PM 25 350-404 Н-041 ACCEPTED QUPONT. FEB | 4 1995 Under the Federal Insecticida, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 352-404**Telar**<sup>®</sup> herbicide )

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"........ A Growing Partnership With Nature"

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Active Ingredient	By Weight
Chlorsulfuron	
2-Chloro-N-[(4-methoxy-6-methyl -1,3,5-triazin-2-yl)-aminocarbonyl] benzenesulfonamide	750%
Inert Ingredients	75%
TOTAL	100%

EPA Reg. No. 352-404

U.S. Pat. 4,127,405

# KEEP OUT OF REACH OF CHILDREN CAUTION

# **PRECAUTIONARY STATEMENTS**

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION! MAY IRRITATE EYES, NOSE, THROAT AND SKIN.

Avoid breathing dust or spray mist. Avoid contact with skin, eyes and clothing.

In case of contact with eyes, immediately flush with plenty of water. Get medical attention if irritation persists.

Wash thoroughly after handling. Remove and wash contaminated clothing before reuse.

For medical emergencies involving this product, call toll free 1-800-441-3637.

# **ENVIRONMENTAL HAZARDS**

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

# **DIRECTIONS FOR USE**

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

TELAR should be used only in accordance with recommendations on this label or in separate published DuPont recommendations available through local suppliers.

Do not use cr. food or feed crops.

# **GENERAL INFORMATION**

DuPont Telar<sup>®</sup> Herbicide is a dispersible granule that is used to control many annual, biennial, and perennial broadleaf weeds on noncrop, industrial sites such as airports, military installations, fence rows, roadsides and associated rights-ofway, lumberyards, petroleum tank farms, pipeline and utility rights-of-way, pumping installations, railroads, storage areas, plant sites and other similar areas including governmental and private lands.

TELAR is noncorrosive, nonflam mable, nonvolatile and does not freeze. TELAR should be mixed in water and applied as a spray.

TELAR can be applied as a preensegence or postemergence treatment. For best results, apply TELAX before or during early stages of weed growth. The degree and duration of control may depend on the following:

- use rate
- weed spectrum and size at application
- environmental conditions at and following treatment

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## Environmental Conditions and Biological Activity

TELAR is absorbed by both the roots and foliage of plants, rapidly inhibiting the growth of susceptible weeds. Two to 3 weeks after application to weeds, leaf growth slows, and the growing points turn reddish-purple. Within 4 to 6 weeks of application, leaf veins and leaves become discolored, and the growing points subsequently die.

Warm, moist conditions following treatment enhance the effectiveness of TELAR since moisture carries TELAR into weed roots, preventing roots from developing. Cold, dry conditions delay the activity of TELAR. Weeds hardened off by cold weather or drought stress are less susceptible to TELAR.

## Resistance

Biotypes of certain weeds listed on this label are resistant to TELAR and other herbicides with the same mode of action, even at exaggerated application rates. Biotypes are naturally occurring individuals of a species identical in appearance but with slightly different genetic compositions. The mode of action

of an herbicide is the chemical interaction that interrupts a biological process necessary for plant growth and development.

If weed control is unsatisfactory, it may be necessary to respray problem areas using a product with a different mode of action, or to use TELAR in tank mixes and/or sequential treatments with other registered broadleaf herbicides. Do not let weed escapes go to seed; time postemergence treatments before seed formation.

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## **APPLICATION INFORMATION**

## NONCROPLAND, INDUSTRIAL SITES

TELAR is recommended for control of many annual, biennial, and perennial broadleaf weeds in noncropland, industrial areas.

#### Application Timing

Apply TELAR as a preemergent or early postemergent spray when weeds are actively germinating or growing.

## Weeds Controlled

TELAR effectively controls the following weeds when applied at the use rates shown. When applied at lower rates, TELAR provides short term control of weeds listed; when applied at higher rates, weed control is increased.

#### 1/4 to 1/2 oz per acre

Annual sowthistle	Mayweed		
Blue mustard	Miners lettuce		
Common chickweed	Pineapple-weed		
Common speedwell	Prostrate pigweed		
Conical catchfly	Redroot pigweed		
Fiddleneck(tarweed)	Shepherd's-purse		
Field pennycress	Smooth pigweed		
Flixweed*	Freacle mustard		
Hempnettle	Tumble mustard (Jim		
Henbit	Hill)		
London rocket	Wild mustard		

## 1/2 to 1 oz per acre

Bouncingbet	Common sunflower
Bur beakchervil	Common speedwell*
Buttercup	Dandelion*
Canada thistle *†	Goldenrod
Common lambsquarters	

#### 1/2 to 1 oz per acre

Groundsel	Tumble mustard
Marestail	Turkey mullein*
Musk thistle	Whitetop (hoary cress)†
Sweet clover*	Wild parsnip

\* Partial control only.

† Prebloom to bloom and fall rosette are recommended timings.

