equivalent	5-10% with maximum of 1 gal. of oil per acre	Sponto 712 or Triton X-100	Nalco-Trol or Equivalent	See footnotes 1,2
Hi-Dep [®] plus Remedy Range and Pasture Herbicide	NO	New Mexico Oklahoma Texas Arizona	1.0 0.50	0.95 0.50	>10	0.50%v/v	Nalco-Trol or Equivalent	5-10% with maximum of 1 gal. of oil per acre	Rangeland Spra-Mate, ¹ Sponto 712 Triton X-100	Nalco-Trol or Equivalent	See footnotes 1,3
Hi-Dep [®] plus Grazon [®] PC Herbicide	YES	New Mexico Oklahoma Texas	1.0 0.5-1.0	0.95 0.25-0.50	10 - 25	0.50%v/v	Nalco-Trol or Equivalent	15-20% with max. of 1 gal. of oil per acre	Sponto 712 or Triton X-100	Nalco-Trol or Equivalent	See footnotes 1,4
1) Observe these intervals: <ul style="list-style-type: none">• A 7 day pregrazing interval for dairy cattle.• A 30 day preharvest interval for grass cut for hay.• A preslaughter interval for meat animals of 3 days.											
2) Do not spray pastures containing desirable forbs, especially legumes, unless injury to such plants can be tolerated. Do not treat more than once a year. Fall treatments are not recommended. Do not transfer livestock from treated grazing areas onto sensitive broadleaf crop areas without allowing 7 days of grazing on an untreated pasture.											
3) Do not spray pastures containing desirable forbs, especially legumes such as clover, unless injury or loss of plants can be tolerated. Withdraw livestock from treated forage at least 3 days before slaughter during the year of treatment. Do not graze lactating dairy animals on treated areas for one year following treatment. Do not harvest grass for hay from treated areas for one year following treatment.											
4) Do not transfer livestock from treated areas onto broadleaf crop areas without first allowing 7 days of grazing on untreated grass pasture. Otherwise, urine may contain enough picloram to cause injury to sensitive broadleaf plants. Do not spray pastures if the forage legume component is desired. Grazon [®] PC Herbicide may injure or kill legumes. Also, new legume seedlings may not be successful if made within 2 years following application of this herbicide. Do not treat with Grazon [®] PC Herbicide (Picloram) more than once a year. Maximum application rate for Grazon [®] PC Herbicide is 2 pints per acre per year. (0.5 lbs. ac/A).											
5) Use nonionic agricultural surfactants such as Ortho [®] X-77 or equivalent products.											

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HIGH VOLUME LEAF STEM TREATMENTS OF INDIVIDUAL MESQUITE PLANTS WITH BACKPACK SPRAYERS, KNAPSACK SPRAYERS, POWER SPRAYERS, SPRAYGUNS, OR OTHER GROUND EQUIPMENT - This method is appropriate for sparse infestations of mesquite trees less than 6 to 8 feet in height or as a follow-up treatment in subsequent or different growing seasons. Hi-Dep® may be applied alone or in combination with Reclaim® in a dilution with water or in an oil-water emulsion.

For Hi-Dep® alone, mix 2.0 gallons of Hi-Dep® per 100 gallons of water (2.0% spray concentration). For Hi-Dep® plus Reclaim® tank mixture, mix 1 gallon of Hi-Dep® plus 0.5 to 0.75 gallon of Reclaim® Herbicide per 100 gallons of water (1.0% and 0.5 to 0.75% spray concentration of Hi-Dep® and Reclaim®, respectively). See Chart 3 for additional instructions for the spray preparation of 100 gallons of spray solution.

Spray volumes will depend upon the density and height of the mesquite plants. Thorough coverage of the leaves, stems, trunks, and root collars is essential. Apply as a spray-to-wet application for the best results. However, do not exceed one application of 1 1/3 pints per acre per year of Reclaim® Herbicide.

CHART 3. SPRAY PREPARATION CHART FOR MIXING 100 GALLONS OF SPRAY SOLUTION

Spray Concentration (% vol/vol) and Type	Amounts of Products to Make 100 Gallons of Spray Solution					
	Hi-Dep®, Gallons	Reclaim®, Gallons	Water, Gallons	Oil, Gallons	Ortho® X-77®, Gallons	Emulsifier, Gallons
2.0% water dilution	2.0	—	98.0	—	—	—
1.0% + (0.5 - 0.75%) water dilution	1.0	0.5 - 0.75	98.0 - 98.25	—	0.25	—
1.0% + (0.5 - 0.75%) oil-water emulsion	1.0	0.5 - 0.75	93.1 - 93.40	5.0	—	0.12
¹Add oil to the total spray mixture at the rate of 5% (vol./vol.), but do not use more than 1 gallon of oil per acre for this oil-water emulsion.						
²Nonionic agricultural surfactants may be substituted for Ortho® X-77.						
³Triton® X-100, Sponto® 712, or other emulsifiers are added at the rate of 3 fl. ozs. per gallon of oil.						

