

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Karen Cain Bayer Crop Science 2 T. W. Alexander Drive PO Box 12014 Research Triangle Park, NC 27709

FEB 18 2014

Subject:

Label Amendment – Removal of Indemnification language

Sencor DF 75% Dry Flowable Herbicide

EPA Reg. No. 264-738 Decision No. 487255

Application dated – January 27, 2014

Dear Ms. Cain:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

A stamped copy of the label is enclosed for your records. This label supersedes all previously accepted labels. You must submit one (1) copy of the final printed label before you release the product for shipment. Products released for shipping after eighteen (18) months must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA §6(e). Your release for shipment of the product constitutes acceptance of these conditions.

If you have any questions regarding this letter, please feel free to contact Shanta Adeeb at (703) 347-0502 or adeeb.shanta@epa.gov.

Sincerely,

Kable Bo Davis
Product Manager 25
Herbicide Branch
Registration Division (

Registration Division (7505P)

# Sencor® DF 75% Dry Flowable the Federal Insectioide, Herbicide

FEB 18 2014 Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 26 L

ACCEPTE

For control of certain grasses and broadleaf weeds.

## **ACTIVE INGREDIENT:**

Metribuzin, 4-Amino-6-(1,1-dimethylethyl)-3-(methylthio)-1,2,4-triazin-5(4H)-one .....

100%

EPA Reg. No. 264-738

EPA Est. No. 3125-MO-001

## STOP - Read the label before use **KEEP OUT OF REACH OF CHILDREN CAUTION**

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577 For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

## FIRST AID

IF SWALLOWED:	Call a poison control center or doctor immediately for tréatment advice.
	Have person sip a glass of water if able to swallow.
	Do not induce vomiting unless told to do so by a poison control center or doctor.
	Do not give anything by mouth to an unconscious person.
IF ON SKIN OR	Take off contaminated clothing.
CLOTHING:	Rinse skin immediately with plenty of water for 15 to 20 minutes.
	Call a poison control center or doctor for treatment advice.
IF IN EYES:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>
	Call a poison control center or doctor for treatment advice.
	all toll free the Bayer CropScience Emergency Response Telephone No. 1-800-334-7577. Have a Sencor® rou when calling a poison control center or doctor, or going for treatment.

Note To Physician: Treat patient symptomatically.

## PRECAUTIONARY STATEMENTS

## HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation.

Personal Protective Equipment: Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA Chemical Resistant Category Selection Chart.

## Applicators and other handlers must wear:

- Long sleeved shirt and long pants
- Chemical-resistant gloves made out of any water-proof material

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

#### USER SAFETY RECOMMENDATIONS

#### User should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- · Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing

Do not contaminate feed or food. Keep out of reach of children.

Obtain prompt medical aid if poisoning should occur.

**Symptoms of Poisoning:** The compound does not cause any definite symptoms that would be diagnostic. Poisoning is accompanied by breathing difficulties and sedation.

#### **ENVIRONMENTAL HAZARDS**

For terrestrial uses, 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 apply when weather conditions favor drift from areas treated. Do not contaminate water when disposing of equipment washwaters.

**GROUND WATER ADVISORY:** Metribuzin is a chemical which can travel (seep or leach) through soil and can contaminate ground water which may be used as drinking water. Metribuzin has been found in ground water as a result of agricultural use. Users are advised not to apply metribuzin where the water table (ground water) is close to the surface, and where the soils are very permeable, i.e., well drained soils such as loamy sands. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

## **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.

## **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

**Exception:** If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Applicators and other handlers must use chemical resistant gloves, such as Butyl Rubber, or Nitrile Rubber, or Neoprene Rubber, or Natural Rubber.
- Shoes plus socks

#### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**Pesticide Storage:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking or material spilled for any reason or cause, carefully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Dispose of pesticide as directed above. In spill or leak incidents, keep unauthorized people away. You may contact the Bayer CropScience Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Bayer CropScience Emergency Response Telephone No. is 1-800-334-7577.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** Triple rinse (or equivalent). 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.

#### **GENERAL INFORMATION**

**MIXING:** When using Sencor® DF, make sure the sprayer is completely clean, free of rust or corrosion which occurs from winter storage. Examine strainers and screens to be sure the sprayer is clean from previously used pesticides.

Any tank mix containing Sencor® DF should be kept agitated and sprayed out immediately. Do not allow tank mixes to stand for prolonged periods of time.

The proper mixing procedure for Sencor® DF alone or in tank mix combinations with other herbicides is:

- 1. Fill the spray tank 1/4 to 1/3 full with clean water.
- 2. Add recommended rate of Sencor® DF while recirculating and with agitator running.
- Follow the triple rinse procedure described under "STORAGE AND DISPOSAL" to insure that all product is removed from the container.
- 4. Mix thoroughly and add clean water to fill spray tank to desired level.
- 5. Add the other herbicide to tank last and agitate thoroughly.
- 6. Continue agitation during application and until sprayer tank is empty.

**SOIL TEXTURE:** As used on this label, "Coarse soils" are loamy sand or sandy loam soils. "Medium soils" are loam, silt, sandy clay, or sandy clay loam. "Fine soils" are silty clay, silty clay loam, clay, or clay loam. Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S.

## **GENERAL PRECAUTIONS AND RESTRICTIONS**

- Do not allow sprays to drift on to adjacent desirable plants.
- · Apply this product only as specified on this label.
- Do not use on other crops grown for food or forage. Observe all cautions and limitations on labeling of all products used in mixtures.
- Do not rotate any crop not listed on this label for 18 months following application of Sencor DF.
- For all uses: Low-pressure and high-volume hand-wand equipment is prohibited.

#### CHEMIGATION

Sencor® DF is recommended for application through sprinkler irrigation equipment to potatoes, soybeans, tomatoes, and asparagus as directed on this label. Refer to the crop sections of this label for recommended rates, weeds controlled or suppressed, restrictions, and special precautions.

Apply this product only through sprinkler (including center pivot, lateral move, or solid set) irrigation systems. 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.

Calibration: (Center Pivot and Self-Propelled Lateral Move Systems): Sprinkler irrigation systems must be accurately calibrated for application of Sencor® DF. Greater accuracy in calibration (and distribution) will be achieved by injecting a larger volume of a more dilute mixture of product and water per hour. Follow the steps below to calibrate center pivot and lateral move systems:

- 1. Determine number of minutes required to make one complete revolution while applying 1/4 to 3/4 inch of water per acre.
- 2. With the system at operating pressure determine the exact number of minutes required to inject one gallon of water.
- 3. Divide the time required for one revolution (step 1) by the time required to inject one gallon (step 2). This gives total gallons of product-water mixture to be added to nurse tank.
- 4. Add required amount of water to nurse tank and start the agitation system. Then add sufficient Sencor® DF at the recommended rate (See RECOMMENDED BROADCAST APPLICATIONS) to the nurse tank.

**EXAMPLE:** If 20 hours (1200 minutes) were required for one revolution and if 2 minutes were required to inject one gallon, then a total of 600 gallons of product-water mixture are required (1200/2 = 600); to treat 135 acres at 2/3 lb/acre, 90.5 lb of Sencor® DF are required.

If you have questions about calibration, you should contact State Extension Service 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.

The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Maintain continuous agitation in the injection nurse tanks during the herbicide application, sufficient to keep herbicide in suspension.

Apply specified dosage in 1/4 to 3/4 inch of water (1/4 to 1/2 inch of water on sandy soils) per acre as a continuous injection in center pivot and lateral move systems or in the last 15 to 30 minutes of set in permanent solid set sprinkler systems. Application of more than the quantity of irrigation water recommended on this label may result in decreased product performance by removing the chemical from the zone of effectiveness. Where sprinkler distribution patterns do not overlap sufficiently unacceptable weed control may result. Where sprinkler distribution patterns overlap excessively crop injury may result. Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. To ensure that lines are flushed and free of remaining pesticide, an indicator dye may be injected into the lines to mark the end of the application period.

Use a minimum of 1 part water to 1 part herbicide for injection. The use of a larger volume of water will insure greater accuracy and more uniform distribution.

## AERIAL DRIFT REDUCTION ADVISORY INFORMATION

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

- 1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
- 3. Where states have more stringent regulations, they should be observed.
- 4. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

**INFORMATION ON DROPLET SIZE:** The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. 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).

#### CONTROLLING DROPLET SIZE:

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of nozzles Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other
  orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift
  potential.
- 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. Solid stream nozzles oriented straight back produce the largest droplets
  and the lowest drift.

**BOOM LENGTH:** For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

**APPLICATION HEIGHT:** Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

**SWATH ADJUSTMENT:** When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

**WIND:** Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. 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 low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

**TEMPERATURE INVERSIONS:** Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light 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 moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

**SENSITIVE AREAS:** Sencor® DF should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

## APPLICATION OF SENCOR® DF WITH HERBICIDE SPRAY EQUIPMENT

Use a standard low-pressure (20 to 40 psi.) herbicide boom sprayer equipped with suitable nozzles and screens no finer than 50-mesh in-nozzle and in-line strainers. Agitate thoroughly before and during application with bypass agitation.

GROUND APPLICATION: Apply the proper rate of Sencor® DF in a minimum of 10 to 40 gallons of spray mixture per acre broadcast.

**Banded Application:** Use proportionally less Sencor® DF per acre in a band versus a broadcast application. For band application use 1/4 to 1 gallon of spray mix per inch of band width regardless of row spacing.

**EXAMPLES:** (1) To treat a 15-inch band on rows 30 inches apart, use one-half of the broadcast rate of Sencor®. (2) To treat a 14-inch band on rows 42 inches apart, use one-third of the broadcast rate of Sencor®.

**AERIAL APPLICATION:** Where permitted, apply specified rate in a minimum of 2 to 10 gallons of spray mixture per acre. Do not apply aerially when wind speed is greater than 10 mph.

NOTE: Do not apply aerially when Sencor® is tank mixed with Lasso®.

For All Applications of Sencor® DF: Sprayer must be accurately calibrated before applying Sencor® DF. Check sprayer during application to be sure it is working properly and delivering a uniform spray pattern. As the volume of spray mixture decreases per acre, the importance of accurate calibration and uniform application increases. Avoid over application, misapplication, and boom and spray swath overlapping that will increase spray dosage. (Crop injury may occur as a result). Avoid spray skips and gaps which allow weeds to grow in untreated soil. Do not apply when weather conditions favor spray drift and/or when sensitive or cool season crops, such as cole crops, onions, peas, or strawberries are present in adjacent fields or in areas where wheat is growing in coarse textured soils.

**SPRAYER CLEANUP:** Spray equipment must be thoroughly cleaned to remove remaining traces of herbicide that might injure other crops to be sprayed. Drain any remaining spray solution of Sencor® from the spray tank and dispose of according to label disposal instructions. Rinse the spray tank and refill with water, adding a heavy-duty detergent at the rate of one cup per 20 gallons of water. Recycle this mixture through the equipment for 5 minutes and spray out. Repeat this procedure twice. Fill the spray tank with clean water, recycle for 5 minutes, and spray out. Clean pump and nozzle screens thoroughly. Wash away any spray mixture from the outside of spray tank, nozzles or spray rig. All rinse water must be disposed of in compliance with local, state, and Federal guidelines.

## APPLICATION OF SENCOR® DF IN FLUID FERTILIZERS

Sencor® DF may be applied in fluid fertilizer solutions to alfalfa and soybeans by following the appropriate mixing procedures and compatibility check. When using tank mix combinations, be sure all components are compatible.

Compatibility checks of Sencor® DF and tank mix combinations which include Sencor® should be made for each batch of fluid fertilizer because of the variability of these fertilizers.

Compatibility Check:

- Pre-mix 2 teaspoonfuls of Sencor® DF with 8 teaspoonfuls of water (1:4 ratio) in a quart jar by adding the water first and follow with Sencor® DF. Mix thoroughly. If a second herbicide is to be used, double the amount of water (1:8 ratio) and add the second herbicide after mixing Sencor® DF first.
- 2. Then pour 1 pint of fluid fertilizer into the quart jar and shake well.
- 3. Allow to stand for 5 minutes.

## THIS COMPATIBILITY CHECK SHOULD ONLY BE USED WHEN MIXING WITH FLUID FERTILIZERS.

Interpretation of Results: If the solution in the jar appears to be uniform, without signs of agglomeration, or without a separation of an oily film on top of the fertilizer, the mixture may be used. If not, repeat the compatibility check using twice the amount of water or add a compatibility agent to the water. If separation occurs, but the mixture can be resuspended by shaking, then application is possible with good agitation in the spray tank.

Tank mixing Guidelines:

- Add the required amount of water and compatibility agent (if required) to the tank. Start agitation system while adding Sencor® DF
  and follow by adding the fluid fertilizer and agitate.
- 2. If a second herbicide is to be used, follow as above in 1, but use twice the amount of water. Start agitation and add Sencor® DF and follow by adding the second herbicide, and then continue filling the tank with fluid fertilizer.
- Maintain continuous agitation to assure uniform spray mixture until the tank is emptied.

## COMMERCIAL IMPREGNATION AND APPLICATION OF SENCOR® DF ON DRY BULK FERTILIZER

Dry bulk fertilizer may be impregnated or coated with Sencor® DF for application to established alfalfa and to soybeans. All recommendations, cautions, and special precautions on this label must be followed along with state regulations relating to dry bulk fertilizer blending, impregnating and labeling.

**Impregnation:** To impregnate, use a system consisting of a belt, conveyor, or closed drum which is used for dry bulk fertilizer blending. Any commonly used fertilizer can be impregnated with Sencor® except ammonium nitrate, or fertilizers containing ammonium nitrate, potassium nitrate, or sodium nitrate. Do not use on powder limestone.

Apply using a minimum of 200 lb dry bulk fertilizer per acre and up to a maximum of 450 lb per acre. To impregnate or coat dry bulk fertilizer, mix Sencor® DF with sufficient water to form a sprayable slurry. The delivery nozzles must be directed to deliver a fine spray toward the fertilizer for thorough coverage while avoiding spray contact with mixing equipment. Uniform impregnation of Sencor® DF to dry bulk fertilizer will vary and if the absorptivity is not adequate, an absorptive powder may be added to produce a dry, free-flowing mixture. Micro-Cel E (Johns-Manville Product Corporation) is the recommended absorbent powder. When another herbicide is used with Sencor® DF, mix and impregnate immediately.

Apply immediately after impregnation unless experience has shown that impregnated fertilizer can be stored without becoming lumpy and difficult to spread.

Rates: Select the recommended rate of Sencor® DF per acre from the appropriate section of this label and refer to the formula below to determine the amount of Sencor® DF which is to be impregnated on a ton of dry bulk fertilizer based on the amount of fertilizer which will be distributed on one acre.

Lb Sencor® DF X 2000 Lb Fertilizer = Lb Sencor® DF

Acre

Acre

Ton of Fertilizer

**Application:** Uniform application is essential for satisfactory weed control. Accurate calibration of fertilizer application equipment is essential for uniform distribution to the soil surface. The recommended method of application is to apply 1/2 the recommended rate and overlap 50 percent or to double apply by splitting the middles to obtain the best distribution pattern.

If fertilizer materials are excessively dusty, use diesel oil or other suitable additive to reduce dust prior to impregnation as dusty fertilizer will result in poor distribution during application. Crop injury and/or poor weed control may occur where the impregnated fertilizer is not uniformly applied.

**INCORPORATION AND COMBINATION USES:** When Sencor® DF is to be used in combination with another herbicide, follow directions on this label for combinations, rates, crops, incorporation, and special precautions.

## SOYBEANS

## (EXCEPT CALIFORNIA)

Sencor® DF herbicide tank mix combinations are recommended for preplant incorporated applications, preemergence surface applications, Split-Shot application and Extended Split-Shot application. Sencor® DF is also recommended as an overlay application following a preplant incorporated application of a recommended grass herbicide and alone as a preemergence surface application. All these applications can be applied with ground equipment, and some can be applied with aerial spray equipment. In addition, Sencor® DF can be applied as a postemergence directed spray to soybeans in certain states.

SPECIAL PRECAUTIONS (Soybeans): Injury to soybeans may occur when Sencor® DF is used under the following conditions:

- When soils have a calcareous surface area or a pH of 7.5 or higher.
- Due to the sensitivity of certain soybean varieties, Sencor® DF is not recommended for use on Altona, AP 55, AP 71, Asgrow 6520, Burlison, Coker 102, Coker 156, Dassel, GL 3202, Govan, Maple Amber, NB 3665, NKS 1884, Paloma 350, Portage, Regal, Semmes, Terra-Vig 505, Terra-Vig 606, Tracy, Vansoy, and Vinton 81. Consult your Bayer CropScience Representative

or your seed supplier for information on the tolerance to Sencor® of newly released soybean varieties, prior to use of Sencor® DF

- When applied in conjunction with soil-applied organic phosphate pesticides.
- Over application or boom overlapping may result in stand loss and soil residues.
- Uneven application or improper incorporation can decrease the level of weed control and/or increase the level of injury.
- When applied to any soil with less than 1/2% organic matter.
- Soil incorporation deeper than recommended.
- When sprayers are not calibrated accurately.
- When heavy rains occur soon after application, especially in poorly drained areas where water may stand for several days.
- When soybeans are planted less than 1-1/2 inches deep, particularly in preemergence application.

**Activation:** A minimum amount of soil moisture is required to activate Sencor® DF. In areas of low rainfall, preemergence applications to dry soil should be followed with light irrigation of 1/4 acre inch of water. Do not apply heavy irrigation immediately after application. As with many surface-applied herbicides, weed control and crop tolerance may vary with rainfall and/or soil texture.

Grazing and Feeding Treated Vines: Treated vines may be grazed or fed to livestock 40 days after application when Sencor® DF is applied alone or with Treflan®, Dual®, Prowl®, or Lasso®.

Do not use treated vines for feed or forage when Sencor® DF is applied with Sonalan®, linuron plus Lasso®, or linuron plus Dual®.

Rate Ranges: Where a rate range is shown, use a lower rate on soils that are coarse-textured or low in organic matter. Use a higher rate on soils that are relatively fine-textured or high in organic matter.

Replanting: If replanting is necessary in fields treated with Sencor® DF as directed on this label, the field may be replanted to soybeans. When replanting a minimum of tillage is recommended. Do not apply a second treatment as injury to soybeans may occur.

WEEDS CONTROLLED BY	SENCOR®	AND SEN	COR® H	ERBICIDE	TANK MIX	COMBIN	IATIONS		
C = Control S = Suppression or Erratic Control	P = Poor or No Control 0 = No Information (Control may range from poor to excellent)								
1 = Sencor® Alone 4 = Sencor®	plus Dual			7 = Exten	ded Split-Sl	not			
2 = Sencor® Split-Shot 5 = Sencor®	plus Prow	1		8 = Senco	or® plus So	nalan			
3 = Sencor® plus Treflan 6 = Sencor®	plus Lasso	)		9 = Senco	r® plus linu	ıron plus (L	asso or Du	al)	
ANNUAL BROADLEAF WEEDS	11	2	3	4	5	6	7	8	9
Black Nightshade (Solanum nigrum)	Р	Р	Р	С	Р	С	С	Р	s
Bristly Starbur (Acanthospermum hispidum)	С	С	C	С	С	С	Ç	С	С
Buffalobur (Solanum rostratum)	С	С	Р	Р	Р	P	С	Р	0
Carpetweed (Mollugo verticillata)	С	С	С	С	С	С	С	С	. C
Cocklebur (Xanthium pensylvanicum)	s	С	S	s	S	s	С	s	S
Copperleaf, Hophornbeam (Acalypha ostryaefolia)	С	С	С	С	С	С	С	С	С
Florida Beggarweed (Desmodium tortuosum)	С	С	С	С	С	С	С	Ç	С
Florida Pusley (Richardia scabra)	С	С	С	Ç,	С	С	С	С	С
Galinsoga ( <i>Galinsoga</i> spp.)	С	С	С	С	С	С	С	С	С
Horseweed Marestail (Conyza canadensis)	0	0	0	0	0	0	С	0	0
Jimsonweed (Datura stramonium)	С	С	С	С	С	С	С	С	s
Knotweed ( <i>Polygonum</i> spp.)	С	С	С	С	С	С	С	С	С
Kochia (Kochia scoparia)	С	С	С	С	С	С	С	C ·	С
Lambsquarters (Chenopodium spp.)	С	С	Ċ	С	С	С	С	С	С
Morningglory, Ivyleaf (Ipomoea hederacea)	ρ	Р	S	Р	Р	Р	Р	Р	Р
Morningglory, Pitted (Ipomoea lacunosa)	Р	Р	S	P	Р	Р	Р	Р	Р
Morningglory, Smallflower (Jacquemontia tamnifolia)	Р	P	С	Р	Р	Р	Р	Р	Р
Morningglory, Tall (Ipomoea purpurea)	Р	Р	s	Р	Р	Р	Р	Р	Р
Pigweeds (Amaranthus spp.)	С	С	С	С	С	С	C	С	С
Prickly Sida/Teaweed (Sida spinosa)	С	С	Ċ	С	С	С	С	С	С
Purslane (Portulaca oleracea)	С	С	С	С	С	С	С	С	С
Ragweed, Common (Ambrosia artemisiifolia)	С	С	С	С	С	С	С	С	С
Redweed (Melochia corchorifolia)	С	С	С	С	С	С	С	· c	С

WEEDS CONTROL	LED BY	SENCOR®	AND SEN	OR® H	ERBICIDE	TANK MI	COMBIN	NATIONS		
<b>C</b> = Control <b>S</b> ≈ Suppression or Erratic (	Control	P = Poor o	No Control	<b>0</b> = No	Information	(Control m	ay range fro	om poor to	excellent)	
1 = Sencor® Alone 4 =	Sencor	® plus Dual			7 = Extend	ded Split-Sl	not			
2 = Sencor® Split-Shot 5 =	Sencor	® plus Prowl			8 = Senco	r® plus So	nalan			
3 = Sencor® plús Treflan 6 =	Sencor	® plus Lasso	)		9 = Senco	r® plus linu	ıron plus (L	asso or Du	al)	
ANNUAL BROADLEAF WEEDS		11	2	3	4	5	6	7	8	9
Russian Thistle (Salsola kali)		С	С	С	С	С	С	С	С	С
Sesbania (Sesbania spp.)		С	С	С	С	С	С	С	С	С
Shepherdspurse (Capsella bursa-pastoris)		С	C	С	С	С	С	С	С	С
Sicklepod (Cassia obtusifolia)		С	С	S	С	s	С	С	s	S
Smartweeds (Polygonum spp.)		С	С	С	С	С	С	С	С	S
Spotted Spurge (Euphorbia maculata)		С	С	Р	С	P	С	с	Р	0
Spurred Anoda (Anoda cristata)		С	С	С	С	С	С	С	С	0
Sunflower (Helianthus spp.)	···	С	С	S	s	S	s	С	S	Р
Velvetleaf (Abutilon theophrasti)		С	С	С	С	С	С	С	С	С
Venice Mallow (Hibiscus trionum)		С	С	С	С	С	С	С	С	С
Wild Mustards (Brassica spp.)		С	С	С	С	С	c	С	С	С

WEEDS CONTROLLED BY	SENCOR	® AND SE	NCOR® H	IERBICIDE	TANK MI	х сомвіі	VATIONS		
C = Control S = Suppression or Erratic Control	P = Poor or	No Contro	1 0 = No Ir	iformation (	Control may	range fron	n poor to ex	cellent)	
1 = Sencor® Alone 4 = 5	Sencor® plu	ıs Dual		7 = Exte	ended Split-	Shot			
2 = Sencor® Split-Shot 5 = 5	Sencor® plu	ıs Prowl		8 = Ser	cor® plus S	Sonalan			
3 = Sencor® plus Treflan 6 = 5	Sencor® plu	is Lasso		<b>9</b> = Ser	cor® plus li	nuron plus	(Lasso or D	ual)	
ANNUAL GRASSES	11	2	3	4	5	6	7	8	9
Barnyardgrass (Echinochloa crus-galli)	s	С	С	С	С	С	С	С	С
Bluegrass ( <i>Poa annua</i> )	С	С	С	С	С	С	_ с	С	С
Broadleaf Signalgrass (Brachiaria platyphylla)	С	С	С	С	С	С	С	С	0
Browntop Millet (Panicum ramosum)	С	С	С	Р	С	s	С	0	0
Crabgrass ( <i>Digitaria</i> spp.)	С	С	С	С	С	С	С	С	С
Crowfootgrass (Dactyloctenium aegyptium)	С	С	С	С	С	С	С	. 0	0
Cupgrass (Eriochloa gracilis)	Р	С	Р	Р	Р	Р	С	0	0
Foxtails (Setaria spp.)	s	С	С	С	С	С	С	С	С
Goosegrass (Eleusine indica)	С	С	С	С	С	С	С	С	С
Johnsongrass, Seedling (Sorghum halepense)	С	С	С	С	С.	С	С	С	0
Junglerice (Echinochloa colonum)	С	С	С	С	С	С	С	С	0
Nutsedge, Yellow (Cyperus esculentus)	Р	P	Р	С	Р	С	С	Р	0
Panicum, Fall (Panicum dichotomiflorum)	Р	С	С	.C	С	С	С	С	С
Panicum, Texas ( <i>Panicum texanum</i> )	· P	С	С	Р	C.	S	S	С	.0
Red Rice (Oryza sativa)	Р	С	С	С	Р	С	С	0	0
Sandbur (Cenchrus spp.)	Р	С	С	Р	С	S	\S	_0	0
Shattercane (Sorghum bicolor)	Р	С	С	Р	Р	Р	Р	С	0
Sorghum, Volunteer (Sorghum spp)	Р	С	С	Р	Р	Р	Р	0	Р
Sprangletop ( <i>Leptochloa</i> spp.)	Р	С	С	Р	Р	Р	Р	0	Р
Stinkgrass (Eragrostis spp.)	Р	С	С	Р	Р	P	Р	0	Р
Wheat, Volunteer (Triticum spp.)	Р	Р	Р	Р	Р	Р	Р	0	Р
Witchgrass (Panicum capillare)	Р	С	С	С	С	C	С	С	0

SENCOR® ALONE

Sencor® DF (Alone) Preemergence Application: The following rates of Sencor® DF may be applied preemergence to soybeans through center pivot or lateral move sprinkler irrigation systems that apply water in a uniform manner. Refer to "Chemigation" section of this label for directions.

