

# **SUCCULENT SOYBEAN (EDAMAME) - PREPLANT SURFACE AND PREEMERGENCE**

General Information

## **PRODUCT INFORMATION**

Read all label directions before using.

SINISTER is a selective herbicide which may be applied pre plant surface, preemergence and/or postemergence for control or partial control of broad leaf weeds, grasses and sedges in cotton, dry beans, potatoes, snap beans and soybeans.

### **Preplant Surface and Preemergence Applications**

Certain germinating broad leaf weeds, grasses and sedges can be controlled or partially controlled by soil residual activity from either preplant surface or preemergence applications of SINISTER. Moisture is necessary to activate SINISTER in soil for residual weed control. Dry weather following applications of SINISTER may reduce effectiveness. When adequate moisture is not received after a SINISTER application, weed control may be improved by overhead irrigation with at least a ½ inch of water.

### **Postemergence Applications**

SINISTER is generally most effective when used postemergence, working through contact action.

Therefore, emerged weeds must have thorough spray coverage for effective control. Best broad-spectrum postemergence control of susceptible broadleaf weeds is obtained when SINISTER is applied early to actively growing weeds. This usually occurs within 14 to 28 days after planting. Refer to the weed control tables for specific recommendations on weed growth stages and rates. Some bronzing, crinkling or spotting at labeled crop leaves may occur following postemergence applications, but labeled crops soon outgrow these effects and develop normally.

## Soil Characteristics

Application of SINISTER to soils with high organic matter and/or high clay content may require higher rates than soils with low organic matter and/or low clay content. Refer to the SINISTER Regional Use Map, weed control tables, and specific crop use sections for recommendations on use rates based on soil texture.

## Environmental and Agronomic Conditions

Always apply SINISTER under favorable environmental conditions that promote active weed growth.

Avoid applying SINISTER to weeds or labeled crops which are under stress from drought, extreme temperatures, excessive water, low humidity, low soil fertility, mechanical or chemical injury as reduced weed control and/or increased crop injury may result.

## Rainfastness

SINISTER requires a 1 hour rain-free period for best results when applied postemergence.

## Cultivation

Cultivation prior to postemergence application is not recommended. Cultivation may put weeds under stress, reducing weed control. Timely cultivation 1-3 weeks after applying SINISTER may assist weed control.

## Information on Weed Resistance

Naturally occurring biotypes of certain broadleaf species with resistance to this herbicide and related products (same mode of action) are known to exist. Selection of resistant biotypes, through repeated use of these herbicides, may result in control failures.

If poor performance cannot be attributed to adverse weather conditions or improper application methods, a resistant biotype may be present. In such a case, additional treatments with this herbicide or similar mode of action products are not recommended. Consult your local company representative or agricultural advisor for assistance.

## APPLICATION DIRECTIONS

### Drift Management

Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator and grower must consider the interaction of equipment and weather-related factors to ensure that the potential for drift to sensitive nontarget plants is minimal.

This pesticide may only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, nontarget plants) is minimal (i.e., when the wind is blowing away from the sensitive area).

### Spray Additives

Only spray additives cleared for use on growing crops under 40 CFR 180.1001 may be used in spray mixture.

For Postemergence Applications One of The Following May Be Added Except in Tank Mix With Products Prohibiting Spray Additives:

Nonionic Surfactant (NIS) - Use NIS containing at least 75% surface active agent at 0.25 to 0.5% v/v (1-2 qts./100 gals.) of the finished spray volume.

Crop Oil Concentrate (COC) - Use a nonphytotoxic COC containing 15-20% approved emulsifier, at 0.5-1% v/v (0.5-1 gal./100 gals.) of the finished spray volume. COC can improve weed control but may slightly reduce crop tolerance.

## GROUND APPLICATION

Preplant Surface and Preemergence Application – Use a minimum of 10 gallons per acre. Nozzle selection should meet manufacturer's gallonage and pressure recommendations for preplant surface or preemergence applications.

Postemergence Application – Use sufficient spray volume and pressure to ensure complete coverage of the target weed. A spray volume of 10-20 gallons per acre and 30-60 psi at the nozzle tip is recommended. On large weeds and/or dense foliage. Use 60 psi and a minimum of 20 gallons per acre to ensure coverage of weed foliage.

The use of flat fan nozzles will result in the most effective postemergence application of SINISTER. Use nozzles that are set up to deliver medium quality spray (ASAE Standard S-572).