Observe these grazing and harvest intervals for Hi-Dep® treatments.

- 1) A 7 day pregrazing interval for dairy cattle.
- 2) A 30 day preharvest interval for grass cut for hay.
- 3) A preslaughter interval for meat animals of 3 days.

Observe these additional precautions for Hi-Dep® and Reclaim® Herbicide combinations.

- ♦ Do not spray pastures containing desirable forbs, especially legumes, unless injury to such plants can be tolerated.
- ♦ Do not treat more than once a year. Fall treatments are not recommended. Do not transfer livestock from treated grazing areas onto sensitive broadleaf crop areas without allowing 7 days of grazing on an untreated pasture.

CONTROL OF WOODY PLANTS OR BRUSH AND BROADLEAF WEEDS ON ROADSIDES, DRAINAGE DITCHBANKS, RIGHTS-OF-WAY, RAILROADS, FIREBREAKS, FORESTS (Forest Site Preparation), FENCEROWS, INDUSTRIAL SITES AND OTHER SIMILAR NONCROP AREAS:

High volume - Mix 1 to 2 gallons per 100 gallons of water (1 to 2% solution). Dosage rates per acre depend on the density of brush and/or weeds. For small broadleaf weeds, use the lower rate. Heavy dense stands of brush require the high rate with higher water volume. For small applications with small tank sprayers mix 1.25 to 2.5 fluid ounces of product per gallon of water.

To effectively control brush, all leaves, stems and suckers should be thoroughly wetted to the ground. Apply when plants come into full leaf (spring) to the time plants begin to go dormant. Best results are obtained when brush and broadleaf weeds are young and actively growing. Do not cut brush until the herbicide has translocated throughout the plant causing root death. Do not apply as a stand release or cover spray to established conifers as injury may result.

CONTROL OF SOUTHERN WILD ROSE:

On roadsides and fencerows, use 1 gallon of product per 100 gallons of water. Spray thoroughly as soon as foliage is well developed. Two or more treatments may be required.

AERIAL APPLICATIONS FOR INDUSTRIAL/NONCROPLAND AREAS:

Forestry Site Preparation - For use in desiccation/controlled burning programs, use $\frac{1}{2}$ to 1 gallon of Hi-Dep® in tank mixes with other herbicides labeled for forestry site preparation (e.g. Garlon®, Tordon®, Arsenal® Applicators Concentrate). Use sufficient water to achieve uniform wetting of target brush species. Do not exceed 25 gallons total spray per acre.

The maximum application rate to forestry site preparation is 4 pounds 2,4-D acid equivalent per acre per application per site.

Utility & Pipeline Rights-of-Way - Use $\frac{1}{2}$ to 2 gallons of Hi-Dep® in tank mix combination with other herbicides labeled for rights-of-way and apply a total spray volume of 5 to 30 gallons per acre.

TANK MIXTURES FOR INDUSTRIAL/NONCROPLAND AREAS:

Hi-Dep®, a mixed amine salt of 2,4-D, can be applied as a tank mixture with other recommended herbicides such as Garlon®, Tordon®, and Banvel® to broaden the spectrum of control. In order to assure maximum safety and weed control, follow all precautions and limitations on this label and the labels of products used in tank mixtures with Hi-Dep®.

PRODUCTS	RATES
Hi-Dep® + Garlon® 3A	$\frac{1}{2}$ to 2 gallon/A + $\frac{1}{2}$ to 1 gallon/A
Hi-Dep® + Garlon® 4E	$\frac{1}{2}$ to 2 gallon/A + 2 to 4 quarts/A
Hi-Dep® + Tordon® 22K	$\frac{1}{2}$ to 2 gallon/A + $\frac{1}{2}$ to 4 quarts/A
Hi-Dep® + Banvel® Herbicide	$\frac{1}{2}$ to 2 gallon/A + 1 quart to 2 gallon/A

FOREST TREE INJECTION:

To control unwanted hardwood trees make injections as near the root collar as possible using one injection per inch of trunk's diameter at breast height. For resistant species such as hickory, injections should overlap. For best results injections should be made during the growing season - May 15 to October 1.

For Concentrate Injection - Use 1 to 2 ml. of concentrate per injection. The injection bit must penetrate the inner bark.

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LEAFY SPURGE CONTROL IN COLORADO, IDAHO, MINNESOTA, MONTANA, NEBRASKA, NORTH DAKOTA, SOUTH DAKOTA, WASHINGTON AND WYOMING:

Hi-Dep® is recommended for use in combination with Tordon® or Banvel® for the suppression and/or control of leafy spurge on industrial noncropland sites in Colorado, Idaho, Minnesota, Montana, Nebraska, North Dakota, South Dakota, Washington and Wyoming.