Sencor® DF can be applied broadcast or banded. This application may be made during planting or as a separate operation after planting but before crop emergence. See the "GENERAL INFORMATION" section in the front of this label.

Do not apply to sand soils, or to sandy loam or loamy sand soils containing less than 2% organic matter. Do not incorporate into soil or apply more than once per season.

Lb of Sencor® DF Per Acre								
		ORGANIC MATTER						
SOIL TEXTURE	Less than 2%	2 to 4%	Over 4%					
COARSE SOILS (Sandy loam, loamy sand)	DO NOT USE <sup>3</sup>	1/2	2/3					
MEDIUM SOILS¹ (Loam, silt loam, silt, sandy clay, sandy clay loam)	1/2 to 2/3	2/3 to 5/6	5/6 to 1					
FINE SOILS <sup>1</sup> (Silty clay, silty clay loam <sup>2</sup> clay, clay loam)	2/3 to 5/6	5/6 to 1	1 to 1-1/6					
Mississippi Delta Only	1	1-1/6	1-1/3					

<sup>&</sup>lt;sup>1</sup> For control of lambsquarters, redroot pigweed and wild mustard, and for suppression of green, yellow and giant foxtails on alkaline (calcareous) soils in Nebraska, Minnesota, South Dakota and North Dakota only, apply Sencor® DF at rates of 1/3 lb/acre on medium soils and 1/3 to 1/2 lb/acre on fine soils regardless of soil organic matter percentage (use 1/2 lb only where soil pH is less than 7.5 and weed pressure is heavy). The 1/3 lb/acre rate of Sencor® DF alone can be applied regardless of soil pH. For control of other weeds listed on this label use Sencor® DF at full rates recommended in the table above, but note that crop injury may occur on soils having a calcareous surface area or a pH of 7.5 or higher.

## USES OF SENCOR® DF HERBICIDE IN COMBINATION WITH OTHER HERBICIDES

## SEQUENTIAL APPLICATION OF SCEPTER® FOLLOWING SENCOR® DF

If needed, application of Sencor® DF alone or in a registered tank mix according to directions on this label may be followed by an early postemergence application of Scepter® herbicide (1.5 lb/gal liquid or 70 DG) for control of cocklebur. Apply 1/6 to 1/3 pint of Scepter® (0.7 to 1.4 ounces of Scepter® 70 DG) in a minimum of 20 gallons of water per acre. Use 1/6 pint of Scepter® (0.7 ounce of Scepter® 70 DG) if cockleburs are less than 3 inches tall or have fewer than 3 leaves and are actively growing. For cockleburs less than 6 inches tall and actively growing use 1/3 pint of Scepter® (1.4 ounces of Scepter® 70 DG) per acre. Do not use Scepter® when soybeans or cockleburs have been subjected to stress conditions such as temperature or moisture extremes. Do not exceed a total of 2/3 pint of Scepter® (2.8 ounces of Scepter® 70 DG) per acre in one season. Wait at least 10 days after application of Scepter® before cultivating.

When preparing the spray mixture with Scepter®, add 2 pt of nonionic surfactant approved for use on growing crops and containing at least 80% active ingredient per 100 gallons of mixture. Apply crop oil concentrate (COC) at the rate specified on the COC label.

Use Scepter® only in the states where it is registered as listed on the product label.

Apply Scepter at least 90 days before harvest of soybeans. Do not graze or feed soybean forage, hay, or straw to livestock.

Refer to the Scepter® label for additional cautions and precautions, directions, limitations, and information on environmental hazards and planting of rotational crops.

## **SPLIT-SHOT APPLICATION**

A preplant incorporated application of Sencor® DF tank mixed with either Treflan®, Lasso®, Dual®, Prowl® or Sonalan® and followed by a preemergence surface application of Sencor® DF alone after planting but prior to soybean emergence, will control more broadleaf and grass weeds in soybeans than when either herbicide is used alone.

Refer to the Treflan®, Lasso®, Dual®, Prowl® or Sonalan® labels, and to appropriate sections of this label for directions on soil preparation, herbicide application, incorporation techniques, herbicide rates, weed species controlled, and restrictions for using tank mix combinations of Sencor® DF. Carefully observe the "Special Precautions" section concerning the use of Sencor® DF in tank mix combinations on soybeans.

When a Split-Shot application of Sencor® DF with Prowl®, Treflan®, or Sonalan® is used, the preplant incorporated tank mix may be applied up to 21 days prior to planting soybeans; with Dual® or Lasso®, the preplant incorporated tank mix may be applied up to 14 days prior to planting.

On medium and fine textured soils with greater than 2% organic matter, a rate range is recommended for the Sencor® DF preemergence overlay application. The higher rate should be used (a) in fields with a history of severe broadleaf weed pressure, (b) when the time between preplant incorporated tank mix and preemergence overlay applications approaches the maximum stated above, and/or (c) when the organic matter content of the soil is at the upper end of the indicated range.

<sup>&</sup>lt;sup>2</sup> Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

<sup>&</sup>lt;sup>3</sup> Refer to the appropriate section of this label for use of Sencor® DF on soybeans in coarse soils with 0.5% or more organic matter in certain states.

For black nightshade control, refer to the appropriate sections of the Lasso®, Dual®, or Sonalan® labels for specific instructions.

		SP	LIT-SHOT APPLICATION			
	Preplant Incorporated Tank m	ix Applica	ation - FOLLOWED BY -	Preemergence Over	ay Application	
				Rate	of Sencor® DF Lb/	Acre
	Rate of Combination		Rate of		ORGANIC MATTER	
SOIL TEXTURE	Product/Acre	Plus	Sencor® DF Lb/Acre	Less than 2%	2% to 4%	Over 4%
COARSE	Treflan® 1 pt					
(Light)	<b>OR</b> Lasso® 2 to 2-1/2 qt					
sand, loamy sand, sandy	OR Dual® 1-1/4 to 1-1/2 pt					
loam	OR Prowl® 1-1/2 pt					
	OR Sonalan® 1-1/4 to 2 pt	plus	1/3-FOLLOWED BY	1/6	1/6	1/6 to 1/3
MEDIUM	Treflan® 1-1/2 pt		1/2-FOLLOWED BY	1/6	1/6 to 1/3	1/3 to 1/2
loam, silt loam,	<b>OR</b> Lasso® 2-1/2 to 3 qt					
sandy clay loam, silt, sandy clay	OR Dual® 1-1/2 pt		or			
Sitt, Sariay Glay	OR Prowl® 1-1/2 pt					ļ
	OR Sonalan® 1-3/4 to 2-1/2 pt	plus	1/3 <sup>2</sup> -FOLLOWED BY	1/3	1/3 to 1/2	(1/2 to 2/3) <sup>3</sup>
FINE (Heavy)	Treflan® 2 pt		2/3-FOLLOWED BY	1/6	1/6 to 1/3	1/3 to 1/2
silty clay loam*,	OR Lasso® 2-1/2 to 3 qt					
clay loam, silty clay, clay	<b>OR</b> Dual® 2 to 2-1/2 pt		or			
olay, olay	OR Prowl® 1-1/2 to 2 pt					
	OR Sonalan® 2-1/4 to 3 pt	plus	1/2 <sup>2</sup> -FOLLOWED BY	1/3	1/3 to 1/2	(1/2 to 2/3) <sup>3</sup>

- \* Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.
- On coarse textured soils, does not use on sand soils with less than 1% organic matter, or on loamy sand or sandy loam soils with less than 0.5% organic matter. However, on coarse textured soils with a calcareous surface area or a pH of 7.5 or higher, do not use on sand soils with less than 2% organic matter, or on loamy sand or sandy loam soils with less than 1% organic matter.
- Use this lower rate of Sencor® DF in the preplant incorporated tank mix on soils having a calcareous surface area or a pH of 7.5 or higher, and in those situations where soils within a field vary extremely in texture or organic matter content.
- Reduce this preemergence overlay rate of Sencor® DF by 1/6 lb/acre when using SPLIT-SHOT application on soils with over 4% organic matter and which have a calcareous surface area or a pH of 7.5 or higher.

## **EXTENDED SPLIT-SHOT APPLICATION**

(Includes No-Till, Reduced-Till, Ridge-Till, Strip-Till, Mulch-Till)

An early preplant (surface-applied or shallow incorporated) application of Sencor® DF tank mixed with either Dual® or Lasso®, followed by a preemergence surface application of Sencor® DF tank mixed with Dual® or Lasso® after planting but prior to soybean emergence, will control more broadleaf and grass weeds in soybeans than either herbicide used alone.

An Extended SPLIT-SHOT application will decrease the need for tillage and/or contact herbicides for the control of existing vegetation prior to planting, while providing residual control of weeds after planting.

When an Extended SPLIT-SHOT application of Sencor® DF with Dual® or Lasso® is used, the preplant tank mix combination may be applied 15 to 30 days prior to planting soybeans. Follow directions on the label accompanying the product for SPLIT-SHOT applications from 0 to 14 days before planting.

Where a rate range is recommended, the higher rates should be used (a) in fields with a history of severe weed pressure, (b) when the time between early preplant tank mix and preemergence overlay applications approaches the maximum 30 days, (c) when the organic matter content of the soil is at the upper end of the indicated range, (d) when heavy crop residues are present on the soil surface, and/or (e) when the early preplant tank mix application is shallow incorporated (e.g. use 2 to 2-1/2 qt Lasso® in the early preplant tank mix when surface applied and use 2-1/2 to 3 qt Lasso® when the tank mix is to be lightly incorporated).

When weeds exceed 1 to 1-1/2 inches in height or diameter at application, use a contact herbicide, such as Round-Up® or Gramoxone®.

Refer to the Dual® or Lasso® label, and to appropriate sections of this label for additional information on soil preparation, herbicide application, weeds controlled, precautions, restrictions, limitations and sprayer clean-up.

			EXTEND	ED SPLIT-S	HOT APPLICA	TION			
Early Preplant Tank (Surface-Applied or		rated)				Pree	mergence Overl	ay Application	
	Rate of		Rate of Sencor®		Rate of		R	ate of Sencor® [ Lb/Acre	)F
	Combination		DF	Followed	Combination	Plu		RGANIC MATTE	R
SOIL TEXTURE1	Product/Acre	Plus	_Lb/Acre	Ву	Product/Acre	s	1/2 to 2%	2 to 4%	Over 4%
COARSE (Light)	Dual® 1-1/3 pt								
Sand, loamy sand,	or			Dual®	2/3 pt				
sandy loam	Lasso®			or					,
	1-1/2 to 2 qt	plus	1/3 to 1/2	Lasso®	1-1/2 qt	pius	1/6	1/6 to 1/3	1/3
MEDIUM									
Loam, silt loam, sandy clay loam, silt, sandy clay	Dual® 1-3/4 pt or		,	Dual® or	3/4 pt				
	Lasso® 2 to 3 qt	plus	1/2 to 2/3 <sup>2</sup>	Lasso®	1 to 2 qt	plus	1/3	1/3 to 1/2	1/2 to 2/3
FINE (Heavy)	Dual® 2 pt								
Silty clay loam* clay loam, silty	or			Dual® or	1 pt				
clay, clay	Lasso® 2 to 3	plus	2/3 to 5/6 <sup>2</sup>	Lasso®	1 to 2 qt	plus	1/3	1/3 to 1/2	1/2 to 2/3

<sup>\*</sup> Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

## **SENCOR® DF PLUS SONALAN®**

Sencor® DF plus Sonalan® Overlay Application: Sencor® DF may be applied as a preemergence overlay application following a preplant incorporated application of Sonalan® 3 EC. Consult the Sonalan® label for specific directions on use, recommendations, restrictions and any additional weeds not specified on this label.

Sencor® DF plus Sonalan® Tank mix Application: Incorporate the tank mixture into the top 1 to 2 inches of soil within 21 days before planting according to label directions for Sonalan®.

Apply Sencor® DF plus Sonalan preplant incorporated if furrow irrigation is used or when a period of dry weather after application is expected. If soybeans are planted on beds, apply and incorporate the tank mixture after bed formation.

Mixing: Refer to the "General Information" section in the front of this label.

**Application:** Sonalan® should be uniformly applied and thoroughly mixed into the soil within 2 days after application. For specific application information, refer to the "Application" under "General Information" section in the front of this label.

**SPECIAL PRECAUTIONS (Sencor® DF plus Sonalan®):** For additional precautions, restrictions, limitations, incorporation, and sprayer clean-up information, refer to the appropriate sections of this label and the Sonalan® label.

For black nightshade control, refer to the Sonalan® label for specific rates and application instructions.

BROADCAST RATES						
SOIL TEXTURE	Sencor® DF Lb/Acre	Sonalan® 3EC Pt/Acre				
COARSE <sup>1</sup> (Sandy loam, loamy sand)	1/3	1-1/4 to 2				
MEDIUM³ (Loam, silt loam, silt, sandy clay, sandy clay loam)	1/2	1-3/4 to 2-1/2				
FINE <sup>3</sup> (Silty clay, silty clay loam <sup>2</sup> , clay, clay loam)	2/3	2-1/4 to 3				

On coarse textured soils, do not use on sand soil with less than 1% organic matter. However, on coarse textured soils with a calcareous surface area or a pH of 7.5 or higher, do not use on sand soils with less than 2% organic matter, or on loamy sand or sandy loam soils with less than 1% organic matter.

Use the lower rate of Sencor® DF in the early preplant tank mix on soils having a calcareous surface area or a pH of 7.5 or higher, and in those rare situations where soils within a field vary extremely in texture or organic matter content.

- <sup>1</sup> Do not use on coarse soils with less than 1% organic matter.
- Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.
- For control of lambsquarters, redroot pigweed, wild mustard, and green and yellow foxtails on alkaline (calcareous) soils in Minnesota, Nebraska, South Dakota, and North Dakota only, apply Sencor® DF at rates of 1/3 lb/acre on medium soils and 1/3 to 1/2 lb/acre on fine soils regardless of soil organic matter percentage (use 1/2 lb only where soil pH is less than 7.5 and weed pressure is heavy). The 1/3 lb rate of Sencor® DF in tank mix combination with Sonalan® can be applied regardless of soil pH. For control of other weeds not listed on the label, use Sencor® DF at full rates recommended in the table above, but note that crop injury may occur on soils having a calcareous surface area or a pH of 7.5 or higher.

## SENCOR® DF PLUS TREFLAN®

Sencor® DF and Treflan® Overlay Application: Sencor® DF may be applied as a preemergence broadcast or band overlay application following a pre-plant incorporated treatment of Treflan®. Consult the Treflan® label for specific directions for use, recommendations, restrictions and any additional weeds not specified on this label.

Sencor® DF plus Treflan® Tank mix Application: A single application of a tank mix combination of Sencor® DF and Treflan® EC will control more broadleaf and grass weeds in soybeans than when either herbicide is used alone.

Prepare the soil surface by deep plowing, offset disking or tandem disking prior to the application of the herbicide combination. The soil surface should be well prepared and free of clods and trash.

This Sencor® DF plus Treflan® tank mix combination may be applied and incorporated into the soil up to 10 days before planting.

Mixing: Refer to the "General Information" section in the front of this label.

Application: For specific application information refer to the "General Information" section in the front of this label.

Apply Sencor® DF plus Treflan® to the soil surface and incorporate in the same operation, if possible. Variable weed control may result from delayed incorporation if Sencor® DF plus Treflan® are applied to a wet, warm soil surface or if the wind velocity is 10 miles per hour or higher. Use machinery that mixes Sencor® DF plus Treflan® thoroughly with the soil. Incorporation may be delayed up to 24 hours after application. Shallow incorporation with implements set to cut less than 2 inches deep may result in erratic weed control. Do not use spike or spring-tooth harrows alone for incorporation.

## **Incorporation Equipment:**

- 1. Set PTO-driven equipment (tillers, cultivators, hoes) to cut 2 to 3 inches deep and space rotors to provide a clean sweep of the soil. PTO equipment should not be operated at a speed greater than 4 miles per hour.
- 2. Set disk to cut 4 to 6 inches deep and operate twice in different directions at 4 to 6 miles per hour.
- 3. Set mulch treader and other similar disk-type implements to cut 3 to 4 inches deep and operate twice in different directions at 5 to 8 miles per hour.

For Coarse and Medium Textured Soils Only:

4. Set rolling cultivator to cut 2 to 4 inches deep and operate twice at 6 to 8 miles per hour. Set bed conditioner (Do-All) to cut 2 to 4 inches deep and operate at 4 to 6 miles per hour.

BROADCAST RATES						
SOIL TEXTURE	Sencor® DF Lb Per Acre	Treflan® EC Pt Per Acre				
COARSE <sup>1</sup> (Sandy loam, loamy sand)	1/3	1				
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	1/2	1-1/2				
FINE (Silty clay, silty clay loam <sup>2</sup> , clay, clay loam) <sup>3</sup>	2/3	2				

- Do not use on coarse soils with less than 1% organic matter.
- Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.
- For control of lambsquarters, redroot pigweed, wild mustard, and green and yellow foxtails on alkaline (calcareous) soils in Minnesota, Nebraska, South Dakota, and North Dakota only, apply Sencor® DF at rates of 1/3 lb/acre on medium soils and 1/3 to 1/2 lb/acre on fine soils regardless of soil organic matter percentage (use 1/2 lb only where soil pH is less than 7.5 and weed pressure is heavy). The 1/3 lb rate of Sencor® DF in tank mix combination with Treflan® can be applied regardless of soil pH. For control of other weeds listed on the label use Sencor® DF at full rates recommended in the table above, but note that crop injury may occur on soils having a calcareous surface area or a pH of 7.5 or higher.

### SPECIAL PRECAUTIONS (Sencor® DF plus Treflan®):

- Seedling disease, cold weather, excessive moisture, high salt concentration or drought may weaken soybean seedlings and
  increase possibility of damage from the tank mix. Do not plant soybeans deeper than 2 inches.
- Do not rotate any crop not listed on this label for 18 months after the tank mix application.
- In the Central United States, do not plant sorghum or oats for 12 months where the tank-mix has been applied unless 20 inches or more of irrigation and/or rainfall (total) was used to produce the crop. If less than 20 inches total water was used to produce the crop during the year, do not plant either crop for 18 months after the tank-mix application. Cool, wet weather conditions during the early stage of growth may increase the possibility of injury to sorghum.
- For additional precautions, restrictions, limitations and sprayer clean-up information refer to the appropriate section of this label.
   Do not use this tank mix combination on soils containing charcoal in Arkansas, Louisiana and Mississippi.

## SENCOR® DF PLUS DUAL®

Sencor® DF plus Dual® Overlay Application: Apply a preplant incorporated treatment of Dual® 8E as directed on that product label for use on soybeans. Follow with a preemergence treatment of Sencor® DF as directed on this label for use on soybeans.

## SENCOR® DF PLUS DUAL® TANK MIX APPLICATIONS

**Preplant Incorporated Application:** Incorporate the tank mixture into the top 2 inches of soil within 14 days before planting using a disk, harrow, rolling cultivator, or similar implement.

Apply Sencor® DF plus Dual® preplant incorporated if furrow irrigation is used or when a period of dry weather after application is expected. If soybeans are planted on beds, apply and incorporate the tank mixture after bed formation.

**Preemergence Application:** Dry weather following preemergence application of Sencor® DF plus Dual® tank mixture may reduce effectiveness. If weeds develop, cultivate uniformly with shallow tillage equipment such as a rotary hoe that will not damage soybeans.

Mixing Instructions: Refer to the "General Information" section in the front of this label.

<sup>2</sup> Sitty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

	BROADCAST RATES  Sencor® DF Plus Dual®  Tank Mix Preemergence Applications	
	0.5% to 3% ORGANIC MATTER	
SOIL TEXTURE	Sencor® DF Lb/Acre	DUAL® 8E Pt/Acre
COARSE <sup>1</sup> (Loamy sand, sandy loam)	1/3	1-1/4
MEDIUM (Loam, silt loam, silt)	1/2	1-1/2
FINE (Silty clay loam <sup>2</sup> , sandy clay loam, silty clay, sandy clay, clay loam, clay)	2/3	2
MISSISSIPPI DELTA ONLY (Silty clay, clay)	1	2
·	Over 3% ORGANIC MATTER	
COARSE <sup>1</sup> (Loamy sand, sandy loam)	1 /2	1-1/2
MEDIUM (Loam, silt loam, silt)	2/3	2
FINE (Silty clay loam <sup>2</sup> , sandy clay loam, silty clay, sandy clay, clay loam, clay)	, 2/3 to 5/6	2 to 2-1/2
MISSISSIPPI DELTA ONLY (Silty clay, clay)	. 1	2 to 2-1/2

#### **BROADCAST RATES** Sencor® DF Plus Dual® **Tank Mix Preplant Incorporated Applications** 0.5% to Less Than 3% ORGANIC MATTER Sencor® DF Lb/Acre **DUAL® 8E Pt/Acre SOIL TEXTURE** COARSE1 (Loamy sand, sandy loam) 1/3 1-1/4 1-1/2 MEDIUM (Loam, silt loam, silt) 1/2 FINE (Silty clay loam<sup>2</sup>, sandy clay loam, silty 2/3 2 clay, sandy clay, clay loam, clay) MISSISSIPPI DELTA ONLY (Silty clay, clay) 2/3 to 5/6 2 3% or Greater ORGANIC MATTER 1-1/2 1/3 COARSE1 (Loamy sand, sandy loam) MEDIUM (Loam, silt loam, silt) 1/2 2 FINE (Silty clay loam<sup>2</sup>, sandy clay loam, silty 2/3 2 to 2-1/2 clay, sandy clay, clay loam, clay) MISSISSIPPI DELTA ONLY (Silty clay, clay) 2/3 to 5/6 2 to 2-1/2 1 Do not use on sand soils. Do not apply Sencor® DF plus Dual® tank mix preplant incorporated on sand or loamy sand with less 2% organic matter or

## <sup>2</sup> Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S. SPECIAL PRECAUTIONS (Sencor® DF and Dual®):

crop injury may occur.

• For additional precautions, restrictions, limitations, and sprayer clean-up information refer to the appropriate sections of this label and the Dual® label.

#### SENCOR® DF PLUS PROWL®

Sencor® DF plus Prowl® Overlay Application: Apply a preplant incorporated treatment of Prowl® as directed on that product label for use on soybeans. Follow with a preemergence treatment of Sencor® DF as directed on this label for use on soybeans.

## Sencor® DF plus Prowl® Tank mix Application

**Preplant Incorporated Application:** Prepare the soil by plowing or disking to mix previous crop residues into the soil to a depth of 4 to 6 inches.

For specific application information refer to the "General Information" section in the front of this label.

Incorporate the tank mixture into the top 1 or 2 inches of soil within 7 days after application according to label directions for Prowl®. Mechanical incorporation is not required if a rain of one-quarter inch or more occurs within 7 days after application. Soybeans must be planted no later than 7 days after application of the tank mixture.

Preemergence Application: Except for minimum and no-tillage systems, the seed bed should be firm and free of trash and clods,

For specific application information refer to the "General Information" section in the front of this label. Do not apply Prowl® preemergence north of Interstate 80. This application must be made after planting and before crop emergence. Do not incorporate.

If cultivation is necessary because of soil crusting, soil compaction or weed germination before rain or irrigation, use shallow tilling equipment such as a rotary hoe that does not damage soybeans.

Mixing Instructions: Refer to the "General Information" section in the front of this label.

For information on applying Sencor® DF in fluid or dry fertilizer refer to the "Application Of Sencor® DF In Fluid Fertilizers" or "Commercial Impregnation And Application Of Sencor® DF On Dry Bulk Fertilizer" under the "General Information" section in the front of this label.

## **SOUTHERN STATES AND EASTERN COASTAL PLAINS**

For use only in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, Southeastern Missouri "Bootheel" Region and Coastal Plains of Delaware\*, Maryland\*, New Jersey\* and Virginia\*.

\*Sencor® DF plus Prowl® is not recommended for use on soils with less than 2% organic matter in the coastal plain of New Jersey or the Delmarva Peninsula.

BROADCAST RATES Sencor® DF Plus Prowl® Tank Mix Applications						
SOIL TEXTURE	Sencor® DF Lb/Acre	Prowi® Pt/Acre				
COARSE <sup>1</sup> (Sandy loam, loamy sand)	1/3	1-1/2				
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	1/2	1-1/2				
FINE (Silty clay, silty clay loam², clay, clay loam)	2/3	1-1/2 to 2				

<sup>&</sup>lt;sup>1</sup> Do not use on sand soils. Do not use on loamy sand or sandy loam containing less than 1% organic matter.

Do not use on muck or peat soils.

## NORTHEASTERN AND NORTH CENTRAL STATES

For use only in Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Nebraska, New York, North Dakota, Ohio, Pennsylvania, South Dakota, Wisconsin and Missouri (except the "Bootheel" Region).

## **BROADCAST RATES**

## Sencor® DF Plus Prowl® Tank Mix Applications

	1/2% to 3% ORGANIC MATTER	
SOIL TEXTURE	Sencor® DF Lb/Acre	Prowl® Pt/Acre
COARSE <sup>1</sup> (Sandy loam, loamy sand)	1/3	1
MEDIUM (Loam, silt loam, sandy clay, sandy clay loam)	1/2	1-1/2 to 2
FINE (Silty clay, silty clay loam <sup>2</sup> , clay, clay loam)	1/2 to 2/3	1-1/2 to 2
·	Over 3% ORGANIC MATTER	
COARSE <sup>1</sup> (Sandy loam, loamy sand)	1/2	1-1/2
MEDIUM (Loam, silt loam, sandy clay, sandy	1/2 to 2/3	1-1/2 to 2

<sup>&</sup>lt;sup>2</sup> Silty clay loam soils are transitional soils and may be classified as medium textured soils in certain regions of the U.S.

clay (oam)		
FINE (Silty clay, silty clay loam <sup>2</sup> , clay, clay loam)	2/3 to 5/6	2 to 2-1/2
<sup>1</sup> Do not use on sand soils. Do not use on loamy sand or medium and fine soils, use the higher rate if heavy wee		ic matter. Where a range of rates is shown for
<sup>2</sup> Silty clay loam soils are transitional soils and may be cla	assified as medium textured soils in certain a	areas of the U.S.

