111 - 9

Frederick J. Pearson Pesticide Regulatory Specialist ICI Agricultural Products Group Wilmington, DE 19897

Dear Mr. Pearson:

Subject:

Devrinol 50-DF Selective Herbicide

EPA Reg. No. 10182-258

Re: Amendment To Change Signal Word From "Danger" to "Caution"

Your Submission Dated March 22, 1990

The Agency has completed its review of the Acute Ocular Irritation study submitted in support of the above mentioned amendment. The study supports the requested change in signal word but is rated "core minimum" because the required six animals did not come from the same source and it was not stated if they were of the same age or within the same weight range. In addition, eye evaluations were missing for three animals in day four.

Labeling

- 1. The signal word is "Caution"
- 2. Update "Precautionary Statements" to include: "Causes moderate eye injury and skin irritations."
- 3. Reformat "Statements of Practical Treatment" as follows:

IF SWALLCHED: Immediately give several glasses....

IF ON SKIN: Flush all affected areas with water

IF IN EYES: Immediately flush eyes with large.....

IF INHALED: Remove to fresh air. Seek medical......

Additional Study Requested

Because the named product consists of fine particulate matter and is destined to be sprayed, an <u>Inhalation Study</u> is requested at this time. Additional label changes may be required upon review of data.

A stamped approved copy of your label is attached. Please submit five (5) copies your final printed label incorporating this amendment and above mentioned communts before you release the product for shipment.

Sincerely yours,

Robert J. Daylor

Product Manager (25

	CONCURRENCESUNGICIDE Nerbicide Branch
SYMBOL 1/7555C	Registration Division (87505C)
SURHAME MONTULBERNES	
DATE 16/27/90	
EPA Form 1326-7 (12-76)	



Page 1 of 27 Devrinol 50-DF RS-012290

DEVRINOL® 50-DF Selective Herbicide Dry Flowable

For use on certain Citrus, Nuts, Pome fruits, Small Fruits, Stone Fruits, Vegetables and Tobacco

ACTIVE INGPEDIENT: N,N-Diethyl-2-(1-no	Ph	+	\ ~	le	ηy	, 1,	•¥}	y).	-p	ro	рí	on	A M	id	e.	•	•	•	•	•	•	•	•	•	50.0%
INERT INGREDIENTS:																									

Contains 50 lbs. of Active Ingredient per 100 lbs.

ACCEPTED
with COMMENTS
in EFA Letter Dated:

KEEP OUT OF REACH OF CHILDREN

CAUTION

July 9 190

Function of the Act as amended, the the pesticide registered under EPA Reg. No.

STATEMENT OF PRACTICAL TREATMENT

Immediately start the procedures given below and contact a Poison Conter; a physician, or the nearest hospital. Report the type and extent of exposure, describe the victim's symptoms and follow the advice given. For 24-hour emergency assistance, call ICI Americas Medical Emergency Information Center 1-800-327-8633. In case of a significant spill, call CHEMTREC 1-800-424-9300.

If swallowed, immediately give several glasses of water and induce vomiting by gagging the victim with a finger placed on the back of the victim's tongue. Give fluids until vomitus is clear. Do not induce vomiting or give anything by mouth to an unconscious or convulsing person.

For skin contact, flush all affected areas with plenty of water for several minutes. Remove and clean contaminated clothing and shoes. Seek medical attention if skin irritation occurs.

For eye contact, immediately flush eyes with large amounts of running water for 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. Get medical attention immediately.

If inhaled, remove to fresh air. Seek medical attention if respiratory irritaion occurs or if breathing becomes difficult.

LB.	NET	WT.	Kg.

EPA Reg. No. 10182-258

This product is sold only for uses stated on its label. No express or implied license is granted to use or sell this product under any patent in any country except as specified: Country: United States Patent No.: 3,489,671; 3,718,455

Made in U. S. A. by ICI AGRICULTURAL PRODUCTS ICI AMERICAS INC. WILMINGTON, DE 19897

Page 2 of 27 304 29 Devrinol 50-DF RS-012290

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

HARMFUL IF SWALLOWED. CAUSES EYE IRRITATION. Wear goggles or face shield when handling. Avoid contact with skin, eyes and clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

- Do not apply directly to water or wetlands.
- Do not contaminate water by cleaning of equipment or disposal of wastes. Apply this product as specified on this label.
- Do not contaminate water used for domestic purposes.
- Avoid contamination of food and feed.

GENERAL PRECAUTIONS.

- Read all instructions before using.
- Use only for recommended purposes and at recommended rates. Do not overdose.
- Except where specifically noted, DEVRINOL 50-DF is not recommended for use on soil containing more than 10% organic matter.
- Spraying or ground heavily covered with leaves or trash may adversely affect weed control.
- Do not apply to frozen ground.
- To minimize injury to succeeding crops not listed on this label, a deep disc plow or moldboard plow operation (minimum 10 inches) must be carried out prior to planting. To avoid injury to crops not specified on the label, do not plant until 12 months after the last application of DEVRINOL 50-DF.
- When applied at rates no greater than 2 lbs. a.i./A, rotational corpo which are not registered on this label may be planted no econor than 12 months after application when harvest and use of mature crop(s) is only for food or feed purposes. Crops are not to be grazed or harvested for food or feed purposes earlier than maturity.

GENERAL DIRECTIONS FOR USE

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

DEVRINOL 50-DF is a selective surface-applied or incorporated herbicide for use in certain types of newly planted or established crops. DEVRINOL 50-DF does not control established weeds. All weed growth and crop stubble in the fields must be thoroughly worked into the soil prior to planting. Spray equipment should be carefully calibrated before use and checked frequently during application to be sure nozzles are operating properly and are delivering a uniform spray pattern. Apply the recommended rate of DEVRINOL 50-DF in 20 to 100 gallons of water per acre in a low pressure boom-type sprayer.

Be sure the spray tank, boom and nozzle have been thoroughly flushed with clean water before use. Sufficient jet or mechanical agitation should be provided during the filling operation and during application.

