JUN 23 1998

Mr. John S. Thornton Bayer Corporation 8400 Hawthorn Road, P.O. Box 4913 Kansas City, MO 64120-0013

bear Mr. Thornton:

Subject: TURBO 8 EC Herbicide

EPA Registration No. 3125-366
Your Letter Dated June 5, 1990, Revised Labeling
in Response to Metolachlor Reregistration Eligibility
Document (RED), Dated April, 1995

The proposed labeling revisions described in your letter of June 5, 1998 have been reviewed. The proposed label as submitted is acceptable under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) as amended, provided that you:

1. Submit one (1) copy of your final printed label prior to releasing this pesticide product for shipment under the subject label.

If this condition is not complied with, the registration will be subject to cancellation in accordance with FIFRA, section v(e). Your release for shipment of the product constitutes acceptance of this condition.

This product can not be reregistered until a Reregistration Eligibility Document for the active ingredient metribuzin has been issued and you have appropriately responded to the data and information requirements for the metribuzin RED.

A stamped copy of the proposed label is enclosed for your records.

Sincerely yours,

Joanne I. Miller Product Manager (23) Herbicide Branch Registration Division (7505C)

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17-98 - Emus 2/18

U.S. LABEL

Reason to Issue: To revise based on EPA's letter dated 01/08/98.

Date of Pre-Reg Draft; 05/11/98 (D) Supersedes Pre-Reg Draft Dated: 11/18/97

# Turbo® 8 EC

# Herbicide

For control of certain grasses and broadleaf weeds in soybeans and potatoes.

#### ACTIVE INGREDIENTS:

Metolachior, 2-chloro-N-(2-ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl)-	acetamide* 70%	É
Metribuzin, 4-amino-6-(1,1-dimethylethyl)-3-(methylthio)-1,2,4-triazin-5(4 H)-one	15%	, =
INERT INGREDIENTS	<u></u>	5
	100%	

Contains 6.55 pounds of metolachlor and 1.45 pounds of metribuzin per gallon.

EPA Reg. No. 3125-366 \*U.S. Patent No. 3,937,730

Net Contents ACC PARTY with COMMENTS

In EPA Letter Dated

JUN 23 1998

Under the Federal Insecticide, Fundicide, and Rodenticide Act as amended, for the pesticide

# registered under EPA Reg. No. 3/25-366 PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

STOP - Read Label Before Use KEEP OUT OF REACH OF CHILDREN

CAUTION: Harmful if swallowed, absorbed through the skin, or inhaled. Sauses moderate eye and skin irritation. Avoid contact with skin and eyes, or inhaling spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wear long-sleeved shirt and long pants, socks and shoes and chemical resistant gloves (such as Nitrile, Butyl, Neoprene, and / or Banier Laminate). Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Wash thoroughly with soap and water after handling.

Keep out of reach of children.

Obtain prompt medical aid if poisoning should occur.

Personal Protective Equipment: Applicators and other handlers must wear: Coveralls over short-sleeved shirt and short pants

- Water-proof gloves
- Shoes plus socks

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.

# **User Safety Recommendations:**

User should:

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

To Physician: No specific antidote is available. Treat the patient symptomatically.

SYMPTOMS OF POISONING: The compound does not cause any definite symptoms that would be diagnostic. Poisoning is accompanied by breathing difficulties and secation.

# STATEMENTS OF PRACTICAL TREATMENT

If in eyes: Immediately flush eyes with plenty of water for at least 15 minutes. For further treatment get medical attention. Flush eyes with plenty of water. Call a physician if irritation persists. If swallowed: Gall a physician or poison control center. Vomiting should be induced. Administer water freely, and induce vomiting by giving one dose (1/2 oz or 15 mL) of syrup of ipecac. If vomiting does not occur within 10 to 20 minutes, administer second dose. If syrup of ipecac is not available, induce vomiting by sticking finger down throat: Repeat until vomit fluid is clear. Do not induce vomiting or give anything by mouth to an unconscious person;

Professional medical assistance should be secured immediately. If inhaled: Remove victim to fresh air. If not breathing give artificial respiration, preferably mouth to mouth. Get medical attention. Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger, or if available by administering syrup of ipecac. If person is unconscious, do not give anything by mouth and do not induce vomiting. If on skin: Wash thoroughly with soap and warm water. Wash with plenty of soap and water. Get medical attention.

# **ENVIRONMENTAL HAZARDS**

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

Apply this product only as specified on this label. Do not allow sprays to drift on to adjacent desirable plants. Observe all cautions and limitations on labeling of all products used in mixtures.

#### Ground Water and Surface Water Advisories

Metolachlor has been identified in limited sampling of ground water and there is the possibility that it may leach through the soil to ground water, especially where soils are coarse and ground water is near the surface. Following application and during rainfall events that cause runoff, metolachlor may

reach surface water bodies including streams, rivers, and reservoirs. Care must be taken when using this product to prevent back siphoning into wells, spills or improper disposal of excess pesticide, spray mixture or rinsates. Check valves or antisiphoning devices must be used on all mixing equipment.

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.

# AGRICULTURAL USE REQUIREMENTS continued

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: 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, soils, or water, wear:

- Coveralls over long-sleeved shirt and long pants
- Waterproof-gloves Socks and chemical resistant footwear
- Shoes plus socks Chemical resistant gloves (such as Nitrile, Butyl, Neoprene and / or Barrier Laminate).

Do not contaminate feed or food.

IMPORTANT: Read these entire Directions for Use and Conditions of Sale before using TURBO 8 EC. Herbicide.

CONDITIONS OF SALE: THE DIRECTIONS ON THIS LABEL WERE DETERMINED THROUGH RESEARCH TO BE THE DIRECTIONS FOR CORRECT USE OF THIS PRODUCT. THIS PRODUCT HAS BEEN TESTED FOR A RANGE OF WEATHER CONDITIONS SIMILAR TO THOSE WEATHER CONDITIONS THAT ARE ORDINARY AND CUSTOMARY IN THE GEOGRAPHIC AREA WHERE THE PRODUCTISUSED. INSUFFICIENT CONTROL OF PESTS AND/OR INJURY TO THE CROP TO WHICH THE

PRODUCT IS APPLIED MAY RESULT FROM THE OCCURRENCE OF EXTRAORDINARY OR UNUSUAL WEATHER, OR FROM FAILURE TO FOLLOW LABEL DIRECTIONS. IN ADDITION, FAILURE TO FOLLOW LABEL DIRECTIONS MAY CAUSE INJURY TO OTHER CROPS, ANIMALS, MAN, OR THE ENVIRONMENT. BAYER OFFERS, AND THE BUYER ACCEPTS AND USES, THIS PRODUCT SUBJECT TO THE CONDITIONS THAT EXTRAORDINARY OR UNUSUAL WEATHER, OR FAILURE TO FOLLOW LABEL DIRECTIONS ARE BEYOND THE CONTROL OF BAYER AND ARE, THEREFORE, THE RESPONSIBILITY OF THE BUYER.