Do not use on muck or peat soils.

## SPECIAL PRECAUTIONS (Sencor® DF plus Prowl®):

- Soil incorporation deeper than recommended will reduce weed control and can result in crop injury.
- For additional precautions, restrictions, limitations, and sprayer clean-up information, refer to the appropriate sections of this label and the Prowl® label.

## **SENCOR® DF PLUS LASSO®**

## Sencor® DF Plus Lasso® Tank mix Application:

#### **PREEMERGENCE**

Sencor® DF may be used in a tank mix combination with Lasso® as a preemergence band or broadcast application to soybeans in accordance with the specified soil types and dosages recommended.

For specific information regarding spray equipment, dilution rates, mixing, directions for use, methods of application, limitations and restrictions refer to the appropriate section of this label.

Refer to the Lasso® label for pertinent recommendations, directions for use, restrictions and any additional weeds not specified on this label.

Do not use on muck soils.

<b>C</b>	RECOMMENDED		Detect)
SOIL TEXTURE	Sencor® DF  Lb/Acre	ergence Application (Broadcast  Plus	Lasso® Qt/Acre
	1/2 to 3% Org	anic Matter	
COARSE <sup>1</sup> (Sandy loam)	1/3	plus	1-1/2 to 2
MEDIUM <sup>2</sup> (Loam, silt loam, silt, sandy clay, sandy clay loam)	1/2	plus	1-1/2 to 2
<b>FINE</b> <sup>2</sup> (Silty clay, silty clay loam <sup>3</sup> , clay, clay loam)	2/3	plus	2
MISSISSIPPI DELTA ONLY (Silty clay to heavy clay)	1-1/3	plus	2 to 2-1/2
	Greater than 3%	Organic Matter	
COARSE <sup>1</sup> (Sandy loam)	1/2	plus	1-1/2 to 2
MEDIUM <sup>2</sup> (Loam, silt loam, silt, sandy clay, sandy clay loam)	2/3	plus	1-1/2 to 2
FINE <sup>2</sup> (Silty clay, silty clay loam <sup>3</sup> , clay, clay loam)	2/3 to 5/6	plus	2 to 2-1/2
MISSISSIPPI DELTA ONLY (Silty clay to heavy clay)	1-1/3	plus	2 to 2-1/2

<sup>&</sup>lt;sup>1</sup> Do not use Sencor® DF plus Lasso® on sand or loamy sand soils with less than 2% organic matter.

PREPLANT INCORPORATED: For specific application information refer to the "General Information" section in the front of this label.

Apply Sencor® DF plus Lasso® preplant incorporated if furrow irrigation is used or when a period of dry weather after application is expected. If soybeans are planted on beds, apply and incorporate the tank mixture after bed formation. Apply within 7 days prior to planting and shallowly incorporate into the upper 1 to 2 inches of soil.

Do not use on muck soils.

<sup>&</sup>lt;sup>2</sup> For control of lambsquarters, redroot pigweed, wild mustard, green and yellow foxtails on alkaline (calcareous) soils in Minnesota, Nebraska, South Dakota, and North Dakota only, apply Sencor® DF at rates of 1/3 lb/acre on medium soils and 1/3 to 1/2 lb/acre on fine soils regardless of soil organic matter percentage (use 1/2 lb only where soil pH is less than 7.5 and weed pressure is heavy). The 1/3 lb/acre rate of Sencor® DF in tank mix combination with Lasso® can be applied regardless of soil pH. For control of other weeds use Sencor® DF at full rates recommended in the table above, but note that crop injury may occur on soils having a calcareous surface area or a pH of 7.5 or higher.

<sup>&</sup>lt;sup>3</sup> Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

	RECOMMENDED APPLICATIONS  INK Mix Preplant Incorporated Application	ons (Broadcast Rates)
SOIL TEXTURE	Sencor® DF Lb/Acre	Lasso® Qt/Acre
COARSE <sup>1</sup> (Loamy sand <i>[over 2% organic matter]</i> , sandy loam)	1/3	2 to 2-1/2
MEDIUM (Loam, silt loam, silt)	1/2	2-1/2 to 3
FINE (Silty clay loam <sup>2</sup> , sandy clay loam, silty clay, sandy clay, clay loam, clay)	2/3	2-1/2 to 3
MISSISSIPPI DELTA ONLY (Silty clay, clay)	2/3 to 5/6	2-1/2 to 3

<sup>&</sup>lt;sup>2</sup> Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

## SPECIAL PRECAUTIONS (Sencor® DF Plus Lasso®):

 For additional precautions, restrictions, limitations and sprayer clean-up information, refer to the appropriate sections of this label and the Lasso label.

## **SENCOR® DF PLUS COMMAND® 4EC**

Sencor® DF may be applied in combination with Command® 4EC as a preplant or shallow incorporated application for the control of certain weeds in soybeans. Consult the Command® 4EC label for specific directions on use, recommendations, restrictions and any additional weeds not specified on this label.

Mixing: Refer to the "General Information" section in the front of this label.

**Application:** Sencor® DF plus Command® 4EC may only be applied with ground equipment as a preplant or shallow incorporated application. Sencor® DF plus Command® 4EC should be immediately incorporated into the top 1 to 3 inches after application unless surface is dry. On dry soils, incorporate into the top 1-3 inches within 3 hours of tank mix application.

Do not apply this tank mix within 1000 feet of towns and subdivisions, commercial vegetable, fruit, nurseries or greenhouse operations.

A minimum of 15 gallons spray volume per acre is recommended with appropriate nozzle types and sizes to produce a coarse spray droplet. The use of an approved agricultural drift reducing additive is recommended for application volumes of 15-40 gallons per acre. The use of an approved agricultural drift reducing additive is required at spray volumes of 10 to 15 gallons per acre.

**NOTE:** Off-site movement of Command® 4EC spray drift or vapors can cause foliar whitening or yellowing of some vegetation. Prior to application of Command® 4EC, read and strictly follow all precautions and application instructions as set forth in that label.

For additional information on application, refer to the "General Information" section in the front of this label and the Command® 4EC label.

## WEEDS CONTROLLED:

Bristly Starbur	Galinsoga	Prickly Sida/Teaweed	Smartweed
Carpetweed	Jimsonweed	Purslane	Spurred Anoda
Copperleaf	Knotweed	Common Ragweed	Velvetleaf
Florida Beggarweed	Lambsquarters	Redweed	Venice Mallow
Florida Pusley	Pigweeds	Sesbania	Wild Mustards
Barnyardgrass*	Foxtails (Green, Giant, Yellow*,	Johnsongrass (seedling)*	Texas Panicum
Bluegrass	Robust Purple)	Fall Panicum*	Witchgrass
Broadleaf Signalgrass	Goosegrass		
Crabgrass*		:	

<sup>\*</sup> Use 2 pt/A Command® 4EC on coarse and medium textured soils with high populations of these weeds

	ECOMMENDED APPLICATIONS	
SENCOR® DF Plus COMMAND®	4EC Tank Mix Preplant Incorporated A	Application (Broadcast Rates)
SOIL TEXTURE <sup>1</sup>	SENCOR® DF (Lb/Acre)	COMMAND® 4EC Pt/Acre
	0.5% to 3% ORGANIC MATTER	
COARSE <sup>2</sup> (Sandy loam, loamy sand)	1/3	1-1/2 to 2
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	1/3 to 1/2	1-1/2 to 2
FINE (Silty clay, silty clay loam <sup>3</sup> , clay, clay loam)	1/3 to 1/2	1-1/2 to 2
	Over 3%ORGANIC MATTER	
COARSE <sup>2</sup> (Sandy loam, loamy sand)	1/3	1-1/2 to 2
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	1/3 to 1/2	1-1/2 to 2
FINE (Silty clay, silty clay loam³, clay, clay loam)	1/2 to 2/3	1-1/2 to 2
1		

<sup>&</sup>lt;sup>1</sup> Crop injury may occur on soils having a calcareous surface area or a pH of 7.1 or higher.

#### SPECIAL PRECAUTIONS (Sencor® DF plus Command® 4EC):

- Do not rotate to wheat, barley, alfalfa or seed corn in the fall of the year of application or in the spring of the following year as crop injury may occur. Do not rotate any crop not listed on this label for 18 months following application of Sencor® DF.
- Do not apply when weather conditions favor drift. Do not use treated vines for feed or forage.
- Observe all cautions and limitations on labeling of all products used in mixtures.
- Do not apply aerially or through irrigation equipment.

## SENCOR® DF PLUS COMMENCE® 5.25 EC

Sencor® DF plus Commence® 5.25 EC Tank mix Early Preplant Incorporated Application: Sencor® DF in a tank mix with Commence® 5.25 EC may be applied broadcast preplant incorporated up to 30 days before planting soybeans for the control of certain broadleaf weeds and grasses. Refer to the Commence® 5.25 EC herbicide label for additional directions for use, weeds controlled, recommendations, restrictions and limitations not specified on this label.

Mixing: Refer to the "General Information" section on this label.

Application: For information on applying Sencor® DF, refer to the "General Information" section on this label.

	RECOMMENDED APPLICATIONS	•
Sencor® DF	Plus Commence® 5.25 EC Tank Mix Early Preplant In	corporated Application <sup>1</sup>
SOIL TEXTURE	Sencor® DF Lb/Acre	Commence® 5.25 EC Pt/Acre
	1/2 to 3% ORGANIC MATTER	
COARSE <sup>2</sup>	1/2	1-1/3 to 2
MEDIUM	2/3	2 to 2-1/4
FINE	2/3	2 to 2/3
	Over 3% ORGANIC MATTER	
COARSE <sup>2</sup>	1/2	1-1/3 to 2
MEDIUM	2/3	2 to 2-1/4
FINE	1	2 to 2/3

For use on soils with a pH of 7.5 or lower.

## **RESTRICTIONS AND LIMITATIONS:**

- Do not apply aerially or through irrigation equipment.
- Do not apply when weather conditions favor drift. Do not allow sprays to drift onto adjacent desirable plants. Do not use treated vines for feed or forage.
- Do not rotate to wheat, barley, alfalfa or seed corn in the fall of the year of application or in the spring of the following year as crop injury may occur. Do not rotate any crop not listed on this label for 18 months following application of Sencor® DF.

<sup>&</sup>lt;sup>2</sup> Do not use on coarse soils with less than 1% organic matter.

<sup>3</sup> Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

<sup>&</sup>lt;sup>2</sup> Do not use on coarse soils with less than 1% organic matter.

Sencor® DF plus Commence® 5.25 EC Tank mix Preplant Incorporated: Sencor® DF may be tank mixed with Commence® 5.25 EC for preplant incorporated application to control certain weeds in soybeans. Refer to the "General Information" section of this label for information on mixing, application, restrictions, special precautions and weeds controlled by Sencor® DF. See appropriate sections of the Commence® 5.25 EC herbicide label for additional precautionary statements, directions for use, recommendations and additional weeds controlled.

	RECOMMENDED APPLICATIONS 25 EC Tank Mix Preplant Incorporated	Annipation (Proadcast Pates)
SOIL TEXTURE <sup>1</sup>	Sencor® DF Lb/Acre	Commence® 5.25 EC Pt/Acre
	1/2% to 3% ORGANIC MATTER	
COARSE <sup>2</sup> (Sandy loam, loamy sand)	1/3	1-1/3 to 2
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	1/3 to 1/2	2 to 2-1/4
FINE (Silty clay, silty clay loam <sup>3</sup> , clay, clay loam)	1/3 to 1/2	2 to 2/3
	Over 3% ORGANIC MATTER	
COARSE <sup>2</sup> (Sandy loam, loamy sand)	1/3	1-1/3 to 2
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	1/3 to 1/2	2 to 2-1/4
FINE (Silty clay, silty clay loam <sup>3</sup> , clay, clay loam)	1/2 to 2/3	2 to 2/3

<sup>&</sup>lt;sup>1</sup>Crop injury may occur on soils having a calcareous surface area or a pH of 7.1 or higher.

## SPECIAL PRECAUTIONS (Sencor® DF plus Commence® 5.25 EC):

- Do not rotate to wheat, barley, alfalfa or seed corn in the fall of the year of application or in the spring of the following year as crop injury may occur. Do not rotate any crop not listed on this label for 18 months following application of Sencor® DF.
- Do not apply when weather conditions favor drift. Do not use treated vines for feed or forage. Do not apply aerially or through irrigation equipment.
- Do not allow sprays to drift onto adjacent desirable plants.

## SENCOR® DF PLUS FREEDOM® 3 EC

Sencor® DF may be tank mixed with Freedom® 3 EC for preplant incorporated application to control certain weeds in soybeans. Refer to the "General Information" section of this label for information on mixing, application, restrictions, special precautions and weeds controlled by Sencor® DF. See appropriate sections of the Freedom® 3 EC herbicide label for additional precautionary statements, directions for use, recommendations and additional weeds controlled.

Do not use on muck soils.

Do not allow sprays to drift onto adjacent desirable plants.

<sup>&</sup>lt;sup>2</sup>Do not use on coarse soils with less than 1% organic matter.

<sup>&</sup>lt;sup>3</sup> Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

Sencor® DF Plu	RECOMMENDED AF us Freedom® 3 EC Tank Mix Preplan		(Broadcast Rates)
SOIL TEXTURE	Sencor® DF Lb/Acre	Plus	Freedom® 3 EC Qt/Acre
	1/2% to 3% Orga	nic Matter	
COARSE 1 (Sandy loam)	1/3	plus	2-3/4 to 3-1/2
MEDIUM 2 (Loam, silt loam, silt, sandy clay, sandy clay loam)	1/2	plus	2-3/4 to 3-1/2
FINE <sup>2</sup> (Silty clay, silty clay loam <sup>3</sup> , clay, clay loam)	2/3	plus	3-1/2 to 4
MISSISSIPPI DELTA ONLY (Silty clay to heavy clay)	1-1/3	plus	3-1/2 to 4-1/2
	Greater than 3% Or	ganic Matter	
COARSE 1 (Sandy loam)	1/2	plus	3 to 3-1/2
MEDIUM <sup>2</sup> (Loam, silt loam, silt, sandy clay, sandy clay loam)	2/3	plus	3-1/2 to 4
FINE <sup>2</sup> (Silty clay, silty clay loam <sup>3</sup> , clay, clay loam)	2/3 to 5/6	plus	3-1/2 to 4-1/2
MISSISSIPPI DELTA ONLY (Silty clay to heavy clay)	1-1/3	plus	3-1/2 to 4-1/2

<sup>&</sup>lt;sup>1</sup> Do not use Sencor® DF plus Freedom® 3 EC on sand or loamy sand soils with less than 2% organic matter.

## SENCOR® PLUS CANOPY® 75 DF PLUS A GRASS HERBICIDE

A tank mix combination of Sencor® DF plus Canopy 75 DF plus a registered and recommended grass herbicide (Dual®, Lasso®, Prowl®, Sonalan® or Treflan®) is recommended for control of the following weeds in soybeans:

## **WEEDS CONTROLLED**

		ANNUAL BE	ROADLEAVES		
Bristly Starbur		Knotweed		Russian Thistle	
Carpetweed .		Kochia		Sesbania	
Cocklebur		Lambsquarters		Shepherds	spurse
Copperleaf, Hophornbeam	Copperleaf, Hophornbeam			Smartwee	d
Florida Beggarweed		Prickly Sida/Teaweed		Spurred Anoda	
Florida Pusley		Purslane		Velvetleaf	
Galinsoga		Ragweed, Common	•	Venice mallow	
Jimsonweed		Redweed		Wild must	ard
		ANNUAL	GRASSES		
Barnyardgrass	Crabgrass		Johnsongrass (seedling)		Sandbur
Bluegrass	Crowfootgras	ass Junglerice			Sprangletop
Broadleaf signalgrass	Foxtails	Panicum, Fall			Stinkgrass
Browntop Millet	Goosegrass	Panicum, Texas			

Tank mix combinations which include Dual®, Lasso® or Prowl® can be applied preemergence broadcast or preplant incorporated broadcast. When Sonalan® or Treflan® are used in the tank mix, apply preplant incorporated broadcast. Refer to the table below for recommended rates of each product to be used in tank mix combinations:

<sup>&</sup>lt;sup>2</sup> For control of lambsquarters, redroot pigweed, wild mustard, green and yellow foxtails on alkaline (calcareous) soils in Minnesota, Nebraska, South Dakota, and North Dakota only, apply Sencor® DF at rates of 1/3 lb/acre on medium soils and 1/3 to 1/2 lb/acre on fine soils regardless of soil organic matter percentage (use 1/2 lb only where soil pH is less than 7.5 and weed pressure is heavy). The 1/3 lb/acre rate of Sencor® DF in tank mix combination with Freedom® 3 EC can be applied regardless of soil pH. For control of other weeds use Sencor® DF at full rates recommended in the table above, but note that crop injury may occur on soils having a calcareous surface area or a pH of 7.5 or higher.

<sup>&</sup>lt;sup>3</sup> Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

RECOMMENDED APPLICATIONS  Sencor® DF Plus Canopy® 75 DF Plus A Grass Herbicide (Broadcast Rates)				
PRODUCT		SOIL TEXTURE <sup>1</sup>		
	COARSE <sup>2</sup>	MEDIUM	FINE	
Sencor® DF (Lb/Acre)	1/3	1/3 to 1/2 <sup>3</sup>	1/2 to 2/3 <sup>3</sup>	
Canopy® DF (Oz/Acre)	3	3	3 to 4	
Treflan® (Pt/Acre)	1	1 to 1/2	2	
Dual® (Pt/Acre)	1-1/4 to 1-1/2	1-1/2 to 2	2 to 2-1/2	
Prowl® (Pt/Acre)	1 to 1/2	1-1/2 to 2	1-1/2 to 2-1/2	
Lasso® (Qt/Acre)	2 to 2-1/2	2-1/2 to 3	2-1/2 to 3	
Sonalan® (Pt/Acre)	1-1/4 to 2	1-1/4 to 2-1/2	2-1/4 to 3	

<sup>&</sup>lt;sup>1</sup> Do not use on soils with a pH greater than 7.0.

**IMPORTANT:** If weeds escape in fields treated with these tank mix combinations, postemergence application of a registered and recommended herbicide will be needed for control.

Refer to the "General Information" section of this label for mixing and application directions.

## **SPECIAL PRECAUTIONS:**

- For additional precautions, restrictions, limitations and sprayer clean-up information, refer to the appropriate sections of the labels for Sencor® DF and Canopy® 75 DF.
- Do not use treated vines for feed or forage.

## SENCOR® DF PLUS COMMAND® 4EC PLUS A GRASS HERBICIDE

Sencor® DF may be applied with Command® 4EC and a grass herbicide (Treflan®, Lasso®, Dual®, Prowl® or Sonalan®) for the control of certain broadleaf weeds and grasses in soybeans. This combination will provide improved control of heavy infestations of velvetleaf, jimsonweed and common ragweed. Sencor® DF and Command® 4EC plus a grass herbicide may be applied preplant incorporated broadcast. Consult the Command®, Treflan®, Lasso®, Dual®, Prowl® or Sonalan® labels for specific directions for use, recommendations, restrictions and additional weeds controlled not specified on this label.

Mixing: Refer to the "General Information" section in the front of this label.

Application: For specific application information, refer to the "General Information" section in the front of this label.

## **WEEDS CONTROLLED**

	ANN	UAL BROADLEAVES	
Bristly Starbur	Knotweed	Ragweed, Common	Smartweed
Carpetweed	Kochia	Redweed	Spotted spurge
Copperleaf, Hophornbeam	Lambsquarters	Russian Thistle	Spurred Anoda
Florida Beggarweed	Pigweeds	Sesbania	Velvetleaf
Florida Pusley	Prickly Sida/Teaweed	Shepherdspurse	Venice mallow
Galinsoga	Purslane	Sicklepod	Wild Mustard
Jimsonweed		•	
	A1	NNUAL GRASSES	
Barnyardgrass	Browntop Millet	Foxtails	Panicum, Fall
Bluegrass	Crabgrass	Goosegrass	Witchgrass
Broadleaf signalgrass	Crowfootgrass	Johnsongrass (seedling)	

Sencor® DF and Command® plus Treflan®, Lasso®, Dual®, Prowl® or Sonalan® will provide suppression (reduce the competition) of cocklebur and sunflower.

<sup>&</sup>lt;sup>2</sup> Refer to "Soil Texture" paragraph on this label for specific soil classification.

<sup>&</sup>lt;sup>3</sup> Use the lower rate of Sencor® DF in preplant incorporated tank mix as in those situations where soils within a field vary extremely in texture or organic matter content.

RECOMMENDED APPLICATIONS  Sencor® DF Plus Command® 4EC Plus A Grass Herbicide (Broadcast Rates)				
PRODUCT	SOIL TEXTURE <sup>1</sup>			
	COARSE	MEDIUM	FINE	
Sencor® DF (Lb/Acre)	1/3	1/3 to 1/2 <sup>2</sup>	1/2 to 2/3 <sup>2</sup>	
Command® 4EC³ (Pt/Acre)	1/2 to 3/4	1/2 to 3/4	1/2 to 3/4	
Treflan® (Pt/Acre)	1	1-1/2	2	
Dual® (Pt/Acre)	1-1/4 to 1-1/2	1-1/2 to 2	2 to 2-1/2	
Prowl® (Pt/Acre)	1-1/2	1-1/2 to 2	1-1/2 to 2-1/2	
Lasso® (Qt/Acre)	2 to 2-1/2	2-1/2 to 3	2-1/2 to 3	
Sonalan® (Pt/Acre)	1-1/4 to 2	1-3/4 to 2-1/2	2-1/4 to 3	

<sup>&</sup>lt;sup>1</sup> Refer to "Soil Texture" paragraph on this label for specific soil classification. On coarse textured soils with a calcareous surface area or a pH of 7.5 or higher, do not use on loamy sand or sandy loam soils with less than 1% organic matter.

## **SENCOR® PLUS SCEPTER PLUS A GRASS HERBICIDE**

Sencor® DF may be applied with Scepter® herbicide and a grass herbicide (Treflan®, Lasso®, Dual®, Prowl® or Sonalan®) for the control of certain broadleaf weeds and grasses in soybeans. Sencor® DF and Scepter® plus Treflan® or Sonalan® may be applied preplant incorporated broadcast. Sencor® DF and Scepter® plus Lasso®, Dual® or Prowl® may be applied preplant incorporated, preemergence broadcast or in a band application.

Consult the Scepter®, Treflan®, Lasso®, Dual®, Prowl® or Sonalan® labels for specific directions for use, recommendations, restrictions and additional weeds controlled not specified on this label.

Mixing: Refer to the "General Information" section in the front of this label.

Application: For specific application information, refer to the "General Information" section in the front of this label.

Weeds Controlled: Sencor® DF plus Scepter® plus Treflan®, Lasso®, Dual®, Prowl® or Sonalan® will control the following broadleaf weeds and grasses:

## **WEEDS CONTROLLED**

ANNUAL BROADLEAVES							
Bristly Starbur	Galinsoga	Prickly Sida/Teaweed	Smartweed				
Buffalobur	Jimsonweed	Purslane	Spotted spurge				
Carpetweed	Knotweed	Ragweed, Common Redweed	Spurred Anoda				
Cocklebur	Kochia	Russian Thistle	Sunflower				
Coffee Senna	Lambsquarters	Sesbania	Velvetleaf				
Copperleaf, Hophornbeam	Morningglory, pitted	Shepherdspurse	Venice mallow				
Florida Beggarweed	Morningglory, smallflower	Sicklepod	Wild mustards				
Florida Pusley	Pigweeds						
	ANI	NUAL GRASSES					
Barnyardgrass	Browntop Millet	Foxtails	Panicum, Fall				
Bluegrass	Crabgrass	Goosegrass	Witchgrass				
Broadleaf signalgrass	Crowfootgrass	Johnsongrass (seedling)					

Sencor® DF and Scepter® plus Treflan®, Lasso®, Dual®, Prowl® or Sonalan® will suppress (reduce the competition of) ivyleaf and tall morningglory, and red rice.

<sup>&</sup>lt;sup>2</sup> The higher rate of Sencor® DF is recommended for the control of sicklepod and hemp sesbania. Use the lower rate of Sencor® DF in the preplant incorporated tank mix on soils having a calcareous surface area or a pH of 7.5 or higher, and in those situations where soils within a field vary extremely in texture or organic matter content.

<sup>&</sup>lt;sup>3</sup> Higher rate is recommended under moderate to heavy weed infestations.

Sencor® DF Plus Scepter® Plus A Grass Herbicide (Broadcast Rates)								
PRODUCT	SOIL TEXTURE <sup>1</sup>							
	COARSE	MEDIUM	FINE					
Sencor® DF (Lb/A)	1/3	1/3 to 1/2²	1/2 to 2/3 <sup>2</sup>					
Scepter® (1.5 lb/Gal liquid³Pt/A)	1/3 to 1/2	1/3 to 1/2	1/3 to 1/2					
- or -								
Scepter® 70 DG <sup>3</sup> (Oz/A)	1.4 to 2.1	1.4 to 2.1	1.4 to 2.1					
Treflan® (Pt/A)	1	1-1/2	2					
Dual® (Pt/A)	1-1/4 to 1-1/2	1-1/2 to 2	2 to 2-1/2					
Prowl® (Pt/A)	1 to 1/2	1-1/2 to 2	1-1/2 to 2-1/2					
Lasso® (Qt/A)	2 to 2-1/2	2-1/2 to 3	2-1/2 to 3					
Sonalan® (Pt/A)	1-1/4 to 2	1-3/4 to 2-1/2	2-1/4 to 3					

<sup>&</sup>lt;sup>1</sup> Refer to "Soil Texture" paragraph on this label for specific soil classification. On coarse textured soils with a calcareous surface area or a pH of 7.5 or higher, do not use on loamy sand or sandy loam soils with less than 1% organic matter.