When mixing DEVRINOL 50-DF alone, or in combination with recommended wettable powders, make a slurry and add to a nearly filled sprzy tank with adequate agitation. This will enhance initial mixing. Recommended contact herbicides and spreaders should always be added to a nearly filled spray tank. Never add them to the slurry.

Whenever a rate range is recommended for DEVRINOL 50-DF, use the lower rate on light soil (coarse textured-sandy) and the higher rate INSERT) on heavy soil (fine textured-clay).

(see 26,)

د/)

NOTE: All rates are given on a broadcast basis, per acre. Reduce rates proportionately for band or strip treatment.

WEEDS CONTROLLED BY 8 LBS. DEVRINOL 50-DF PER ACRE

SURFACE APPLICATION

NOTE: DEVRINOL 50-DF does not control established weeds.

ANNUAL GRASSES:

Barnyardgrass, Junglerice
Wild Barley
Annual Bluegrass
Bromes
Cheatgrass
Downy Brome
Ripgut Brome
Soft Chess
Large (Hairy) Crabgrass
Smooth Crabgrass
Southwestern Cupgrass
Foxtails
Bristly Foxtail
Giant Foxtail

(Echinochloa spp.)
(Hordeum leporinum;
(Poa annua)
(Bromus)
(B. secalinus)
(B. tectorum)
(B. rigidus)
(B. mollis)
(Digitaria sanguinalis)
(Digitaria ischaemum)
(Eriochloa gracilis)
(Setaria)
(S. verticilla)
(S. faberi)

Green Foxtail
Yellow Foxtail
Goosegrass
Seedling Johnsongrass
Wild Oats
Panicums
Guineagrass
Fall Panicum
Texas Panicum
Witchgrass
Italian Ryegrass
Sandbur
Red Sprangletop
Stinkgrass

(S. viridis)
(S. lutescens)
(Eleusine indica)
(Sorghum halepense)
(Avena fatua)
(Panicum)
(P. Paximum)
(P. dichotomiflorum)
(P. texanum)
(P. capillare)
(Lolium multiflorum)
(Cenchrus spp.)
(Leptochloa filiformis)
(Eragrostis cilianensis)

ANNUAL BROADLEAF WEEDS:

Carpetweed
Common Chickweed
Coast Fiddleneck
Filaree
Groundsel
Prostrate Knotweed
Lambsquarters
Prickly Lettuce
Little Mallow*
Redroot Pigweed
Pineappleweed
Common Purslane
Horse Purslane
Common Ragweed**
Annual Sowthistle

(Mollugo verticillata)
(Stellaria media)
(Amsinckia intermedia)
(Erodium spp.)
(Senecio spp.)
(Polygonum aviculare)
(Chenopodium album)
(Lactuca serriola)
(Malva parviflora)
(Amaranthus retroflexus)
(Matricaria matricarioides)
(Portulaca oleracea)
(Trianthema portullacastrum)
(Ambrosia artemisiifolia)
(Sonchus oleraceus)

DIRECTIONS FOR USE

NOTE: All rates are given on a broadcast basis. Reduce rates proportionately for band or strip treatment.

For control of all weeds listed, apply 8 pounds DEVRINOL 50-DF per broadcast acre to the soil surface. Apply in the Fall through early Spring prior to weed emergence. Do not apply DEVRINOL 50-DF to frozen ground. For best results, the treatment must reach the zone of weed seed germination. If rainfall does not occur the treatment must be shallowly incorporated or irrigated-in following application (sprinkler or flood) with sufficient water to wet the soil to a depth of 2 to 4 inches.

^{*}From seed **Suppression

ALLOWABLE TIME FOR TREATMENT TO REMAIN ON SOIL SURFACE (BY REGION):

Three weeks (November through February) or 24 hours (remain-WEST: der of year).

PACIFIC NORTHWEST: Three weeks (Fall through Early Spring) or 24 hours (remainder of year).

OTHER REGIONS: 24 hours.

Use as a directed spray and avoid contact with fruit or foliage. Do not apply when fruit or nuts are on the ground during the harvest period. Do not graze treated areas.

Regional Use Map

FRUIT AND NUT CROPS SURFACE APPLICATION

RECOMMENDATIONS

DEVRINOL 50-DF is recommended for use on the following crops. Refer to regional map under "DIRECTIONS FOR USE".

Almonds: (All Regions)

8 pounds DEVRINOL 50-DF per broadcast acre. In the Rate: Western region an additional 8 pounds may be applied

during the growing season. Do not apply within 35 days of hurvest.

Use Recommendations: Apply to a weed free soil surface.

May be applied to newly planted and

established crop.

Apples: (All Regions)

8 pounds DEVRINOL 50-DF per broadcast acre. In the

Western Region an additional 8 pounds may be applied

during the growing season. Do not apply within

✓ of harvest.

Apply to a weed free soil surface. Use Recommendations:

May be applied to newly planted and

established crop.

Apricots: (All Regions)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre. In the

Western Region an additional 8 pounds may be applied

during the growing season. Do not apply within 35 days of harvest.

Use Recommendations: Apply to a weed free soil surface

May be applied to newly planted and

established crop.

706 28

(Western Region Only) Avocados:

8 pounds DEVRINOL 50-DF per broadcast acre. An Rate:

additional 8 pounds may be applied during the growing

season. Do not apply within 35 days of harvest

Use Recommendations: Apply to a weed free soil surface.

May be applied to established crop only.

Blueberries: (A' Regions)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre. Use Recommendations: Apply to a weed free soil surface.

May be applied to newly planted and

established crop.

Cameberries (blackberries, raspberries, boysenberries and loganberries): (All Regions)

8 pounds DEVRINOL 50-DF per broadcast acre.

Apply to a weed free soil surface. Use Recommendations:

May be applied to newly planted and

established crop.

Cherries: (All Regions)

8 pounds DEVRINOL 50-DF per broadcast acre. In the Rate:

Western Region an additional 8 pounds may be applied during the growing season. Do not apply within 35

days of harvest.

Use Recommendations: Apply to a weed free soil surface.

May be applied to newly planted and

established crop.

Figs: (All Regions)

8 pounds DEVRINOL 50-DF per broadcast acre. In the Western Region an additional 8 pounds may be applied

during the growing season. Do not apply within 35

days of harvest.