#### **GENERAL INFORMATION**

MIXING: When using TURBO 8EC, 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 TURBO 8EC 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 TURBO 8EC alone or intank mix combinations with other herbicides is: (Emulsifiable Concentrates):

- 1. Fill the spray tank 1/4 to 1/3 full with clean water.
- Add recommended rate of TURBO 8EC 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.
- Mix thoroughly and add clean water to fill spray tank to desired level.
- 5. Add the other emulsifiable concentrate herbicide to tank last and agitate thoroughly.
- Continue agitation during application and until sprayer tank is empty.

(Other Products): If the tank mix combination is to be made using a wettable powder, liquid solution, liquid flowable, or water dispersable granules, TURBO 8EC should be added last after the other herbicide has been thoroughly dispersed.

APPLICATION: 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 TURBO 8EC in a minimum of 10 to 40 gallons of spray mixture per acre broadcast. For banded application, use proportionally less TURBO 8EC 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: To treat a 15-inch band on rows 30 inches apart, use one-half of the broadcast rate of TURBO 8EC. To treat a 14-inch band on rows 42 inches apart, use one-third of the broadcast rate of TURBO 8EC.

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.

FOR ALL APPLICATIONS OF TURBO 8EC: Sprayer must be accurately calibrated before applying TURBO 8EC. 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 TURBO 8EC 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.

CROP ROTATION RECOMMENDATIONS Waiting Period After Application of TURBO 8EC <sup>b</sup>						
4-1/2 MONTHS	8 MONTHS	12 MONTHS	18 MONTHS			
Winter Barley Winter Wheat	Corn Cotton Peas Potatoes Rice Soybeans Spring Barley Spring Wheat	Alfalfa Asparagus Forage Grasses Lentils Sainfoin Sugarcane Tomatoes Other Crops not listed (except root crops)	Onions Sugar Beets and Other Root Crops			

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. REPLANTING RECOMMENDATIONS: In instances where the initial crop seeding has failed to provide an adequate stand, crops that are registered for the rate of TURBO 8EC applied may be replanted into the treated area. Do not reapply TURBO 8EC into this area in the same crop year as injury may result.

#### **CHEMIGATION**

TURBO 8EC is recommended for application through sprinkler irrigation equipment to potatoes as directed on this label. Refer to the "Potatoes" section 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 non-uniform distribution of treated water.

Calibration: (Center Pivot and Self-Propelled Lateral Move Systems) Sprinkler irrigation systems must be accurately calibrated for application of TURBO 8EC. 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.
- With the system at operating pressure determine the exact number of minutes required to inject one gallon of water.
- 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 the nurse tank,
- Add required amount of water to nurse tank and start the agitation system. Then add sufficient TURBO 8EC 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 pints/acre, 270 pints (33.75 gallons) of TURBO 8EC are required.

If you have questions about calibration, you should contact State Extension Service Specialist, 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 value 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 witndrawn from the supply tank when the irrigation system is either automatically or manually shut down.

Crop rotation recommendations do not include the tank mix applications of Scepter or Command plus TURBO 8EC. Refer to the label of the other product for additional restrictions.

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 insure that all 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.

# APPLICATION OF TURBO 8EC IN FLUID FERTILIZERS

TURBO 8EC may be applied in fluid fertilizer solutions to soybeans by following the appropriate mixing procedures and compatibility check. Compatibility checks of TURBO should be made for each batch of fluid fertilizer because of the variability of these fertilizers.

#### COMPATIBILITY CHECK:

- Premix 2 teaspoonfuls of TURBO 8EC with 8 teaspoonfuls of water (1:4 ratio) in a quart jar by adding the water first and follow with TURBO 8EC. Mix thoroughly.
- 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 and can be resuspended by shaking, then application is possible with good agitation in the spray tank.

## IMPREGNATION AND APPLICATION OF TURBO SEC ON DRY BULK FERTILIZER

Dry bulk fertilizer may be impregnated or coated with TURBO 8EC for application to soybeans. All recommendations, cautions, and special precautions on the 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 TURBO 8EC 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 pounds dry bulk fertilizer per acre and up to a maximum of 450 pounds per acre. To impregnate or coat the dry bulk fertilizer with TURBO 8EC, 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 TURBO 8EC 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.

TURBO 8EC should be pre-mixed with water to form a sprayable mixture. Apply immediately after impregnation unless experience has shown that impregnated fatilizer can be stored without becoming lumpy and difficult to spread.

RATES: Select the recommended ate of TURBO 8EC per acre from the appropriate section of this label and refer to the formula below to determine the amount of TURBO 3EC 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.

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.

# SOYBEANS

(Except California)

TURBO 8EC is recommended for preplant surface, preplant incorporated, preemergence, SPLIT SHOT and EXTENDED SPLIT SHOT application to control certain weeds in soybeans. All applications where permitted can be applied with ground or aerial spray equipment.

Activation: A minimum amount of soil moisture is required to activate TURBO 8EC. 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 the application of TURBO 8EC.

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

Replanting: If replanting is necessary in fields previously treated with TURBO 8EC as directed on this label, the field may be replanted to soybeans. However, a minimum of tillage is recommended. Do not apply a second treatment as injury to soybeans may occur.

SPECIAL PRECAUTIONS (SOYBEANS): Injury to soybeans may occur when TURBO 8EC 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, TURBO 8EC 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 representative or your seed supplier for information on the tolerance of newly released soybean varieties prior to use of TURBO 8EC.
- When applied in conjunction with soil-applied organic phosphate pesticides.
- 4. 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.
- 7. Soil incorporation deeper than recommended.
- 8. 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\* deep, particularly when TURBO 8EC is applied preemergence.
- 11. Where atrazine carryover is present.
- 12. When using poor quality soybean seed.