## SENCOR® PLUS PURSUIT® AND A GRASS HERBICIDE

Sencor® DF may be tank mixed with Pursuit® herbicide and a registered and recommended grass herbicide (Dual®, Lasso®, Prowl®, Sonalan® or Treflan®) for control of certain broadleaf and grass weeds in soybeans. Refer to the product labels for Pursuit®, Dual®, Lasso®, Prowl®, Sonalan® or Treflan® for additional directions for use, recommendations, restrictions and limitations not included on this label.

Tank mix combinations of Sencor® DF, Pursuit® and Dual®, Lasso® or Prowl® can be applied broadcast preemergence or preplant incorporated. When the grass herbicide used is Sonalan® or Treflan®, apply the tank mix broadcast preplant incorporated.

Mixing and Application: Refer to the "General Information" section of this label for directions on mixing and application of Sencor® DF.

	RECOMMENDED APPLICATIONS	
	Sencor® DF Plus Pursuit® and a Grass Herbicide	e*
SOIL TEXTURE	Sencor® DF (Lb/Acre)	Pursuit® (Oz/Acre)
COARSE	1/3	4
MEDIUM	2/5 to 1/2	4
FINE	1/2 to 2/3	4

<sup>\*</sup>For control of grass weeds, include Dual®, Lasso®, Prowl®, Sonalan® or Treflan® at label rates in the tank mix with Sencor® DF and Pursuit® herbicides.

## **RESTRICTIONS AND LIMITATIONS:**

- Do not apply this tank mix with aerial or irrigation equipment. Do not apply when weather conditions favor drift, or allow sprays to drift onto adjacent desirable plants. Do not use treated vines for feed or forage. Refer to appropriate sections of the Pursuit herbicide label for restrictions on use area and rotational crops.
- Observe all cautions and limitations on the labeling of all products used in mixtures.

## **SENCOR® PLUS PURSUIT® PLUS HERBICIDE**

Sencor® DF may be tank mixed with Pursuit® Plus herbicide for broadcast preemergence or preplant incorporated application to soybeans for control of certain broadleaf and grass weeds. Refer to the Pursuit® Plus herbicide label for additional directions for use, recommendations, restrictions and limitations not included on this label.

Mixing and Application: Refer to the "General Information" section of this label for directions on mixing and application of Sencor® DF.

<sup>&</sup>lt;sup>2</sup> The higher rate of Sencor® DF is recommended for preemergence tank mix application and for the control of sicklepod and hemp sesbania. Use the lower rate of Sencor® DF in the preplant incorporated tank mix on soils having a calcareous surface area or a pH of 7.5 or higher, and in those situations where soils within a field vary extremely in texture or organic matter content.

<sup>&</sup>lt;sup>3</sup> Higher rate is recommended under moderate to heavy weed infestations.

	RECOMMENDED APPLICATIONS					
Sencor® DF Plus Pursuit® Plus Herbicide (Broadcast Rates)						
SOIL TEXTURE	Sencor® DF (Lb/Acre)	Pursuit® Plus (Pt/Acre)				
COARSE	1/3	2-1/2				
MEDIUM	2/5 to 1/2	2-1/2				
FINE	1/2 to 2/3	2-1/2				

## **RESTRICTIONS AND LIMITATIONS:**

- Do not apply this tank mix with aerial or irrigation equipment. Do not apply when weather conditions favor drift, or allow sprays to drift onto desirable plants.
- Do not use treated vines for feed or forage.
- Refer to appropriate sections of the Pursuit® Plus herbicide label for restrictions on use area and rotational crops.

## SENCOR® DF PLUS LINURON® PLUS (LASSO® OR DUAL®)

Sencor® DF plus Linuron® plus (Lasso® or Dual®) Tank mix Application: Sencor® DF may be applied in combination with Linuron® 50 DF or 4L and Lasso® 4 or Dual® 8 EC as a preemergence application for the control of certain weeds in soybeans. Consult the Linuron®, Lasso®, or Dual® labels for specific directions for use, recommendations, restrictions and any additional weeds not specified on this label.

Mixing: Refer to the "General Information" section in the front of this label.

**Application:** Applications can be made only with ground spray equipment in accordance with specified soil types and dosage rates. For specific application information, refer to the "General Information" section in the front of this label.

Sencor® Plus Linuron® Plus (Lasso® or Dual®) Broadcast Rates (0.5% to 3% Organic Matter Only)								
	SOIL TEXTURE							
Product	COARSE <sup>1</sup> (Sandy, loamy sand, sandy loam)	MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	FINE (Silty clay, silty clay loam², clay clay loam)					
Sencor® DF (Lb/Acre)	1/6 to 1/4	1/4 to 1/3	1/3 to 1/2					
Linuron® 50 DF (Lb/Acre)	1/3 to 1/2	1/2 to 3/4	3/4 to 1-1/2					
or Linuron® 4L (Pt/Acre)			·					
Lasso® 4 (Qt/Acre)	3/4 to 1	1 to 1-1/2	1-1/4 to 2					
Dual® 8 EC (Pt/Acre)	1 to 1-1/4	1-1/4 to 1-1/2	1-1/2 to 2					

<sup>&</sup>lt;sup>1</sup> Do not use Sencor® DF plus Linuron® plus (Lasso® or Dual®) on sand soils with less than 1% organic matter.

## SPECIAL PRECAUTIONS (Sencor® DF plus Linuron® plus (Lasso® or Dual®)):

• For additional precautions, restrictions, limitations, and sprayer clean-up information, refer to the appropriate sections of this label and the Linuron® label and the Lasso® or Dual® labels.

FOR USE IN COARSE (LIGHT) SOILS In Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia.

Sencor® DF herbicide is recommended alone or in combination with Treflan®, Lasso® or Dual® for use in coarse-textured, low organic matter soils in the states listed above for the control of certain weeds in soybeans. Refer to the appropriate sections of this label and the Treflan®, Lasso® or Dual® label for specific directions for use, recommendations, restrictions and any additional weeds not specified on this label.

Mixing: Refer to the "General Information" section in the front of this label.

Application: For specific application information, refer to the "General Information" section in the front of this label.

<sup>&</sup>lt;sup>2</sup> Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

Sencor® DF (Alone) Preemergence Application (Broadcast Rates)						
ORGANIC MATTER	SENCOR® DF Lb/ACRE					
0.5% or Above	1/3 to 1/2 <sup>2</sup>					
	ORGANIC MATTER					

Sencor® DF In Combination With Other Herbicides: Sencor® DF is recommended in a tank mix combination with Treflan® as a preplant incorporated application or as a preemergence overlay application following a preplant incorporated application of Treflan®. Sencor® DF is also recommended for use as a preemergence application in combination with Lasso® or Dual®.

	FOR USE IN COARSE (LI 0.5% or Above ORGAN (Broadcast Rate	IC MATTER					
SOIL TEXTURE	URE COMBINATION Plus PRODUCT/ACRE						
COARSE (LIGHT) SOILS Sand <sup>1</sup> , Loamy sand, Sandy loam	Preplant Incorporated Treflan® 4EC 1 pt	plus	1/3 to 1/2 <sup>2</sup>				
	Preemergence           Lasso® 4E         1-1/2 to 2 qt           Dual® 8E         1-1/4 to 1-1/2 pt	plus	1/3 to 1/2 <sup>2</sup>				

<sup>2</sup> Use the higher rate under heavy weed pressures and/or on soils higher in organic matter.

#### SPECIAL PRECAUTIONS:

- Do not use on sand soils with less than 1% organic matter, or on sandy loam or loamy sand soils with less than 0.5% organic matter.
- For additional precautions, restrictions, limitations and sprayer clean-up information, refer to the appropriate sections of this label and the Treflan®, Lasso®, Dual®, Surflan® or Amiben® labels.

## **BURNDOWN WEED CONTROL - Field Corn and Soybeans**

Sencor® DF can be used as part of a herbicide program for burndown of existing vegetation prior to crop emergence in conservation tillage systems. Sencor® DF may be tank mixed with 2.4-D low volatile ester (LVE), Gramoxone Extra®, or Roundup® / Roundup Ultra® / Touchdown® for control of emerged weeds prior to field corn or soybean emergence. Sencor® DF tank mixes with 2.4-DB®, Fusion®, Poast Plus® or Select® may also be used in soybeans for control of emerged weeds prior to crop emergence. Sencor® DF burndown tank mixes can be applied before planting or prior to crop emergence in the following areas:

## Field Corn:

Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, Ohio, South Dakota, and Wisconsin.

#### Soybeans:

All areas for all products except Fusion® tank mixes - see Fusion® section of this label for recommended states.

Application: Sencor® DF may be applied up to 30 days prior to planting or preemergence. Apply only by ground equipment when Sencor® DF is used for burndown of existing vegetation in conservation tillage systems. Sencor® DF and tank mix partner burndown rates are listed in the following three tables.

<sup>&</sup>lt;sup>2</sup> Use the higher rate under heavy weed pressures and/or on soils higher in organic matter.

SENCOR® DF BURNDOWN RATES FIELD CORN AND SOYBEANS					
CROPS	APPLICATION TIMING	SENCOR® DF RATE (oz/Acre)			
Field corn Iowa Kansas Missouri Nebraska South Dakota	Preplant (0 to 30 days )	2 to 5-1/3			
	Preemergence ,				
Field corn Illinois Indiana Kentucky	Preplant (10 to 30 days )	2 to 5-1/3			
	Preplant (0 to 9 days )	2 to 4			
Michigan Minnesota Ohio Wisconsin	Preemergence				
Soybeans	Preplant (0 to 30 days)	2 to 5-1/3			
·	Preemergence				

## SPECIAL PRECAUTIONS:

Do not apply these treatments after crop emergence. Observe all precautions and limitations on the labeling of all products used in tank mixtures. Refer to the "General Information" section of this label for additional information, precautions, and limitations.

## Field Corn:

- Do not apply on coarse textured soils with less than 1.5% organic matter.
- Do not apply more than 4 oz of Sencor® DF per acre on soils with less than 2% organic matter.
- Do not apply on soils having pH 7.0 or greater.
- Do not apply more than 5-1/3 ounces Sencor® DF (0.25 pound active ingredient) per acre per growing season.
- Corn seed should be planted a minimum of 1-1/2 inches deep.
- Sencor® DF may only be used in hybrid seed corn production fields if both inbred parents are known to be tolerant to Sencor® DF.

#### Soybeans:

- Apply only 2,4-D low volatile ester formulations which are registered and recommended for preplant or burndown use in soybeans.
- Do not apply tank mixtures containing 2,4-D LVE if wind is blowing toward desired susceptible plants (i.e. cotton, tobacco, tomato, etc.) or when wind speeds exceed 6 miles per hour.

**Feeding restrictions.** Corn treated with Sencor® DF may be harvested for silage or grain 60 days after treatment. Soybean vines or hay treated with Sencor® DF may be grazed or fed to livestock 40 days after application. Do not feed hay, forage, fodder or graze 2,4-D, Select®, or Fusion® treated vegetation. Follow the most restrictive preharvest interval of all products used in a tank mixture.

	SENCOR® DF PLUS TANK MIX PARTNER BURNDOWN RATES - FIELD CORN OR SOYBEANS					
PRODUCT	RATE	DIRECTIONS AND REMARKS				
Sencor® DF + 2,4-D LVE®	2 to 5-1/3 oz/A* + 1/4 to 1 lb ai/A	In soybeans, apply at least 7 days preplant when using 2,4-D LVE at 1/4 to 1/2 lb ai/A and at least 30 days preplant with rates greater than 1/2 lb ai/A. Include crop oil concentrate (COC) at the rate of 1 gal/100 gal of spray solution (1% v/v).  In corn, apply at least 7 days preplant or at least 3 days after planting but before corn emergence.				
Sencor® DF + Gramoxone Extra®	2 to 5-1/3 oz/A* + 24 to 48 fl oz/A	Must be applied prior to crop emergence. Use 24 to 32 fluid ounces of Gramoxone Extra® for weeds less than 4 inches in height and 32 to 48 fluid ounces when weeds are 4 to 6 inches in height. Apply in 20 to 60 gallons of water per acre. Include either nonionic surfactant at 1 quart per 100 gallons (0.25% v/v) or crop oil concentrate at 1 gallon per 100 gallons (1% v/v) of spray solution.				
Sencor® DF + Gramoxone Extra® + 2,4-D LVE®	2 to 5-1/3 oz/A* + 24 to 48 fl oz/A + 1/4 to 1 lb ai/A	For this tank mix follow the Directions and Remarks Sections above for Sencor® DF+ 2,4-D LVE® and Sencor® DF + Gramoxone Extra®, paying special attention to crop planting restrictions with 2,4-D LVE®. Include either nonionic surfactant or crop oil concentrate in this tank mix.				
Sencor® DF + Roundup®/ Roundup Ultra® or Touchdown®	2 to 5-1/3 oz/A* + 12 to 24 fl oz/A  or 8 to 16 fl oz/A	Must be applied prior to crop emergence. Use the higher rates as weeds approach the maximum weed heights listed in the "Weeds Controlled" section below. Apply in 10 to 20 gallons of water per acre. With Roundup® and Touchdown®, include nonionic surfactant at 2 quarts per 100 gallons (0.5% v/v) and ammonium sulfate (spray grade) at 17 pounds per 100 gallons of spray solution. With Roundup Ultra®, include ammonium sulfate (spray grade) at 17 pounds per 100 gallons of spray solution. Any glyphosate formulation registered and labeled for use in field corn or soybeans may be tank mixed with Sencor® DF.				
Sencor® DF + Roundup®/ Roundup Ultra® or Touchdown® + 2.4-D LVE®	2 to 5-1/3 oz/A* + 12 to 24 fl oz/A or 8 to 16 fl oz/A + 1/4 to 1 lb ai/A	For this tank mix follow the Directions and Remarks Sections above for Sencor® + 2,4-D LVE and Sencor® + Roundup® / Roundup Ultra® / Touchdown®, paying special attention to planting restrictions with 2,4-D LVE®. Use the adjuvant recommendations under the Sencor® DF + Roundup® / Roundup Ultra® / Touchdown® tank mix. Do not use crop oil concentrate.				

\* If applied to field corn grown in Illinois, Indiana, Kentucky, Michigan, Minnesota, Ohio and Wisconsin, refer to Table 1 for correct Sencor® DF rate based on application timing.

	SENCO	OR® DF PLUS TANK MIX PARTNER BURNDOWN RATES - SOYBEANS ONLY
PRODUCT	RATE	DIRECTIONS AND REMARKS
Sencor® DF + 2,4-DB®	2 to 5-1/3 oz/A + 1/8 to 7/32 lb ai/A	Apply preplant or before soybean emergence. Include nonionic surfactant at 2 quarts per 100 gallons (0.5% v/v) of spray solution.
Sencor® DF + Fusion® + 2,4-D LVE®	2 to 5-1/3 oz/A + 4 to 8 fl oz/A + 1/4 to 1 lb ai/A	For use <b>only</b> in Delaware, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Pennsylvania, South Dakota, Virginia, West Virginia, and Wisconsin. For this tank mix follow the planting restrictions under the Directions and Remarks Section above for Sencor® DF + 2,4-D LVE®. Fusion® rates of 4, 6 and 8 fl. ounces will control certain grasses up to 2, 4 and 6 inches in height, respectively. Include either crop oil concentrate at 1 gallon per 100 gallon (1.0% v/v) or nonionic surfactant at 1 to 2 quarts per 100 gallons (0.25 to 0.5% v/v) of spray solution. Refer to the Fusion® label for additional information.
Sencor® DF + Poast Plus® + 2,4-D LVE®	2 to 5-1/3 oz/A + 8 to 16 fl oz/A + 1/4 to 1 lb ai/A	For this tank mix follow the planting restrictions under the Directions and Remarks Section above for Sencor® DF + 2,4-D LVE®. The 8 and 12 fl oz rate of Poast Plus® will control certain grasses up to 2 and 3 inches in height, respectively. Include either crop oil concentrate at the rate of 1 gallon per 100 gallons of spray solution (1% v/v) or Dash HC at 1 pint per acre. Refer to the Poast Plus® label for additional information.
Sencor® DF + Select® +	2 to 5-1/3 oz/A + 3 to 4 fl oz/A + 1/4 to 1 lb ai/A	For this tank mix follow the planting restrictions under the Directions and Remarks Section above for Sencor® DF + 2,4-D LVE®. The 3 and 4 fluid ounce rates of Select® will control certain grasses up to 3 and 4 inches in height, respectively. Include crop oil concentrate at the rate of 1 quart per acre and 28% UAN (urea ammonium nitrate) at a rate of 1 to 2 quarts per acre. Refer to the Select label for additional information.

	SENCOR® DF PLUS TANK MIX PARTNER BURNDOWN RATES - SOYBEANS ONLY						
PRODUCT	RATE	DIRECTIONS AND REMARKS					
2,4-D LVE®							

WEEDS CONTROLLED. Sencor® DF in tank mixtures with the above herbicides will provide burndown control of the weeds listed below.

	Ī	WEEDS CO	WINOLL		RNDOWN RA			.♥ Di		
WEEDS CONTROLLED	2,4-D LVE	Poast Plus® + 2,4-D LVE	Select® + 2,4-D LVE	Fusion® + 2,4-D LVE	Roundup®/ Roundup Ultra®/ Touchdown®	Round	undup®/ dup Ultra®/ chdown® + 4-D LVE	Gramoxo i ne Extra®	Gramoxone Extra® + 2,4-D LVE	2,4-DB®
ANNUAL GRASSES	MAXIMUM BURNDOWN HEIGHT (INCHES)								2,4000	
Barley		-	_			8	1		4 to 6	T
Barnyardgrass		2 to 3	3 to 4			6		,	4 to 6	
Crabgrass spp.		2 to 3	-			6			4 to 6	1
Foxtail spp.		2 to 3	3 to 4	2 to 6		8			1 to 6	
Johnsongrass, seedling		2 to 3	-	-		8		-	4 to 6	1
Panicum, fall	<b>1</b>	2 to 3	3	2 to 6		6	·		4 to 6	1
Sandbur, field		-	-	-		8	·		4 to 6	1
Shattercane	Does not	2 to 3	-	-		8		4	4 to 6	Does not
Wheat, volunteer	control	-	-	-		6			4 to 6	control
Witchgrass	these species	2 to 3	-	-		6			4 to 6	these species
BROADLEAVES				MAX	(IMUM BURNE	OWN H	EIGHT (INC	CHES)		
Buffalobur					6	6		4 to 6	4 to 6	-
Chickweed, common	6			6	8	•	4 to 6	4 to 6	2	
Cocklebur, common	6				6	8		4 to 6	4 to 6	6
Dandelion, common	6 diaª				2 dia <sup>b</sup>	6 dia	aª	4 dia <sup>d</sup>	6 dia <sup>a</sup>	2 dia
Henbit		4			4	4		4 to 6	4 to 6	
Horseweed/marestail		6ªc			4 <sup>b</sup>	6		3	6ª	2°
Jimsonweed		. 6			6	6		4 to 6	4 to 6	2
Kochia*		4 <sup>ac</sup>			4	4		4	4	-
Ladysthumb ·		6			6	8		4 to 6	4 to 6	3
Lambsquarters, common		6			6	8		4 to 6	4 to 6	2
Lettuce, prickly		6			4	6		4 to 6	4 to 6	2
Mallow, Venice		6			6	6		4 to 6	4 to 6	
Morningglory spp.		6			2	. 4		2	4	4
Mustard spp.		6			6	8		4 to 6	4 to 6	2
Pennycress, field		6			6	6		4 to 6	4 to 6	2
Pigweed, spp. (annual)		6			6	8		4 to 6	4 to 6	3
Ragweed, common		6			6 <sup>b</sup>	8		4 to 6	4 to 6	2
Ragweed, giant		6ªc			4 <sup>b</sup>	6		4	6	2
Shepherdspurse		6			6	6		4 to 6	4 to 6	
Sida, prickly		6			4	4		4	4	1
Smartweed, Pennsylvania		6			6	8		4 to 6	4 to 6	3
Sunflower, common		6			6	6		4 to 6	4 to 6	4
Thistle, Russian		4 <sup>ac</sup>			2 to 4 <sup>bc</sup>	6		4	4 to 6	3°
Velvetleaf		6			6	8		4 to 6	4 to 6	3
Waterhemp spp.		6			6	8	ļ	4 to 6	4 to 6	3

- b Use a minimum Roundup®/Roundup Ultra® rate of 16 fl oz/A and a minimum Touchdown® rate of 10.6 fl oz/A.
- <sup>c</sup> Use Sencor® DF at 4 oz/A for optimum control.
- <sup>d</sup> Suppression only.
- \* Does not control triazine resistant biotypes.

## **RESIDUAL WEED CONTROL**

Sencor® DF burndown programs can be used as part of a full season weed control program in both field corn and soybeans when, 1) applied as a tank mixture with residual herbicides, or 2) followed with a postemergence weed control program, which is registered for use on that crop.

For residual control, Sencor® DF burndown programs may include tank mixes with the following herbicides or combination of herbicides:

Field Corn			
Alachlor	Bullet	Harness Xtra	Pursuit <sup>a</sup>
Atrazine	Clarity	Lariat	Pursuit Plus <sup>a</sup>
Banvel	Cycle	Linex	Ramrod
Bicep	Dual	Linuron	Ramrod/Atrazine
Bicep II	Dual II	Lorox	Simazine
Bicep Lite	Extrazine II	Marksman	Surpass
Bladex	Frontier	Pentagon	Surpass 100
Broadstrike + Dual	Guardsman	Prowl	Topnotch
Broadstrike Plus	Harness		

Soybeans			
Alachlor	Dual	New Lorox Plus	Pursuit Plus
Broadstrike + Dual	Dual II	Pentagon	Scepter
Canopy	Frontier	Preview	Sencor <sup>b</sup>
Command	Gemini	Prowl	Squadron
Detail	Linuron	Pursuit	Turbo

bSencor® DF used (alone and in tank mixes) on soybeans at higher labeled rates than those listed for burndown weed control will also provide residual control of those weeds listed in the "Weeds Controlled by Sencor® DF and Sencor® DF Tank mix Combinations" section of the Sencor® DF label.

Refer to the individual product labels for additional information, precautions, and limitations.

## SOUTHERN AND SOUTHEASTERN STATES ONLY

## POSTEMERGENCE DIRECTED SPRAY APPLICATIONS

Sencor® DF can be applied in postemergence directed sprays to soybeans for control of certain weeds which escape preplant or preemergence herbicide applications and for control of additional flushes of weeds that may occur after soybeans have emerged. Postemergence directed sprays of Sencor® DF can be applied to soybeans in addition to a preemergence or preplant application of Sencor® herbicide according to label directions.

**WEEDS CONTROLLED:** Sencor® DF, applied postemergence to soybeans as a directed spray according to directions on this label, will control the following at rates shown (broadcast basis) when grasses and common ragweed are less than 1 inch tall and other broadleaves are less than 3 inches tall:

1/3 Lb/Acre			
Carpetweed (Mollugo verticillata)	Dayflower (Commelina spp.)	Pigweeds (Amaranthus spp.)	Sicklepod (Cassia obtusifolia)
Cocklebur (Xanthium pensylvanicum)	Florida beggarweed (Desmodium tortuosum)	Purslane (Portulaca oleracea)	Velvetleaf (Abutilon theophrasti)
Crabgrass ( <i>Digitaria</i> spp	Mexicanweed (Caperonia castaniifolia)		
1/3 to 2/3 Lb/Acre			
Pricklysida/Teaweed (Sida spinosa)	Sesbania (Sesbania spp.)		·
2/3 Lb/Acre			

	Y		
Ragweed, common		•	
1			
(Ambrosia artemisiifolia)			

At the rate of 2/3 lb/acre morningglory species, (*Ipomoea* spp.) horsenettle, (*Solanum* spp.) Florida pusley, (*Richardia scabra*) spotted spurge (*Euphorbia maculata*) and wild poinsettia (*Euphorbia heterophylla*) are suppressed when Sencor® DF is applied before these weeds are 3 inches tall. The 2/3 lb/acre rate will suppress broadleaf signalgrass (*Brachiaria platyphylla*) up to 1 inch tall.

#### SENCOR®DF POSTEMERGENCE DIRECTED SPRAY

RECOMMENDED APPLICATIONS				
CROP	Sencor® DF Lb/Acre			
Soybeans	1/3 to 2/3			
(Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina,	(Broadcast Basis)			
Tennessee and Texas)				

Apply proper dosage using 10 to 40 gallons of water per acre as a directed spray in a 6 to 8 inch band on each side of the row after soybeans are 8 inches tall and before broadleaf weeds are 3 inches tall and before grasses and common ragweed are 1 inch tall. For best results the spray must cover weed foliage with minimum or no contact with soybean foliage. Add a nonionic surfactant such as Ortho X-77 to the spray mixture to obtain better wetting of weed leaf surfaces. To determine the correct dosage of Sencor® DF for a band application see "Banded Application" under the "General Information" section in the front of this label.

If necessary, a second postemergence directed spray application can be made after 7 days.

Do not feed or graze green soybean vines. Do not harvest soybeans or use dry soybean vines for feed or forage within 70 days of last application.

## SPECIAL PRECAUTIONS (Directed Postemergence):

- Do not apply directly to soybeans or serious crop injury will occur. Do not allow spray to contact more than the lower 1/4 to 1/3 of soybean plants. Soybean leaves contacted by the spray will be killed.
- Do not apply Sencor® DF postemergence to sensitive soybean varieties. See "Special Precautions" in the front of this label.
- To avoid injury to other crops or desirable plants from spray drift, sprayer pressure must not exceed 30 psi and the sprayer must be fitted with nozzles no smaller than 8002 T-Jet (or equivalent). Do not apply under weather conditions which favor drift.