Use Recommendations: Apply to a weed free soil surface.

May be applied to newly planted and

established crop.

Filberts: (All Regions)

8 pounds DEVRINOL 50-DF per broadcast acre. In the Rate:

Western Region an additional 8 pounds may be applied during the growing season. Do not apply within 35

days of harvest.

Use Recommendations: Apply to a weed free soil surface.

May be applied to newly planted and

established crop.

Grapefruit: (All Regions)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre. In the Western Region an additional 8 pounds may be applied during the growing season. Do not apply within 35

days of harvest.

use Recommendations: Apply to a weed free soil surface.

May be applied to newly planted and established crop.

Grapes: (All Regions)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre. In the Western Region an additional 8 pounds may be applied during the growing season. Do not apply within 35 days of harvest.

Use Recommendations: Apply to a weed free soil surface.

May be applied to newly planted and

established crop.

Kiwifruit: (Western Region Only)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre. An additional 8 pounds may be applied during the growing season. Do not apply within 35 days

of harvest.

Use Recommendations: Apply to a weed free soil surface.

May be applied to newly planted and

established crop.

Lemons: (All Regions)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre. In the Western Region an additional 8 pounds may be applied during the growing season. Do not apply within 35 days of harvest.

Use Recommendations: Apply to a weed free soil surface.

May be applied to newly planted and established crop.

Nectarines: (All Regions)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre. In the Western Region an additional 8 pounds may be applied during the growing season. Do not apply within 35 days of harvest.

Use Recommendations: Apply to a weed free soil surface.

May be applied to newly planted and established crop.

Olives: (Western Region Only)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre. An

additional 8 pounds may be applied during the growing

season. Do not apply within 35 days of harvest.

Use Recommendations: Apply to a weed free soil surface.

may be applied to newly planted and

established crop.

Oranges: (All Regions)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre. In the

Western Region an additional 8 pounds may be applied during the growing season. Do not apply within 35

days of harvest.

Use Recommendations: Apply to a weed free soil surface.

May be applied to newly planted and

established crop.

Peaches: (All Regions)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre. In the

Western Region an additional 8 pounds may be applied during the growing season. Do not apply within 35

days of harvest.

Use Recommendations: Apply to a weed free soil surface.

May be applied to newly planted and

established crop.

Pears: (All Regions)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre. In the

Western Region an additional 8 pounds may be applied during the growing season. Do not apply within 35

days of harvest.

Use Recommendations: Apply to a weed free soil surface.

May be applied to newly planted and

established crop.

Pecans: (All Regions)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre. In the

Western Region an additional 8 pounds may be applied during the growing season. Do not apply within 35

days of harvest.

Use Recommendations: Apply to a weed free soil surface.

May be applied to newly planted and

established crop.

Persimmons: (Western Region Only)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre. An

additional 8 pounds maybe applied during the growing

season. Do not apply within 35 days of harvest.

Use Recommendations: Apply to a weed free soil surface.

May be applied to established crop only.

Pistachios: (All Regions)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre.

Use Recommendations: Apply to a weed free soil surface. May be applied to newly planted and

established crop.

Plums: (All Regions)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre. In the

Western Region an additional 8 pounds may be applied during the growing season. Do not apply within 35

days of harvest.

Use Recommendations: Apply to a weed free soil surface.

May be applied to newly planted and

established crop.

Prunes: (All Regions)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre. In the

Western Region an additional 8 pounds may be applied during the growing season. Do not apply within 35

days of harvest.

Use Recommendations: Apply to a weed free soil surface.

May be applied to newly planted and

established crop.

Strawberries: (All Regions)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre.

Use Recommendations: Apply to a weed free soil surface.

May be applied to newly transplanted and established crop. Delay application until desired number of daughter plants have become established. Do not apply

from bloom through harvest.

Tangerines: (All Regions)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre. In the

Western Region an additional 8 pounds may be applied during the growing season. Do not apply within 35

days of harvest.

Use Recommendations: Apply to a weed free soil surface.

May be applied to newly planted and

established crop.

Walnuts: (All Regions)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre. In the

Western Region an additional 8 pounds may be applied during the growing season. Do not apply within 35

days of harvest.

Use Recommendations: Apply to a weed free soil surface.

May be applied to newly planted and

established crop.

10.

OTHER CROPS SURFACE APPLICATION

RECOMMENDATIONS

Artichokes: (Western Region Only)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre.

Use Recommendations: Apply to a weed free soil surface.

May be applied to established crop

only.

Asparagus: (All Region)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre.

Use Recommendations: Apply to a weed free soil surface.

May be applied to established crop

only.

Mint: (Pacific Northwest Only)

Rate: 8 pounds DEVRINOL 50-DF per broadcast acre.

Use Recommendations: Apply to a weed free soil surface.

May be applied to newly planted and

established crop.

Where recommended for use on established crops, apply DEVRINOL 50-DF only to stands that have been established for at least one growing season. Where recommended for use on newly planted crops, application may be made immediately after planting young trees, vines, and bushes.

DEVRINOL 50-DF may be applied at the recommended rates through irrigation water for pre-emergence control of listed weeds in grapes and tree crops (Western Region Only). Do not allow treatment to contact foliage or crop. Remove existing weed growth before application. Apply at the start of irrigation set and with sufficient water to wet the soil to a depth of 2-4 inches. Avoid run-off. These irrigation systems should be equipped with automatic shutoff devices and valves to prevent back flow into the water source.

11.

WEEDS CONTROLLED BY 2 to 4 LBS. DEVRINOL 50-DF PREPLANT INCORPORATED APPLICATION

NOTE: DEVRINOL 50-DF does not control established weeds.