# TURBO 8EC USE RATES IN CONVENTIONAL TILLAGE SYSTEMS

Preplant Incorporated Application: Incorporate TURBO 8EC into the top 2 inches of soil within 14 days before planting using a disk, field cultivator, rolling cultivator, or similar implement. Except when shallow mixing, two incorporation passes are recommended. Apply TURBO 8EC preplant incorporated if furrow imigation 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 TURBO 8FC may reduce effectiveness. If weeds develop cultivare uniformly with shallow tilling equipment such as a rotary hoe that will not damage soybeans.

For information on applying product in fluid or dry fertilizer refer to "Application of TURBO 8EC in Fluid Fcrtilizers" or "Commercial Impregnation and Application of TURBO 8EC on Dry Bulk Fertilizer" on this label.

TURBO 8EC USE RATES IN CONVENTI Pints	ONAL TILLAGE SYSTEM (Broad per Acre	Icast Rate)
SOIL TEXTURE	0.5 to 3% Organic Matter	Over 3% Organic Matter
COARSE* (Loamy sand, sandy loam)	1-1/2°	1-3/4 to 2
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	2 to 2-1/4	2-1/4 to 2-3/4
FINE (Silty clay, silty clay loam*, clay, clay loam)	2-3/4	2-3/4 to 3-1/2

- Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S.
- Do not use on sand soils. On coarse-textured soils, do not use on loamy sand soils with less than 2% organic matter.
- For preplant incorporated application, use the lower rate range.
- For Southern and Southeastern states, see section below "IN COARSE (LIGHT) SOILS"

# IN COARSE (LIGHT) SOILS

(Only in Alabama, Arkansas, Florida, Georgía, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tenñessee, Texas, Virginia.)

TURBO 8EC is recommended for use as a preplant incorporated and preemergence application 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 for specific directions on use, recommendations and restrictions.

MIXING/APPLICATION: Refer to the "General Information" section in the front of this label.

Weeds Controlled: Refer to the "TURBO 8EC Alone" section of this label for a complete list of weeds controlled.

TURBO 8EC Preemergence Application (Broadcast Rates)					
SOIL TEXTURE	ORGANIC MATTER	TURBO 8EC (pints/acre)			
Coarse Soils (Sanda, loamy sand, sandy loam)	0.5% or above	1-1/2 to 2-1/2 <sup>b</sup>			

- Not recommended for use on sand with less than 1% organic matter.
- Use the higher rate under heavy weed pressures and/or on soils higher in organic matter. For maximum control of sicklepod, use a preemergence application.

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

#### TURBO 8EC USE RATES FOR REDUCED AND NO-TILL SYSTEMS

Preplant Surface Application: TURBO 8EC may be used in reduced-till and no-till systems. Applications may be made up to 30 days prior to planting or after planting, but prior to soybean emergence. Residual herbicides such as Canopy®, Lorox Plus®, Scepter®, Command®, Prowl® and Lorox

Plus® may be tankmixed for additional weed control. If weeds are present at time of application, burndown herbicides may be added to the tank mixes (see Burndown Section). Refer to the tankmix product labels for specific rates and use directions.

TURBO 8EC USE RATES FOR REDUCED-TILL AND NO-TILL SYSTEMS (Broadcast Rates)					
SOIL TEXTURE	TURBO 8EC Pints/Acre*				
COARSE <sup>b</sup> (loamy sand, sandy loam)	1-1/2 to 2-1/4				
MEDIUM (loam, silt loam, silt, sandy clay, sandy clay loam)	2-1/4 to 3				
FINE (silty clay, silty clay loams, clay, clay loam)	3 to 3-3/4				

- Do not use on sand soils. On coarse-textured soils, do not use on loamy sand soils with less than 2% organic matter.
- Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S

#### Weeds Controlled by TURBO 8EC\*

TURBO 8EC, when applied as directed, will control the following weeds.

Annual Broadleaves

Anoda, spurred

Beggarweed, Florida

Carpetweed Chickweed, common Copperleaf, hophornbeam

Galinsoga sp. Henbit Horseweed/marestail Jimsonweed Knotweed sp.

Kochia\* Ladysthumb Mallow, Venice Mustard sp. Nightshade, black Pennycress, field Pepperweed, Virginia

Lettuce, prickly

Lambsquarters, common\*

Plaweed sp.\* Purslane, common Pusley, Florida Ragweed, common Redweed Sesbania sp. Shepherdspurse . Sicklepod Sida, prickly/teaweed Smartweed, Pennsylvania Spurge, spotted Starbur, bristly

Thistle, Russian Velvetleaf Waterhemp sp.

Annual Grasses **Barnyardgrass** Bluegrass, annual Crabgrass sp.

Crowfootgrass Cuporass, prairie Cupgrass, southwestern Foxtail sp.

Goosegrass Junglerice Panicum, fall Rice, red Signalgrass.

broadleaf Witchgrass

TURBO 8EC will provide suppression or erratic control (ranging from poor to excellent) of cocklebur, seedling Johnsongrass, hairy nightshade, yellow nutsedge. Texas panicum, sandbur sp., shattercane, common sunflower, and the volunteer crops barley, sorghum and wheat.

Except triazine resistant biotypes.

# TURBO 8EC PLUS OVERLAY APPLICATION OF SENCOR DF or SENCOR 4 HERBICIDE

TURBO 8EC applied preplant surface or preplant incorporated and followed by a preemergence overlay application of herbicide will control more broadleaf and grass weeds in soybeans than when either herbicide is used alone.

Refer to the herbicide label and to appropriate sections of this label, for directions for soil preparation, herbicide application, incorporation techniques, and for additional directions on rates, weeds species controlled, and special precautions.

Application: Apply TURBO 8EC as a preplant surface or preplant incorporated application up to 14 days before planting at rates listed below. This is followed by herbicide alone at the indicated rates as a preemergence overlay application after planting but prior to soybean emergence.

On medium and fine textured soils with greater than 2% organic matter, a rate range is recommended for the preemergence overlay application of herbicide. 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 14 days as stated above, and/or (c) when the organic matter content of the soil is at the upper end of the indicated range.