## **POTATOES**

Sencor® DF herbicide is recommended for use in ground, aircraft or specified chemigation equipment as a preemergence and/or postemergence application to potatoes. Early maturing smooth skinned white and all red skinned varieties may be injured with postemergence applications. The varieties Atlantic, Bellchip, Centennial, Chipbelle and Shepody are sensitive to Sencor® DF. Avoid postemergence applications on these varieties. Preemergence applications on these varieties may cause crop injury under adverse weather conditions, on coarse soils, under high soil pH, with higher rates per acre and with mechanical incorporation.

**Ground Application:** Sencor® DF is recommended for use with ground spray equipment applied as a preemergence and/or postemergence application for control of the listed grass and broadleaf weeds in potatoes. Apply as a uniform broadcast spray at 20 or more gallons per acre.

**Aerial Application:** Sencor® DF may be applied in aerial spray equipment as a preemergence and/or postemergence application at 5 or more gallons per acre.

Chemigation: Sencor® DF may be applied preemergence and/or early postemergence to potatoes using center pivot, solid set and lateral roll systems. Apply specified dosage in 1/4 to 3/4 inch of water per acre (1/4 to 1/2 inch on sandy soil) as a continuous injection in self-propelled systems or apply in the last 15 to 30 minutes of the set in other systems. Be sure all the Sencor® DF has been flushed from the lines before shutting down the system.

WEEDS CONTROLLED: Sencor® DF applied to potatoes according to directions, will provide economic control of the following weeds. For optimum control, applications should be made before weeds are 1 inch tall. (See NOTE)

Carpetweed, common <sup>1</sup>	Mustard, Indian <sup>1</sup>	Pigweed, redroot <sup>1</sup> , <sup>2</sup>	Sicklepod <sup>1</sup>
Cocklebur, common <sup>1</sup> , <sup>2</sup>	Mustard, tansy <sup>1</sup>	Pigweed, smooth <sup>1</sup> , <sup>2</sup>	Smartweed, Pennsylvania <sup>1</sup> , <sup>2</sup>
Jimsonweed <sup>1</sup>	Mustard, tumble <sup>1</sup>	Ragweed, common <sup>1</sup> , <sup>2</sup>	Sunflower, common <sup>3</sup>
Kochia <sup>3</sup>	Mustard, wild <sup>1</sup>	Shepherdspurse <sup>1</sup>	Thistle, Russian <sup>2</sup>
Lambsquarters, common <sup>1</sup> , <sup>2</sup>	Pennycress, field <sup>1</sup> , <sup>2</sup>		
GRASSES			
Barnyardgrass <sup>3</sup>	Foxtail, giant <sup>1</sup>	Foxtail, yellow <sup>1</sup>	Panicum, fall <sup>1</sup>
Crabgrass, large <sup>1</sup>	Foxtail, green <sup>1</sup>	Johnsongrass, seedling <sup>1</sup>	Signalgrass, broadleaf <sup>1</sup>
Crabgrass, smooth <sup>1</sup>			

<sup>&</sup>lt;sup>2</sup> Weeds controlled with postemergence applications.

<sup>&</sup>lt;sup>3</sup> Weeds requiring two applications for control.

HARD TO CONTROL WEEDS: Although Sencor® DF may not provide commercially acceptable control in every instance, it will suppress growth of the following weeds and reduce their competition with potato plants.

BROADLEAVES			
Kochia	Purslane, common	Barnyardgrass	Nutsedge, yellow
Nightshade, hairy	Sunflower, common Grasses		
NOTE: Where triazine-resist	tant weeds are present, Sencor® DF alone m	nay not provide adequate contro	ol.

RECOMMENDED BROADCAST APPLICATIONS				
CROP         SENCOR® DF (Ib/Acre)           Potatoes         1/3 to 1-1/3				
				<b>PREEMERGENCE:</b> Apply specified dosage as a broadcast spray. Do no of wild mustard ( <i>Brassica</i> sp.) only. On sand soils or sensitive varieties, d
Potatoes 1/3 to 2/3				
(Except early maturing smooth skinned, red skinned, and other				

**POSTEMERGENCE:** Apply specified dosage as a broadcast spray over the tops of potato plants [Refer to Special Precautions (Potatoes)]. Use rates of 1/3 to 2/3 lb/acre for control of redroot pigweed and common lambsquarters only. Apply the 2/3 lb/acre rate for control of other weeds listed on this label.

**SPLIT APPLICATIONS:** This product may be applied once preemergence and once postemergence as directed above [Refer to Special Precautions (Potatoes)]. Do not exceed 1-1/3 lb total per acre per season.

IDAHO, OREGON AND WASHINGTON ONLY: Two postemergence applications can be made as broadcast sprays over the tops of potato plants if Sencor® DF is applied preemergence. Use 1/3 to 2/3 lb/acre for control of redroot pigweed and lambsquarters only. On coarse (sandy) soils with low organic matter do not exceed 1/2 lb/acre per application. On medium and heavy soils only, use 2/3 lb/acre per application for control of other weeds listed on this label and for suppression of hairy nightshade. Make the first application early in the season while weeds are still small. Allow at least 14 days before the second application. Do not apply after June 30 if treated land is to be planted to crops other than potatoes.

**TANK MIXES**: Sencor® DF may be tank mixed with the following herbicides: Dual®/Dual® II, Eptam®, Prowl® 3.3 EC and Matrix®. In addition, three-way tank mix combinations may be used for Sencor® DF plus Dual®/Dual® II, Eptam® or Prowl® 3.3 EC plus Matrix® when applied preemergence. Refer to each product's label for precautionary statements, restrictions, application information and weeds controlled.

Dual®/Dual® II: Sencor® DF may be applied in a tank mix combination with Dual®/Dual® II as a preemergence broadcast application. Apply Sencor® DF at 1/2 to 1-1/3 lbs and Dual®/Dual® II at 1.5 to 3 pints per acre according to the respective labels for use of each product alone on potatoes.

Eptam®: Sencor® DF may be tank mixed with Eptam® at rates and uses permitted on each product's label.

**Prowl® 3.3 EC**: Sencor® DF may be applied in tank mix combination with Prowl® as a preemergence or early postemergence broadcast application. As a preemergence mix, apply Sencor® DF at 2/3 to 1-1/3 lbs and Prowl® at 1.2 to 3.6 pints per acre. As an early postemergence spray, apply Sencor® DF at 1/3 to 2/3 lb and Prowl® at 1.2 to 3.6 pints per acre before the crop is in the 6-inch growth stage.

Matrix® (except the following counties in Colorado: Almosa, Conejos, Costilla, Rio Grande and Saguache): Sencor® DF may be applied in tank mix combination with Matrix® as a preemergence and/or early postemergence application for improved control on weeds such as Russian thistle, kochia and common lambsquarters. As a preemergence mix, apply Sencor® DF at 1/3 to 3/4 lb and Matrix® at 1 to 1-1/2 oz product per acre. As an early postemergence spray, apply Sencor® DF at 1/3 to 2/3 lb and Matrix® at 1 to 1-1/2 oz product per acre. Use a nonionic surfactant at a rate of 0.125% v/v (1 pt/100 gallon of water). Apply before the crop exceeds 14 inches in height. Postemergence applications of Matrix® treatments should be made prior to June 30.

## SPECIAL PRECAUTIONS (Potatoes):

- Do not use Sencor® DF on potatoes in Kern County, California.
- Do not apply more than a total of 1-1/3 lbs Sencor® DF per acre in a single crop season regardless of the method of application.
- Do not make postemergence applications prior to rainfall or irrigation on recently cultivated potatoes, nor within 3 days after periods of cool, wet cloudy weather or injury may occur.
- Postemergence applications may cause some chlorosis or minor necrosis. These symptoms may be more severe if seed-piece
  decay is occurring or if growing conditions favor crop stress.
- Postemergence applications may be made only on russet or white skinned varieties that are not early maturing.
- Potato varieties may vary in their response to herbicide applications. When using Sencor® DF for the first time on a particular variety, always determine crop tolerance before using on a field scale.
- Do not apply Sencor® DF within 60 days of harvest.
- Do not use air blast sprayers.
- Do not apply to sweet potatoes or yams.

Do not rotate any crop not listed on this label for 18 months following application of Sencor® DF.

Do not plant sensitive crops such as onions, lettuce, cole crops and cucurbits during the next growing season/following SENCOR® DF application.

Certain cereal varieties are sensitive to Sencor® DF (see cereal section of this label for sensitive varieties) and should not be planted during the next growing season unless the following cultural practices occur:

- Potato vines left in rows as a result of harvest must be uniformly distributed over the soil surface prior to plowing and,
- Plow with a moldboard plow to a depth sufficient to mix the upper 8 inches of soil.

## ALFALFA AND SAINFOIN

Sencor® herbicide is labeled for use in alfalfa and sainfoin in the following areas:

- Alfalfa and sainfoin (Including mixed stands with grasses) (all areas except California).
- Alfalfa and sainfoin (Including mixed stands with grasses) (California only).
- Alfalfa Tank mix Combination with Gramoxone (Colorado, Idaho, Montana, Nevada, Oregon, Utah, Washington, Wyoming, and the following California counties: Del Norte, Lassen, Modoc, Nevada, Plumas, Shasta, Sierra, and Siskiyou).
- Alfalfa Post Dormant Application of Sencor® Impregnated on Dry Fertilizer Only (Connecticut, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Nebraska, New Mexico, New York, Ohio, Oklahoma, Pennsylvania, South Dakota, Tennessee, Texas and Wisconsin).
- Alfalfa Non-Dormant, Non-Winter Hardy varieties (Arizona only).

Sencor® DF is recommended for use in aerial or ground spray equipment as a broadcast surface application to established crops of alfalfa and sainfoin for the control of certain grass and broadleaf weeds.

APPLICATION: Refer to "General Information" in the front of this label for detailed information on the application of Sencor®. For information on applying Sencor® DF in fluid or on dry fertilizer refer to the "Application of Sencor® DF in Fluid Fertilizers" or "Commercial Impregnation And Application Of Sencor® DF On Dry Bulk Fertilizer" under the "General Information" section of this label.

- Use Sencor® DF only on established alfalfa and sainfoin. Do not apply Sencor® DF after growth begins in the spring or before growth ceases in the fall, except as specified on this label.
- Do not graze or harvest within 28 days after application.
- For best weed control, apply Sencor® DF when weeds are less than 2 inches tall or before weed foliage is 2 inches in diameter.
- Reduced weed control may occur when extended dry conditions follow application of Sencor® DF.

Crop injury may occur when:

- Crop is under stress conditions such as diseases, insect infestations, poorly drained soils, drought or winter injury at time of application;
- Crop is treated within 12 months after seeding; 2.
- There is excessive irrigation or rainfall immediately after application. Do not apply more than 1/2 inch of water in the first irrigation after Sencor® DF is applied.

ALFALFA	A and SAINFOIN
(All Areas	Except California)
RECOMMENDED BE	ROADCAST APPLICATIONS
CROP	SENCOR® DF Lb/Acre
Alfalfa and Sainfoin (Except California)	1/3 to 1-1/3

apply more than 2/3 lb of Sencor® DF per acre.

## FOR USE ON MIXED STANDS OF ALFALFA AND GRASSES

Rates of 2/3 to 1 lb of Sencor® DF per acre will provide partial reduction of forage grass stands. These rates may be used to reduce forage grass stands to prevent crowding out of alfalfa. Higher rates will severely reduce forage grass stands.

Sencor® DF should not be used on sand soils. In areas West of the Rocky Mountains, avoid using Sencor® DF on soils with calcareous surface area, high levels of lime or sodium, or a pH greater than 8.2.

		SAINFOIN (Continued) DLLED (Except California)	
	1/3 to 1/2	Lb Sencor® DF/Acre	
Chickweed, Common (Stellaria media)			
	1/2 to 2/3	Lb Sencor® DF/Acre	
Cheat (Bromus secalinus)  Deadnettle, Purple	Downy brome (Bromus tectorum) Japanese brome	Pennycress (Thlaspi arvense) Rescuegrass	Shepherdspurse (Capsella bursa pastoris)
(Lamium purpureum)	(Bromus japonicus)	(Bromus catharticus)	
	2/3 to 1-1/3	Lb Sencor® DF/Acre	
BROADLEAVES Fleabane, Rough	Lambsquarters, Common (Chenopodium album)	Mustard, Jim Hill (tumble) (Sisymbrium altissimum)	Prickly Lettuce (Lactuca serriola)
(Erigeron strigosus)	Marestail (Horseweed) (Hippuris vulgaris)	Mustard, Tansy (Descurainia pinnata)	White Cockle (Melandrium album)
(Descurainia sophia)	Meadow Salsify (Tragopogon pratensis)	Pepperweed (Lepidium virginicum)	Wild Buckwheat (Polygonum convolvulus)
(Lamium amplexicaule) Kochia (Kochia scoparia)	Mustard, Blue (Chorispora tenella)	Pigweed, Redroot (Amaranthus retroflexus)	Yellow Rocket (Barbarea vulgaris)
GRASSES	Little Barley	Smooth Brome	Wild Oats
Foxtail, Green (Setaria viridis)	(Hordeum pusillum)	(Bromus inermis)	(Avena fatua)
	1-1/3 Lb	Sencor® DF/Acre	
BROADLEAVES	Dandelion	Ragweed, Common	
Chickweed, Mousear (Cerastium vulgatum)	(Taraxacum officinale)	(Ambrosia artemisiifolia)	
GRASSES Barnyardgrass (Echinochloa crus-galli)	Bluegrass ( <i>Poa annua</i> )	Foxtail Barley (Hordeum jubatum	

**WEEDS PARTIALLY CONTROLLED:** At the rate of 1-1/3 lb/acre Sencor® DF may be used to reduce the competition from curly dock (*Rumex crispus*).

At 2/3 to 1-1/3 lb/acre, Sencor® DF may be used to reduce the competition of German Moss or knawel (Scleanthus annus).

## ALFALFA AND SAINFOIN (California Only)

(Including Mixed Stands With Grasses)

Sencor® DF is recommended for use in aerial or ground spray equipment as a broadcast surface application to dormant established crops of alfalfa and sainfoin.

**APPLICATION:** Sencor® DF is recommended for use in aerial or ground spray equipment as a broadcast surface application to dormant established crops of alfalfa and sainfoin for control of certain grass and broadleaf weeds. Do not apply Sencor® DF after growth begins in the spring or before growth ceases in the fall. Do not apply to either alfalfa or sainfoin during the first growing season after seeding.

For information on applying Sencor® DF in fluid fertilizer solutions to alfalfa, refer to the appropriate section of this label.

For information on Commercial impregnation and application of Sencor® DF on dry bulk fertilizer, refer to the appropriate section of this label.

	WEEDS	CONTROLLED	
	1/2 to 2/3	Lb Sencor® DF/Acre	
Cheatgrass (downy brome) (Bromus secalinus)	·	·	·
	2/3 to 1-1/3	B Lb Sencor® DF/Acre	
BROADLEAVES Chickweed, Common (Stellaria media) Flixweed (Descurainia sophia) Henbit (Lamium amplexicaule)  GRASSES Smooth Brome	Kochia (Kochia scoparia)  Meadow Salsify (Tragopogon pratensis)  Mustard, Blue (Chlorispora tenella)  Mustard, Tansy (Descurainia pinnata)  Wild Oats (Avena fatua)	Pepperweed, Virginia (Lepidium virginicum) Shepherdspurse (Capsella bursa-pastoris) White Cockle (Melandrium album)	Wild Buckwheat (Polygonum convolvulus) Yellow Rocket (Barbarea vulgaris)
(Stellaria media)	1-1/3 Lb	Sencor® DF/Acre	
BROADLEAVES			
Dandelion (Taraxacum officinale)			
GRASSES Barnyardgrass (Echinochloa crus-galli)	Bluegrass (Poa annua)	Foxtail Barley (Hordeum jubatum)	

RECOMMENDED BROADCAST APPLICATIONS		
CROP Sencor® DF Lb/Acre		
Alfalfa and Sainfoin (California Only)  1/2 to 1-1/3		

Select the proper dosage according to weeds known to be present in the field to be treated. Apply specified dosage in 20 to 40 gallons of water per acre with ground spray equipment or 3 to 10 gallons of water per acre with aerial spray equipment fitted with nozzles suitable for broadcast applications of herbicides. Treat only dormant established crops of alfalfa and sainfoin. Injury may occur to alfalfa if Sencor® DF is applied earlier than 12 months after seeding. Do not apply after Spring growth begins or before growth ceases in in the Fall. Do not graze or harvest within 28 days after application.

At the 1-1/3 lb/acre rate, Sencor® DF may be used for suppression of curly dock.

**FOR USE ON MIXED STANDS OF ALFALFA AND GRASSES:** Rates of 2/3 to 1-1/3 lb of Sencor® DF per acre will provide partial reduction of forage grass stands. These rates may be used to reduce forage grass stands to prevent crowding out of alfalfa. Higher rates will severely reduce forage grass stands.

Do not apply with aerial spray equipment when wind speed is greater than 10 mph. Do not apply when weather conditions favor spray drift and/or when sensitive cool season crops, such as cole crops, onions, peas, or strawberries, are present in adjacent fields. Applications should not be made when weather conditions favor spray drift, especially in areas where wheat is growing on coarse textured soils in adjacent fields, or injury may occur.

#### **ALFALFA**

#### SENCOR® DF PLUS GRAMOXONE EXTRA® TANK MIX

Colorado, Idaho, Montana, Nevada, Oregon, Utah, Washington, Wyoming and the following California counties: Del Norte, Lassen, Modoc, Nevada, Plumas, Shasta, Sierra, and Siskiyou.

**APPLICATION:** Sencor® DF plus Gramoxone Extra® tank mix application is recommended for use, during the dormant season, in aerial or ground spray equipment as a broadcast surface application to established (at least 1 year old) alfalfa for the control of certain grass and broadleaf weeds. Do not apply Sencor® DF/Gramoxone Extra® tank mix to regrowth (after grazing or cutting) that is more than 2 inches tall. Apply once per season. Do not apply following cuttings during growing season. Use a minimum of 10 gallons of water per acre with aerial spray equipment and a minimum of 20 gallons of water per acre with ground spray equipment. Add a non-ionic spreader at label rates to the spray solution.

**WEEDS CONTROLLED:** Sencor® DF plus Gramoxone Extra (1-1/2 to 2-1/2 pt/acre) tank mix application will control established weeds. Gramoxone controls weeds by contact activity.

	1/3 to 1/2 Lb	of Sencor® DF Per Acre	
Common Chickweed			
•	1/2 to 1 Lb o	f Sencor® DF Per Acre	
Bluegrass	Downy brome	Henbit	Rescuegrass
Cheat	Field pennycress	Japanese brome	Shepherdspurse
	Use Sencor® DF at 2/3 to 1 Lb	Acre for control of the followin	g weeds:
Blue mustard	Kochia	Redroot pigweed	Tansy mustard
Common lambsquarters	Little barley	Rough fleabane	White cockle
Flixweed	Marestail (Horseweed)	Ryegrass	. Wild oats
Green foxtail	Meadow salsify	Smooth brome	Wild buckwheat
Groundsel	Pepperweed	Sow thistle	Yellow rocket
Jim Hill mustard	Prickly lettuce		

	RECOMMENDED APPLICATIONS		
DOSAGE/ACRE			
Sencor® DF	Apply specified dosages of Sencor® and Gramoxone Extra in at least 10 gallons of water per acre with aerial equipment or at least		
1/3 to 1 Lb	20 gallons of water per acre with ground equipment. Do not apply this tank mix to alfalfa growth if more than 2 inches tall. For best weed control, apply when broadleaf weeds and grasses are 1-6 inches tall and are actively growing. Care should be taken to avoid overlaps. Do not apply more than 2/3 lb of Sencor® DF per acre on loamy sand soils. Reduced weed control may occur when		
Plus	extended dry conditions follow application of Sencor®. Crop injury may occur if alfalfa is under stress conditions such as diseases, insect infestations, drought or winter injury or if Sencor® is applied to alfalfa earlier than 12 months after seeding.		
Gramoxone Extra	insect mestations, drought of writter trijury of it Sericolo is applied to aliana earner than 12 months after securing.		
1-1/2 to 2-1/2 Pt			

**FOR USE ON MIXED STANDS OF ALFALFA AND GRASSES:** Rates of 2/3 to 1 lb of Sencor® DF per acre will provide partial reduction of forage grass stands. These rates may be used to reduce forage grass stands to prevent crowding out of alfalfa.

Do not graze or harvest within 42 days after application.

In areas west of the Rockies, avoid the use of Sencor® on soils with calcareous surface, soils with high levels of lime or sodium, and with a pH greater than 8.2.

Do not apply when weather conditions favor spray drift. Aerial application should not be made when wind speed is greater than 10 mph.

Do not use on sand soil.

Refer to the Gramoxone Extra label for additional directions, weed species controlled and precautions.

#### Post Dormant Application of Sencor® Impregnated on Dry Fertilizer Only

Sencor® DF may be applied after dormancy has broken, but prior to three inches of new alfalfa shoot growth, only when impregnated on dry fertilizer in Connecticut, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Nebraska, New Mexico, New York, Ohio, Oklahoma, Pennsylvania, South Dakota, Tennessee, Texas and Wisconsin. Apply at rates of 1 to 1-1/3 lb per acre as directed on this label for application during dormancy. Apply only when alfalfa foliage is dry or crop injury may occur. When using this application method, do not harvest or graze treated alfalfa for 60 days after application.

#### **ALFALFA**

## Non-Dormant, Non-Winter Hardy Varieties (Arizona Only)

Sencor® DF is recommended as a broadcast surface application to established crops of non-dormant alfalfa varieties for preemergence and postemergence control of certain winter annual weeds following either a fall or winter sheep grazing/green-chop harvest.

#### **WEEDS CONTROLLED:**

WEEDO OCIVINOEEEDI			
Field pepperweed	Littleseed canarygrass	Mouse barley	Silversheath knotweed
Lambsquarters	London rocket (mustard)	Nettleleaf goosefoot	Spiny sowthistle
Little mallow (cheeseweed)	Prickly lettuce	Shepherdspurse	)

RECOMMENDED APPLICATIONS			
CROP	SENCOR® DF		
Alfalfa Non-Dormant, Non-Winter Hardy Varieties	1/2 to 2/3		

Apply specified dosage by aerial or ground spray equipment in 7 to 40 gallons of water per acre. Treat established alfalfa stubble after fall or winter sheep grazing or green-chop harvest and prior to the time regrowth is 2" tall. Alfalfa foliage present at time of application can exhibit yellowing. Injury may occur to alfalfa in areas of high salt concentration where the crop is stunted and/or has a poorly developed root system, or if alfalfa is under stressed growing conditions such as diseases, insect infestations, or drought. For most effective postemergence weed control, treatment should be made before weeds are 2" tall or before leaf rosettes are 2" wide. For maximum control, rainfall (1/4" or more) or irrigation is necessary within 30 days of treatment, however, do not flood irrigate within 2 days after treatment. Use 1/2 lb Sencor® on sand soil when only mustard, goosefoot, lambsquarters, or canary grass are the weeds to be controlled. Do not apply earlier than 6 months after seeding. Do not graze or harvest within 28 days after application.

#### **SPECIAL PRECAUTIONS:**

- Maintain continuous mechanical agitation in the spray tank to insure a uniform spray mixture.
- Do not apply with aerial spray equipment when wind speed is greater than 10 mph. Do not apply when weather conditions favor spray drift and/or when sensitive cool season crops, such as cole crops, onions, peas or strawberries, are present in adjacent fields. Applications should not be made when weather conditions favor drift especially in areas where wheat is growing on coarse textured soils in adjacent fields, or injury may occur.

#### ESTABLISHED PERENNIAL GRASSES GROWN FOR SEED

For Weed Control in Established Perennial Bentgrass Grown for Seed in Oregon West of the Cascade Mountains and in Crook, Deschutes, and Wasco Counties

Used as directed below, SENCOR® DF will reduce competition from seedlings of annual Bromus species, annual ryegrass, and annual bluegrass. SENCOR® DF will control rattail fescue, henbit, ivyleaf speedwell, chickweed, mustards, and shepherdspurse.

Crop Tolerance: Crop tolerance is marginal, and crop injury and yield reduction are possible. To minimize crop injury, apply when the crop is not under stress. Use of adjuvants will reduce crop tolerance. Making the application after three consecutive sunny days will reduce potential for crop injury.

APPLICATION INSTRUCTIONS				
CROP	RATE OF SENCOR® DF (lbs/A)	REMARKS		
Bentgrass grown for seed	0.38 to 0.5	Apply specified dosage as a broadcast spray in at least 15 gallons of spray solution per acre when volunteer grasses are in the 1 to 2 leaf growth stage following full rainfall or irrigation and before active spring growth. Applications made after mid-February may result in excessive crop injury and/or failure to control weeds.		
		Allow at least 120 days between application and harvest for seed.		

#### **Application Restrictions:**

- 1) Apply only to established bentgrass that is at least one year old and has been harvested for seed at least once.
- 2) Do not apply to a crop that is under stress (i.e., severe insect damange, cool to cold temperatures, disease, nutrient deficiency or deficient or excessive moisture).
- 3) Do not tank mix with other herbicides.
- 4) Do not apply more than once per year.
- 5.) Apply only to Colonial and Creeping Bentgrass.

#### For Weed Control in Established Perennial Grasses Grown for Seed in Oregon West of the Cascade Mountains and in Crook, Deschutes, Jefferson, and Wasco Counties

Used as directed below, Sencor® DF will reduce competition from volunteer seedlings of the indicated crop, annual Bromus species, annual ryegrass, and annual bluegrass. Sencor® will control rattail fescue, henbit, ivyleaf speedwell, chickweed, mustards, and shepherdspurse. Control of the volunteer crop and grassy weeds may be enhanced by adding wetting agents containing crop oil. Follow the directions for use and rates recommended on the wetting agent label.