**DO NOT USE FLOOD TYPE OR OTHER SPRAY NOZZLES, WHICH DELIVER COARSE, LARGE DROPLET SPRAYS.**

#### **BAND APPLICATIONS**

Calculate the amount of herbicide and water volume needed for band treatment by the formula given in the label.

**NOTE:** Thorough weed coverage is important for postemergence band applications. Best coverage is obtained with a minimum of two nozzles, one directed to each side of the planted row. Application with a single nozzle directed over the top of the row is not recommended for postemergence applications but is suitable for preemergence applications. Cultivation of untreated areas may be needed following band applications. When making post emergence band applications and cultivating in the same operation, intercept spray, reducing weed coverage resulting in less than adequate weed control.

#### **AERIAL APPLICATION**

Use sufficient spray volume and pressure to ensure complete coverage of the target. A minimum of 5 gallons per acre of spray mixture should be applied with a maximum of 40 PSI pressure. When foliage is dense, use a minimum of 10 gallons per acre to ensure coverage of weed foliage.

**DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM, EXCEPT**

## CENTER PIVOT SYSTEMS.

### CENTER PIVOT IRRIGATION APPLICATION

SINISTER alone or in tank mixture with other herbicides on this label, which are registered for center pivot application, may be applied in irrigation water preemergence (after planting but before weeds or crop emerge) at rates recommended on this label. SINISTER also may be applied postemergence to the crop and preemergence to weeds in crops where postemergence applications are allowed on this label. Follow all restrictions (height, timing, rate, etc.) to avoid illegal residues. Apply this product only through a center pivot irrigation system. Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water. If you have questions about calibration, you should contact State Extension specialists, equipment manufacturers, or other experts. 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. 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.

### PRECAUTIONS

- Thoroughly clean the spray system with water and a commercial tank cleaner before and after each use.
- Tank mixes of SINISTER with other pesticides, fertilizers or any other additives except as specified on this label or other approved Syngenta supplemental labels may result in tank-mix incompatibility, unsatisfactory performance or unsatisfactory crop injury.
- Avoid overlapping spray swaths, as injury may occur to rotational crops.
- To provide adequate coverage, it is recommended that ground speed not exceed 10 mph during application.

- Avoid drift to all other crops and nontarget areas. Crops other than those labeled may be severely injured by drift. Do not apply when wind velocity exceeds 15 mph.

## RESTRICTIONS AND PRECAUTIONS

- A maximum of 1.05 pts. of SINISTER (or a maximum of 0.375 lb. a.i./A of fomesafen from any product containing fomesafen) may be applied per acre per year in Region 1 (see Regional Use Map).

- A maximum of 1.05 pts. of SINISTER (or a maximum of 0.375 lb. a.i./A of fomesafen from any product containing fomesafen) may be applied per acre in ALTERNATE years in Region 2 (see Regional Use Map).

- A maximum of 0.87 pt. of SINISTER (or a maximum of 0.313 lb. a.i./A of fomesafen from any product containing fomesafen) may be applied per acre in ALTERNATE years in Region 3 (see Regional Use Map).

- A maximum of 0.70 pt. of SINISTER (or a maximum of 0.25 lb. a.i./A of fomesafen from any product containing fomesafen) may be applied per acre in ALTERNATE years in Region 4 (see Regional Use Map).

- A maximum of 0.52 pt. of SINISTER (or a maximum of 0.1875 lb. a.i./A of fomesafen from any product containing fomesafen) may be applied per acre in ALTERNATE years in Region 5 (see Regional Use Map).

- Do not make ground or aerial application during temperature inversions.

## Replanting

If replanting is necessary in fields previously treated with SINISTER, the field may be replanted to cotton, dry beans, potatoes, snap beans or soybeans. During replanting, a minimum of tillage is recommended to preserve the herbicide barrier for effective weed control. Do not apply a second application of SINISTER or other fomesafen containing product as crop injury or illegal residues may occur in harvested crops. If tank-mix combinations were used, refer to product labels for any additional replanting instructions.

## Limitations, Restrictions, and Exceptions

## SUCCULENT SOYBEAN (EDAMAME)

### Preplant Surface and Preemergence Applications

Apply SINISTER at 1-1.5 pt/A as a preplant surface or preemergence application only in Regions 1, 2, 3, and 4 in succulent vegetable soybean (edamame) or other food-grade soybeans. Refer to Table 1 for weeds controlled or partially controlled by preplant surface and preemergence applications. Refer to the SINISTER Regional Use Map for the maximum rate that may be applied in each geographic region.