Weeds Controlled: In addition to the weeds controlled by TURBO 8EC alone, TURBO 8EC Herbicide with SENCOR Herbicide will improve control of the following broadleaf weeds: Buffalobur, Cocklebur, and Sunflower.

TURBO 8EC Plus SENCOR 4	Overlay Applica	ation (Broadcas	Rates)			
	Preplant Application		Preemergence Overlay Application			
SOIL TEXTURE	FOLLO TURBO 8EC (pints/acre)	FOLLOWED	SENCOR 4 (pints/acre) ORGANIC MATTER			
		BA				
			0.5 to 2%	2 to 4%	Over 4%	
COARSE <sup>a</sup> (Sand, loamy sand, sandy loam)	1-1/2	- followed by -	1/4	1/4	1/4 to 1/2	
MEDIUM (Loam, silt loarn, sandy clay loam, silt, sandy clay)	2	- followed by -	1/1	1/4 to 1/2	1/2 to 3/4	
FINE (Silty clay loam*, clay loam, silty clay, clay)	2-3/4	- followed by -	1/4	1/4 to 1/2	1/2 to 3/4	

TURBO 8EC Plus SENCOR I	OF Overlay Applicati	on (Broadcast I	Rates)		
	Preplant Application		Preemergence Overlay Applicati		Application
		FOLLOWED BY	SENCOR DF (lbs/acre) ORGANIC MATTER		
SOIL TEXTURE	TURBO 8EC (picts/acre)				
			0.5 to 2%	2 to 4%	Over 4%
COARSE* (Sand, loamy sand, sandy loam)	1-1/2	- followed by -	1/6	1/6	1/6 to 1/3
MEDIUM (Loam, silt loam, sandy clay loam, silt, sandy clay)	2	- followed by -	1/6	1/6 to 1/3	1/3 to 1/2
FINE (Silty clay loam*, clay loam, silty clay, clay)	2-3/4	- followed by	1/6	1/6 to 1/3	1/3 to 1/2

Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S.

Do not use on coarse-textured soil with less than 1% organic matter, a calcareous surface area or a pH of 7.5 or higher.

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

# TURBO 8EC SPLIT-SHOT APPLICATION

TURBO 8EC applied preplant surface or preplant incorporated followed by a preemergence application of TURBO 8EC will control more broadleaf and grass weeds in soybeans than when either application is used alone.

Refer to the appropriate sections of this label for directions for soil preparation, herbicide application, incorporation techniques, and for additional directions on rates, weeds species controlled, and special precautions.

Applications: Apply TURBO 8EC as a preplant surface or preplant incorporated application up to 14 days before planting at rates listed below. This is followed by TURBO 8EC at the indicated rates as a preemergence overlay application after planting but prior to soybean emergence.

Where a rate range is recommended for TURBO 8EC, the higher rate should be used (a) in fields with a history of severe broadleaf weed pressure, (b) when the time between preplant incorporated and preemergence overlay applications approaches the maximum 14 days as stated above, and/or (c) when the organic matter content of the soil is over 3 percent.

Weeds Controlled: In addition to the weeds controlled by TURBO 8EC alone, SPLIT-SHOT application of TURBO 8EC improves control of the following annual broadleaf weeds: Buffalobur, Cocklebur, and Sunflower.

SPLIT-SHOT APPLICATION (Broadcast Rates)						
	Preplant Application	FOLLOWED	Preemergence Overlay Application			
SOIL TEXTURE	TURBO 8EC (pints/acre)	BY	TURBO 8EC (pints/acre)			
COARSE* (Sand, loamy sand, sandy loam)	1 to 1-1/2	- followed by -	3/4 to 1			
MEDIUM (Loam, silt loam, sandy clay loam, silt, sandy clay)	1-3/4 to 2	- followed by -	3/4 to 1			
FINE (Silty clay loam*, clay loam, silty clay, clay)	2 to 2-1/2 <sup>b</sup>	- followed by -	3/4 to 1 <sup>b</sup>			

- Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S.
- Do not use on coarse-textured soil with less than 1% organic matter, a calcareous surface area or a pH of 7.5 or higher.

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

# TURBO 8EC EXTENDED SPLIT-SHOT APPLICATION

An early preplant (surface-applied or shallow incorporated) application of TURBO 8EC, followed by a preemergence application of TURBO 8EC after planting but prior to soybean emergence, will provide more consistent control of broadleaf and grass weeds than a single application.

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

Total not to exceed 3 pints/acre on soils with organic matter less than 3 percent.

Application: An early preplant application may be made 15 to 30 days prior to planting soybeans. Follow this application with a preemergence overlay application after planting but before crop emergence. Follow directions on this label 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 and preemergence overlay applications approaches the maximum 30 days, (c) when the organic matter content of the soil is over 3 percent, and/or (d) when heavy crop residues are present on the soil surface

When weeds exceed 1 to 1-1/2 inches in height or diameter at application, use a burndown herbicide, such as Roundup Ultra, Gramoxone Extra or 2,4-D LVE.

Weeds Controlled: In addition to weeds controlled by TURBO 8EC alone, the EXTENDED SPLIT-SHOT application improves control of the following annual broadleaf weeds: Buffalobur, Cocklebur, and Sunflower.

Broadcast Rates							
SOIL TEXTURE <sup>A</sup>	Early Preplant Application	- FOLLOWED BY -	Preemergence Overlay Application TURBO 8EC (pints/acre)				
•	TURBO 8EC (pints/acre)						
COARSE' (sand, loamy sand, sandy loam)	1-1/2 to 2	- followed by -	3/4 to 1-1/4				
MEDIUM (loam, silt loam, sandy clay loam, silt, sandy clay)	1-3/4 to 2-1/4	- followed by -	1 to 1-1/2				
FINE (sity day loam*, day loam, silty day, day)	2 to 2-1/2 <sup>b</sup>	- followed by -	1-1/4 to 1-3/4 <sup>b</sup>				

- Sitty day loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S.
- On coarse-textured soils, do not use on sand soils 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.
- Total not to exceed 3-3/4 pints of TURBO 8EC/acre per use season.

#### TURBO 8EC PLUS SCEPTER TANK MIX APPLICATION

TURBO 8EC may be applied with Scepter herbicide (1.5 lb/gal liquid or 70 DG) as a preplant surface, preplant incorporated or preemergence application, for the control of certain broadleaf weeds and grasses in soybeans. Consult the Scecter label for specific directions on use, recommendations, restrictions and any additional weeds not specified on this label.

