### **MUSTARD SEED - ANNUAL GRASSES**

General Information

#### GENERAL INFORMATION

Select 2 EC is not recommended for use on vegetable crops being grown for seed production unless specific use directions are provided.

Select 2 EC is a selective postemergence herbicide for control of annual and perennial grasses. Select 2 EC does not control sedges or broadleaf weeds.

Repeated use of Select 2 EC (or similar postemergence grass herbicides with the same mode of action) may lead to the selection of naturally occurring biotypes that are resistant to these products in some grass species.

If poor performance occurs and cannot be attributed to adverse weather or applications conditions, a resistant biotype may be present. This is most likely to occur in fields where other control strategies such as crop rotation, mechanical removal, and other classes of herbicides are not used from year to year.

Do not allow Select 2 EC to come in contact with desirable grass crops such as corn, rice, sorghum, small grains, or turf, as these and other grass crops will be injured or killed.

Minor leaf spotting may occur on treated plants under certain environmental conditions. New foliage is not affected.

# Control Symptoms

Treated grass weeds show a reduction in vigor and growth. Early chlorosis/necrosis of younger plant tissue is followed by a progressive collapse of the remaining foliage. Symptoms will generally be observed in 7 to 14 days after application, depending on grass species treated and environmental conditions.

#### APPLICATION INFORMATION

Timing of Applications

Apply Select 2 EC postemergence to actively growing grasses according to rate table recommendations in the label.

Applications made to grass plants stressed by insufficient moisture, hot or cold temperatures, or to grass plants exceeding recommended growth stages may result in unsatisfactory control. Do not apply under these conditions.

In arid regions where irrigation is used to supplement limited rainfall, Select 2 EC should be applied as soon as possible after irrigation (within 7 days). In arid regions, a second application of Select 2 EC will generally provide more effective control of perennial grass weeds than a single application. Make second application to actively growing grass 2 to 3 weeks after emergence of new growth.

Cultivation of treated grasses 7 days prior to or within 7 days after application of Select 2 EC may reduce weed control. DO NOT APPLY Select 2 EC if rainfall is expected within one hour, since control may be reduced.

# **Ground Application**

Use of sufficient spray volumes and pressure is essential to ensure complete coverage. Use a minimum of 5 gals. and a maximum of 40 gals. of spray solution per acre. Under the following conditions a minimum of 10 gals. per acre is required: ultra narrow row cotton, narrow row soybeans, broadleaf herbicide tank mixes, perennial grasses, volunteer corn, drought or stress conditions, heavy grass pressure or when grasses are at or near maximum height. Failure to use a minimum of 10 gals. per acre under these conditions can result in poor coverage and reduced grass control requiring repeat applications. Spray pressures should reflect a minimum of 30 psi and a maximum of 60 psi at the nozzle. Do not use flood nozzles.

Applications to onions (dry bulbs), garlic, and shallots (dry bulbs) should be made in a minimum of 20 gals. of spray solution per acre.

# Air Application

Use a minimum of 3 gals. of spray solution per acre unless otherwise directed in the label. Increase spray volumes up to 10 gals. as grass or crop foliage becomes dense. For onions (dry bulbs), garlic, or shallots (dry bulbs): When applying by air do not exceed 8 fl. oz./A in a single application. In California, air applications to onions, garlic or shallots should be made in a minimum of 20 gals. of spray solution per

acre. In states other than California, air application to onions, garlic, or shallots should be made in a minimum of 10 gals. of spray solution.

NOTE: Crop injury may occur when Select 2 EC is applied to onions, garlic, or shallots with aerial equipment.

# **Spot Treatment**

When using hand sprayers or high volume sprayers utilizing hand guns, mix 1/4% to 1/2% (0.33 oz. to 0.65 oz. per gal.) Select 2 EC and treat to wet vegetation, while not allowing runoff of spray solution. For uses requiring crop oil concentrate, include crop oil concentrate at 1% (1.3 oz. per gal.) by volume. For uses requiring non-ionic surfactant, include non-ionic surfactant at 1/4% (0.33 oz. per gal.) by volume.

NOTE: If Select 2 EC is applied as a spot treatment, care should be taken to not exceed the maximum rate allowed on a "per acre" basis or crop injury may occur.

#### RESTRICTIONS AND LIMITATIONS

## **GENERAL**

Do not apply if rain is expected within 1 hour of application as control may be unsatisfactory.

Do not apply a postemergence broadleaf herbicide within one day following application of Select 2 EC or reduced grass control may result.

Select 2 EC is not recommended for use on vegetable crops being grown for seed production unless specific use directions are provided.

