

PERENNIAL GRASS GROWN FOR SEED CROPS - ORCHARDGRASS BILLBUG, CUTWORMS AND SOD WEBWORMS - OREGON

General Information

PRODUCT INFORMATION

Method 50SG Herbicide is a soluble granule that is mixed in water and applied as a spray. Method 50SG Herbicide may be applied by aerial or ground equipment for control of broadleaf weeds and woody species, including many terrestrial and riparian invasive and noxious weeds.

Method 50SG Herbicide is registered for general weed and brush control on private, public and military lands as follows: uncultivated nonagricultural areas (such as airports, highway, railroad and utility rights-of-way, sewage disposal areas, etc.); uncultivated agricultural areas - non-crop producing (such as farmyards, fuel storage areas, fence rows, non-irrigation ditchbanks, barrier strips, etc.); industrial sites - outdoor (such as lumberyards, pipeline and tank farms, etc.) and natural areas (such as wildlife management areas, wildlife openings, wildlife habitats). Method 50SG Herbicide may be used for the release or restoration of native perennial grasses and in established, industrial turf grasses.

This product may be applied to terrestrial non-crop sites and unimproved turf sites that contain areas of temporary surface water caused by collection of water, in equipment ruts, or in other depressions created by management activities. It is permissible to treat intermittently flooded low lying sites, seasonally dry flood plains and transitional areas between upland and lowland sites when no water is present. It is also permissible to treat marshes, swamps and bogs after water has receded, as well as seasonally dry flood deltas. Method 50SG Herbicide may be applied up to the waters edge. Do not apply directly to water.

Method 50SG Herbicide provides preemergence and/or postemergence control of the broadleaf weeds, vines and brush species listed in the weeds controlled section of the label. For perennial species on the label, a postemergence application should be used. For best postemergence performance, an MSO type adjuvant should be included to the spray solution. Excessive wetting of the target plant is not necessary but good spray coverage of the target plant is needed for best results. Method 50SG

Herbicide is non-corrosive to spray equipment.

Do not apply more than 9 ounces of product per acre per year.

BIOLOGICAL ACTIVITY

Method 50SG Herbicide is quickly taken up by the leaves, stems and roots of plants. The effects of Method 50SG Herbicide may be seen on plants from within a few hours to a few days. The most noticeable symptom is a bending and twisting of stems and leaves. Other advanced symptoms include severe necrosis, stem thickening, growth stunting, leaf crinkling, calloused stems and leaf veins, leaf-cupping, and enlarged roots. Death of treated broadleaf plants may require several more weeks and up to several months for some woody plant species.

Method 50SG Herbicide is rain-fast at 1 hour after application.

IMPORTANT RESTRICTIONS

- Do not apply this product in areas where the roots of desirable trees and/or shrubs may extend unless injury or loss can be tolerated. Root zone areas of desirable trees or vegetation are affected by local conditions and can extend well beyond the tree canopy.
- Do not apply this product if site-specific characteristics and conditions exist that could contribute to movement and unintended root zone exposure to desirable trees or vegetation unless injury or loss can be tolerated.
- Do not make applications when circumstances favor movement from treatment site.
- Do not apply Method 50SG Herbicide to roadsides or other noncrop areas during periods of intense rainfall, or where prevailing soils are either saturated with water or of a type through which rainfall will not readily penetrate, as this may result in off-site movement.
- Do not apply or otherwise permit this product or sprays containing this product to come into contact with any non-target crop or desirable vegetation.
- Do not apply in or on dry or water containing irrigation ditches or canals including their outer banks.
- Do not apply through any type of irrigation system.
- Do not contaminate water intended for irrigation. To avoid injury to crops or other desirable vegetation, do not treat or allow spray drift or run-off to fall onto banks or bottoms of irrigation ditches, either dry or containing water, or other channels that carry water that may be used for irrigation purposes.
- Treatment of powdery, dry soil and light, sandy soils when there is little likelihood

of rainfall soon after treatment may result in off target movement and possible damage to susceptible crops and desirable vegetation when soil particles are moved by wind or water. Injury to crops or desirable vegetation may result if treated soil is washed, blown, or moved onto land used to produce crops or land containing desirable vegetation. Do not apply Method 50SG Herbicide when these conditions are identified and powdery, dry soil or light or sandy soils are known to be prevalent in the area to be treated.