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

Weeds Controlled: In addition to weeds controlled by TURBO 8EC alone, TURBO 8EC plus Scepter improves control of the following annual broadleaf weeds:

Buffalobur

Morningglory, smallflower

Cocklebur

Sicklepod

Momingglory, pitted

Sunflower

TURBO 8EC plus Scepter will provide suppression (reduce the competition) of ivyleaf and tall morningglory, and giant ragweed.

TURBO 8EC plus Scepter Application (Broadcast Rates)						
SOIL TEXTURE	TURBO 8EC* (pints/acre)	Scepter 1.5 AS <sup>b</sup> (pints/acre)		Scepter 70 DGb (ounce/acre)		
COARSE (learny sand or sandy learn)	1-1/2 <sup>c</sup>	1/3 to 1/2	OR	1.4 to 2.1		
MEDIUM (loam, silt loam, silt, sandy clay, sandy clay loam)	1-3/4 to 2-1/4	1/3 to 1/2		1.4 to 2.1		
FINE (sity day, silty clay loam*, clay, clay loam)	2-1/4 to 2-3/4	1/3 to 1/2	]	1.4 to 2.1		

- Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S.
- Higher rate is recommended on soils with organic matter greater than 3%.
- For preemergence application, use the higher rate. For maximum control of moderate to heavy infestations of uccklebur, giant ragweed and sickleped, use the higher rate and a preplant incorporated application.
- For Southern and Southeastern States in coarse soils, see the "IN COARSE (LIGHT) SOILS" section of this label for TUPBO 8EC rates.

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

Do not use vines treated with Scepier for feed or forage.

## TURBO 8EC PLUS CANOPY® TANK-MIX APPLICATION

TURBO 8EC may be applied with Canopy (75DG) herbicide as a preplant surface, preplant incorporated or preemergence application for the control of certain broadleaf weeds and grasses in soybeans. Consult the Canopy label for specific directions on use, recommendations and restrictions not specified on this label.

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

Weeds Controlled: In addition to weeds controlled by TURBO 8EC alone, TURBO 8EC plus Canopy will improve control of cocklebur and provide additional suppression (reduce competition) of giant ragweed and morningglory sp.

TURBO 8EC plus Canopy (75 DG) Application (Broadcast Rates)						
SOIL TEXTURE' TURBO 8EC² (pints/acre) CANOPY (75 DG) (ounces						
COARSE (loamy sand or sandy loam)	1-1/23	2 to 3				
MEDIUM (loam, silt loam, silt sandy clay, sandy clay loam)	1-3/4 to 2-1/4	3				
FINE (silty clay, silty clay loam*, clay, clay loam)	2-1/4 to 2-3/4	3 to 4				

- Sitty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S.
- Do not use on soils with pH greater than 7.0.
- Use higher rate on soils with more than 3% organic matter.
- For Southern and Southeastern States in coarse soils, see "IN COARSE (LIGHT) SOILS" section of this label for rates of TURBO 8EC.

SPECIAL PRECAUTIONS: For additional precautions, restrictions, limitations and sprayer clean-up information,

refer to the appropriate sections of this label and the Canopy label.

#### TURBO 8EC PLUS COMMAND® TANK MIX APPLICATION

TURBO 8EC may be applied with Command 4EC and 3ME as a preplant or shallow incorporated broadcast application for the control of certain broadleaf weeds and grasses in soybeans. Command 3ME may also be applied preemergent. Consult the Command 4EC / 3 ME labels for specific directions for use, recommendations and restrictions not specified on this label.

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

Weeds Controlled: In addition to weeds controlled by TURBO 8EC alone, TURBO 8EC plus Command 4EC will provide improved control of heavy infestations of velvetleaf, jimsonweed and common ragweed.

TURBO 8EC plus Co	mmand Application	(Broadcast Rates)		
SOIL TEXTURE	TURBO 8EC* (pints/acre)	Command 4EC (pints/acre)		Command 3 ME (pints/acre)
COARSE (loamy sand or sandy loam)	1-1/2 to 1-3/4°	1/2 to 3/4	OR	2/3 to 1
MEDIUM (loam, silt loam, silt sandy day, sandy clay loam)	1-3/4 to 2-1/4	1/2 to 3/4		2/3 to 1
FINE (silty clay, silty clay loam*, clay, clay loam)	2-1/4 to 2-3/4	1/2 to 3/4		2/3 to 1

- 'Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.
- \* Higher rate is recommended on soils with organic matter greater than 3%.
- For Southern and Southeastern States in coarse soils, see the IN COARSE (LIGHT) SOILS section of this label for TURBO 5EC rates.

Special Precautions: Do not plant wheat, oats, barley, rye or alfalfa in the fall or following spring after application as crop injury may occur.

For additional precautions, restrictions, limitations and sprayer clean-up information, refer to the appropriate sections of this label and the Command 4EC / 3ME label.

Do not use vines treated with Command 4EC / 3ME for feed or forage.

Do not apply where weather conditions favor drift.

# TURBO 8EC PLUS PROWL® TANK MIX APPLICATION

TURBO 8EC may be applied with Prowl 3.3EC as a preplant surface, preplant incorporated or preemergence broadcast application for the control of certain broadleaf weeds and grasses in soybeans. Consult the Prowl labels for specific directions for use, recommendations and restrictions not specified on this label.

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

Weeds Controlled: In addition to weeds controlled by TURBO 8EC alone. TURBO 8EC plus Prowl 3.3EC will provide improved control for triazine resistant weeds such as common lambsquarters, pigweed spp., etc.

TURBO 8EC PLUS PROWL 3.3EC APPLICATION (Broadcast Rates)				
SOIL TEXTURE	TURBO 8EC* (pints/acre)	Prowl 3.3EC (pints/acre)		
COARSE (loamy sand or sandy loam)	1-1/2 to 1-3/4 <sup>b</sup>	1.2 to 2.4		
MEDIUM (loam, silt loam, silt sandy clay, sandy clay loam)	1-3/4 to 2-1/4	1.8 to 3.6		
FINE (silty clay, silty clay loam*, clay, clay loam)	2-1/4 to 2-3/4	1.8 to 3.6		

- Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.
- Higher rate is recommended on soils with organic matter greater than 3%.
- For Southern and Southeastern States in coarse soils, see the IN COARSE (LIGHT) SOILS section of this label for TURBO 8EC rates.