#### I to 3 oz per acre

Annual ryegrass (Lolium spp)*	Dyer's woad Elixweed
Aster	Foxtail (Setaria spp)*
Bedstraw	Horsetail (Equisetum spp)
Black mustard	Pepperweed (perennial)
Bull thistle	Poison-hemlock
Burclover	Prostrate knotweed*
Canada thistle	Puncturevine
Common cinquefoil	Red clover
Common mallow	Russian knapweed <sup>†</sup>
Common mullein	Scotch thistle
Common ragweed*	Scouringrush (Equisetum
Common tansy	spp)
Common teasel	Tansymustard
Common yarrow	White clover
Corn spurry	Wild carrot
Cow cockle	Wild garlic/wild onion
Curly dock	Yellow starthistle*

\* Partial control only.

† Prebloom to bloom and fall rosette are recommended timings.

#### Specific Weed Problems

Kochia, Russian Thistle, and Prickly Lettuce: Tank mix TELAR with herbicides with different modes of action and apply postemergence before weeds form mature seed.

#### Tank Mixtures

For improved, broad spectrum control, task mix TELAR with DuPont Karmex<sup>•</sup> DF Herbicide or DuPont Krovar<sup>•</sup>, I DF Herbicide for preemergence to early post-mergence treatments. Tank mix TELAR with dicamba, 2,4-D, or glyphosate for postemergent applications. When tank mixing "ELAR, use the most restrictive label limitations for each product used in the mix.

Do not tank mix TELAR with DuPont's HYVAR<sup>\*</sup> XL Herbicide.

# INDUSTRIAL TURF , (Unimproved Only)

TELAR is recommended to control weeds on unimproved industrial turf, on roadsides, and on other noncropland areas.

#### Application Timing

Apply TELAR when desirable grasses are well established, as premature treatment may result in top kill and stand reduction. For best results, treat turf at green-up. Plant new seeds in cultivated areas at least 6 months after treatment.

#### Weads Controlled

TELAR effectively controls the following grasses when applied at the use rates shown. When applied at lower rates, TELAR provides short term control of weeds listed; when applied at higher rates, weed control is increased.

Note: The higher rates and/or the addition of surfactant may result in temporary chlorosis of desirable grasses.

# 1/4 to 1 ozBahiagrassBluegrassBermudagrassWheatgrass

Blue grama

#### 1/2 oz

	Bentgrass	Orchardgrass
S.	Bluestems (big, little, plains, sand, ww spar)	Prairie sandreed Sand dropseed
	Bromegrasses (meadow, smooth)	Sheep fescue Sideoats grama
	Buffalograss	Switchgrass
	Galleta	Wheatgrasses
)	Green needlegrass Green sprangetop Indiangrass Indian ricegrass Kleingrass Lovegrasses (sand, weeping)	(crested, intermediate pubescent, slender, streambank, tall, thick spike, western) Wildrye grasses (beardless, Russian)

#### <u>1/4 to 1/2 oz</u>

Fescue

Smooth brome

## GROWTH SUPPRESSION AND SEEDHEAD INHIBITION

TELAR as a tank mix with other herbicides may be used to suppress grass growth (chemical mowing) and inhibit seedhead formation.

#### **Application Timing**

Apply TELAR to turf at green-up and before seed heads form (boot stage). Ensure that desirable grasses are well established at application, as premature treatment may result in top kill and stand reduction.

#### Weeus Controlled

Fescue

TELAR effectively controls the following grasses when applied at the use rates shown. When applied at lower rates, TELAR provides short term control of weeds listed; when applied at higher rates, weed control is increased.

E Ar /

1/4	oz TELA	(R + 1)	4 • 1/2	pt Embai	rk 2S

Bluegrass

#### 1/2 oz TELAR + 1/2 - 1 pt "Embark" 2S (PNW Only)

Fescue	Smooth brome
Annual bluegrass	Orchardgrass
Perennial ryegrass	Reed canarygrass

#### IMPORTANT PRECAUTIONS (Industrial Turf Only)

- Do not use TELAR or TELAR in a tank mix with "Embark" on bahiagrass turf or turf that is under stress from drought, insects, disease, cold temperature, or poor fertility, as injury may result.
- · Do not apply TELAR to turf less than 1 year old.
- For broadcast applications, do not exceed 1/2 oz TELAR per acre within a 12-month period. For those weeds listed under the 1- to 3-oz recommendation in the Noncrop, Nonindustrial Sites section of this label, spot treatment (at that rate) is recommended. Do not make broadcast applications to turf at 1- to 3-oz as this may cause excessive turf injury.

#### SPRAY EQUIPMENT

Apply TELAR using ground equipment only. Equipment used to apply TELAR should not be used for application to crops following a TELAR application, as even low rates of TELAR can kill or severely injure most crops (except small grains).

### **BROADCAST APPLICATION**

Use 10 to 40 GPA when applying TELAR as a broadcast application. Be sure to calibrate sprayers before application. Select a spray volume and delivery system that will ensure thorough coverage and a uniform spray pattern. When spraying industrial turf, avoid overlapping and shut off spray booms while starting, turning, slowing, or stopping to avoid injury to desired species.