- Do not apply when the soil is frozen or covered with snow.
- Do not use on lawns, walks, driveways, tennis courts, or similar areas.
- Do not apply more than 9 ounces of product (0.28 pounds ai) per acre per year.
- Do not graze or feed forage, hay or straw from treated areas to livestock.
- Do not use plant material treated with this product for mulch or compost.
- If non-crop sites treated with Method 50SG Herbicide are to be converted to a food, feed, or fiber agricultural crop, or to a horticultural crop, do not plant the treated sites for at least one year after the Method 50SG Herbicide application. A field bioassay must then be completed before planting the desired crop.
- Not for sale, sale into, distribution and/or use in Nassau and Suffolk counties of New York State.

IMPORTANT PRECAUTIONS

- Certain species may, in particular, be sensitive to low levels of Method 50SG Herbicide including but not limited to, conifers (such as Douglas fir, Norway spruce, ponderosa pine and white pine), deciduous trees (such as aspen, Chinese tallow, cottonwood, honey locust, magnolia, poplar species, redbud, silver maple, and willow species), and ornamental shrubs (such as arborvitae, burning bush, crape myrtle, forsythia, hydrangea, ice plant, magnolia, purple plum and yew).
- Injury or loss of desirable trees or vegetation may result if Method 50SG Herbicide is applied on or near desirable trees or vegetation, on areas where their roots extend, or in locations where the treated soil may be washed or moved into contact with their roots. Consider site-specific characteristics and conditions that could contribute to unintended root zone exposure to desirable trees or vegetation. Root zone areas of desirable trees or vegetation are affected by local conditions and can extend beyond the tree canopy. If further information is needed regarding root zone area, consult appropriate state extension service, professional consultant or other qualified authority.
- Injury to or loss of desirable trees or vegetation may result if equipment is drained or flushed on or near these trees or vegetation, or on areas where their roots may

extend, or in locations where the chemical may be washed or moved into contact with their roots.

- In non-crop areas adjacent to desirable vegetation, avoid overlapping spray applications and shut off spray to the spray boom while starting, turning, slowing or stopping to avoid injury to desirable vegetation.

- Applications made where runoff water flows onto agricultural land may injure or kill crops, such as but not limited to sugar beets, potatoes, tomatoes, tobacco, soybeans, field beans, alfalfa, grapes, peaches, almonds, and vegetables.

- Applications should be made only when there is little or no hazard from spray drift. Very small quantities of spray, which may not be visible, may seriously injure susceptible plants.

- Exposure to Method 50SG Herbicide may injure or kill most crops and may injure or kill desirable vegetation. Injury may be more severe when the crops or desirable vegetation are irrigated.

- Caution is advised when using this product in areas where loss of desirable conifer or deciduous trees and/or shrubs as well as other broadleaf plants, including but not limited to, legumes and wild flowers, cannot be tolerated. Without prior experience, it is necessary that small areas containing these plants be tested for tolerance to Method 50SG Herbicide and its soil residues before any large scale spraying occurs.

- Low rates of Method 50SG Herbicide can kill or severely injure most crops.

Following a Method 50SG Herbicide application, the use of spray equipment to apply other pesticides to crops on which Method 50SG Herbicide is not registered may result in their damage. The most effective way to reduce this crop damage potential is to use dedicated mixing and application equipment.

- Leave treated soil undisturbed to reduce the potential for Method 50SG Herbicide movement by soil erosion due to wind or water.

- In the case of suspected off-site movement of Method 50SG Herbicide to cropland, soil samples should be quantitatively analyzed for Method 50SG Herbicide or any other herbicide which could be having an adverse effect on the crop, in addition to conducting the field bioassay.

- Method 50SG Herbicide may suppress or severely injure certain established grasses, such as some brome grass and wheat grass species, especially when the grass plants are stressed by adverse environmental conditions. Areas that contain these grass plants should recover as environmental conditions for good grass growth occur.