ANNUAL GRASSES

Barnyardgrass, Junglerice Crabgrass Foxtails Giant Foxtail Green Foxtail Yellow Foxtail Goosegrass Seedling Johnsongrass Panicums Fall Panicum Witchgrass Stinkgrass (Echinochioa spp.)
(Digitaria spp.)
(Setaria)
(S. faberi)
(S. viridis)
(S. lutescens)
(Eleusine indica)
(Sorghum halepense)
(Panicum)
(P. dichotomiflorum)
(P. capillare)
(Eragrostis cilianensis)

ANNUAL BROADLEAF WEEDS

Carpetweed
Purple Cudweed
Galinsoga*
Lambsquarters
Redroot Pigweed
Common Purslane
Florida Pusley
Common Ragweed**

(Mollugo verticillata)
(Gnaphalium purpureum)
(Galinsoga spp.)
(Chenopodium album)
(Amaranthus retroflexus)
(Portulaca oleracea)
(Richardia scabra)
(Ambrosia artemisiifolia)

*Controlled at 4 lb. DEVRINOL 50-DF **Suppression

DIRECTIONS FOR USE OF DEVRINOL PRE-PLANT INCORPORATED

On flat-planted or bedded crops apply, before planting, to well-worked soil that is dry enough to permit thorough incorporation to a depth of 1 to 2 inches. Incorporate the same day as applied, using equipment which will result in uniform incorporation of the herbicide to the desired depth.

After harvest or prior to planting of succeeding crops, a deep moldboard or disc plowing operation must be carried out.

When applied at rates no greater than 2 lbs. a.i./A, rotational crops which are not registered on this label may be planted no sooner than 12 months after application when harvest and use of the mature crop(s) only is for food or feed purposes. Crops are not to be grazed or harvested for food or feed purposes earlier than maturity.

MELONS, TOBACCO AND VEGETABLES PRE-PLANT INCORPORATED APPLICATION

RECOMMENDATIONS

NOTE: All rates are given on a broadcast basis. Reduce rates proportionately for band or strip treatment.

Cole Crops - Broccoli, Brussel Sprouts, Cauliflower: (Pacific North-West Region Only)

Rate: 2-4 pounds DEVRINOL 50-DF per broadcast acre. Use Recommendations: Apply to a weed free soil surface.

May be applied to direct seeded and transplanted crop,pre-plant incorporated or as a surface spray after direct seeding or transplanting. Shallow incorporate no deeper than seeding depth or sprinkler irrigate within 24 hours using sufficient water to wet the soil to a depth of 2-4 inches. Use the lower rate on light soil (course textured-sandy) and the higher rate on heavy soil (fine textured-clay).

Cole Crops - Broccoli, Brussel Sprouts, Cauliflower: (All Regions except Pacific NorthWest)

2-4 pounds DEVRINOL 50-DF per broadcast acre.

Use Recommendations: Apply to a weed free soil surface. Maybe applied to direct seeded and transplanted crop, pre-plant incorporated or as a surface spray. Shallow incorporate to a depth of 1-2 inches or sprinkler irrigate within 24 hours using sufficient water to wet the soil to a depth of 2-4 inches. Use the lower rate on light soil (coarse textured-sandy) and the higher rate on heavy soil (fine textured-clay).

Eggplants: (All Regions)

Before transplanting, apply 2-4 pounds DEVRINOL 50-DF Rate:

per broadcast acre.

Use Recommendations: Apply to a weed free soil surface. May be

applied to transplanted crop only. Use the lower rate on light soil (coarse textured sandy) and the higher rate on heavy soil

(fine textured-clay).

Melons (except cantaloupes) and Squash: (All Regions)

Rate: 2-4 pounds DEVRINOL 50-DF per broadcast &cre.

Apply to a weed free soil surface. Use Recommendations:

May be applied to direct seeded crop.

Use the lower rate on light soil

(coarse textured-sandy) and the higher rate on heavy soil (fine textured-clay).

Peppers: (All Regions)

2-4 pounds DEVRINOL 50-DF per broadcast acre.

Use Recommendations: Apply to a weed free soil surface. May be

applied to direct seeded and transplanted crop. Use the lower rate on light soil (coarse textured - sandy) and the higher rate on heavy soil (fine textured-clay)

Tomatoes: (All Regions)

Rate: 2-4 pounds DEVRINOL 50-DF per broadcast acre.

Use Recommendations: Apply to a weed free soil suface. May be

applied to direct seeded and transplanted crop. Use the lower rate on light soil (coarse textured - sandy) and the higher rate on heavy soil (fine textured-clay).

Tobacco: (All Regions)

Rate: Before transplanting, apply 2-4 pounds DEVRINOL 50-DF

per broadcast acre.

Use Recommendations: Apply to a weed free soil surface. Use the

lower rate on light soil (coarse texturedsandy) and the higher rate on heavy soil (fine textured - clay). In Southeast only: Apply up to 3 weeks before transplanting.

No waiting period is necessary.

Posttransplant surface and layby surface applications for use in transplanted tobacco (Virginia and Southeastern Region Only)

Weeds Controlled

See list of weeds controlled under DEVRINOL 50-DF preplant incorporated application.

Directions for Use.

At Transplanting: Apply the recommended amount of DEVRINOL 50-DF to the soil surface immediately after transplanting. May be applied over the top of transplants.

At Layby: Apply the recommended amount of DEVPINOL 50-DF in a band immediately after the layby cultivation. Apply as a directed spray to the row middles.

Use 20 to 50 gallons of spray per acre. For best results the treatment must reach the zone of weed seed germination. If rainfall does not occur within 24 hours after application, the treatment must be shallowly incorporated or irrigated—in with sufficient overhead irrigation to wet the soil to a depth of 2 to 4 inches.

Recommendations

Rate: Apply 2 to 4 pounds DEVRINOL 50-DF per broadcast acre.

Use Recommendations: Apply to a weed free soil surface. Reduce rates proportionately for band application. Treatments may follow a preplant incorporated application of DEVRINOL 50-DF or DEVRINOL 50-DF /Tillam 6-E. Do not apply more than 4 pounds DEVRINOL 50-DF in any one season.

15 171

Rotational Crop Restrictions

When LIVRINOL 50-DF is used on tobacco posttransplant or lay by at 2 to 4 pounds, surface applied, small grains may be seeded in rotation in the fall to prevent soil erosion. These grains may be stunted but not otherwise adversely affected.