## TURBO 8EC PLUS LOROX PLUS™ TANK MIX

(For use in DE, IL, IN, IA, KS, MD, MI, MN, NE, ND, NJ, OH, PA, SD, VA, WI, WV)

TURBO 8EC may be applied with Lorox Plus 60 DG herbicide as a preplant surface, preplant incorporated or preemergence broadcast application for the control of certain broadleaf weeds and grasses in soybeans. Consult the Lorox Plus label for specific directions for use, recommendations of restrictions not specified on the label.

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

Weeds Controlled: In addition to weeds controlled by TURBO 8EC alone, TURBO 8EC plus Lorox Plus will provide improved control of cocklebur and suppression of giant ragweed and morningglory species.

TURBO 8EC PLUS LOROX PLUS (60DG) Preemergence Application (Broadcast Rates)				
SOIL TEXTURE'	TURBO 8EC² (pints/acre)	LOROX PLUS (60 DG) (oz/acre)		
COARSE (loamy sand or sandy loam)	1-1/2	6 to 8		
MEDIUM (loarn, silt loam, silt, sandy clay, sandy clay loam)	1-3/4 to 2-1/4	8		
FINE (silty clay, silty clay loam³, clay, clay loam)	2-1/4 to 2-3/4	8 to 10		

- Do not use on soils with pH greater than 7.0.
- Use higher rate on soils with more than 3% organic matter.
- 3 Silty ctay toam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S.

For additional precautions, restrictions, limitations and sprayer clean-up information, refer to the appropriate

sections of the TURBO 8EC and the Lorox Plus labels.

#### APPLICATION OF POSTEMERGENCE HERBICIDES FOLLOWING TURBO 8EC

If required, application of TURBO 8EC alone or in a registered tank mixture may be followed by a postemergence

herbicide to provide additional control of certain weeds. The following postemergence herbicides are recommended:

Assure II	Conclude	Liberty Herbicide <sup>2</sup>	Prestige	Roundup/Roundup Ultra*	Storm.
Basagran	B&G	Manifest	Pursuit	Scepter	Synchrony
Blazer	Flexstar	Option II	Reflex	Scepter O.T.	STS
Classic	Fusilade DX	Pinnacle	Reliance STS	Select	Torrado
Cobra	Fusion -	Poast	Resource	Status	
Concert	Galaxy	Poast Plus	Rezult A&B	Stellar	

Use on Roundup-ready soybeans only.

2 Use on Liberty Link soybeans only.

Refer to the above information and the individual product labels for use directions, use rates and special precautions/restrictions.

# REDUCED RATE SCEPTER APPLICATION FOLLOWING TURBO 8EC

If required, application of TURBO BEC alone or in a registered tankmix may be followed by an early postemergence application of a reduced rate of Scepter 1.5 AS herbicide for improved control of cocklebur. Apply 1/6 to 1/3 pint of Scepter (0.7 to 1.4 ounces of Scepter 70 DG). Use the lower rate of Scepter if cockleburs are less than 3 inches tall or have fewer than 3 leaves and

are actively growing and use the higher rate if cockleburs are less than 6 inches tall and actively growing. Do not use Scepter when plants have been subjected to stress conditions. Use of nonionic surfactant or crop oil concentrate is recommended for Scepter applications. Refer to the Scepter label for additional use directions and special precautions/restrictions.

# **BURNDOWN WEED CONTROL**

TURBO 8EC can be used as part of a burndown herbicide program for control of existing vegetation prior to soybean emergence in conservation allage (reduced-tillage/no-till) systems. TURBO 8EC may be tank mixed with 2,4-D low volatile ester (LVE), Gramoxone Extra, Roundup, Roundup Ultra, Touchdown, 2,4-DB, Fusion, Poast Plus or Select for control of emerged weeds prior to crop emergence. TURBO 8EC burndown tank mixes can be applied before planting or prior to crop emergence.

APPLICATION: TURBO 8EC may be applied up to 30 days prior to planting or preemergence. Apply only by ground equipment when TURBO 8EC is used for burndown of existing vegetation in conservation tillage systems. TURBO 8EC and tank mix partner burndown rates are listed in the following table.

	TURBO 8EC P	LUS TANK MIX PARTNER BURNDOWN RATES IN SOYBEANS
PRODUCT	RATE	DIRECTIONS AND REMARKS
TURBO 8EC + 2.4-D LVE	1 to 1-1 2 pts/A - 1/4 to 1 b ai/A	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).
TURBO 8EC + Gramoxone Extra	1 to 1-12 pts/A 24 to 45 floz/A	Must be applied prior to crop emergence. Use 24 to 32 fl oz of Gramoxone Extra for weeds less than 4 inches in height and 32 to 48 fl oz when weeds are 4 to 6 inches in height. Apply in 20 to 60 gal of water per acre. Include either nonionic surfactant at 1 qt per 100 gal (0.25% v/v) or crop oil concentrate at 1 gal per 100 gal (1% v/v) of spray solution.
TURBO 8EC + Gramoxone Extra + 2,4-D LVE	1 to 1-1/2 ots/A 	For this tank mix follow the Directions and Remarks Sections above for TURBO 8EC + 2,4-D LVE and TURBO 8EC - 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.
TURBO 8EC  + Roundup/ Roundup Ultra or Touchdown	1 to 1-12 pts/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 gal of water per acre. With Roundup and Touchdown, include nonionic surfactant at 2 qts per 100 gal (0.5% v/v) and ammonium sulfate (spray grade) at 17 pounds per 100 gal 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 soybeans may be tank mixed with TURBO 85C.
TURBO 8EC  + Roundup/ Roundup Ultra or Touchdown + 2.4-D LVE	1 to 1-12 pts/A 	For this tank mix follow the Directions and Remarks Sections above for TURBO 8EC + 2,4-D LVE and TURBO 8EC + Roundup / Roundup Ultra / Touchdown, paying special attention to planting restrictions with 2,4-D LVE. Use the adjuvant recommendations under the TURBO 8EC + Roundup/Roundup Ultra/Touchdown tank mix. Do not use crop oil concentrate.
TURBO 8EC + 2,4-DB	1 to 1 = ots/A  1/8 to 315 b ai =	Apply preplant or before soybean emergence. Include nonionic surfactant at 2 qts per 100 gal (0.5% v/v) of spray solution.
TURBO 8EC + Fusion + 2,4-D LVE	1 to 1-12 pts/A - 4 to 8 a oz/A - 1/4 to 1 to ai/A	For this tank mix follow the planting restrictions under the Directions and Remarks Section above for TURBO 8EC + 2.4-D LVE. Fusion rates of 4, 6 and 8 fl oz will control certain grasses up to 2, 4 and 6 inches in height, respectively. Include either crop oil concentrate at 1 gal per 100 gal (1.0% v/v) or nonionic surfactant at 1 to 2 qts per 100 gal (0.25 to 0.5% v/v) of spray solution. Hefer to the Fusion label for additional information.