HOW TO USE:

Apply 1 to 2 quarts of Hi-Dep® in combination with 1 quart of Tordon®, or 2 quarts of Hi-Dep® plus 2 quarts of Banvel®, or 2 quarts of Hi-Dep® plus 1 pint of Tordon® plus 1 quart of Banvel®. Rates are on a per acre basis.

Mix with water, 1 to 10 gallons per acre with conventional equipment. Use nozzle systems capable of spraying correct gallonage. Add a nonionic agricultural surfactant at 0.25% by volume (1 quart per 100 gallons of solution).

IMPORTANT: Before using HI-DEP®, TORDON® and/or BANVEL® in these combinations, read and carefully observe the precautionary statements and all other information appearing on the product labels.

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.

Reentry statement for residential and other turf sites excluding sod farms. Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment area until spray has dried or dust has settled.

BROADLEAF WEED CONTROL IN NONCROPLAND GRASS AREAS:

Airfields, Roadsides, Vacant Lots, Drainage Ditchbanks - Use 1 to 3 quarts of product per acre. Treat when weeds are young and growing well. Usually 2 quarts of product per acre will provide adequate weed control.

For Ornamental Turfgrass Established in Lawns, Golf Courses, Cemeteries, and Parks - Use 1.0 - 2.0 quarts of product per acre. For residential and other turf sites excluding sod farms, the maximum application rate to turf is 2.0 pounds 2,4-D acid equivalent per acre per application per site. The maximum number of broadcast applications per treatment site is 2 per year.

Do not use on dichondra or other herbaceous groundcovers. Do not use on creeping grasses such as bentgrass except for spot treating nor on newly seeded turf until grass is well established. Reseeding of lawns should be delayed following treatment. With spring application, reseed in the fall; with fall application, reseed in the spring. Legumes are usually damaged or killed. Deep rooted perennial weeds such as bindweed and Canada thistle may require repeated applications.

SPOT TREATMENT/NONCROP:

Hand-Held and High Volume Equipment - For control of weeds listed using knapsack sprayers or high volume equipment utilizing sprayguns or other nozzle arrangements. Unless otherwise specified, make a ¾% solution in water and apply to foliage as a coarse spray. For hard-to-kill woody plants use a 1½% solution. Applications should be made on a spray-to-wet basis with uniform coverage. Do not spray to point of runoff. When using knapsack sprayers, insure mixture is complete by shaking or inverting sprayer several times.

Roadsides, Vacant Lots, Fencerows and Drainage Ditchbanks - Use a ¾% spray concentration or mix 1.0 fl. oz. of product with 1.0 gallon of water.

For Turf - Use a ½ - 1% spray concentration or mix ⅔ - 1⅓ fl. oz. of product with 1.0 gallon of water.

For Woody Plants - Use a 1½ % spray concentration or mix 2.0 fl. oz. of product with 1.0 gallon of water. Prepare the spray solution by mixing in water as per the following table:

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Desired Volume	Spray Concentration			
	½%	¾%	1%	1½%
1 gallon	⅔ fl. oz. (4 tsp.)	1 fl. oz. (2 Tbs.)	1⅓ fl. oz. (8 tsp.)	2 fl. oz. (4 Tbs.)
25 gallon	1 pint	1½ pint	2 pints	3 pints
100 gallon	½ gallon	¾ gallon	1 gallon	1½ gallon
Equal Measures: 2 Tablespoons (Tbs.) = 1 fluid ounce (fl. oz.) 1 teaspoon (tsp.) = ⅓ Tablespoon (Tbs.) = 0.17 fluid ounce (fl.oz.)				

LIMITED WARRANTY AND DISCLAIMER.

The manufacturer warrants only that the chemical composition of this product conforms to the ingredient statement given on the label, and that the product is reasonably suited for the labeled use when applied according to the Directions for Use.

THE MANUFACTURER NEITHER MAKES NOR INTENDS ANY OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE EXPRESSLY DISCLAIMED. This limited warranty does not extend to the use of the product inconsistent with label instructions, warnings or cautions, or to use of the product under abnormal conditions such as drought, excessive rainfall, tornadoes, hurricanes, etc. These factors are beyond the control of the manufacturer or the seller. Any damages arising from a breach of the manufacturer's warranty shall be limited to direct damages, and shall not include indirect or consequential damages such as loss of profits or values, except as otherwise provided by law.

The terms of this Limited Warranty and Disclaimer cannot be varied by any written or verbal statements or agreements. No employee or agent of the seller is authorized to vary or exceed the terms of this Limited Warranty and Disclaimer in any manner.

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Triton® X-100 is a registered trademark of Union Carbide Corporation.

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