No tolerance is established for residues of DEVRINOL 50-DF in small grains. Rotational cover crops must be destroyed by plowing under or otherwise prevented from reaching food of feed production.

If rotating out of tobacco the following spring, to avoid injury to crops not specified on this label do not plant until 12 months after the last DEVRINOL 50-DF application.

When applied at rates no greater than 2 lbs. a.i./4, rotational crops which are not registered on this label may be planted no sooner than 12 months after application when harvest and use of the mature crop(s) only is for food or feed purposes. Crops are not to be grazed or harvested for food or feed purposes earlier than maturity.

TANK MIXTURES

FRUIT AND NUT CROPS

IMPORTANT

Observe all cautions and limitations on labeling of all products used in combination.

Make only one application per season.

Do not contaminate water by cleaning of equipment or disposal of wastes. Apply these combinations only as specified on this label.

For a tank mix application, apply the recommended dosage (see directions for use) in 20 to 100 gallons of water per acre.

In any tank mix including GRAMOXONE SUPER, add an approved non-ionic spreader to the tank water, such as ORTHO*X-77 spreader, at the rate of 8 oz. per 100 gallons.

DEVRINOL 50-DF/GRAMOXONE SUPER COMBINATION

DEVRINOL 50-DF will not control emerged weeds. GRAMOXONE SUPER may be used to control existing weeds when applied prior to, or in combination with DEVRINOL.

Refer to the section on DEVRINOL 50-DF surface application for a list of weeds controlled.

*Registered trademark of Chevron Chemical Company

DIRECTIONS FOR USE

Follow use directions for DEVRINOL 50-DF surface application. Read the GRAMOXONE SUPER label for timing with respect to stage of weed growth and for application methods recommended to minimize crop injury.

For control of all weeds listed, apply 8 pounds DEVRINOL 50-DF and 3 to 5 pints GRAMOXONE SUPER per broadcast acre.

RECOMMENDATIONS

Consult the GRAMOXONE SUPER label for recommended uses in orchards and vineyards. Then read the crop recommendations for DEVRINOL 50-DF surface application to insure that the combination may be used for a particular crop in your state. Recommended only for the uses specified on the GRAMOXONE SUPER and DEVRINOL 50-DF labels. Do not apply this combination to caneberries.

DEVRINOL 50-DF/SIMAZINE 80-WP COMBINATION (CALIFORNIA AND PACIFIC NORTHWEST ONLY)

DEVRINOL 50-DF may be used in combination with SIMAZINE 80-WP for control of additional weeds not controlled by DEVRINOL 50-DF alone. This tank mix does not control emerged weeds.

Additional weeds controlled by DEVRINOL 50-DF/SIMAZINE 80-W tank mix, surface applied, at recommended rates:

California burclover
Henbit
London rocket
Marestail (horseweed)
Miners lettuce
Panicle willoweed
Redmaids (rockpurslane)

(Medicago polymorpha)
(Lamium amplexicaule)
(Sisymbrium irio)
(Conyza canadensis)
(Montia perfoliata)
(Epilohium paniculatum)
(Calandrinia caulescens)

DIRECTIONS FOR USE

For control of all weeds listed, apply 8 pounds DEVRINOL 50-DF and 0.6 to 1.25 pounds SIMAZINE 80-WP per broadcast acre. Limit treatment of almonds, grapes and peaches to a 4 to 8 foot band centered on the tree row, reducing the dosage proportionately. Apply in the fall through early spring, prior to weed emergence. For best results, the treatment must reach the zone of weed seed germination. Treatments made other than in November through February must be shallowly incorporated or irrigated-in the same day as applied (sprinkler or flood) with sufficient water to wet the soil to a depth of 2 to 4 inches. Irrigation or shallow

incorporation is recommended for treatments made from November through February if no rainfall occurs within three weeks of application.

Read directions on the SIMAZINE Label concerning nozzle and screen

Use as a directed spray and avoid contact with fruit or foliage. Do not apply when fruit or nuts are on the ground during the harvest period. No not graze treated areas.

RECOMMENDATIONS

For use on almonds, apples, avocados, grapefruit, grapes, lemons, olives, oranges, peaches, pears, and walnuts in California and apples, filberts, grapes and walnuts in the Pacific Northwest.

NOTE: To avoid possible crop injury follow these precautions.

- . Apples and Pears. Make application only to orchards where trees have been established one year or more.
- Almonds and Peaches (California unly). Do not treat trees established in the orchard less than 3 years. Do not treat the Mission variety of almonds. Do not apply to almond trees propagated on plum rootstocks. Do not replant almonds or peaches in treated soil. Do not apply on gravelly, sandy, or loamy sand soil, or on soil with less than 1% organic matter. Do not treat areas where water will accumulate (flood or furrow irrigation water should not be applied to any treated areas or allow to stand on treated areas).
- Filberts (Oregon and Washington Only). Do not apply on gravelly, sand or loamy sand soil.
- Grapes. Do not use in vineyards established less than three years.
- Grapefruit, Lemons, and Oranges (California Only). Do not use in the Imperial, Coachella, or Palo Verde Valleys. Do not use in nurseries. Do not apply to bedded grapefruit, lemons, or oranges. Do not apply to trees under stress from freeze damage for one year after the freeze.

Walnuts. Do not apply to sandy soil. Leveling and furrowing operations after application will lessen effectiveness of weed control.

DEVRINOL 50-DF/SIMAZINE 80-WP/GRAMOXONE SUPER COMBINATION (California and Pacific Northwest Univ)

DEVRINOL 50-DF/SIMAZINE 80-WP will not control emerged weeds. TRAMOXONE SUPER may be used to control existing weeds when applied prior to, or in combination with DEVRINOL/SIMAZINE.

For weeds controlled refer to the weed lists for DEVRINOL 50-DF and DEVRINOL/SIMAZINE tank mix surface applied.

For control of all weeds listed, apply 8 pounds DEVRINOL 50-DF, 0.6 to 1.25 pounds SIMAZINE 80-WP, and 3 to 5 pints GRAMOXONE SUPER per broadcast acre.