	TURBO 8EC PLUS TANK MIX PARTNER BURNDOWN RATES IN SOYBEANS					
PRODUCT	RATE	DIRECTIONS AND REMARKS				
TURBO 8EC  + Poast Plus + 2,4-D LVE	1 to 1-1/2 pts/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 TURBO 8EC + 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 gal per 100 gal of spray solution (1% v/v) or Dash HC at 1 pint per acre. Refer to the Poast Plus label for additional information.				
TURBO 8EC + Select + 2,4-D LVE	1 to 1-1/2 pts/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 TURBO 8EC + 2,4-D LVE. The 3 and 4 fl oz 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 qt per acre and 28% UAN (urea ammonium nitrate) at a rate of 1 to 2 qts per acre. Refer to the Select label for additional information.				

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.

#### Soybeans:

- Apply only 2,4-D low volatile ester formulations which are registered and recommended for preplant or burndown use in soybeans.
- 2. 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. Observe all cautions and limitations of all products used in tank mixtures.

Feeding Restrictions: Soybean vines or hay treated with TURBO 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.

Weeds controlled. TURBO 8EC in tank mixtures with the above herbicides will provide burndown control of the weeds listed below.

	WEED	S CONT	ROLLED	BY BURN	DOWN RATE	S OF TURB	O 8EC		
					TURBO 8 E	C Plus			
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	Roundup/ Roundup Ultra/ Touchdown + 2,4-D LVE	Gramoxone Extra	Gramoxone Extra + 2,4-D LVE	2,4-DB
ANNUAL GRASSES				MAXIMUN	BURNDOWN	HEIGHT (INC	HES)		
Barley		-		-		8	4	to 6	
Barnyardgrass		2 to 3	3 to 4	-		6	4	to 6	
Crabgrass spp.	Does	2 to 3		-	6		4 to 6		Does not control these
Foxtail spp.		2 to 3	3 to 4	2 to 6	8		4 to 6		
Johnsongrass, seedling	not control	2 to 3	-	-	8		4 to 6		
Pancium, fall	these	2 to 3	3_	2 to 6	6		4 to 6		
Sandbur, field	species	-		-		8	4	to 6	species
Shattercane		2 to 3		-		8 -	4	to 6	]
Wheat, volunteer			 	-		6	4	to 6	
Witchgrass		2 to 3	<u> </u>	-		6	4	to 6	<u>l</u>
BROADLEAVES				MAXIMUN	N BURNDOWN	N HEIGHT (INC	HES)		
Buffalobur			-	<u>".</u>	6	6	4 to 5	4 to 6	-
Chickweed, common		-	6	··	6	8	4 to 6	4 ኤ 3	2
Cocklebur, common			6		6	8	4 to ว่	4 to 6	6
Dandelion, common		6	dia*		2 dia <sup>b</sup>	6 dia	4 dia <sup>c</sup>	6 dia²	2 dia
Henbit			4	<del></del>	4	4	4 to 6	4 to 19	-
Horseweed/marestail		1	6ª		4 <sup>b</sup>	6	3	67	2

	WEE	OS CONT	ROLLED	BY BURN	DOWN RATE	S OF TURB	O 8EC		
					TURBO 8 E	C Plus .			
WEEDS CONTROLLED	2. <b>∸</b> D LVE ¯	Poast Plus + 2,4-D LVE	Select + 2,4-D LVE	Fusion + 2,4-D LVE	Roundup/ Roundup Ultra/ Touchdown	Roundup/ Roundup Ultra/ Touchdown + 2,4-D LVE	Gramoxone Extra	Gramoxone Extra + 2,4-D LVE	2,4-DB
Jimsonweed			3		6	6	4 to 6	4 to 6	2
Kochia*		4	ja .		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.		1	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		6⁵	8	4 to 6	4 to 6	2
Ragweed, giant			6ª		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, Pennsytvania		!	6		6	8	4 to 6	4 to 6	3
Sunflower, common			6		6	6	4 to 6	4 to 6	4
Thistle, Russian			43		2 to 4 <sup>b</sup>	6	4	4 to 6	3
Velvetteaf			6		6 .	8	4 to 6	4 to 6	3
Waterhemp spp.			6		66	8	4 to 6	4 to 6	3

- Use 2.4-D LVE at 0.5 pound active ingredient per acre.
- Use a minimum Roundup/Roundup Ultra rate of 16 fl oz/A and a minimum Touchdown rate of 10.6 fl oz/A
- Suppression only.
- Does not control triazine resistant biotypes.

# **RESIDUAL WEED CONTROL**

TURBO 8EC burndown programs can be used as part of a full season weed control program in soybeans when, 1) applied as a tank mixture with residual herbicides, or 2) followed with a posternergence weed control program, which is registered for use on that crop. For residual control, TURBO 8EC burndown programs include tank mixes with the following herbicides or combination of herbicides:

B						1
Alachlor	Command	Dual II	New Lorox Plus	Prowi	Scepter	Steel
Broadstrike + Dual	Detail	Frontier	Pentagon	Pursuit	Sencor	Turbo 8EC*
Canopy	Dual	Linuron	Preview '	Pursuit Plus	Squadron	

<sup>\*</sup> TURBO 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 "Weed Controlled" sections of the TURBO label. Refer to the section of the label "Use Rates for Reduced and No-Tital Systems" for use rates for residual control.