FIELD BIOASSAY

To conduct a field bioassay, grow to maturity test strips of the crop you plan to grow the following year. The test strips should cross the entire field including knolls and low areas. Crop response to the field bioassay will indicate whether or not to plant the crops grown in the test strips. If no crop injury (such as, poor germination, stunting, or chlorosis, malformation, or necrosis of leaves) or yield loss is evident from the crops grown in the test strips, the intended rotational crop may be planted. If herbicide symptoms or yield loss is observed do not plant the crop.

TANK MIXTURES

Method 50SG Herbicide may be tank mixed with other herbicides which are registered for the same use sites, methods of application and timings as specified on this product label. Refer to the tank mix product label for any additional instructions or use restrictions. In addition, a spray adjuvant may be mixed with Method 50SG Herbicide when making postemergence applications. Refer to the adjuvant label for additional instructions or use restrictions.

ADJUVANTS

Methylated Seed Oils and Vegetable Oils: A methylated seed oil (MSO) or vegetable oil based adjuvant may provide increased leaf absorption of Method 50SG Herbicide. Include the MSO or vegetable oil adjuvant at 1% v/v (1 gallon per 100 gallons of spray solution).

Non-ionic Surfactants: Use a non-ionic surfactant at a minimum rate of 0.25% v/v (1 quart surfactant per 100 gallons of spray solution). Surfactant products must contain at least 70% non-ionic surfactant with a hydrophilic/lipophilic balance (HLB) of 12 to 17.

Invert Emulsions: Method 50SG Herbicide may be applied as an invert emulsion. The spray solution results in an invert (water-in-oil) spray emulsion designed to minimize spray drift and spray run-off, resulting in more herbicide deposited on the target foliage. The spray emulsion may be formed in a single tank (batch mixing) or injected (in-line mixing). Consult the invert chemical label for proper mixing directions.

INVASIVE SPECIES MANAGEMENT

This product may be used on public, private, and tribal lands to treat certain weed species infestations that have been determined to be invasive, consistent with the Federal Interagency Committee for the Management of Noxious and Exotic Weeds

(FICMNEW) National Early Detection and Rapid Response (EDRR) System for invasive plants.

Effective EDRR systems address invasions by eradicating the invader where possible, and controlling them when the invasive species is too established to be feasibly eradicated. Once an EDRR assessment has been completed and action is recommended, a Rapid Response needs to be taken to quickly contain, deny reproduction, and if possible eliminate the invader. Consult your appropriate state extension service, forest service, or regional multidisciplinary invasive species management coordination team to determine the appropriate Rapid Response provisions and allowed treatments in your area.

RESISTANCE

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field.

Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different site of action. To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes, it may be necessary to change cultural practices within and between crop seasons such as using a combination of tillage, retreatment, tank-mix partners and/or sequential herbicide applications that have a different site of action. Weed escapes that are allowed to go to seed will promote the spread of resistant biotypes. It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative cultural practices or herbicide recommendations available in your area.

INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and

treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

PRODUCT INFORMATION

FOR NON-AGRICULTURAL USES

Method 50SG Herbicide is a soluble granule that is mixed in water and applied as a spray. Method 50SG Herbicide may be applied by aerial or ground equipment for control of broadleaf weeds and woody species, including many terrestrial and riparian invasive and noxious weeds. Method 50SG Herbicide is registered for general weed and brush control on private, public and military lands as follows: uncultivated non-agricultural areas (such as airports, highway, railroad and utility rights-of-way, sewage disposal areas, etc.); uncultivated agricultural areas - non-crop producing (such as farmyards, fuel storage areas, fence rows, non-irrigation ditch banks, barrier strips, etc.); industrial sites - outdoor (such as lumberyards, pipeline and tank farms, etc.) and natural areas (such as wildlife management areas, wildlife openings, wildlife habitats).

Method 50SG Herbicide may be used for the establishment or release of native grasses and for weed control in established, unimproved grass turf.