Follow the use directions and recommendations for the DEVRINOL 50-DF/SIMAZINE 80-WP combination. Consult the GRAMOXONE SUPER label for timing with respect to stage of weed growth and for application methods recommended to minimize crop injury.

RECOMMENDATIONS

For crop recommendations, read the section on DEVRINOL/SIMAZINE.

DEVRINOL 50-DF/GOAL+1.6-E COMBINATION (CALIFORNIA ONLY)

DEVRINOL 50-DF may be used in combination with GOAL 1.6-E for control of additional weeds not controlled by DEVRINOL alone.

Additional weeds controlled preemergence by DEVRINOL 50-DF/GOAL 1.6-E tank mix, applied preemergence to a relatively weed-free established berm or soil surface, at recommended rates:

Burclover
Filaree, (Redstem,
Broadleaf)
Henbit
London rocket
Redmaids
Shepherdspurse

(Medicago hipide)
(Erodium cicutarium)
(Erodium notrys)
(Lamium amplexicaule)
(Sisymbrium irio)
(Calandrinia caulescens)
(Capsella bursa-pastoris)

DIRECTIONS FOR USE - DORMANT APPLICATION, CALIFORNIA ONLY

For control of all weeds listed, apply 8 pounds DEVRINOL 50-DF and 5.0 quarts 60AL 1.6-E (2.0 lb. active) per broad ast acre. Spray should be directed to the soil and the base of dormant trees or vines. Use of a low pressure sprayer equipped with a break-away boom and flat fan or off-center (OC) nozzle is recommended. For best results, the treatment must reach the zone of weed germination. Irrigation sufficient to wet the soil to a minimum depth of 2 to 4 inches is recommended for treatments made from November through February 15 if no rainfall occurs within three weeks of application.

Registered Trademark of Rohm and Haas Company

NOTE: Applications made in October must be irrigated in (sprinkler or flood) the same day as applied with sufficient water to wet the soil to a minimum depth of 2 to 4 inches.

Cultural practices which result in redistribution or disturbance of the soil surface after treatment will decrease the herbicidal effectiveness of GOAL 1.6-E. For best results from the DEVRINOL 50-DF/GOAL 1.6-E tank mix combination, application should be made to established berms or soil surfaces which are left undisturbed during the time period for which weed control is desired.

Read the GOAL 1.6-E label for specific use directions and precautions.

RECOMMENDATIONS

For use on almond, apricot, cherry, fig, grape, nectarine, peach, pear, pistachio, plum, prune and walnut in California only.

NOTE: To avoid possible crop injury follow these precautions:

- Apply only to dormant fruit or nut trees or grape vines. Do not apply when foliage, buds or fruit/nuts are present.
- Grapes: Do not apply to grapes established less than 3 years.
 Do not apply to grapes which are not staked or trellised.

DEVRINOL 50-DF/GOAL 1.6-E/GRAMOXONE SUPER COMBINATION CALIFORNIA ONLY

DEVRINOL 50-DF/GOAL 1.6-E/GRAMOXONE SUPER is recommended for residual preemergence control of susceptible broadleaf and grassy weeds. GRAMOXONE SUPER is included in the tank mix to control existing emerged weeds.

For weeds controlled refer to the weed lists for DEVRINOL 50-DF and DEVRINOL 50-DF/GOAL 1.6-E tank mix surface applied.

DIRECTIONS FOR USE

For control of all weeds listed, apply 8 pounds DEVRINOL 50-DF, 5 quarts GOAL 1.6-E (2.0 lb. active) and 3 to 5 pints GRAMOXONE SUPER per broadcast acre.

Follow the use directions and recommendations for the DEVRINOL 50-DF 50-DF/GOAL 1.6-E combination. Consult the GRAMOXONE SUPER label for timing with respect to stage of weed growth and for application methods recommended to minimize crop injury.

RECOMMENDATIONS

For use on almond, apricot, cherry, fig, grape, nectarine, peach, pear, plum, prune and walnut in California only.

DEVRINOL 50-DF/KARMEX* 80-WP COMBINATION

DETRINOL 50-DF may be used in combination with KARMEX 80-WP for improved control of annual broadleaf weeds. This tank mix does not control emerged weeds.

DIRCTIONS FOR USE

NOTE: All rates are given on a broadcast basis. Reduce rates proportionately for band or strip treatment.

For control of all weeds listed, apply 8 pounds DEVRINOL 50-DF and 1.25 pounds KARMEX 80-WP per broadcast acre to the soil surface. Apply in the fall through early spring prior to weed emergence. Do not apply to frozen ground. For best results, the treatment must reach the zone of weed seed germination. If rainfall does not occur the treatment must be shallowly incorporated or irrigated-in following application (sprinkler or flood) with sufficient water to wet the soil to a depth of 2 to 4 inches. In the Western and Pacific Northwest Regions treatment made in November through February must be incorporated-in or irrigated-in if no rainfall occurs within three weeks of application.

For treatments made other than in November through February in these regions, and for all treatments applied in the Northern Southwestern, and Southeastern Regions regardless of season, the treatment must be incorporated in or irrigated in within 24 hours if no rainfall occurs.

Use as a directed spray and avoid contact with fruit or foliage. Do not apply when fruit is on the ground during the harvest period. Do not graze treated areas.

RECOMMENDATIONS

For use on the following crops: Apples and peaches (All Regions). Citrus (California and Arizona only). Grapes, pears and walnuts (California only).

NOTE: To avoid possible crop injury follow these precautions:

- Apples and Pears: Use only under trees established in the orchard for at least 1 year; do not treat varieties grafted on full-dwarf root stocks.
- Citrus: Use only under trees established in the grove for at least 1 years.
- Grapes: Apply only to established vineyards (at least 3 years old) as a band treatment to grape rows. Do not apply to vines with trunks less than 1-1/2" in diameter as injury may result. On soils low in clay or organic
- * Registered trademark of E.I. DuPont De Nemours & Company.

matter (1 to 2%), severe plant injury may result if heavy rainfall or more than one inch of irrigation occurs soon after treatment. This risk must be assumed by the user.

- Peaches: Use only under trees established in the orchard for at least 2 y ars.
- Walnuts: Use only under trees established in the orchard for at least 1 year.