NOTE: Treated soil that is splashed onto newly emerged seedlings may result in temporary crop injury but plants normally outgrow these effects and develop normally.

### Use Restrictions – Succulent Soybean (Edamame)

- Refer to the SINISTER Regional Use Map for the maximum rate of SINISTER (or other fomesafen containing products) that may be applied in each geographic region.
- Do not apply to any field in Regions 2, 3, 4 or 5 more than once every two years.
- Do not exceed 1.5 pints of SINISTER per acre in any one year and also adhere to the maximum rate that may be applied in each geographic region (refer to the SINISTER Regional Use Map).
- Do not graze treated areas or harvest for forage or hay. Do not utilize hay or straw for animal feed or bedding.
- Do not apply within 30 days of harvest.

### REGION 1

Maximum Rate 1.05 pints/acre per year

Includes the following states or portion of states where SINISTER may be applied:

Alabama All areas.

Arkansas All areas.

Florida All areas except for Miami-Dade County.

Georgia All areas.

Louisiana All areas.

Mississippi All areas.

Missouri Counties of Bollinger, Butler, Cape Girardeau, Dunklin, Madison, Mississippi, New Madrid, Pemiscot, Perry, Ripley, Scott, Stoddard and Wayne.  
North Carolina All areas.

Oklahoma All areas east of U.S. Highway 75 and East of Indian Nation Parkway.

South Carolina All areas.

Tennessee All areas.

Texas All areas east of U.S. Highway 77 to State Road 239, including all of Calhoun County.

## REGION 2

Maximum Rate 1.05 pints per acre, alternate years

Includes the following states or portion of states where SINISTER may be applied:

Delaware All areas.

Illinois All areas south of Interstate 70.

Indiana All areas south of Interstate 70.

Kentucky All areas.

Maryland All areas.

Ohio All areas south of Interstate 70.

Pennsylvania All areas south of Interstate 80 to the intersection of U.S. Highway 15 and east of U.S. Highway 15 and U.S. Highway 522.

Virginia All areas.

West Virginia All areas.

## REGION 3

Maximum Rate 0.87 pints per acre, alternate years

Includes the following states or portion of states where SINISTER may be applied:

Connecticut All areas.

Illinois All areas north of Interstate 70.

Indiana All areas north of Interstate 70

Iowa All areas.

Maine All areas.

Massachusetts All areas.

Missouri All counties except for those listed in Region 1.

Ohio All areas north of Interstate 70.

New Hampshire All areas.

New Jersey All areas.

New York All areas. Do not use on potatoes in Nassau and Suffolk counties, New



York.

Pennsylvania All areas except those listed in Region 2.

Rhode Island All areas.

Vermont All areas.

Wisconsin All areas south of U.S. Highway 18 between Prairie Du Chien and Madison, and south of Interstate 94 between Madison and Milwaukee.

#### REGION 4

Maximum Rate 0.70 pint per acre, alternate years

Includes the following states or portion of states where SINISTER may be applied:

Kansas All counties east of or intersected by U.S. Highway 281.

Michigan Southern Peninsula

Minnesota All areas south of Interstate 94.

Nebraska All counties east of or intersected by U.S. Highway 281.

North Dakota All areas east of Interstate 29 from Fargo south to the South Dakota state line.

South Dakota All areas east of Interstate 29 from the North Dakota state line to Watertown, all areas east of Highway 81 from Watertown to Madison and all areas east and south of State Road 34 and U.S. Highway 281 to the Nebraska state line.

Wisconsin All areas south of Interstate 94 (except those in Region 3) from Minnesota state line to Eau Claire and south of U.S. Highway 29 from Eau Claire to Green Bay plus Barron, Burnett, Chippewa, Clark, Door, Dunn, Eau Claire, Langlade, Lincoln, Kewaunee, Marathon, Marinette, Menominee, Oconto, Polk, Price, Rusk, Sawyer, Shawano, St. Croix, Taylor, and Washburn counties. The following counties are excluded: Adams, Marquette, Portage, Waupaca, Waushara and Wood.

#### Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Surface](#)

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Surface](#)

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Surface](#)

Pre-Harvest Interval

30 days

Restricted Entry Interval

24 hours

Timings

[Preemergence \(Crop\)](#)

[Preplant](#)

[Preemergence \(Weed\)](#)