# INDUSTRIAL TURF (UNIMPROVED ONLY) - WEEDS CONTROLLED AT 1/4 TO 1/2 OUNCE

**General Information** 

## 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.

Only use Chlorsulf E-Pro 75 WDG Herbicide in accordance with directions on the label or in separately published Etigra supplemental labeling.

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

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

## **GENERAL INFORMATION**

Chlorsulf E-Pro 75 WDG Herbicide contains the active ingredient chlorsulf which is a herbicide used for control of many broadleaf weeds found in non-crop industrial sites (including industrial (unimproved) turf and for growth suppression and seedhead inhibition of established desirable grasses). Some non-crop industrial sites include airports, fence rows, government and private lands, military installations, petroleum tank farms, pipeline and utility rights-of-way, plant sites, pumping installations, railroads, roadsides and associated rights-of-way, and storage areas.

Some of these sites may contain temporary pools of surface water as a result of site management. Chlorsulf E-Pro 75 WDG Herbicide may be used to treat intermittent drainage, intermittently flooded low lying sites, seasonally dry flood plains and transitional areas between upland and lowland sites when no water is present. In addition, Chlorsulf E-Pro 75 WDG Herbicide may be applied to bogs, marshes, and swamps after water has receded and to seasonally dry flood deltas. DO NOT make applications to natural or man-made bodies of water such as canals, lakes, ponds, reservoirs, and streams.

Both preemergent and postemergent applications of Chlorsulf E-Pro 75 WDG Herbicide will control weeds although several factors (including use rate, weed growth stage at the time of application, and post-application weather conditions) will affect the range of weeds controlled and the length of residual activity. Annual weeds are best controlled from application of Chlorsulf E-Pro 75 WDG Herbicide in the early stages of weed development. Perennial weeds are best controlled from application of Chlorsulf E-Pro 75 WDG Herbicide when weeds are in the bud to bloom or fall rosette stage.

# ENVIRONMENTAL CONDITIONS AND ACTIVATION OF Chlorsulf E-Pro 75 WDG Herbicide

Chlorsulf E-Pro 75 WDG Herbicide moves into plants by absorption through the roots and foliage and rapidly inhibits the growth of susceptible weeds. Within two to three weeks after application, the weed growth slows and the new growth changes to a red-purple color. By four to six weeks after application, discoloration of the leaf veins and leaves is apparent, and growing points subsequently die.

For optimum control of target weeds, Chlorsulf E-Pro 75 WDG Herbicide needs to reach the weed roots. Rainfall or irrigation after an application moves the Chlorsulf E-Pro 75 WDG Herbicide into the soil and the weed root zone. Under cold, dry conditions movement of Chlorsulf E-Pro 75 WDG Herbicide into the root zone will be delayed. Chlorsulf E-Pro 75 WDG Herbicide is less effective to weeds hardened off by cold weather or under stress from lack of water.

Under most normal conditions, Chlorsulf E-Pro 75 WDG Herbicide will not harm labeled desirable grasses. Injury may result from application of Chlorsulf E-Pro 75 WDG Herbicide to grasses that are growing under stress (due to extreme temperatures or moisture, abnormal soil conditions, or cultural practices) or to certain sensitive species of grass.

## INTEGRATED PEST MANAGEMENT

Chlorsulf E-Pro 75 WDG Herbicide may be used as part of an Integrated Pest

Management (IPM) program. This program relies on tillage (or other mechanical), biological, cultural, and chemical control practices to prevent economic pest damage. IPM principles and practices include field monitoring, historical information related to herbicide use and crop rotation, correct identification of target pests, population monitoring, and treatment when target pest populations reach a locallydetermined action threshold. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine the action treatment threshold levels for treating specific pest/crop systems in your area.

# IMPORTANT PRECAUTIONS AND RESTRICTIONS

Read the following restrictions and precautions to avoid injury to or loss of desirable trees or other desirable plants or vegetation.

- To avoid severe injury or death, do not drain or flush equipment rinses on or near desirable trees or other plants, on areas where their roots may extend, or in areas where the product may be washed or moved into contact with desirable plant roots.

 To minimize off-site movement of product on treated soils which can lead to damage of susceptible crops, do not apply if soils are powdery, dry or light, or sandy and if rainfall is not expected soon after treatment. Treated soil particles may move off-site to non-target crop sites through wind or water. Low levels of Chlorsulf E-Pro 75 WDG Herbicide may injure or kill most crops (except small grains), especially when crops are irrigated.

- The following conditions should be avoided during application to prevent runoff and movement of Chlorsulf E-Pro 75 WDG Herbicide residues: periods of intense rainfall, soils already saturated with water, asphalt or concrete paved surfaces, frozen soils or soils through which rain water will not readily penetrate. Do not disturb treated soils to minimize the potential for Chlorsulf E-Pro 75 WDG Herbicide movement by soil erosion from wind or water.