DEVRINOL 50-DF/SINBAR* 80-WP COMBINATION

DEVRINOL 50-DF may be used in combination with SINBAR 80-WP for improved control of annual broadleaf weeds. This tank mix does not control emerged weeds.

DIRECTIONS FOR USE

NOTE: All rates are given on a broadcast basis. Reduce rates proportionately for band or strip treatment.

For control of all weeds listed, apply 8 pounds DEVRINOL 50-DF and 1.25 pounds SINBAR 80-WP per broadcast acre to the soil surface. Apply in the fall through early spring prior to weed emergence. Do not apply to frozen ground. For best results, the treatment must reach the zone of weed seed germination. If rainfall does not occur the treatment must be shallowly incorporated or irrigatedin following application (sprinkler or flood) with sufficient water to wet the soil to a depth of 2 to 4 inches. In the Western and Pacific Northwest Regions treatment made in November through February must be incorporated in or irrigated in if no rainfall occurs within three weeks of application. For treatments made other than in November through February in these regions, and for all treatments applied in the Northern, Southwestern, and Southeastern Regions regardless of season, the treatment must be incorporated in or irrigated in within 24 hours if no rainfall occurs.

Use as a directed spray and avoid contact with fruit or foliage. Do not apply when fruit is on the ground during the harvest period. Do not graze treated areas.

<u>RECOMMENDATIONS</u>

For use on apples, peaches and citrus (restrict use on citrus to California only).

NOTE: To avoid possible crop injury follow these precautions:

- Apples and Peaches: Where crop is grown under furrow irrigation or under raised-berm flood irrigation (trees 4" to 6" above waterline), apply only as a band treatment. Do not treat trees planted in the bottom of irrigation furrows or trees grown under flat flood or basin irrigation, and do not use on eroded areas where subsoil or tree roots are exposed, as injury to trees may result. Use only on trees established in the orchard for at least two years.
- * Registered Trademark of E. I. DuPont De Nemours & Company.

Citrus: Tempory yellowing of citrus leaves may occur following treatment. Treatment may be used on coarse soils but is not to be used on sands low in organic matter (less than 1%), on poorly drained soils, nor on trees planted in irrigation furrows, as injury to trees may result. Treated areas may be planted to citrus trees one year after last application. Use only on trees established in the grove for at least one year.

TANK MIXTURES VEGETABLES AND TOBACCO

IMPORTANT

Observe all cautions and limitations on labeling of all products used in combination.

Make only one application per season.

Do not contaminate water by cleaning of equipment or disposal of wastes.

In each case where a range of rates is given, the lower rates should be used on light (coarse) textured soils and soils low in organic matter. The higher rates should be used on heavy (fine) textured soils.

After harvest or prior to planting of succeeding crops, a deep moldboard or disc plowing operation must be carried out. To avoid injury to crops not specified on the label, do not plant until 12 months after the last DEVRINOL application. When applied at rates no greater than 2 lbs. a.i./A, rotational crops which are not registered on this label may be planted no sooner than 12 months after application when harvest and use of the mature crop(s) only is for food or feed purposes. Crops are not to be grazed or harvested for food or feed purposes earlier than maturity.

DIRECTIONS FOR USE

The recommended tank mix controls weeds by interfering with normal seed germination and seedling development. It does not control established weeds. All weed growth and crop stubble should be throroughly worked into the soil before treatment.

TANK MIX DIRECTIONS

Follow directions given in the sections DEVRINOL 50-DF GENERAL DIRECTIONS FOR USE AND TANK MIXTURES - IMPORTABLE.

At labeled spray volumes of 20-50 gallons per acre on transplanted tobacco, DEVRINOL 50-DF is physically compatible with Dyfonate®, Dasanit®, Diazinon®, Nemacur®, Ridomil® and Tillam®.

Registered Trademarks of Mobay Chemical Corporation
 Registered Trademarks of Ciba-Geigy Corporation

22.

DEVRINOL 50-DF/TILLAM 6-E TANK MIX COMBINATION APPLIED PRE-PLANT INCORPORATED

A tank mix combination of DEVRINOL 50-DF and TILLAM 6-E can be applied and mixed (incorporated) into the soil before planting for weed control in tomatoes and tobacco.

ADDITIONAL WEEDS CONTROLLED BY DEVRINOL/TILLAM TANK MIX AT RECOMMENDED RATES.

ANNUAL GRASSES

Bermudagrass Narrowleaf Signalgrass Wild oats Millet. foxtail (<u>Cynodon dactylon</u>) (<u>Brachiaria piligera</u>) (<u>Avena fatua)</u> (<u>Setaria italica</u>)

ANNUAL BROADLEAF WEEDS

Henbit (Deadnettle)
Nettleleaf goosefoot
Hairy nightshade*
Blackeyed Susan
Shepherdspurse

(Lamium amplexicaule)
(Chenopodium murale)
(Solanum villosum)
(Sweet Suzy)(Rudbeckia serotina)
(Capsella bursa-pastoris)

PERENNIAL WEEDS

Purple nutsedge (purple nutgrass)
Yellow nutsedge (yellow nutgrass)

(Cyperus rotundus)
(Cyperus esculentus)

Existing stands of nutgrass must be turned under and chopped up thoroughly before treatment.

APPLICATION DIRECTIONS

The soil should be well-worked and dry enough to permit good soil mixing (incorporation). Pour the recommended amounts of DEVRINOL and TILLAM 6-E into a spray tank during the filling operations. Apply in 25 to 50 gallons of water per acre.

For soil incorporated applications, use a properly calibrated, low-pressure, boom-type sprayer having good agitation.

In irrigated areas, do not apply before pre-irrigation. For all band applications, reduce dosage proportionately depending upon row spacing and band to be treated. Do not band application on rocky ground because thorough incorporation is not possible.

INCORPORATION DIRECTIONS

The herbicides must be mixed (incorporated) into the soil IMMEDIATELY after application to prevent loss by evaporation. Whenever possible, application and incorporation should be done in the same operation.