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

# POTATOES

(Except California)

TURBO 8EC is recommended for preemergence or postemergence broadcast application for control of certain broadleaf weeds and grasses in potatoes.

Preemergence Application: Apply with ground spray

equipment (except air blast sprayers), aerial spray equipment or in sprinkler irrigation water as a preemergence broadcast application. Apply after planting but before crop emergence, or apply after drag-off if this operation is part of the usual cultural practice.

Postemergence Application: Apply postemergence only in sprinkler irrigation water after drag-off but not later than 60

days of harvest. Refer to the "Chemigation" section of this label for application information.

		o potatoes according to direction	o, niii oncourcij contoj.	
Annual Broadleaves		er e e e e e e e e e e e e e e e e e e	Annual Grasses	
Carpetweed	Nightshade, black	Sicklepod	Barnyardgrass	Goosegrass
Galinsoga	Nightshade, hairy	Sida, prickly/teawood	Crabgrass	Junglerice
Jimsonweed	Pigweed sp.	Smartweed, Pennsylvania	Crowfootgrass	Nutsedge, Yellow
Lambsquarters, common	Ragweed, common	Thistle, Russian	Cupgrass, Prairie	Panicum, Fall
Mallow, venice	Sesbania sp.	Velvetleaf	Cupgrass, Southwestern	Red Rice
Mustard, wild	Shepherdspurse		Foxtail sp.	Signalgrass, broadlead Witchgrass

Preemergence Broadcast Rates			
TURBO 8EC Pints/Acre			
0.5 to 3% Organic Matter	Over 3% Organic Matter		
2 to 2-1/2	2-1/2 to 3		
3 to 3-1/2	3-1/2 to 4		
	0.5 to 3% Organic Matter 2 to 2-1/2		

	SOIL TEXTURE		Rate TURBO 8EC Pints/Acre
COARSE* (loamy sand, sandy loam	1)		2
MEDIUM/FINE (loam, silt loam, silt,	sandy clay, sandy clay Ioam, silty clay,	silty clay loam b, clay, clay loam)	2 to 2-2/3

## SPECIAL PRECAUTIONS:

- TURBO 8EC can be applied two times per year, but not more than a total of 5-1/2 pints per acre.
- Do not apply within 24 hours of application of insecticides.
- Postemergence applications can be made only on russetted or white skinned varieties of potatoes that are not early maturing and are not one of the sensitive varieties listed below. Crop injury may occur if TURBO 8EC is applied within 3 days of cool, wet or cloudy weather.
- 4. Preemergence and postemergence applications of TURBO 8EC to early maturing varieties and Atlantic, Bellchip, Centennial, Chipbelle, Shepody and Superior varieties may cause crop injury, delayed maturity and/or reduced yields especially under adverse weather conditions and/or when maximum label rates are used.
- 5. Do not harvest within 60 days of application.
- 6. Do not apply after June 30 in Idaho, Oregon, or

- Washington if treated land will be planted to crops other than potatoes in the Fall.
- 7. Do not use on muck or peat soils.
- 8. Potato varieties may vary in their response to herbicide application. When using TURBO 8EC for the first time on a particular variety, always determine crop tolerance before using on a field scale.
- Do not plant sensitive crops such as onions, lettuce, sugar beets, cole crops and cucurbits during the next growing season following application of TURBO 8EC or injury may occur.
- 10. Certain cereal varieties are sensitive to SENCOR DF, SENCOR 4 or SENCOR SOLUPAK (a part of the active ingredient mixture in TURBO 3EC see cereal section of SENCOR DF, SENCOR 4 or SENCOR SOLUPAK labels for sensitive varieties) and should not be planted during the nex, growing season unless the following cultural practices occur.

 Potato vines left in the row 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.

# POSTEMERGENCE SEQUENTIAL APPLICATIONS WITH SENCOR

Preemergence application of TURBO 8 EC may be followed by a single postemergence application of 1/2 to 1 pint/acre of SENCOR 4 or 1/3 to 2/3 pounds/acre of SENCOR DF. If TURBO 8EC is used on medium/fine soils with greater than

3% organic matter, use 1/2 pint of SENCOR 4 or 1/3 pound of SENCOR DF. For additional precautions, restrictions and limitations, refer to the appropriate section of this label and the label for SENCOR 4 or SENCOR DF.

# PREEMERGENCE / POSTEMERGENCE APPLICATIONS WITH MATRIX

Matrix herbicide may be used in tank mixtures with or sequentially to TURBO 8EC for the improved control of weeds such as kochia and hairy nightshade. Matrix may be mixed with TURBO 8EC for preemergence applications and also for postemergence applications (sprinkler irrigation only).

Matrix may also be applied early postemergence following TURBO 8EC applied preemergence. Matrix use rates are 1 to 1-1/2 ounces product per acre for all applications. Consult the Matrix label for additional information concerning specific application timing, precautions and restrictions.

#### STORAGE AND DISPOSAL

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

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

CONTAINER DISPOSAL: Non-refillable Plastic - 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. Returnable Refillable Sealed Container: Do not rinse container. Do not break seals. Replace the dust-cover cap and return container intact to point of purchase.

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 container is leaking invert to prevent leakage. If the container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides above. In spill or leak incidents, keep unauthorized people away. You may contact the Bayer Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Bayer Kansas City Emergency Response Telephone No. is 800-414-0244 or contact Chemtrec at 800-424-9300.

Sencor is a Reg. TM of Bayer AG, Germany Liberty Herbicide and Liberty Link are Reg. TMs of AgrEvo USA Company

Option II is a Reg. TM of Agrevo

Scepter, Pursuit, Detail, Pentagon, Prestige, Prowl, Pursuit Plus, Squadron, Scepter O.T., Steel and Status are Reg. TMs of American Cyanamid Basagran, Blazer, Conclude B&G, Frontier, Galaxy, Manifest, Poast, Poast Plus, Rezult, Storm are Reg. TMs of BASF

Broadstrike + Dual is a Reg. TM of DowElanco

Assure II, Canopy, Classic, Concert, Lorox Plus, Matrix, Pinnacle, Reliance STS, Synchrony STS are Reg. TMs of DuPont deNemours and Co. Command is a Reg. TM of FMC

Roundup, Roundup Ultra are Reg. TMs of Monsanto

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Cobra, Resource, Select, and Select O.T. and Stellar are Reg. TMs of Valent

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