- Before using Chlorsulf E-Pro 75 WDG Herbicide, consult your state experimental station, university, or extension agent as to sensitivity of grass species or varieties to various herbicides. If the sensitivity of grass species or varieties is unknown, test Chlorsulf E-Pro 75 WDG Herbicide on a small area of the grass species. Tolerance to Chlorsulf E-Pro 75 WDG Herbicide of components in a grass seed mixture will vary and the final stand may not reflect the seed ratio.

- To avoid injury, do not apply Chlorsulf E-Pro 75 WDG Herbicide to grasses growing under conditions of stress (severe weather conditions, drought, low fertility, watersaturated soils, disease, or insect damage). Injury to grasses is also possible if grasses are under stress before or after an application of Chlorsulf E-Pro 75 WDG Herbicide. Other weather conditions (such as heavy rainfall, high pH, prolonged cold weather, or wide fluctuations in day/night temperatures, drought, low fertility, watersaturated soils, disease, or insect damage) in effect before or after Chlorsulf E-Pro 75 WDG Herbicide applications may result in temporary discolorations and/or grass injury.

- Do not use this product on lawns, walks, driveways, tennis courts, or similar areas.

- Do not apply this product in or on irrigation or drainage ditches or canals including their outer banks.

- Do not allow Chlorsulf E-Pro 75 WDG Herbicide to drift or move into irrigation or drainage ditches.

- Do not apply though any type of irrigation system.

- Do not use this product in the following counties of Colorado: Saguache, Rio Grande, Alamosa, Costilla, and Conejos.

There are no hay harvest restrictions or grazing restrictions for livestock (including lactating animals) when Chlorsulf E-Pro 75 WDG Herbicide is applied at rates up to 1-1/3 ounces per Acre.

#### GROUND APPLICATION

## **BROADCAST APPLICATION**

Apply Chlorsulf E-Pro 75 WDG Herbicide at 20 to 40 GPA using calibrated ground broadcast application equipment. Optimum control is obtained when weeds are treated in a sufficient volume to receive a thorough, uniform coverage.

Industrial turf: Do not overlap sprays. To avoid injury to desirable species, turn off spray booms while starting, turning, slowing, or stopping.

HIGH VOLUME HANDGUN APPLICATION

Apply Chlorsulf E-Pro 75 WDG Herbicide at 100 to 300 GPA using calibrated handgun broadcast application equipment. Mix 1 ounce Chlorsulf E-Pro 75 WDG Herbicide in 100 gals. of water. Do not apply more than 300 gals. of spray mix per acre.

## INVERT SPRAY APPLICATION

Apply the high viscosity invert solution of Chlorsulf E-Pro 75 WDG Herbicide at 10 to 40 GPA. Mix 1/4 to 3 ounces of Chlorsulf E-Pro 75 WDG Herbicide in the water phase of the invert solution for application to 1 Acre. The labeled use rate for target weeds is found in the section, WEEDS CONTROLLED BY Chlorsulf E-Pro 75 WDG Herbicide. Follow all use directions and precautionary statements appearing on the labels of the inverting oils and additives or in the operator's manual of the inverting equipment.

## SPOT APPLICATIONS

#### NON-CROP SITES

Mix 1 to 3 ounces of Chlorsulf E-Pro 75 WDG Herbicide with 100 gallons of water. Do not apply more than 300 gallons of the Chlorsulf E-Pro 75 WDG Herbicide at the 1 ounce spray mix rate per Acre, and no more than 100 gallons of the Chlorsulf E-Pro 75 WDG Herbicide of the 3 ounce spray mix rate per Acre.

#### SPRAY ADJUVANTS

Include a high quality spray adjuvant (but not LI-700 or other acidifying adjuvants) with the Chlorsulf E-Pro 75 WDG Herbicide to improve postemergence weed control. Follow the manufacturer's labeled rate for the adjuvant.

#### SPRAY DRIFT CONTROL AGENTS

Include a spray drift control agent with the Chlorsulf E-Pro 75 WDG Herbicide tank mix to reduce the chance of drift. Follow the manufacturer's labeled rate for the drift control agent.

#### FIELD BIOASSAY

When crop or grass species/varieties which are not listed on the label are to be planted to areas previously treated with Chlorsulf E-Pro 75 WDG Herbicide, a field

bioassay test must be carried out to determine if this species can be replanted without injury. Test the crop or grass intended to be planted the year following a treatment with Chlorsulf E-Pro 75 WDG Herbicide by growing the crop or grass in small plots which received the Chlorsulf E-Pro 75 WDG Herbicide treatment. The crop or grass response will determine the feasibility of rotating this crop or grass to large areas which had been treated with Chlorsulf E-Pro 75 WDG Herbicide. Additional information on the procedures for carrying out field bioassays can be obtained from your local dealer or Etigra representative.