^{*}Suppression (partial control)

INCORPORATION BEFORE PLANTING

Use power-driven cultivation equipment set to cut to a depth of two to three inches in coarse soils and three to four inches in heavy soils OR a tandem disc set to cut to a depth of six inches, followed by a spiked-tooth harrow or some other leveling device which extends beyond ends of the disc. For thorough mixing, disc in two different directions (cross disc).

INCORPORATION AT PLANTING

Use power-driven cultivation equipment set to cut to a depth of two to three inches.

PLANTING

Crops should be planted or seeded immediately after application and incorporation. Do not use a drag behind the planter as it may concentrate the herbicides over the seed row and cause cropinjury.

CULTURAL PRACTICES FOLLOWING APPLICATION

Shallow cultivation may be necessary to control those susceptible weeds that escape control as well as those weeds not susceptible to either herbicide. Do not cultivate deeper than the depth of herbicide incorporation.

When cultivating fields where the tank mix has been banded in the row, use shields to prevent the movement of untreated soil into the treated row.

RECOMMENDATIONS

TOMATOES (Direct Seeded (California Only) and Transplanted)

Apply 2 to 4 pounds DEVRINOL 50-DF plus 2-2/3 to 4 quarts TILLAM 6-E per broadcast acre. Use the lower rates on light soils (coarse textured - sandy) and the higher rate on heavy soils (fine textured - clay). Do not use hotcaps on transplanted tomatoes.

TOBACCO (Transplanted)

Before transplanting, apply 2 pounds DEVRINOL 50-DF plus 2-2/3 quarts TILLAM 6-E. This combination may be tank mixed with Furadan* 4-F or Mocap** 6-E at recommended rates. Read the Furadan 4-F and Mocap 6-E labels for recommended uses, directions for use, precautions and limitations. When filling the spray tank follow these orders of mixing: DEVRINOL 50-DF slurry, Furadan 4-F, TILLAM 6-E. OR, DEVRINOL 50-DF slurry, TILLAM 6-E, Mocap 6-E.

^{*}Trademark of FMC Corporation
**Trademark of Rhone-Poulenc Chemical Company

DEVRINOL 50-DF/TILLAM 6-E/DYFONATE [4-E,4-EC or 4-ED] TANK MIX COMBINATION

A tank mix combination of DEVRINOL 50-DF, DYFONATE 4-E, 4-EC or 4-ED and TILLAM 6-E can be applied and mixed into the soil before transplanting tomatoes and tobacco, for control of weeds and soil insects. Refer to DEVRINOL/TILLAM Tank Mix Combination for list of weeds controlled.

NOTE: Dyfonate 4-E, 4-EC and 4-ED are Restricted Use Pesticides. Observe all cautions and limitations on labeling of all products used in combinations. Make only one application per season. Do not contaminate water by cleaning equipment or disposal of wastes.

DIRECTIONS FOR USE

The recommended tank mix controls weeds by interfering with normal seed germination and seedling development. It does not control established weeds. All weed growth and crop stubble should be thoroughly worked into the soil before treatment.

For GENERAL USE PRECAUTIONS and DIRECTIONS FOR USE REFER TO DEVRINOL 50-DF/TILLAM 6-E Tank Mix Recommendations for methods of tank mixing, application and incorporation. When using DEVRINOL 50WP, make a slurry and add to a nearly filled spray tank with adequate agitation.

RECOMMENDATIONS

TOMATOES (Direct Seeded (California Only) and Transplanted): Apply 2 to 4 pounds DEVRINOL 50-DF plus 2-2/3 to 4 qts TILLAM 6-E plus 2 qts. DYFONATE 4-E, 4-EC or 4-ED for control of symphylans or 4 qts. for control of symphylans and wireworms in 25 to 50 gallons of water per broadcast acre. Use the lower DEVRINOL 50-DF and TILLAM 6-E rates on light soils (coarse textured-sandy) and the higer rates on heavy soils (fine textured-clay). Do not use hotcaps on transplanted tomatoes.

TOBACCO (Transplanted): Before transplanting apply 2 pounds DEVRINOL 50-DF plus 2-2/3 qts. TILLAM 6-E plus 2 qts. DYFONATE 4-E, 4-EC or 4-ED for control of wireworms in 25 to 50 gallons of water per broadcast acre.

STORAGE AND DISPOSAL

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

STORAGE: Keep container closed when not in use. Store in a cool dry place. Do not store near seeds, fertilizer or food stuffs.

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

CONTAINER DISPOSAL:

PLASTIC BAGS - Do not reuse. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

PLASTIC CONTAINERS - 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.

NOTICE TO BUYER AND USER: Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal use conditions, or under conditions not reasonably foreseeable to Seller, and Buyer and User assume the risk of any such use. SELLER DISCLAIMS ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING ANY WARRANTY OF FITNESS OR MERCHANTABILITY. SELLER SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT AND SELLER'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE.

A - Applications Through Irrigation Systems

DEVRINOL 50-DF may be applied at the recommended rates through irrigation water for pre-emergence control of listed weeds in grapes and tree crops (Western Region Only). Do not allow treatment to contact foliage or crop. Remove existing weed growth before application. Meter the DEVRINOL 50-DF into the irrigation water during the entire period. Apply with sufficient water to wet the soil to a depth of 2-4 inches. Good agitation should be maintained during the entire application period. Avoid run-off.

Use Precautions

- A. Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, solid set or hand move, flood (basin), furrow, border irrigation systems. Do not apply this product through any other type of irrigation system.
- B. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- C. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- D. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- E. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

For Sprinkler Irrigation

- The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operation valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

- 5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive dispiscement injection pump (e.g., disphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.

For Flood (Basin), Furrow and Border Irrigation

- Systems using a gravity flow pesticide dispensing system must meter the
 pesticide into the water at the head of the field and downstream of a
 hydraulic discontinuity such as a drop structure of weir box to decrease
 potential for water source contamination from backflow if water flow
 stops.
- 2. Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:
 - a. The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
 - b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
 - c. The pesticide injection pipeline must also contain a functional, normally closed, solnoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
 - d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
 - e. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
 - f. Systems must use a metering pump, such as a positive displacement injection pump (e.g., disphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.