Apply Method 50SG Herbicide preemergence or early postemergence when broadleaf weeds are actively germinating or growing. Method 50SG Herbicide can provide long term control of susceptible weeds. The length of control is dependent upon the application rate, condition and growth stage of target weeds, environmental conditions at and following application, and the density and vigor of competing desirable vegetation. Best results for long term weed control occur where grasses and other vegetation is allowed to recover from adverse environmental conditions and compete with susceptible weeds.

Weeds hardened off by cold weather or drought stress may not be controlled. Method 50SG Herbicide may be applied broadcast using ground spray equipment, fixed wing aircraft or by helicopter. When applying by fixed wing aircraft or helicopter, follow directions under the Aerial Applications section of this label otherwise refer to the section on Ground Applications when using surface equipment.

Method 50SG Herbicide may also be applied using low and high volume ground spray equipment.

APPLICATION INFORMATION

AERIAL APPLICATIONS

When applying by air, apply only using nozzles which will deliver coarse or greater (VMD >350 microns) droplets as defined by ASABE S572 standard. Do not release spray at a height greater than 10 feet above the ground or canopy unless a greater height is required for aircraft safety. Do not apply when wind speed is greater than 10 mph. Do not apply during a temperature inversion. For aerial applications near susceptible crops or other desirable plants, use adrift control additive as recommended by the manufacturer, or apply through a "Microfoil" or "Thru-Valve" boom, or use an equivalent drift control system. Thickened sprays prepared by using high viscosity invert systems or other drift control systems may be utilized if drift control is comparable to that obtained with drift control additives or the "Thru-Valve" boom. If a spray thickening agent is used, follow all recommendations and precautions on the product label. Do not use a thickening agent with the "Microfoil" boom or other systems that cannot accommodate thick sprays.

Method 50SG Herbicide may be applied by either fixed wing aircraft or helicopter spray equipment. Fixed wing aircraft and helicopters can be used to apply Method 50SG Herbicide however, do not make applications by fixed wing aircraft unless appropriate buffer zones can be maintained to prevent spray drift out of the target area or, when treating open tracts of land, spray drift as a result of fixed wing aircraft application can be tolerated.

The application volume required will vary with the height and density of the brush and the application equipment used. Generally, aerial applications will require 15 to 25 gallons of spray solution per acre.

Regardless of the application volume or spray equipment used, thorough coverage of the foliage is necessary to optimize control results. All precautions and restrictions should be taken to minimize or eliminate spray drift.

GROUND APPLICATIONS

When applying by ground, apply only using nozzles which will deliver coarse or greater (VMD >350 microns) droplets as defined by ASABE S572 standard. Do not apply with a nozzle height greater than 4 feet above the ground or canopy unless necessitated by the application equipment. Apply with the spray boom or nozzle height as low as possible. Do not apply when wind speed is greater than 10 mph. Do not apply during a temperature inversion.

For ground applications, keep the spray boom as low as possible; apply 10 gallons or more of spray per acre; use spray pressures no greater than are required to obtain adequate plant coverage; use large-droplet producing nozzle tips; use drift control additives; use shielded-sprayers or other drift control systems; and/or spray when wind velocity is low.

LOW VOLUME FOLIAR APPLICATION

For low volume foliar applications, see Table 1 for use rate and mixing guidelines. The spray concentration of Method 50SG Herbicide should be adjusted according to the spray volume per acre and the size and plant density of the target brush species. For best results, include an MSO adjuvant at the rate of 1% v/v. Good plant coverage is necessary for best results. Use spray nozzles and pressure that will aid the proper deposition of the spray solution. Apply in sufficient spray volume to help provide uniform spray distribution of spray particles over the area to be treated and to avoid spray drift. Generally, low volume ground applications will require 20 to 50 gallons per acre and ultralow volume ground application will require 10 to 20 gallons of spray solution per acre. The use of an even flat fan tip with a spray angle of 40 degrees or less will aid in proper spray deposition. Some recommended tip sizes include 4004E or 1504E. For cone or straight stream nozzle patterns, the adjustable cone nozzles, such as the 5500 X3 or the 5500 X4 may be used. Use the higher concentration rates for hard to control brush species. Do not apply more than 9 ounces product of Method 50SG Herbicide per acre per year.