#### MIXING

Sencor® DFis compatible with most fertilizers, fungicides, and insecticides. Sencor® DF may be combined with other herbicides for enhanced weed control. Before mixing with another herbicide, consult both product labels and a knowledgeable authority or Bayer CropScience representative.

APPLICATION INSTRUCTIONS				
CROP	RATE OF SENCOR® DF (lbs/A)	REMARK\$		
Perennial Ryegrass	001.075	Apply specified dosage as a broadcast spray in at least 15 gallons of spray solution per acre		
Tall Fescue	0.3 to 0.75	when volunteer grasses are in the 1 to 2 leaf growth stage following full rainfall or irrigation		
Bluegrass	0.3 to 0.5	and before active spring growth. Applications made after mid-February may result in		
Fine Fescue		excessive crop injury and/or failure to control		
Orchardgrass		weeds.		
		Allow at least 120 days between application and harvest for seed.		

#### **Application Restrictions:**

- 1.) Apply only to established grasses that are at least one year old and have been harvested for seed at least once.
- 2.) Do not apply to a crop that is under stress (i.e., severe insect damange, cool to cold temperatures, disease, nutrient deficiency or deficient or excessive moisture).
- 3.) Do not apply more than once per year.
- 4.) Do not apply this product through any type of irrigation system.

#### For Weed Control in Established Perennial Grasses Grown for Seed in Washington

Used as directed below, Sencor® DF will reduce competition from volunteer seedlings of the indicated crop, annual Bromus species, annual ryegrass, and annual bluegrass. Sencor® DF will control rattail fescue, henbit, ivyleaf speedwell, chickweed, mustards, and shepherdspurse. Control of the volunteer crop and grassy weeds may be enhanced by adding wetting agents containing crop oil. Follow the directions for use and rates recommended on the wetting agent label.

#### MIXING

Sencor® DF is compatible with most fertilizers, fungicides, and insecticides. Sencor® DF may be combined with other herbicides for enhanced weed control. Before mixing with another herbicide, consult both product labels and a knowledgeable authority or Bayer CropScience representative.

APPLICATION INSTRUCTIONS				
CROP	RATE OF SENCOR® DF (lbs/A)	REMARKS		
Perennial Ryegrass Tall Fescue	0.3 to 0.5	Apply specified dosage as a broadcast spray in at least 15 gallons of spray solution per acre when volunteer grasses are in the 1 to 2 leaf		
Bluegrass Fine Fescue	0.2 to 0.38	growth stage following full rainfall or irrigation and before active spring growth. Applications made after mid-February may result in excessive crop injury and/or failure to control weeds.		
		Allow at least 120 days between application and harvest for seed.		

#### **Application Restrictions:**

- 1) Apply only to established grasses that are at least one year old and have been harvested for seed at least once.
- 2) Do not apply to a crop that is under stress, for example disease, severe insect damage, nutrient deficiency, cool to cold temperatures or deficient or excessive moisture.
- 3) Do not apply more than once per year.
- 4) Do not apply this product through any type of irrigation system.
- 5) Do not apply to bluegrass grasses grown for seed on sand or loamy sand soils. On bluegrass, use 0.2 to 0.25 lbs of Sencor® DF per acre if mixing with another herbicide.
- 6.) Use only on soils with organic matter greater than 1.5% and a soil pH lower than 7.5.

#### For Weed Control in Established Perennial Grasses Grown for Seed in Montana and Wyoming

Used as directed below, Sencor® DF will reduce competition from downy brome (Bromus tectorum). Control of the grassy weeds may be enhanced by adding wetting agents containing crop oil.

#### MIXING

Sencor® DF is compatible with most fertilizers, fungicides, and insecticides. Sencor® DF may be combined with other herbicides for enhanced weed control. Before mixing with another herbicide, consult both product labels and a knowledgeable authority or Bayer CropScience representative.

APPLICATION INSTRUCTIONS				
CROP	RATE OF SENCOR® DF (lbs/A)	REMARKS		
Wildrye, Wheatgrass	0.5	Apply specified dosage as a broadcast spray in at least 15 gallons of spray solution per acre		
Meadow Brome		when the crop is dormant and prior to active spring growth.		
		Use on sand soils or on soils with a pH greater than 8.0 may result in unacceptable injury.		
		Allow at least 120 days between application and harvest for seed.		

#### **Application Restrictions:**

- 1) Apply only to established grasses that are at least one year old and have been harvested for seed at least once.
- 2) Do not apply to a crop that is under stress, for example disease, severe insect damage, nutrient deficiency, cool to cold temperatures or deficient or excessive moisture.
- 3) Do not apply more than once per year.
- 4) Do not apply this product through any type of irrigation system.

#### For Weed Control in Established Perennial Bluegrass Grown for Seed in Idaho

Used as directed below, Sencor® DF will reduce competition from volunteer seedlings of the indicated crop, annual Bromus species, annual ryegrass, and annual bluegrass. Sencor® DF will control rattail fescue, henbit, ivyleaf speedwell, chickweed, mustards, and shepherdspurse. Control of the volunteer crop and grassy weeds may be enhanced by adding wetting agents containing crop oil. Follow the directions for use and rates recommended on the wetting agent label.

#### MIXING

Sencor® DF is compatible with most fertilizers, fungicides, and insecticides. Sencor® DF may be combined with other herbicides for enhanced weed control. Before mixing with another herbicide, consult both product labels and a knowledgeable authority or Bayer CropScience representative.

APPLICATION INSTRUCTIONS				
CROP	RATE OF SENCOR® DF (lbs/A)	REMARKS		
Bluegrass	0.1875 to 0.375	Apply specified dosage as a broadcast spray in at least 15 gallons of spray solution per acre when volunteer grasses are in the 1 to 2 leaf growth stage following rainfall or irrigation and before active spring growth.		
		Allow at least 120 days between application and harvest for seed.		

#### **Application Restrictions:**

- 1) Apply only to established grasses that are at least one year old and have been harvested for seed at least once.
- 2) Do not apply to a crop that is under stress, for example disease, severe insect damage, nutrient deficiency, cool to cold temperatures or deficient or excessive moisture.
- 3) Do not apply more than once per year.
- 4) Do not apply this product through any type of irrigation system.
- 5) Do not use on sand or loamy sand soils, or soils with less than 1.5% organic matter and/or a soil pH of 7.5 or above or excessive injury will occur.
- 6) Applications made after mid-March may result in excessive crop injury and/or failure to control weeds.

# ASPARAGUS (Established)

Sencor® DF is recommended for use in ground spray equipment or sprinkler irrigation (center pivot, lateral move, or solid set) systems as a single preemergence broadcast application or as a split application consisting of a preemergence broadcast application followed by a post harvest broadcast application.

Refer to the "General Information" section of this label for directions.

WEEDS CONTROLLED: Sencor® DF, applied to established asparagus according to directions, will effectively control:

BROADLEAVES			
Chickweed, Common (Stellaria media) Jimsonweed (Datura stramonium) Lambsquarters (Chenopodium album)	Pigweed, Redroot (Amaranthus retroflexus) Ragweed, Common (Ambrosia artemisiifolia)	Smartweed, Pennsylvania (Polygonum pensylvanicum)	Sorrel, Red (Rumex acetosella) Velvetleaf (Abutilon theophrasti)
GRASSES			
Crabgrass (Digitaria spp.)	Foxtails (Setaria spp.)	Sandbur, Field (Cenchrus pauciflorus)	

RECOMMENDED BROADCAST APPLICATIONS				
CROP	SENCOR® DF Lb/Acre			
Asparagus	1-1/3 to 2-2/3			
(Preemergence Application only)	PREEMERGENCE APPLICATION ONLY: Make a single surface application in early Spring before asparagus spears or ferns emerge. If the field is to be disked, apply Sencor® DF after disking but before the crop emerges. Use the lower rate for control of the broadleaf weeds listed above. Use the higher rate in fields with a history of severe infestations of grasses and for maximum residual control. Do not apply within 14 days of harvest.			
Asparagus	2/3 to 1-1/3 preemergence			
(Split	plus			
Application)	1-1/3 to 2 post harvest			
	SPLIT APPLICATION PREEMERGENCE AND POST HARVEST: Preemergence Application: Apply before asparagus spears or ferns emerge. If the field is to be disked, apply after disking but prior to crop emergence. Do not apply within 14 days of harvest.  Post Harvest Application: Apply after last harvest of the season but prior to emergence. The lower combination rates may be used for control of common ragweed, lambsquarters, redroot pigweed, and red sorrel. Use the higher combination rates for other weeds listed or in fields with severe grass infestations or for maximum post harvest control of emerged weeds.			

#### **SPECIAL PRECAUTIONS (Asparagus):**

- Do not use on newly seeded asparagus nor on young plants during the first growing season after setting crowns.
- DO NOT APPLY POST HARVEST APPLICATIONS UNTIL AFTER THE LAST HARVEST OF SPEARS.
- · Aerial application is prohibited.

#### **CARROTS**

**Special Conditions of Sale Provision for Use on Carrots:** The following directions for use were developed under the direction of IR-4 (government minor crops use program). As such the testing was done independently from the testing program of Bayer CropScience. Buyer is advised that Bayer CropScience makes no assurances regarding satisfaction with the product and all risks of crop injury or product performance are assumed by the Buyer.

Apply Sencor® DF herbicide with ground equipment as specified below under "Recommended Applications". For effective control of broadleaf weeds with postemergence applications, apply Sencor® DF before weeds are 1 inch in height or diameter. Thorough spray coverage is essential for adequate weed control.

Do not use air blast or other high pressure spray equipment to make postemergence applications of Sencor® DF. Refer to the appropriate section of this label for additional information regarding spray equipment, dilution rates, mixing, sprayer cleanup, restrictions, container disposal and cautions.

Refer to "Mixing" under the "General Information" section in the front of this label.

For specific application information see "General Information" and "Application" sections at the front of this label.

WEEDS CONTROLLED: Sencor® DF applied to carrots according to directions will effectively control:

Carpetweed (Mullugo verticillata)	Lambsquarters, Common (Chenopodium album)	Pigweed, Smooth (Amaranthus hybridus)	Prickly Lettuce (Lactuca serriola)
Galinsoga (Galinsoga parviflora)	Mustard, Wild (Sinapis arvensis)	Pineappleweed (Matricaria matricarioides)	Shepherdspurse (Capsella bursa-pastoris)
Horseweed (Conyza canadensis)	Pigweed, Redroot (Amaranthus retroflexus)		

RECOMMENDED APPLICATIONS				
CROP	SENCOR® DF Lb/Acre			
Carrots	1/3			
	Apply specified dosage per acre as a broadcast spray over the tops of carrot plants. Application should be made after carrots have formed 5 to 6 true leaves but before weeds are 1 inch in height or diameter. If needed, a second application may be made after an interval of at least 3 weeks. Applications may be made up to 60 days of harvest.			

#### SPECIAL PRECAUTIONS:

- Do not apply to carrots grown for seed.
- Do not apply within 3 days after periods of cool, wet or cloudy weather or crop injury will occur.
- Do not apply Sencor® DF within 3 days of any other chemical unless specified on this label.
- Do not apply on very hot days or excessive crop injury will result.
- Do not apply until carrots have at least 5 to 6 true leaves. Earlier applications will result in excessive crop damage.
- Crop injury or delayed maturity may result from applications of Sencor® DF if carrots are growing under stress conditions such as periods of drought or cool, wet and cloudy weather preceding application.
- Following an application of Sencor® DF, chlorosis (yellowing) and burning of the leaf tissue may occur.
- For newly introduced varieties of carrots with unknown tolerance to Sencor® DF, treat only a small area to determine if Sencor® can be used without injury to the crop.

## FIELD CORN

#### POSTEMERGENCE APPLICATION

Sencor® DF is recommended for control of selected broadleaf weeds when applied as a tank mix combination with certain broadleaf herbicides presently registered and recommended for postemergence use in field corn. Herbicides which may be tank mixed with Sencor® DF include:

2,4-D®	Buctril/Buctril Gel®	Laddok S-12®	Resource®		
Atrazine®	Buctril + atrazine (Premix)®	Marksman®	Scorpion III®		
Banvel®	Clarity®	Pursuit®*	Tough®		
Basagran®					
* Use only on Pursuit resistant/tolerant corn hybrids (IMI- Corn).					

Use only on Pursuit resistant/tolerant corn hybrids (IMI- Corn).

**APPLICATION:** Sencor® DF may be applied to field corn after crop emergence until just prior to tasseling. Broadcast applications may be made with ground or aerial equipment. For optimum weed control, apply treatments when weeds are small and actively growing, but before reaching the maximum heights listed in the Weeds Controlled table.

#### POSTEMERGENCE BROADCAST APPLICATION

**Ground Application:** Adjust nozzle height above crop and weed canopy to ensure uniform spray coverage. Gallonage should be increased with increasing weed size and population density.

For tank mixes of Sencor® DF plus atrazine, Basagran®, Laddok® S-12, Buctril®, Buctril® + atrazine, Pursuit®, Resource®, Tough®, or 2,4-D® arnine formulations, use flat fan nozzles spaced a maximum of 20 inches apart. Best results are achieved using a minimum spray volume of 10 gallons per acre and spray pressure from 20 to 40 psi.

For Sencor® DF tank mixes with Banvel®, Clarity®, Marksman®, or 2,4-D® low volatile ester formulations, use drift-reducing nozzles which are specifically designed to produce coarse sprays and reduce the amount of driftable fines. Additional measures which will help avoid potential drift to sensitive crops and plants include using a minimum spray volume of 20 gallons per acre and keeping spray pressures at or below 20 psi unless otherwise specified by the nozzle manufacturer.

For further precautions and additional instructions and recommendations, consult the tank mix partner's label.

**Aerial Application:** Apply in a minimum spray volume of 3 gallons per acre. For optimum spray coverage and distribution, use a minimum of 5 gallons per acre and a maximum pressure of 40 psi. Use a boom and nozzle configuration which will provide a uniform deposition pattern and coverage with low drift potential. Avoid overlaps to prevent potential crop injury. Do not apply near sensitive crops or sensitive plants growing near the treated area. Do not apply when wind speed is greater than 10 mph or when winds are moving toward sensitive crops or plants. To avoid drift hazards, applicator must follow the most restrictive labeling of the products used in a tank mix. Refer to the appropriate tankmix partner's label for further precautions and recommendations.

#### POST DIRECTED APPLICATION

Sencor® DF in tank mix combinations with Banvel®, 2,4-D®, Buctril® or Scorpion® III may be applied post directed to field corn. Use drop nozzles and appropriate spacing to direct spray below the corn whorl and upper leaves. The top of the target weed canopy must be sufficiently below the whorl and upper leaves of the crop to permit this application and provide adequate spray coverage. The height differential required between the crop and weed canopy will depend on the specific equipment used. Apply before tassel emergence. For further precautions and additional recommendations, refer to the appropriate tank mix partner's label.

#### **ADJUVANTS**

The adjuvant types listed below may be utilized with certain Sencor® DF tank mix combinations. Consult the tank mix recommendations section for the appropriate adjuvant and rate. Use of non-recommended adjuvants or rates may result in severe leaf burn, crop stunting, and/or stand reduction. Use only adjuvants which are exempt from tolerance requirements under 40 CFR 180.1-001.

UAN (urea ammonium nitrate) is commonly referred to as 28, 30, or 32% N.

Ammonium sulfate (spray grade) may be used as an alternative to UAN with certain tank mix combinations.

Non-ionic surfactants should contain at least 80% active ingredient.

**DO NOT USE** crop oil concentrate (COC) or any adjuvant containing vegetable or petroleum oils with any Sencor® DF tank mixtures as severe leaf burn, crop stunting, and/or stand reduction may occur.

#### RAINFASTNESS

Sencor® DF will not reduce rainfastness of the recommended tank mix partners. Refer to the individual product labels for rainfastness recommendations.

#### SPRAYER CLEANUP

Refer to each tank mix partner's label and the Sprayer Cleanup section of the Sencor® DF label for specific instructions on cleaning spray equipment. Special attention should be given to the required cleanup procedures for 2,4-D®, Banvel®, Clarity®, and Marksman®.

#### **SPECIAL PRECAUTIONS**

- Do not use on corn grown for seed, sweet corn, popcorn, or white corn.
- Do not apply more than 0.25 pounds a.i. metribuzin (5-1/3 ounces Sencor® DF) per acre per use season.
- Do not apply when field corn is under stress (see Stress statement below).
- Do not use aerial applications if sensitive crops or plants are growing in the vicinity of the area to be treated.
- Do not allow spray drift onto sensitive crops or plants.
- Do not use on sand, loamy sand or sandy loam soils that have less than 0.5% organic matter.
- Do not use on sand or loamy sand soils in Washington, Oregon or Idaho or crop injury may occur.
- Observe all precautions and limitations on labeling of all products used in the tank mixtures.

Stress is any condition or combination of conditions which impairs normal crop growth. Weather, disease, insect damage, fertility or other factors may cause stress. Applications made before or after the corn is under stress from these factors or from periods of prolonged cool, wet and cloudy weather or widely fluctuating day and nighttime temperatures, may result in temporary leaf burn, yellowing and/or stunting of the crop. Recovery from damage is generally rapid with no lasting effects on new growth. Under extreme stress, stand reductions may occur.

**Feeding Restrictions:** Field corn treated with Sencor® DF may be grazed or harvested for silage or grain 60 days after treatment. Follow the most restrictive preharvest interval on the labels of the products used in the tank mixtures.

#### TANK MIX COMBINATIONS

The Sencor® DF tank mixtures listed below can be utilized for control of certain annual broadleaf weeds.

	SENCOR® DF POSTEMERGENCE BROADCAST RECOMMENDATIONS				
PRODUCT	RATE	DIRECTIONS AND REMARKS*			
Sencor® DF + 2,4-D Amine®	2 oz/A + 1/2 to 1 pt/A <sup>1</sup>	Apply as a broadcast spray during the interval from corn emergence until corn is 8 inches tall. Apply only to varieties known to be tolerant to 2,4-D. <b>DO NOT USE ADJUVANTS</b> . 2,4-D may cause injury to nearby sensitive crops. 2,4-D applications may result in brittle corn stalks, and winds or cultivation may cause stalk breakage. To reduce damage, delay cultivation 8 to 10 days after application.			
or 2,4-D LVE®	or 1/3 to 1/2 pt/A <sup>1</sup>				
Sencor® DF + Atrazine®	2 oz/A + 1/2 to 1-1/2 lb ai/A	Apply as a broadcast spray during the interval from corn emergence until corn is 12 inches tall. A non-ionic surfactant (1 qt/100 gal of spray solution) may be added to improve weed control. Atrazine is a restricted use herbicide. Follow all state and federal label recommendations and restrictions pertaining to atrazine applications.			
Sencor® DF + Banvel® or Clarity®	2 oz/A + 1/2 to 1 pt/A or 1/2 to 1 pt/A	Apply as a broadcast spray during the interval from corn emergence through the five leaf stage or when corn is 8 inches tall, whichever occurs first. For Banvel applications to corn greater than 8 inches in height, consult the Banvel label for use rates and restrictions. If growing conditions are dry and plants are stressed, addition of a nonionic surfactant (1 qt/100 gal of spray solution) may improve weed control. For corn grown on coarse textured soils, apply Banvel or Clarity at 0.5 pt/A, regardless of application method. Application may cause injury to nearby sensitive crops or plants. Application may result in temporary leaning of corn plants. Delay cultivation until plants return to normal growth patterns to avoid stalk breakage.			
Sencor® DF + Basagran®	2 oz/A + 1 pt/A	Apply as a broadcast spray after corn emergence but before corn exceeds 30 inches in height and the crop canopy closes the row. Adjuvants such as UAN (0.5 to 1 gal/A), ammonium sulfate (17 lbs/100 gal of spray solution), or non-ionic surfactant (1 qt/100 gal of spray solution) may improve weed control.			
Sencor® DF + Buctril® or	1.6 to 2 oz/A + 1 pt/A or 1/2 pt/A	Apply as a broadcast spray when corn is in the fourth true leaf stage or later but before the crop canopy closes the row. <b>DO NOT USE ADJUVANTS</b> . Occasional temporary corn leaf burn may occur and is similar to that observed from liquid fertilizers. Recovery is generally rapid with no lasting effect. To reduce potential for crop damage, application should be made to dry corn foliage when weather conditions are not extreme.			
Buctril Gel®  Sencor® DF  +  Buctril® +  atrazine  (Premix)	1.6 to 2 oz/A + 1-1/2 to 2 pt/A	Apply as a broadcast spray during the interval from corn emergence until corn is 12 inches tall. <b>DO NOT USE ADJUVANTS.</b> Occasional temporary corn leaf burn may occur and is similar to that observed from liquid fertilizers. Recovery is generally rapid with no lasting effect. To reduce potential for crop damage, application should be made to dry corn foliage when weather conditions are not extreme.			
Sencor® DF + Laddok S-12®	2 oz/A + 1.33 to 1.66 pt/A	Apply as a broadcast spray after corn emergence until the corn is 12 inches tall. Adjuvants such as UAN (0.5 to 1 gal/A) may increase weed control. Laddok® S-12 contains atrazine, and is a restricted use product. Follow all state and federal label recommendations and restrictions pertaining to atrazine.			
Sencor® DF + Marksman®	2 oz/A + 1-1/2 to 2 pt/A	Apply as a broadcast spray during the interval from corn emergence through the five-leaf stage or when corn is 8 inches tall, whichever occurs first. <b>DO NOT USE ADJUVANTS</b> . Application may cause injury to nearby sensitive crops or plants. Application may result in temporary leaning of corn plants. Delay cultivation until plants return to normal growth patterns to avoid stalk breakage. Marksman® contains atrazine, and is a restricted use product. Follow all state and federal label recommendations and restrictions pertaining to atrazine.			
Sencor® DF + Pursuit®	2 oz/A + 2 to 4 oz/A	Use only on designated IMI-Corn hybrids (hybrids which are resistant/tolerant to Pursuit®). Apply the 4.0 ounce rate of Pursuit® if grasses are present or broadleaf weeds are near the maximum heights shown. Apply in combination with a non-ionic surfactant (1 qt/100 gal of spray solution) and UAN (1 to 2 qt/A).			
Sencor® DF + Resource®	3 fl oz/A + 4 to 6 fl oz/A	Apply as a broadcast spray to field corn from 2-leaf through 10-leaf (visible leaf collars) stage. Adjuvants such as nonionic surfactant (0.25% v/v), UAN (2% v/v) or ammonium sulfate (2.5 lbs/A) may increase weed control.			
Sencor® DF  +  Tough®	2 oz/A + 1 to 2 pt/A	Apply as a broadcast spray after corn emergence but before corn height exceeds 30 inches and the crop canopy closes the row. A non-ionic surfactant (1 qt/100 gal of spray solution) may be added to improve weed control. Use the higher rates of Tough® as weeds approach to maximum height listed or are found in high density. Tough® may improve control on triazine/ALS resistant weeds.			

<sup>\*</sup> Consult the appropriate tank mix partner's label for additional recommendations or restrictions. The most restrictive labeling applies to tank mixes with Sencor® DF.

Application rate is based on, but not restricted to, 4 pounds active ingredient per gallon of 2,4-D®.

	SENCOR® DF POST DIRECTED RECOMMENDATIONS				
PRODUCT	RATE	DIRECTIONS AND REMARKS*			
Sencor® DF + 2,4-D Amine® or 2,4-D LVE®	2 to 3 oz/A + 3/4 to 1-1/2 pt/A <sup>1</sup> or 1/2 to 3/4 pt/A <sup>1</sup>	For corn greater than 8-inches tall, apply as a <b>directed spray with drop nozzles</b> before tassel emergence. Apply only to varieties known to be tolerant to 2,4-D®. <b>DO NOT USE ADJUVANTS</b> . 2,4-D® may cause injury to nearby sensitive crops. 2,4-D® applications may result in brittle corn stalks, and winds or cultivation may cause stalk breakage. To reduce damage, delay cultivation 8 to 10 days after application.			
Sencor® DF + Banvel®	2 to 3 oz/A + 1/2 pt/A	For corn 8 to 36 inches tall, apply as a <b>directed spray with drop nozzles</b> . Application may be made up to 18 days prior to corn tasseling. If growing conditions are dry and plants are stressed, addition of a non-ionic surfactant (1 qt/100 gal of spray solution) may improve weed control. For corn grown on coarse textured soils apply Banvel® at 0.5 pt/acre, regardless of application method. Application may cause injury to nearby sensitive crops or plants. Application may result in temporary leaning of corn plants. Delay cultivation until plants return to normal growth patterns to avoid stalk breakage.			
Sencor® DF  + Buctril®  or Buctril® Gel	2 to 3 oz/A + 1 to 1-1/2 pt/A or 1/2 to 3/4 pt/A	Apply as a <b>directed spray with drop nozzles</b> before tassel emergence. <b>DO NOT USE ADJUVANTS</b> Occasional temporary corn leaf burn may occur and is similar to that observed from liquid fertilizers. Recovery is generally rapid with no lasting effect. To reduce potential for crop damage, application should be made to drict corn foliage when weather conditions are not extreme.			
Sencor® DF + Scorpion® III	3 to 4-1/2 fl oz/A + 4 oz/A	For corn 8 to 24 inches tall, apply as a directed spray with drop nozzles. Include nonionic surfactant (1 qt/100 ga plus UAN (2.5 gal/100gal) for optimum weed control.			

<sup>\*</sup> Consult the appropriate tank mix partner's label for additional recommendations or restrictions. The most restrictive labeling applies to tank mixes with Sencor® DF.

Application rate is based on, but not restricted to, 4 pounds active ingredient per gallon of 2,4-D®.