For canola, clover, flax, mustard seed and radish crops, do not apply more than 16 fl. oz. of Select 2 EC (0.25 lb. ai) per acre per season. For all other crops, do not apply more than 32 fl. oz. of Select 2 EC (0.50 lb. ai) per season. Application on Long Island, New York, is restricted to no more than 16 fl. oz. of Select 2 EC (0.25 lb. ai) per acre per season.

Do not apply more than 8 fl. oz./A of Select 2 EC per application to the following crops: garden beets, carrots, radish, (and other root vegetables), leaf lettuce, broccoli, cabbage, cauliflower (and other head & stem brassica vegetables), celery, rhubarb (and other leaf petioles), cranberry, cucurbits, fruiting vegetables (except

tomatoes), non-bearing food crops, flax and strawberry. Do not apply more than 6 fl. oz./A of Select 2 EC per application to canola, or mustard seed. Exceeding these recommendations may result in unacceptable crop injury.

Do not apply under conditions of stress. Applying Select 2 EC under conditions that do not promote active grass growth will reduce herbicide effectiveness. These conditions include drought, excessive water, extremes in temperature, low humidity and grasses either partially controlled or stunted from prior pesticide applications. Grasses under these kinds of stressful conditions will not absorb and translocate Select 2 EC effectively, and will be less susceptible to herbicide activity.

Optimal perennial grass control can be obtained if rhizomes or stolons are cut up by preplant tillage practices (discing, plowing, etc.) to stimulate maximum emergence of grass shoots. Cultural practices, such as continuous no-tillage in which the perennial grass rhizomes or stolons are not cut up, result in a very staggered, non-uniform weed emergence. Due to this non-uniform weed emergence, no fewer than 2 Select 2 EC applications per season per year are recommended at the appropriate weed-growth stage rate under continuous no-till conditions.

Grass crops such as corn, rice, sorghum, small grains, or turf, etc. are highly sensitive to Select 2 EC.

While all the vegetable crops on the label have been tested and are tolerant to Select 2 EC, not all specialty varieties of these crops have been tested. It is advised that, before applying Select 2 EC to specialty varieties of vegetable crops on the label, crop tolerance be investigated first using a small section of the field. It is possible that injury symptoms can occur. Symptoms may appear as leaf speckling or stunting.

Always read and follow the restrictions and limitations for all products whether used alone or in a tank mix. The most restrictive labeling of any product used applies in tank mixtures, including all crop rotational and other crop restrictions.

Tank mixes of Select 2 EC and broadleaf herbicides may result in reduced grass control. If grass regrowth occurs, an additional application of Select 2 EC may be necessary.

For tank mix application instructions, refer to the label.

Limitations, Restrictions, and Exceptions

#### MINT

Do not apply after crop has begun bolting. Crop injury may occur when Select 2 EC is applied during the bloom period.

Do not exceed 16 fl. oz./A in a season.

Crop Oil Concentrate Rates Per Acre: 1% v/v in the finished spray volume.

#### NOTE:

- Crops: Select 2 EC is not recommended for use on vegetable crops being grown for seed production unless specific use directions are provided.
- Acceptable crop oil concentrates would be those which contain a minimum of 80% oils and 15% emulsifier. A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all the following criteria: be non-phytotoxic, contain only EPA-exempt ingredients, provide good mixing quality and be successful in local experience. Highly refined vegetable oils have proven more satisfactory that unrefined vegetable oils. See the Addition of Adjuvant and Crop Oil Concentrate section for further information.

### RESTRICTIONS AND LIMITATIONS

Do not apply more than 32 fl. oz. of SELECT 2 EC Herbicide (0.5 lb. ai) per acre per season.

Application on Long Island, New York is restricted to no more than 16 fl. oz. of SELECT 2 EC Herbicide (0.25 lb. ai) per acre per season.

Do not apply more than 8 fl. oz./A of SELECT 2 EC Herbicide per application. Exceeding these recommendations may result in unacceptable crop injury.

### RECOMMENDATIONS FOR ANNUAL GRASSES

- Apply only to actively growing grasses at recommended weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the recommended growth stage for treatment.
- Use the high rate under heavy grass pressure and/or when grasses are at

maximum height.

- For the control of annual grasses use 6 to 8 fl. oz./A.
- For repeat applications make on a minimum of a 14 day interval.
- Please refer to container label for specific use rates, weeds and weed sizes.

For specific weed height in inches with its corresponding rates, refer to the label.

Method

Broadcast/Foliar Air
Broadcast/Foliar Ground

Pre-Harvest Interval

75 days

Rates

field\_rates 0

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Restricted Entry Interval

24 hours

**Timings** 

Actively growing grasses at recommended weed heights.