# GRAZING/HAYING

No hay harvest restrictions or grazing restrictions for livestock (including lactating animals) apply when Chlorsulf E-Pro 75 WDG Herbicide is applied at up to 1-1/3 ounces per Acre. Animals do not need to be enclosed.

## AERIAL APPLICATION

Use nozzle types and arrangements that provide optimum spray distribution and maximum coverage.

Apply Chlorsulf E-Pro 75 WDG Herbicide in a minimum of 3 GPA.

Solid stream nozzles which are oriented straight back must be used when applying Chlorsulf E-Pro 75 WDG Herbicide by air in areas adjacent to sensitive crops. Avoid spray drift damage to sensitive crops downwind by adjusting the swath. To minimize spray drift, apply Chlorsulf E-Pro 75 WDG Herbicide using ground equipment to treat border edges of fields. See additional information in the SPRAY DRIFT MANAGEMENT section, below.

#### 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.

## ADDITIONAL DIRECTIONS FOR SPECIFIC WEEDS

Dalmation Toadflax (Linaria genistifolia) : For optimum control, apply in the fall at a

rate of 2 to 3 ounces of Chlorsulf E-Pro 75 WDG Herbicide per acre as a high volume foliar spray (minimum of 24 gallons of water per acre) plus a surfactant (refer to SPRAY ADJUVANTS section, in the label).

Kochia, Russian Thistle, and Prickly Lettuce: For optimum results, apply after the weeds have emerged but before mature seeds form. Use a tank mix of Chlorsulf E-Pro 75 WDG Herbicide with herbicides with different modes of action (such as 2,4-D plus dicamba).

Yellow Toadflax (Linaria vulgaris) : For optimum control, use a minimum of 1.5 ounces of Chlorsulf E-Pro 75 WDG Herbicide per acre.

Yellow Starthistle (Centaurea solstitialis) : Use a tank mix of Chlorsulf E-Pro 75 WDG Herbicide at 1/2 to 3 oz. per Acre with other herbicides registered for this use (such as Transline®, Tordon® 22K or 2,4-D) at the tank-mix partner label rates. Refer to the TANK MIX section above. Add a surfactant to improve control of emerged weeds (refer to SPRAY ADJUVANTS section above). For preemergence control of this weed (early emergence to bolting stage of growth), apply when rainfall is expected so that residues of Chlorsulf E-Pro 75 WDG Herbicide reach the root zone. Note: the higher Chlorsulf E-Pro 75 WDG Herbicide rates will control weeds for longer periods of time compared with the lower Chlorsulf E-Pro 75 WDG Herbicide rates.

Limitations, Restrictions, and Exceptions

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The higher Chlorsulf E-Pro 75 WDG Herbicide rates will control weeds for longer periods of time compared with the lower Chlorsulf E-Pro 75 WDG Herbicide rates. Temporary chlorosis of desirable grasses may occur when Chlorsulf E-Pro 75 WDG Herbicide is applied at the higher rate or in combination with a surfactant.

Optimum results are seen if turf is treated at green-up.

Do not use Chlorsulf E-Pro 75 WDG Herbicide on this weed in California. The weeds mentioned are the following: Common spikeweed (Hemizonia pungens), Conical catchfly (Silene conoidea), Cutleaf eveningprimrose (Oenothera laciniata), Fiddleneck, tarweed (Amsinckia lycopsoides), Hempnettle (Galeopsis spp.), London rocket (Sisymbrium irio), Mayweed (Anthemis cotula), Miner's lettuce (Montia perfoliata), Pineapple-weed (Matricaria matricarioides), Prostrate pigweed (Amaranthus blitoides), Shepherd's purse (Capsella bursa-pastoris), Smooth pigweed (Amaranthus chlorostachys), Bur beakchervil (Anthriscus caucalis), Carolina geranium (Geranium carolinianum), Erect knotweed (Polygonum erectum), Groundsel, common (Senecio vulgaris), Smallseed falseflax (Camelina microcarpa), Tumble pigweed (Amaranthus albus), Wild buckwheat (Polygonum convolvulus), False chamomile (Matricaria maritime), Pepperweed (Lepidium spp.), Red clover (Trifolium pretense), Tansy ragwort (Senecio jacobaea).

Chlorsulf E-Pro 75 WDG Herbicide provides only partial control of the following weed: Treacle mustard (Erysimum spp.), Dandelion, common (Taraxacum officinale), Sweet clover (Melilotus spp.), Turkey mullein (Eremocarpus setigerus), Common ragweed (Ambrosia elatior), Foxtails (Setaria spp.), Italian ryegrass (Lolium multiflorum), Yellow starthistle (Centaurea solstitalis).

Time application to occur at prebloom to bloom and fall rosette stage will apply on the following crops: Whitetop, hoar cress (Cardaria draba), Russian knapweed (Acroptilon repens).

Method <u>Broadcast/Foliar Air</u> <u>Broadcast/Foliar Ground</u> Rates <u>field\_rates 0</u>

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Timings Make applications when desirable grasses have become well-established.