#### WEEDS CONTROLLED - POSTEMERGENCE BROADCAST APPLICATION These tank mixtures with Sencor® DF will control the following annual weeds up to the maximum weed heights listed: SENCOR® DF + Buctril®/ Banvel®/ Buctril®+ Laddok<sup>®</sup> Atrazine<sup>®</sup> Basagran<sup>®</sup> Resource<sup>®</sup> Pursuit<sup>®</sup> Tough® Clarity<sup>®</sup> Marksman<sup>®</sup> atrazine S-12 **COMMONWEED NAME MAXIMUM WEED HEIGHT IN INCHES\*** 4ª Amaranth, Palmer Buckwheat, wild Buffalobur Burcucumber Carpetweed Cocklebur, common 8<sup>b</sup> Eclipta Henbit Horseweed/marestail Jimsonweed Knotweed 1ª 2ª 2ª 2ª 2ª Kochia Ladysthumb Lambsquarters, 6ª common Lettuce, prickly Mallow, Venice Morningglory, entire leaf Morningglory, ivyleaf Morningglory, pitted Morningglory, tall Mustard, tansy Mustard, wild Nightshade, black Nightshade, eastern

6ª

6ª

6,

5°

2ª

2ª

8<sup>b</sup>

8<sup>b</sup>

**4**<sup>b</sup>

6ª

6ª

6ª

6ª

6ª

black

Poorjoe

Pigweed, redroot

Pigweed, smooth

Purslane, common

Ragweed, common

Sunflower, common

Thistle, Russian

Waterhemp, spp.

Pusley, Florida

Ragweed, giant

Sicklepod

Sida, prickly

Smartweed, Pennsylvania

Velvetleaf

<sup>\*</sup> When weeds are approaching the maximum height listed or found in high densities, use the higher rate of Sencor® DF and the selected tank mix

<sup>\*</sup> These treatments will not control triazine resistant biotypes.

These treatments will not control ALS resistant biotypes.

#### WEEDS CONTROLLED - POST DIRECTED APPLICATION

These tank mixtures with Sencor® DF will control the following annual weeds up to the maximum weed heights listed:

	SENCOR® DF +				
	2,4-D	Banvel	Buctril	Scorpion III	
COMMON WEED NAME		MAXIMUM WEED H	EIGHT IN INCHES *	ē.	
Amaranth, Palmer	12	12	6	8	
Cocklebur, common	12	12	12	. 15	
Jimsonweed	12	10	10	8	
Ladysthumb	6	8	6	6	
Lambsquarters, common	12	12	10	12	
Morningglory, entire leaf	18	18	6	12	
Morningglory, ivyleaf	18	18	6	12	
Morningglory, pitted	18	18	6	12	
Morningglory, tall	18	18	66	12	
Nightshade, black	10	8	8	6	
Nightshade, eastern black	10	8	8	6	
Pigweed, redroot	12	12	6	. 8	
Pigweed, smooth	12	12	6	8	
Ragweed, common	8	8	8	10	
Ragweed, giant	12	12	8	15	
Smartweed, Pennsylvania	6	8.	6	6	
Sunflower, common	12	12	12	12	
Velvetleaf	10	8	88	8	
Waterhemp, tall	12	12	. 6	8	

PERENNIAL WEED SUPPRESSION

The following Sencor® DF tank mixtures will provide top growth burndown and in season suppression of the following perennial weeds; however, regrowth may occur. For the best performance on these weeds, use the maximum rates of Sencor® DF, Banvel®, Buctril®, Buctril® + atrazine, Clarity®, Marksman®, 2,4-D LVE® or Pursuit® recommended for these tank mixtures.

#### Sencor® DF + Banvel® or Clarity®

Bindweed, field; Dandelion, common; Dock, curly; Smartweed, swamp; Thistle, Canada.

#### Sencor® DF + Buctril® or Buctril ®+ atrazine

Thistle, Canada.

partners.

## Sencor® DF + 2,4-D LVE®

Bindweed, field; Dandelion, common; Dock, curly; Smartweed, swamp; Thistle, Canada.

## Sençor® DF + Marksman®

Bindweed, field; Dandelion, common; Dock, curly; Smartweed, swamp; Thistle, Canada.

## Sencor® DF + Pursuit®

Thistle, Canada.

#### PREPLANT and PREEMERGENCE

#### Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, Ohio, South Dakota and Wisconsin

Sencor® DF is recommended for additional residual control of certain broadleaf weed species in corn when applied as a tank mix combination with both grass and broadleaf herbicides registered and recommended for use in field corn. Sencor® DF can be tank mixed with recommended rates of the following perbicides:

THINCO WILL TOO THIN OHOU TO	ites of the following herbicides.	,	
Alachlor®	Bullet®	Lariat®	Pursuit®*
Atrazine®	Clarity®	Linex®	Ramrod®
Banvel®	Cycle®	Linuron®	Ramrod®/Atrazine®
Bicep®	Dual®	Lorox®	Simazine®
Bicep® II	Dual® II	Marksman®	Surpass®
Bicep® Lite	Extrazine® II	Pentagon®	Surpass® 100
Bladex®	Frontier®	Prowl®	Topnotch®
Broadstrike® + Dual®	Guardsman®	Pursuit® Plus*	
Broadstrike® Plus	Harness® Extra		
* Use only on Pursuit® resistar	t/tolerant corn hybrids (IMI corn).		

**Application:** Sencor® DF may be applied to field corn preplant without incorporation up to 30 days prior to planting or preemergence. Applications may be made by either ground or aerial equipment. For tank mixes, follow the most restrictive application methods of all products used.

#### **SPECIAL PRECAUTIONS:**

- Do not apply more than 5 1/3 ounces Sencor® DF (0.25 pound active ingredient) per acre per growing season.
- Do not apply on soils having pH 7.0 or greater.
- Corn seed should be planted a minimum of 1 1/2 inches deep.
- Sencor® DF may only be used in hybrid seed corn production fields if both inbred parents are known to be tolerant to Sencor®
  DF.
- Not recommended for use on muck soils as reduced weed control may result.
- Observe all precautions and limitations on labeling of all products used in tank mixes.

**Feeding restrictions:** Corn treated with Sencor® DF may be harvested for silage or grain 60 days after treatment. For tank mixes, follow the most restrictive preharvest interval of all products used.

WEEDS CONTROLLED: Sencor® DF will aid in the residual preemergence control of the following weed species when tank mixed with other registered grass and/or broadleaf corn herbicides:

Horseweed/marestail	Pigweed spp.	Smartweed, Pennsylvania	Velvetleaf		
Ladysthumb	Ragweed, common	Sunflower	Waterhemp, Tall		
Lambsquarters, common					
* For control of emerged weeds refer to the "Burndown Weed Control" section of the Sencor® label.					

SENCOR® DF FIELD CORN RATE RECOMMENDATIONS				
	STATES	APPLICATION TIMING	SENCOR® DF oz/A	
Iowa Kansas Missouri	Nebraska . South Dakota	Preplant (0 to 30 days) Preemergence	2 to 5-1/3	
Illinois Indiana	Minnesota Ohio	Preplant (10 to 30 days)	2 to 5-1/3	
Kentucky Michigan	Wisconsin	Preplant (0 to 9 days) Preemergence	2 to 4	

**REMARKS:** Apply as a broadcast spray prior to corn emergence from the soil.

Do not apply Sencor® DF on coarse textured soils with less than 1.5% organic matter. Do not apply more than 4 oz. Sencor® DF per acre on soils with less than 2.0% organic matter.

For heavy weed infestations and/or early preplant applications, use the higher rates of Sencor® DF.

Consult the label of herbicide tank mix partners to determine proper use rates for the other product(s).

## SWEET CORN

#### PREPLANT AND PREEMERGENCE APPLICATIONS

(Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, Ohio, South Dakota and Wisconsin)

Sencor® DF is recommended for additional residual weed control of certain broadleaf weed species, when applied in combination with other broadleaf and/or grass herbicides as a tank mixture. All products used must be labeled for use on sweetcorn. The most restrictive restrictions and precautions of all the products used must be observed. Use only labeled rates and methods of applications.

Tank Mixtures: Sencor® DF can be tank mixed with the products containing one or more of the following herbicides: 2,4-Ď, alachlor, atrazine, cyanazine, glyphosate, linuron, metolachlor, metribuzin, paraquat, and pendimethalin.

Weeds Controlled: Refer to the PREPLANT AND PREEMERGENCE APPLICATION - FIELD CORN section of this label for a list of weeds controlled by Sencor® DF when applied before weed emergence. Use recommended adjuvants when emerged weeds are present. Refer to the BURNDOWN WEED CONTROL - FIELD CORN section for a list of weeds controlled and weed height restrictions.

Sequential Applications: Sequential applications of all herbicides containing metribuzin (the active ingredient in Sencor® DF) are subject to a limitation of not more than 0.25 pounds a.i. of metribuzin (5-1/3 ounces of Sencor® DF) per acre of corn per use season. There are no other specific restrictions on sequential applications due to the application of Sencor® DF.

#### **SPECIAL PRECAUTIONS:**

- Do not apply more then a total of 5-1/3 ounces Sencor® DF (0.25 pounds metribuzin) per acre per growing season.
- Do not apply preplant or preemergence on soils having a pH 7.0 or greater.
- Corn seed should be planted a minimum of 1-1/2 inches deep.
- Sencor® DF may only be used in hybrid seed production fields, if both inbred parents are known to be tolerant to Sencor® DF.
- Reduced residual weed control may result when used on organic soils. For this reason, residual weed control is not claimed on organic soils.
- Observe all precautions and limitations on labeling of all products used in tank mixtures.

Feeding restrictions: Grain, forage, and processing waste may be feed to livestock if harvested at least 60 days after the last application of Sencor® DF.

Sensitive Sweetcorn Hybrids: Make applications only to hybrids that have established tolerance to the application planned.

Application Methods and Timing: Sencor® DF can be applied preplant surface or preemergence as a broadcast or band application in water, fluid fertilizer, or impregnated on dry fertilizer. Ground or aerial equipment may be used. See DIRECTIONS FOR USE section of this label for directions.

Application Rate Recommendations: Refer to the "Directions For Use" section of this label for definitions of "Soil Texture Group" and other information that applies to all applications. Use the lowest rate of the recommended rate range on soils with the lowest percent clay and organic matter for the group and progressively higher rate for increased clay and organic matter content. The clay content is at least twice as important as organic matter when adjusting rates. Rates will vary based on local conditions.

	SOIL ORGANIC MATTER CONTENT		
SOIL TEXTURE GROUP	1.5% to 2.9%	3.0 % or More	
ALL SAND SOILS	DO NOT USE		
COARSE			
	1.6 to 2.4 oz/A	2.5 to 2.8 oz/A	
MEDIUM			
	3 to 3.3 oz/A	3.2 to 3.7 oz/A	
FINE			
	3.6 to 4.0 oz/A	3.6 to 4.4 oz/A	

For early preplant application more than 9 days before planting and fields with at least 30% crop residue on the soil surface at application, the application rate may be increased 1 oz/A, but not to exceed 5-1/3 oz/A.

For band applications use proportional less per planted acre.

See DIRECTIONS FOR USE section of this label.

## **GARBANZO BEANS (Chickpeas)**

California, Idaho, Oregon, and Washington

Special Conditions of Sale for Use on Garbanzo Beans (Chickpeas): The following directions for use were developed under the direction of IR-4 (government minor crops use program). As such the testing was done independently from the testing program of Bayer CropScience. Buyer is advised that Bayer CropScience makes no assurances regarding satisfaction with the product and that all risks of crop injury or product performance are assumed by the Buyer.

Sencor® herbicide is recommended as a preemergence application for the suppression of certain broadleaf weeds in garbanzo beans.

#### WEEDS SUPPRESSED\*

Common Chickweed	Dog Fennel (Mayweed)	Pigweed	Wild Mustard		
Common Lambsquarters	Field Pennycress Henbit	Shepherdspurse			
* Suppression is a reduction in weed size and growth compared to a non-treated area in the same field. Sencor® used alone will not control triazine-resistant weed species.					

RECOMMENDED APPLICATIONS				
CROP SENCOR® DF Lb/Acre				
Garbanzo beans	1/3 to 1/2			
	Apply specified dosage in a single preemergence application using 10 to 40 gallons of water per acre with ground spray equipment. Apply before or after planting but before crop emergence. Thorough incorporation, either by rainfall or by mechanical means, is essential for weed suppression. Under dry conditions, incorporate Sencor® into the top 1 to 2 inches of soil with spike harrows, or similar shallow incorporation equipment, then cross harrow to insure uniform soil incorporation. Where soil surface is moist at the time of application and rain follows before weed emergence, a broadcast application should provide adequate weed suppression.			
	Use on coarse-textured soils, sandy soils or any soil with less than 1.5% organic matter will likely cause crop injury.			
	Use the higher rate on fine textured soils (high in clay or organic matter) and in fields with a history of high weed populations.			

#### **SPECIAL PRECAUTIONS:**

- Crop injury may result if crop is under stress conditions caused by cold weather, poor soil fertility, disease or insect damage.
- Crop injury may result if application is followed by heavy rain. Avoid application of more than 1/2 inch of irrigation within one month after application of Sencor® DF, or crop injury may occur.
- Do not use on clay knobs or poorly covered subsoils.
- Do not apply preemergence on shallow seedings less than 2 inches deep.
- Do not graze or feed treated vines to livestock within 40 days after application.

Maintain continuous spray tank agitation to keep material in suspension. Avoid overlapping of spray swaths and shut off spray booms while turning, slowing or stopping, or crop injury will occur.

**NOTE:** This treatment may cause some chlorosis or minor necrosis. Because garbanzo bean varieties may vary in their susceptibility to Sencor® DF, determine crop tolerance prior to adoption as a field scale practice to prevent possible injury.

## **LENTILS AND PEAS**

(Idaho, Oregon, and Washington)

Sencor® DF herbicide is recommended as a preemergence and postemergence application for the suppression of certain broadleaf weeds in lentils and peas.

#### WEEDS SUPPRESSED\*

Common Chickweed**	Shepherdspurse**	Henbit**	Pennsylvania Smartweed
Lambsquarters	Field Pennycress	Corn Spurry	Pineapple Weed
Dog Fennel	Wild Mustard	Redroot Pigweed	Prostrate Knotweed
* Suppression is a reduction	n in weed size and growth comp	ared to a non-treated area in the sa	ame field.
** Preemergence application	n only		

**PREEMERGENCE APPLICATION**: Make a single preemergence application of Sencor® DF at 1/4 to 1/2 lb per acre per crop year. Apply in 10 or more gallons of water per acre with ground spray equipment or 5 or more gallons of water per acre with aerial spray equipment. Apply Sencor® DF before or after planting. Thorough incorporation, either by rainfall or by mechanical means, is essential for weed suppression. Under dry conditions, incorporate Sencor® DF into the top 1 to 2 inches of soil with spike harrows, or similar shallow incorporation equipment, then cross harrow to insure uniform soil incorporation. Where soil surface is moist at the time of application and rain follows before weed emergence, a broadcast application should provide adequate weed suppression.

Use the higher rate on fine-textured soils (high in clay or organic matter) and in fields with a history of high weed populations.

Sencor® DF may be applied pre- or post plant incorporated as a tank mix combination with FARGO® 4EC. Follow the Directions for Use statements on both product labels.

54/64

**POSTEMERGENCE APPLICATION:** One postemergence application may be made per season. Use 1/6 to 1/3 lb of Sencor® DF per acre on **lentils** and **spring peas**. On **winter peas**, use 1/4 to 1/3 lb of Sencor® DF per acre. For suppression of dog fennel, use 1/3 lb Sencor® DF per acre. Apply specified dosage in 20 or more gallons of water per acre with ground spray equipment or 5 or more gallons of water per acre with aerial spray equipment. Do not exceed 40 psi with ground spray equipment. Apply as a broadcast spray when weeds are small (less than 2 inches in height or diameter) and before crop is 6 inches tall.

Temporary chlorosis of the crop may occur. There is an added risk of crop injury if a postemergence application is made following a previous preemergence or post plant incorporated Sencor® DF application.

Do not apply over very moist soils or wet crop foliage. Do not apply postemergence applications within 3 days after periods of cool, wet, or cloudy weather or crop injury may occur.

Do not apply within 24 hours of treatment with other pesticides.

#### SPECIAL PRECAUTIONS (All applications):

- Do not apply more than 2/3 lb Sencor® DF per acre per year. Crop injury may result if crop is under stress conditions caused by cold weather, low fertility, disease or insect damage.
- Crop injury may also result if application is followed by heavy rain.
- Do not use on coarse-textured soils, sandy soils or soils with less than 1.5% organic matter.
- Do not apply to "Estin" lentils.
- Do not use on clay knobs or poorly covered subsoils.
- Do not apply on shallow seedings less than 2 inches deep (preemergence only).
- Do not apply within 50 days of harvest of peas, or within 75 days of harvest of lentils. Do not graze or feed treated vines to livestock within 40 days after application.

Maintain continuous spray tank agitation to keep material in suspension. Avoid overlapping and shut off spray booms while turning, slowing or stopping, or crop injury will occur.

**NOTE**: This treatment may cause some chlorosis or minor necrosis. Because lentil and pea varieties may vary in their susceptibility to Sencor® DF, determining crop tolerance prior to adoption as a field scale practice is suggested to prevent possible injury.

For additional precautions, restrictions, limitations, and sprayer clean-up information refer to the appropriate sections of this label.

## **SUGARCANE**

#### **SPECIAL PRECAUTIONS:**

- For aerial and chemigation application methods on sugarcane the maximum application rate is 2-2/3 lb Sencor® DF/acre.
- To assure that spray will not adversely affect adjacent sensitive nontarget plants, apply this product by aircraft at a minimum upwind distance of 400 ft from sensitive plants.
- Do not rotate any crop not listed on this label for 18 months following application of Sencor® DF. Refer to the "Crop Rotation Restrictions" section of this label for more information.

#### SUGARCANE (Hawaii Only)

Sencor® DF, a selective herbicide, is effective as a preemergence and an early postemergence broadcast application for control of certain grass and broadleaf weeds. When applied as a spot treatment, it also provides excellent control of perennial grasses and broadleaves.

**Ground Application:** Sencor® DF should be mixed by filling the spray tank half full of clean water. Then add the recommended amount of Sencor® DF to suit the total tank capacity and the rate of application per acre (preferably 25 to 35 gallons per acre). Complete filling the tank and maintain sufficient agitation during mixing and spraying to ensure a uniform spray mixture.

**Aerial Application:** Sencor® DF is recommended for use in aerial spray equipment as a preemergence or postemergence application to irrigated sugarcane. Aerial spray equipment should be calibrated to apply the proper amount of Sencor® DF in 5 to 10 gallons of spray mixture per acre.

Sencor® DF applied preemergence or postemergence to the sugarcane as a broadcast spray or spot treatment will effectively control the following when weeds are less than 3 inches in height.

Weeds Controlled in Irrigated	and Non-irrigated Sugarcane		
BROADLEAVES Amaranth, Spiny (Amaranthus spinosus)	Euphorbia, Wild (Euphorbia spp.) Fireweed (Erechtites hieracifolius)	Floras paintbrush (Emilia sonochifolia)  Spurge, Garden (Euphorbia hirta)	Spurge, Graceful (Euphorbia glomerifera)
GRASSES Crabgrass (Digitaria spp.)	Guineagrass (Panicum maximum) Plushgrass (Chloris radiata)	Ricegrass (Oryzopsis hymenoides)	Wiregrass (Eleusine indica)
Weeds Controlled in Irrigated	Sugarcane Only		
BROADLEAVES Amaranth, Spleen (Amaranthus dubius)	Haole Koa (Leucaena leucocephala) Hialoa (Waltheria americana)	Hilahila ( <i>Mimosa pudica</i> ) Purslane, Common ( <i>Portulaca oleracea</i> )	Rattlepod (Crotalaria spectabilis)
GRASSES Alexandergrass (Brachiaria plantaginea)	Bristly foxtail (Setaria verticillata)		
Weeds Controlled in Non-irrig	ated Sugarcane Only		
BROADLEAVES Ageratum (Ageratum conyzoides)	Richardia ( <i>Richardia brasiliensis</i> )	Tarweed (Cuphea carthagenesis)	

RECOMMENDED BROADCAST APPLICATIONS SUGARCANE (HAWAII ONLY)				
SENCOR® DF (Lb/Acre)	REMARKS			
2-2/3 to 5-1/3 (non-irrigated)	<b>PREEMERGENCE</b> (Irrigated and non-irrigated sugarcane): Apply specified dosage per acre as a broadcast spray to the soil surface. Applications should be made within two weeks after planting prior to cane emergence or shortly after emergence (spike stage).			
5-1/3 to 8 (irrigated)	OR  EARLY POSTEMERGENCE (Irrigated and non-irrigated sugarcane): Apply specified dosage per acre as a broadcast spray over the cane. Application may be delayed as long as 4 to 6 weeks after planting provided weeds are less than 3 inches in height.			
2-2/3 to 5-1/3	OR  POSTEMERGENCE: Apply specified dosage per acre as a broadcast spray to control weeds prior to "close in" time when cane shades out the weed growth.			
3-1/3 to 6-2/3	<b>SPOT TREATMENT:</b> Apply specified dosage in 30 to 50 gallons of finished spray per acre. Spot treatments may be used to control weeds in missed areas, corners of fields, or areas of hard to control weeds.			
	apply more than 10-2/3 lb of Sencor® DF (8 lb active ingredient) / acre per crop cycle regardless of the method of			

## **SPECIAL PRECAUTIONS:**

• Do not use treated foliage for feed or forage.

## **SUGARCANE** (Louisiana and Texas Only)

Preemergence and postemergence applications of Sencor® DF with aerial or ground spray equipment are recommended for control of the following weeds in sugarcane in Louisiana and Texas:

BROADLEAVES	Henbit	Mustard, Wild	Sowthistle
Amaranth, Spiny (Amaranthus spinosus) Bindweed, Field	(Lamium amplexicaule) Lambsquarters (Chenopodium album)	(Brassica kaber) Pigweeds (Amaranthus spp.)	(Sonchus spp.)
(Convolvulus arvensis) Chickweed (Cerastium vulgatum)	London rocket (Sisymbrium irio)  Marestail (Conyza canadensis)	Purslane (Portulaca oleracea)	
GRASSES Broadleaf Signalgrass (Brachiaria platyphylla)	Crabgrass (Digitaria spp.) Foxtails (Setaria spp.)	Johnsongrass, Seedling (Sorghum halepense)	Oats, Winter (Avena spp.)

	RECOMMENDED APPLICATIONS				
	SUGARCANE (LOUISIANA AND TEXAS ONLY)				
SENCOR® DF (Lb/Acre)	REMARKS				
2 to 4	<b>BROADCAST:</b> Apply specified dosage per acre using 20 to 30 gallons of water with ground equipment or 5 gallons of water with aircraft spray equipment. Apply as a broadcast spray during the Fall after planting or to the stubble after harvest. Make a second application early in the Spring.				
1 to 2	<b>BAND:</b> Apply specified dosage in 10 to 20 gallons of water per acre in a 30 to 36 inch band over the row during the Fall after planting or to the stubble after harvest. Make a second application early in the Spring.				

## SPECIAL PRECAUTIONS (Louisiana and Texas only):

- Do not use treated foliage for feed or forage.
- Use the higher rate on heavy clay soil and soil with a high percentage of organic matter. If necessary, a third application may be made in late Spring at layby. Do not apply within 60 days of harvest.

## **SUGARCANE (FLORIDA ONLY)**

Postemergence over-the-top or directed spray applications of Sencor® DF are recommended for the control of the following weeds in sugarcane in Florida.

BROADLEAVES  Amaranth, Spiny (seedling) (Amaranthus spinosus)	Butterweed (Cressleaf groundsel) (Senecio glabellus)	Cudweed (Gnaphalium spp.)	Purslane (Portulaca oleracea)
GRASSES Crabgrass large	Foxtail, bristlegrass (Setaria magna)	Panicum, broadleaf (Panicum adspersum)	Signalgrass, Broadleaf (Brachiaria platyphylla)
(Digitaria sanguinalis)	Goosegrass (Eleusine indica)		

	RECOMMENDED APPLICATIONS				
·	SUGARCANE (FLORIDA ONLY)				
SENCOR® DF (Lb/Acre)	REMARKS				
1-1/3 to 2-2/3	<b>GROUND APPLICATION:</b> Sencor® DF may be used in one or two applications with a minimum of 14 days between each application. Apply when weeds are less than 6 inches tall in 10 to 40 gallons of spray mixture per acre. <b>POSTEMERGENCE BROADCAST OR BAND:</b> Apply over the top of stubble or plant cane while sugarcane is less than 14 inches tall.				
	POSTEMERGENCE DIRECTED SPRAY: Apply to sugarcane that is a minimum of 14 inches tall and before row closing.				
1-1/3 to 2	<b>AERIAL APPLICATION:</b> Apply when weeds are less than 4 inches tall in 5 to 10 gallons of spray mixture per acre. Apply to stubble or plant cane while the sugarcane is less than 14 inches tall.				

57/64

**SENCOR® DF PLUS ATRAZINE TANK MIX:** Sencor® DF may be used with atrazine as a preemergence or postemergence (before row closing) application to sugarcane. Rates for Sencor® DF are 1 to 2-2/3 lb/acre and atrazine 80% WP (4L) are 2-1/2 to 5 lb/acre (2 to 4 qt/acre). For additional information on precautions, instructions, limitations, application, and weeds controlled, refer to this label and the atrazine label.

#### SPECIAL PRECAUTIONS (FLORIDA ONLY):

- Do not use more than 2-2/3 lb per acre in a single growing season. Do not use on sand soils.
- Spray contact with sugarcane foliage may result in minor leaf margin chlorosis and/or necrosis.
- Do not apply within 60 days of harvest. Do not use treated crop for feed or forage.
- Avoid spray overlaps or variations in application speed that may result in insufficient or excessive rates of application.