#### HANDGUN APPLICATION

Use 100 to 300 GPA when applying TELAR as a broadcast application via handgun. Mix 1 oz TELAR per 100 gal of water. Apply up to 300 gal of spray mix per acre.

## SPRAY ADJUVANTS

#### Nonionic Surfactants

Always include a nonionic surfactant when making postemergence applications of TELAR (except for use on turf). Apply at a minimum rate (concentration) of 25% y/v, (1 qt per 100 gal of spray solution) or at the manufacturer's recommended rate based on spray area.

Use only EPA-approved surfactants containing at least 80% active ingredient.

#### **Drift Control Agents**

To minimize drift, a drift control agent may be added at the manufacturer's recommended rate:

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#### **MIXING INSTRUCTIONS**

- 1. Fill spray tank 1/2 full of water.
- 2. With the agitator running, add the proper amount of TELAR.
- 3. If using a companion product, add the recommended amount.
- 4. For postemergence applications, add the proper amount of spray adjuvants (i.e. surfactants, drift control agents, etc.).
- 5. Add the remaining water.
- 6. Agitate the spray tank thoroughly.

Use the spray preparation of TELAR within 24 hours to avoid product degradation. If the spray preparation is left standing, agitate it thoroughly before using.

## SPRAYER CLEANUP

Thoroughly clean all mixing and spray equipment immediately following applications of TELAR as follows:

- 1. Drain tank; rinse interior surfaces of tank; then flush tank, boom, and hoses with clean water for a minimum of 5 minutes.
- Fill the tank with clean water and add the cleaning solution\*.
  Flush the boom, hoses, and nozzles with the cleaning solution.
  Allow them to sit for 15 minutes with agitation running, and then drain the tank.
  - 3. Repeat Step 2.
  - 4. Repeat Step 1.

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- 5. Remove the nozzles and screens and clean separately. To remove traces of cleaning solution, rinse the tank thoroughly with clean water and flush through the hoses and boom.
- \* Use any of the following cleaning solutions:
  - 1. One gal ammonia (containing 3% active) per 100 gal of water.
  - Nutra-sol2 (carefully read and follow Nutra-sol label directions).
  - 3. Loveland Spray Tank Cleaner3 (carefully read and follow Loveland Spray Tank Cleaner label directions).
- Tank-Aid4 (carefully read and follow Tank-Aid label directions).

To reduce the amount of water required in the above procedure, see separate DuPont bulletin, "Reduced Volume Cleanout Procedure for Large Sprayers."

Note: This sprayer cleanup procedure is only effective for TELAR and for general uses specified under "Directions for Use"; do not use sprayer on food crops, feed crops, fine turf, ornamentals, and other desirable plants.

#### SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

#### **IMPORTANCE OF DROPLET SIZE**

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

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#### Controlling Droplet Size - General Techniques

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

#### **BOOM HEIGHT**

Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground 2 juipment, the boom should remain level with the crop and have minimal bounce.

#### WIND

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

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

#### TEMPERATURE AND HUMIDITY

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

#### TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and legit to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and noves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves up ward and rapidly dissipates indicates good vertical air mixing

## PRECAUTIONS

- · Injury to or loss of desirable trees or other plants may result if
- TELAR is applied or if equipment is drained or flushed on or near desirable trees or other plants, on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- Do not use on lawns, walks, driveways, tennis courts, or similar areas.
- Do not apply in or on irrigation ditches or canals including their outer banks.
- · Do not apply through any type of irrigation system.
- In Montana, North Dakota, and South Dakota, TELAR may be used only on railroad rights of way.
- Do not use this product in the following counties of Colorado: Saguache, Rio Grande, Alamosa, Costilla, and Conejos.
- · Do not allow spray to drift onto adjacent crops.
- Do not treat powdery, dry soil and light, sandy soils when there is little likelihood of rainfall soon after treatment.
- In areas where sensitive crops are grown, do not treat before soil has been settled by rain as off-target movement may occur.
- Do not apply to impervious substrates such as paved or highly compacted surfaces nor to frozen ground as off-target movement will occur.
- Do not apply where runoff water may flow onto agricultural land, as injury to crops may result.
- Do not apply TELAR during periods of intense minfall or to soils saturated with water as off-target movement may occur.

# STURAGE AND DISPOSAL

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**Storage:** Store product in original container only. Do not contaminate water, other pesticides, fertilizer, food or feed in storage.

Product Disposal: Do not contaminate water, food or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility or on non-crop sites as previously recommended.

**Container Disposal:** Triple rinse (or equivalent) the container. 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:** Purchase of this material does not confer any rights under patents of countries outside of the United States.

Use of this quantity of purchased TELAR Herbicide is permitted under claim 24 of U.S. Patent 5,084,082.

# NOTICE OF WARRANTY

DuPont warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with the use of this product. Injury to adjacent crops, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of DuPont. In no case shall DuPont be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the buyer. DUPONT MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

- 1 A product of Combelt Chemical Company.
- 2 A product of Thomas G. Kilfoil Company, Inc. San Bruno, Ca.
- 3 A registered trademark of Loveland Industries, Inc.
- 4 A product of Combelt Chemical Company.

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