Note: Add a spray pattern indicator, if desired, at the recommended label rates.

HIGH VOLUME FOLIAR APPLICATION

High volume applications may be applied at rates equivalent to broadcast rates up to 9 ounces product per acre per year. Where a rate range is indicated for the brush species, use the higher rate for high density brush sites. For best results, use MSO adjuvant at the rate of 1% V/V to the spray solution. When making broadcast applications, apply near the tops of the brush plants in a light drizzle pattern. The spray solution should reach the crown of the plants and trickle down into the canopy. Use sufficient spray volume to thoroughly and uniformly wet foliage and stems but don't over apply causing excessive run-off. Generally, high volume ground applications will require 100 to 400 gallons per acre.

Do not apply more than 9 ounces product per broadcast acre per year.

SPOT APPLICATION

Spot applications may be applied at rates equivalent to the broadcast application rate up to a maximum of 9 ounces product per acre per year. Use sufficient spray volume to thoroughly and uniformly wet target weed or brush foliage. Use of a high quality MSO adjuvant may be added to the spray mixture as recommended by the adjuvant manufacturer. Repeat applications may be made, but the total amount of Method 50SG Herbicide must not exceed 9 ounces product per year. To prevent misapplication, spot applications should be applied with either a calibrated boom sprayer, a boom-less sprayer, or a hand-held or backpack sprayer.

Do not apply more than 9 ounces product per broadcast acre per year as a result of broadcast, spot or repeat applications.

Application rates in Table 2 are based on treating an area of 1000 square feet (sq ft). Mix Method 50SG Herbicide in 0.3 to 3 gallons of water, depending on the spray volume necessary to treat 1000 sq ft.

A spray volume of 0.3 to 3 gallons per 1000 sq ft is equivalent to 13 to 130 gallons per acre.

INVERT EMULSION APPLICATIONS

Method 50SG Herbicide can be applied as an invert emulsion (water in oil). This can be done in a batch mixing (single tank) or inline-mixing (injected) process. Follow the directions on the invert chemical guide.

WEEDS CONTROLLED

Use the higher spray volumes and herbicide rates for heavy weed and brush

infestations, hard to control species and tall brush or dense brush/hardwood canopies. Do not apply more than 9 ounces product broadcast per acre per year.

Specific Weed Directions:

Kochia: For non-selective applications, tankmixing glyphosate with Method 50 SG HERBICIDE may improve control under dry conditions.

Limitations, Restrictions, and Exceptions

Application Directions

Orchardgrass billbug, cutworms and sod webworm

Apply 1 quart of Lorsban Advanced per acre in at least 20 gallons of water per acre. Apply as a broadcast spray using power-operated ground application equipment or through sprinkler irrigation equipment (chemigation). Chemigation facilitates maximum downward penetration through thatch and soil.

Suggested Timing: For orchard billbug, apply in early April when adult billbugs are active or after harvest from mid-October through early November when new adults are moving between crowns of the grasses. For cutworm (larvae), apply in either spring or fall when larvae are present and damage first appears. For sod webworm (cranberry girdler) and larvae (western Oregon), apply in late summer (early September to late September) when larvae are small and most of the eggs have hatched. Later applications (late October) have limited effectiveness because most cranberry girdler larvae have finished feeding.

Specific Use Restrictions:

- Do not feed or graze grass grown for seed following application of Lorsban Advanced.
- Do not cut treated grass grown for seed for forage, hay, or silage.
- Do not use harvested seed for sprouting.
- No portion of the treated field, including seed, seed screenings, hay forage or stubble may be used for human or animal feed.
- Maximum single application rate is 0.94 lb ai chlorpyrifos (2 pints of Lorsban Advanced) per acre.
- Do not make more than three applications of Lorsban Advanced per year.
- This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. Consult your cooperative agricultural extension service for additional information concerning protection of

pollinating bees.

Method

Broadcast/Foliar Ground

Timings

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