## **TOMATOES**

Apply Sencor® DF herbicide with ground equipment to seeded and transplanted tomatoes as specified below under "Recommended Applications".

For effective control of grasses and broadleaf weeds with postemergence applications, apply Sencor® DF before weeds are 1-inch tall. Thorough spray coverage on weed foliage is essential for adequate control with postemergence applications.

Do not use air blast or other high pressure spray equipment to make postemergence applications of Sencor® DF. Refer to the appropriate section of this label for additional information regarding spray equipment, dilution rates, mixing, sprayer cleanup, restrictions, container disposal and cautions.

For specific application information see the "General Information" section in the front of this label.

WEEDS CONTROLLED  PREPLANT INCORPORATED APPLICATIONS TRANSPLANT TOMATOES ONLY  Broadcast Sprays - 1/3 to 2/3 Lb Sencor® DF/Acre				
BROADLEAVES Galinsoga (Galinsoga spp.)	Lambsquarters ( <i>Chenopodium album</i> )	*Pigweed, Redroot (Amaranthus retroflexus)	*Purslane, Common ( <i>Portulaca oleracea</i> )	
GRASSES *Goosegrass (Eleusine indica)				

Preplant incorporated applications applied as directed will suppress foxtails, panicums and barnyardgrass.

Sencor®DF/Trifluralin Tank Mix: This tank mix combination applied preplant incorporated as directed on this label will control the weeds listed above plus those weeds listed on the trifluralin label.

\* For optimum control of these weeds, use the highest rate recommended on the label for the type of application to be made. Repeat postemergence applications may be needed for best control.

Postemergence applications as directed on this label will suppress barnyardgrass and crabgrass when these weeds are less than 1-inch tall.

# WEEDS CONTROLLED POSTEMERGENCE APPLICATIONS ESTABLISHED TOMATOES

For effective control of weed Broadcast Sprays 1/3 to 2/3	ds with postemergence applications,	apply Sencor® DF before weeds a	re 1-inch tall.
BROADLEAVES  Carpetweed (Mollugo verticillata)  Fumitory (Fumaria officinalis)  Galinsoga (Galinsoga spp)	*Jimsonweed (Datura stramonium)  *Ladysthumb (Polygonum persicaria)  Lambsquarters (Chenopodium album)  Mustard, Wild (Brassica kaber)	Pigweeds (Amaranthus spp.) Purslane (Portulaca oleracea) *Ragweed, Common (Ambrosia artemisiifolia)	*Smartweed, Pennsylvania (Polygonum pensylvanicum) Toadflax (Linaria spp.) *Velvetleaf (Abutilon theophrasti)
Directed Sprays 2/3 to 1-1/3	Lb Sencor® DF/Acre		
GRASSES *Foxtail, Yellow (Setaria glauca)	Goosegrass (Eleusine indica)	Plus Weeds Listed Under Broadcast Sprays	

<sup>\*</sup> For optimum control of these weeds, use the highest rate recommended on the label for the type of application to be made. Repeat postemergence applications may be needed for best control.

Postemergence applications as directed on this label will suppress barnyardgrass and crabgrass when these weeds are less than 1-inch tall.

RECOMMENDED BROADCAST APPLICATIONS FOR TOMATOES				
SENCOR® DF *Ib/Acre	REMARKS			
1/3 to 2/3	PREPLANT INCORPORATED - TRANSPLANT TOMATOES ONLY: Apply specified dosage in 10 or more gallons of water per acre as a broadcast spray to the soil surface immediately before transplanting. Incorporate to a depth of 2 to 4 inches with equipment capable of uniformly mixing the chemical into the soil. This application may be made alone or in a tank mix combination with trifluralin. When transplanting tomatoes, place the root system of the plants below the herbicide incorporation zone or injury may occur. Refer to the trifluralin label for specific rate of application and for additional precautions and restrictions for tomatoes.			
1/3 to 2/3	POSTEMERGENCE BROADCAST SPRAY - ESTABLISHED TOMATOES: Apply specified dosage in 20 or more gallons of water per acre as a broadcast spray, or apply in 1/4 to 3/4 inch of water (use 1/4 to 1/2 inch of water on sandy soils) per acre as a continuous injection in center pivot and lateral move systems or apply in the last 15 to 30 minutes of set in permanent solid set sprinkler systems. One or more applications may be applied per use season. Allow at least 14 days between applications or severe crop injury may occur. For transplanted tomatoes, do not apply until transplants have recovered from transplant shock and new growth is evident. Do not apply to tomatoes within 24 hours of application of other pesticides. Do not tank mix with other pesticides. (See "Special Precautions" below.)			
2/3 to 1-1/3	POSTEMERGENCE DIRECTED SPRAY - ESTABLISHED TOMATOES: Apply specified dosage in 20 or more gallons of water per acre as a directed spray. One or more applications may be applied per use season. Allow at least 14 days between applications or severe crop injury may occur. Avoid contacting tomato foliage with spray. This method of treatment is recommended for use in fields with a history of severe weed pressure or in fields infested with hard-to-control weeds. For transplanted tomatoes, do not apply until transplants have recovered from transplant shock and new growth is evident. Do not apply to tomatoes within 24 hours of application of other pesticides. (See "Special Precautions" below.) When banding see the appropriate section in the front of this label.			

#### **SPECIAL PRECAUTIONS (Tomatoes):**

- Do not apply more than a total of 1 1/3 lb Sencor® DF per crop season.
- Do not apply the total amount of 1 1/3 lb Sencor® DF within a time span of less than 35 days, except in the case of directed sprays.
- Allow at least 14 days between applications, regardless of dosage or method of application or severe crop injury may occur.
- Do not apply within 7 days of harvest.
- Do not apply within 3 days after periods of cool, wet or cloudy weather, or crop injury will occur.
- Do not use hot caps on tomatoes within 7 days before or at any time after application of Sencor® DF. Do not treat seeded tomatoes until plants have reached the 5 to 6 leaf stage or severe crop injury may occur.

- Crop injury or delayed maturity may result from broadcast or directed spray applications if tomatoes are growing under stress
  conditions such as periods of drought or cool, wet and cloudy weather preceding application.
- For newly introduced tomato varieties with unknown tolerance to Sencor® DF, treat only a small area to determine if Sencor® DF
  can be used without injury to the crop.
- Aerial application is prohibited.

DO NOT USE SENCOR® DF ON TOMATOES IN KERN COUNTY, CALIFORNIA.

## **CEREALS**

## (Spring and Winter Barley and Winter Wheat)

Sencor® DF herbicide is recommended for control or suppression of certain grasses and broadleaf weeds when applied postemergence to spring and winter barley or winter wheat. Sencor® DF alone and several tank mixture treatments are recommended for use in the following states: AR, GA, ID, IL, IN, KS, KY, LA, MS, MO, MT, NV, OH, OK, OR, TN, TX, UT, WA.

**Mixing:** See the "General Information" section of this label for specific mixing procedures. When tank mixing, carefully follow the instructions on this label. Refer to the other product labels registered for use in barley and winter wheat for additional use directions, rates, weeds controlled and restrictions.

**Application:** Sencor® DF may be applied by aerial or ground application equipment. Use a minimum spray volume of 2 gpa by air and 10 gpa by ground. Uniform spray coverage is necessary to obtain optimum weed control and to minimize potential for crop injury. Do not exceed rates specified on this label. Do not apply Sencor® DF through any type of irrigation equipment. Apply Sencor® DF when the crop is healthy and actively growing. Sencor® DF may be applied more than once per crop season. Allow a minimum of 21 days between applications if wheat is actively growing or allow 45 days between applications if wheat is growing in adverse conditions, has entered dormancy or is stressed due to frost damage, disease, drought or excessive moisture. Do not use on soils containing less than 0.75% organic matter. Do not apply more than a total of 10.66 ounces Sencor® DF (8 ounces active ingredient) per acre per year. On irrigated cereals, do not apply more than 0.5 inch of water for the first irrigation, the maximum amount for each additional irrigation should not exceed 1 inch. Allow a minimum of 14 days between the first irrigation and subsequent irrigations.

**Performance Factors:** Weed control may not be observed for 2 to 4 weeks under normal growth conditions and for 4 to 6 weeks under very dry conditions. Moisture (at least 1/2 inch) is required within 2 to 3 weeks after application to move Sencor® DF into the weed root zone. Lack of adequate moisture after application may result in poor or erratic weed control. Control or suppression of listed weeds is dependent on weed size at time of application. Control or suppression may be reduced if broadleaf weeds are taller than 1 inch or grasses have more than 2 leaves.

Tank mixtures: Sencor® DF may be tank mixed with Ally®, Amber®, Finesse®, Glean® FC, Harmony® Extra, 2,4-D®, MCPA®, Igran®, Banvel®/Banvel® SGF, Bronate or Buctril® herbicides. A nonionic surfactant containing at least 80% active ingredient may be used in Sencor® DF tank mixes with sulfonylurea herbicides (Ally®, Amber®, Finesse®, Glean® FC and Harmony® Extra). Do not use a crop oil concentrate or any adjuvant containing vegetable or petroleum oils with any Sencor® DF mix as crop injury may result. Additional pesticides may also be tank mixed with Sencor® DF unless specifically prohibited on the mix products' label. In some instances, combinations with organophosphate insecticides may cause temporary leaf yellowing and/or crop injury, especially when widely fluctuating day/night temperatures occur near application. Always refer to the other product labels registered for use on cereals for additional directions, rates and weed species controlled. Observe all precautions and limitations on labeling of all products used in mixtures.

Feeding Restrictions: Do not graze wheat within 14 days of Sencor® DF application or harvest grain within 21 days after last application. Do not graze or harvest barley before crop maturity. For tank mix combinations, follow the most restrictive label.

SPECIAL PRECAUTIONS: Cereal Injury - Crop injury may occur if Sencor® DF is applied:

- When the crop is under stress such as winter kill, frost damage, disease, drought or excessive moisture, severe grazing, or when these conditions follow the application.
- In combination with fluid fertilizer especially with the addition of surfactant.
- Prior to the growth stage specified on this label.
- To soils high in lime or sodium, a pH greater than 7.7, calcareous, gravelly, thinly covered or exposed subsoil areas.
- To fields where cereal seeds have been planted less than 1 inch deep.
- To a non-winter hardy wheat or barley variety.
- To a sensitive wheat or barley variety as listed below.
- To frozen soil or crop still in winter dormancy.

Cereal Rotations Following Potatoes Treated with Sencor® DF: If planting a sensitive cereal variety (listed under the wheat and barley variety tolerance portion of this label), following potatoes treated with Sencor® DF or metribuzin containing products, refer to the potato section of the Sencor® DF label for special cultural practices to follow.

#### APPLICATION RECOMMENDATIONS

Sencor® DF alone or in a tank mix with labeled broadleaf herbicides may be applied by aerial or ground spray equipment as a broadcast postemergence spray.

	RECOMMENDED POSTEMER	GENCE BROADCAST APPLICATIONS OF	SENCOR® DF	
CROP		SENCOR® DF RATE (oz/A) % ORGANIC MATTER		
GROWTH	SOIL			
STÄGE	TEXTURE	0.75 TO 2.0	OVER 2.0	
2 Leaf	COARSE	1 to 2	1 to 3	
То	MEDIUM	1 to 3	2 to 3	
2 Tiller	FINE	2 to 3	2 to 4	
	Use these rates on crops with secondar For dryland winter wheat (non-irrigative suppression/control.	y roots smaller than 1 inch. ated), apply the highest recommende	ed rate to achieve maximum weed	
3 Tiller	COARSE	3 to 4	4 to 5	
То	MEDIUM	4 to 5	5 to 6	
4 Tiller	FINE	5 to 6	5 to 6	
	Do not apply within 2 weeks after grazing or breaking of winter dormancy. Apply after the crop is at or beyond the 3 tiller growth stage but before jointing. Secondary roots should be developed and larger than 1 inch long. Do not apply before 75 days after planting.			
	For dryland winter wheat (non-irrigated), apply the highest recommended rate to achieve maximum weed suppression/control.			
	GEORGIA ONLY: Wheat must be pla and before December 1 in the Coastal F	nted before November 15 in the Piedmo Plain area.	ont area and Northern part of the state,	
Over	COARSE	4 to 6	5 to 8	
4 Tillers	MEDIUM	4 to 8	5 to 8	
	FINE.	5 to 8	8 to 10-2/3	
	Do not apply within 2 weeks after grazing or breaking of winter dormancy. Apply after the crop is at or beyond the 3 tiller growth stage but before jointing. Secondary roots should be developed and larger than 1 inch long. Do not apply before 75 days after planting.			
	For dryland winter wheat (non-irrigated), apply the highest recommended rate to achieve maximum weed suppression/control.			
	GEORGIA ONLY: Wheat must be pla and before December 1 in the Coastal F	nted before November 15 in the Piedmo Pain area.	ont area and Northern part of the state,	

#### WHEAT AND BARLEY VARIETAL TOLERANCE\*

Wheat and barley varieties vary in their tolerance to Sencor® DF. Varieties below are <u>tolerant</u> to and are <u>recommended</u> for use with Sencor® DF:

Winter Wheat: Abe, AgriPro Mason, AgriPro Shiloh, Arthur, AS 7846, AS 7853, Baker Seed 32, Barbie VI, Basin, Batum, Bayles, Becker, Bintee V, Buchshot DS 2368, Caldwell, Cardinal, Cashup, Centurk, Cherokee, Cheyenne, Clark, Coker 747, Coker 762, Coker 797, Coker 68-15, Coker 9134, Coker 9543, Coker 9904, Coker 9907, Daws, DB 533W, DB 562W, DB 580W, Delta King 502, Delta King 9027, Dixie 952, Doublecrop, Dusty, Dyna-gro 426, Dynasty, Excel, Faro, FFR 525W, Florida 302, FS 432, FS 433, FS 435, Gains, Garst 64, Georgia 100, Genie V, Hatton, Hawk, Hill 81, Howell, Hunter, Hyak, Hyslop, Katie VI, KY 16-2, Larned, Lewis 833, Lewjain, Lisa, Longhorn, Luke, Madsen, Magnum, Malcom, McDermid, McNair 1003, McNair 1813, Molly, Moro, Neely, Nelson, Newton, Norstar, Norwin, Nugaines, Oasis, Omega 78, Paha, Peck, Pike, PI 2157, PI 2180, PI 2510, PI 2545, PI 2548, PI 2550, PI 2552, PI 2566, PI 2571, PI 2580, PI 2684, Quantum 577, Redwin, Rocky, Saluda, Sawyer, SC 104, Siouxland, Sprague, Southern Belle, Stacy, Stallion, Stephens, TAM W101, TAM 105, TE 877, TE 2548, TE SR204, Tiber, Tomahawk, TR 8555, TR 8557, TR 8768, Traveler, Tres, Tyee, Tyler, Verne, Victory, Wakefield, Wanser, Weston, Winalta, Wrangler.

Barley: Advance, Boyer, Clark, Compana, Hannchen, Hector, Hesk, Hudson, Lud, Luther, Kamiak, Klages, Olympic, Piroline, Steptoe and Triumph.

The following cereal varieties are sensitive to Sencor® DF and are not recommended for use:

Winter Wheat: AgriPro Clemens, AT 90W, AT 91W, Arapaho, Baker Seed 33, Century, Cimarron, Coker 833, Coker 916, Coker 983, Coker 9024, Coker 9105, Coker 9323, Coker 9474, Coker 9663, Coker 9835, Coker Coker 9766, Coker 9877, EK 102, EK 114, FFR 555, Florida 304, Freedom, FS 417, FS 423, FS 425, FS 430, Gore, Hazen, Hickory, Jackson, Julie III, KY 49-25, Linden, Madison, Mesa, Mustang, Pacer, PI XW 522, PI 2551, PI 2163, Pioneer 2691, Princeton 733, PSR W71, PSR 226, PSR 278, Rosen, Savannah, Sierra, TAM 107, TR 1011, TR 8822, Triumph 64, Vona, Wings, Winridge, Yamhill.

Spring/Durum Wheat: Avoid use on Spring wheat and Durum wheat varieties.

Barley: Glenn, Morex, Moravian 3, Larker, Summit, Bracken, Anheuser Busch B2601 and varieties with Morex parentage.

Varieties Not Listed: To avoid possible crop injury on any variety not mentioned in this label, contact a Bayer CropScience representative or herbicide expert for a variety recommendation prior to treatment or treat a small strip of the unlisted variety with the recommended Sencor® DF rate to ascertain crop tolerance before treating an entire field.

\* Abbreviated names of vendors: AS (Agseco), AT (Agratech), DB (Diener Bros.), FS (Growmark FS), PI (Pioneer), PSR (Hybritech), SC (J.M. Schultz), TE (Terra), and TR (Terral).

#### WEEDS CONTROLLED

Used at recommended rates, Sencor® DF will control many annual broadleaf weeds. Control is best when applied to young, actively

growing weeds. Weeds controlled by Sencor® DF include:

Bittercress	Falseflax, Smallseed	Knotweed, Prostrate	Pigweed, spp.
Catchfly, Conical (Sand) Catchweed (Madwort)	Fiddleneck, Tarweed Filaree, Redstem	Lambsquarter, Common Lettuce, Miners	Pineappleweed Polemonium, Annual (Jacob's Ladder)
Chickweed, Common	Geranium,	Mustard, Blue Mustard, Wild	Radish, Wild
Chickweed, Mousear	Carolina Gromwell, spp.	Pennycress, Field	Shepardspurse
Corncockle Dogfennel (Mayweed)	Henbit	Pepperweed, Virginia	Speedwell, lvyleaf Turnip, Wild
Evening Primrose, Cutleaf			

#### WEEDS SUPPRESSED

Sencor® DF control of the following weeds varies from poor to excellent depending on time of application, stage of growth at application, temperatures and soil moisture conditions following treatment. For maximum effect on these weeds, apply the highest recommended rate at the earliest growth stage timing for each particular soil type and organic matter. Suppression is a reduction in weed size and growth as compared to a non-treated area in the same field.

hia* uce, Prickly	Mustard, Tumble (Jim Hill)* Tanysmustard	Thistle, Russian Vetch, Winter
uce, Prickly	Tanysmustard	Vetch Winter
		VOICH, VVIIICH
grass, Bulbous	Cheat*	Rescuegrass*
me, Downy*	Foxtail, spp*	Whitlowgrass, Spring
ne, Japanese*	Oat, Wild*	(Vernal)
ne, Ripgut*		Windgrass
r	egrass, Bulbous me, Downy* me, Japanese* me, Ripgut* or® DF rate for maximu	me, Downy* Foxtail, spp* Oat, Wild*

## FOR WEED CONTROL IN A WHEAT/FALLOW/WHEAT ROTATION (Idaho, Oregon, Utah and Washington Only)

Sencor® DF may be applied to provide weed control during the fallow period after wheat harvest or in the Spring before winter wheat is planted. Winter wheat can be seeded 4 months (120 days) after Spring application. Mechanical tillage or the application of a contact herbicide may be required to control weeds germinating prior to seeding of winter wheat. Best results will be obtained where straw and chaff are evenly distributed across the field.

For specific application information see the "General Information" section in the front of this label.

Where weed growth is present at application time, Sencor® DF should be applied with Gramoxone® or other contact herbicide. Refer to the other product label registered for additional directions, rates, and weed species controlled.

## **WEEDS CONTROLLED**

Chickweed, Common (Stellaria media)	Mustard, Blue or Purple (Chorispora tenella)	Mustard, Treacle (Eyrsimum repandum)	*Russian thistle (Salsola iberica)	
Henbit (Lamium amplexicaule)  *Kochia (Kochia scoparia)  Lambsquarters (Chenopodium album)	(Signatura altinoimum)		*Wild Sunflower (Helianthus spp.)	
GRASSES				
Cheatgrass (Bromus secalinus)	Downy Brome (Bromus tectorum)	*Wheat, Volunteer (Triticum spp.)		

After Harvest Application (Fall Fallow): Sencor® DF may be applied to wheat stubble after harvest in the Fall. Apply 2/3 to 5/6 lb per acre broadcast before weeds emerge. Use higher rate for longer weed control or for weeds designated as requiring the higher rate for control. Rainfall (1/2 inch or more) is necessary for herbicide activation.

Do not plant crops in treated areas for at least 10 months following Fall applications. Do not rotate any crop not listed on this label for 18 months following application of Sencor® DF.

Sencor® DF may be applied at 2/3 to 5/6 lb per acre as directed above for a Fall application. If other vegetation is present at the time of application use a contact herbicide.

**Spring Application (Summer Fallow):** Sencor® DF may be applied to wheat stubble in the Spring. Apply 1/2 to 2/3 lb per acre broadcast before weeds emerge in the Spring. Use higher rate for longer weed control or weeds designated as requiring higher rate for control. Rainfall (1/2 inch or more) is necessary for herbicide activation.

PRECAUTIONS AND RESTRICTIONS: Do not graze treated fields.

Do not plant Spring seeded cereals following Fall fallow applications of Sencor® DF.

Where Sencor® DF was applied in the Fall, do not apply Sencor® DF in the Spring.

## FOR WEED CONTROL IN A FALLOW ROTATION WITH BARLEY AND WHEAT (Colorado, Kansas, Montana, Nebraska, and Wyoming Only)

Sencor® DF may be applied to provide weed control during the fallow period after wheat or barley harvest or in the Spring before planting of Winter wheat or barley. Mechanical tillage or the application of a contact herbicide may be required to control weeds germinating prior to seeding of Winter wheat or barley.

For specific application information see the "General Information" section in the front of this label.

Where weed growth is present at application time, Sencor® DF should be applied with Gramoxone®, Roundup®, or other contact herbicide. Refer to the other product label registered for additional directions, rates, and weed species controlled. Do not plant crops in treated areas earlier than 10 months following Fall applications. Do not rotate any crop not listed on this label for 18 months following application of Sencor® DF.

#### **WEEDS CONTROLLED**

BROADLEAVES			
Chickweed, Common (Stellaria media) Cowcockle (Vaccaria pyramidata) Henbit (Lamium amplexicaule) *Kochia (Kochia scoparia)	Lambsquarters (Chenopodium album) Mustard, Blue or Purple (Chorispora tenella) Mustard, Jim Hill (Sisymbrium altissimum) Mustard, Tansy (Descurainia pinnata)	Mustard, Treacle (Eyrsimum repandum) Mustard, Wild (Brassica kaber) Pennycress, Field (fanweed) (Thlaspi arvense)	Pigweeds (Amaranthua spp.) Russian thistle (Salsola iberica) Sunflower (Helianthus spp.)
GRASSES			
Cheatgrass (Bromus secalinus)  Downy Brome (Bromus tectorum)	*Foxtail, Green (Setaria viridis)	*Wheat, Volunteer (Triticum spp.)	*Wild Oats (Avena fatua)

**AFTER HARVEST APPLICATION** (Fall Fallow): Sencor® DF may be applied to the stubble after harvest in the Fall. Apply 5/6 to 1 lb per acre broadcast before weeds emerge. Use the higher rate for longer weed control or for weeds designated as requiring the higher rate for control. Rainfall (1/2 inch or more) is necessary for herbicide activation.

**SPRING APPLICATION (Summer Fallow):** Sencor® DF may be applied to the stubble in the Spring. Apply 1/2 to 2/3 lb per acre broadcast before weeds emerge in the Spring. Use the higher rate for longer weed control or weeds designated as requiring the higher rate for control. Rainfall (1/2 inch or more) is necessary for herbicide activation. Wheat or barley can be seeded 120 days after Spring application.

PRECAUTIONS AND RESTRICTIONS: Do not graze treated fields.

Do not plant Spring seeded cereals following Fall applications for fallow.

Where Sencor® was applied in the Fall, do not apply Sencor® in the Spring.

#### **CROP ROTATION RESTRICTIONS**

Waiting Period After Sencor® Herbicide Application<sup>1</sup>

4 Months	Alfalfa	Forage Grasses	Sugarcane
	Asparagus	Sainfoil	Tomatoes
	Barley <sup>2</sup>	Soybeans	Wheat <sup>2</sup>
	Corn		
8 Months	Barley	Peas	
	Lentils	Wheat	
12 Months	Potatoes	Rice <sup>3</sup>	
18 Months	Sugar Beets, Onions and other root crops not listed on this label, and all other crops not listed on this label.		

Cover crops for soil building or erosion control may be planted any time, but do not graze or harvest for food or feed. Stand reductions may occur in some areas.

Do not rotate any crop not listed on this label after application of Sencor® DF to sugarcane

<sup>&</sup>lt;sup>2</sup> Following peas, lentils or soybeans.

<sup>&</sup>lt;sup>3</sup> Do not rotate rice after any application to a primary crop greater than 1.0 lb ai/A of Sencor® DF per season.

#### IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, 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 Bayer CropScience. All such risks shall be assumed by the user or buyer.

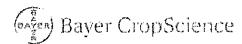
DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE'S ELECTION, THE REPLACEMENT OF PRODUCT.

**NET CONTENTS: Eight 5-Pound Jugs Per Case** 

Sencor and Buctril are registered trademarks of Bayer.
Bronate is a trademard of Bayer.
Banvel is a registered trademark of Velsicol Chemical Corp.
Command and Commence are registered trademarks of FMC Corp.
Amber, Dual and Igran are registered trademarks of Ciba-Geigy.
Ally, Bladex, Canopy, Finesse, Glean and Harmony are registered trademarks of E. I. duPont de Nemours and Co. Gramoxone is a registered trademark of ICI Americas, Inc.
Cannon, Freedom, Lasso and Roundup are registered trademarks of Monsanto Co.
Pursuit, Prowl and Scepter are registered trademarks of American Cyanamid Co.
Sonalan, Surflan, and Treflan are trademarks of DowElanco Products Co.
X-77 is a registered trademark of Valent USA Corp.

#### PRODUCED FOR



Bayer CropScience LP P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, North Carolina 27709 1-866-99BAYER (1-866-992-2937)

Sencor DF 75% Dry Flowable Herbicide (PENDING) Submitted 01/03/07