Base Reg (6220)

366-6220.BLD

U.S. LABEL

Date of Draft: 7/6/87 (H)
Supersedes Draft Dated: 9/30/86
and Pre-Reg Draft Dated: 2/27/87

Reason to Issue: To prohibit application through any type of irrigation system in accordance with EPA PR Notice 87-1; to add "Ground Water and Surface Water Advisories" and revise "Environmental Hazards" and "Crop Rotation Restrictions" in accordance with metolachlor registration standard; to correct use of trademarks and show new corporate signature.

EPA Reg. No. 3125-366

TURBOTM 8EC Herbicide

FOR CONTROL OF CERTAIN GRASSES AND BROADLEAF WEEDS IN SOYBEANS

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

Metribuzin, 4-amino-6-(1,1-dimethylethyl)-3-(methylthio)-1,2,4-triazin-5(4H)-one** 15%

*U.S. Patent No. 3,937,730 **U.S. Patent No. 3,671,523

EPA Reg. No. 3125-366 EPA Est. 3125-MO-1 ACCEPTED

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 2/25 - 366

KEEP OUT OF REACH OF CHILDREN

CAUTION

(See Rear Panel for Additional Precautions and Statements of Practical Treatment)

NE: CONTENTS _____ GALLON(S)

STOP - READ THE LABEL BEFORE USE

OCT 2 0 1987

MOBAY CORPORATION
A Bayer USA INC. COMPANY
AGRICULTURAL CHEMICALS DIVISION
Box 4913, Kansas City, Missouri 64120

Note: Underlined letters in chemical nomenclature should be italicized when printed, not underlined.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

May be harmful if swallowed, inhaled or absorbed through the skin. Avoid contact with eyes, skin or clothing. Avoid breathing spray mist. Wash thoroughly with soap and warm water after handling. Wash contaminated clothing with soap and hot water before reuse.

Keep out of reach of children.

Obtain prompt medical aid if poisoning should occur.

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 sedation.

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. If swallowed, call a physician or poison control center. Vomiting should be induced. Administer water freely, and induce vomiting by giving one dose (I/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 on skin, wash thoroughly with soap and warm water.

ENVIRONMENTAL, HAZARDS

Do not use on other crops grown for food or forage. Do not apply directly to water or wetlands (swamps, bogs, marshes, and potholes). Do not contaminate water by cleaning of equipment or disposal of wastes. Do not apply when weather conditions favor drift from areas treaced. Apply this product only as specified on the 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.

AVISO

PRECAUCION AL USUARIO: Si usted no puede leer o entender inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente. (TO THE USER: If you cannot read or understand English, do not use this product until the label has been fully explained to you.)

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Do not contaminate feed or food.

IMPORTANT: Read these entire Directions for Use and Conditions of Sale before using TURBO 8EC emulsifiable concentrate 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 PRODUCT IS USED. 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. MOBAY 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 MOBAY AND ARE, THEREFORE, THE RESPONSIBILITY OF THE BUYER.

RE-ENTRY STATEMENTS

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons. Do not enter treated areas without protective clothing until sprays have dried. Because certain states may require more restrictive re-entry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings should include those statements found under the label heading "Precautionary Statements" and "Re-entry Statements" included on this label. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information: WARNING, area treated with TURBO 8EC herbicide on (date of application). Do not enter without appropriate protective clothing until sprays have dried. If on skin, remove contaminated clothing and wash skin immediately with soap and warm water. If eyes are contaminated, wash with flowing water for at least 15 minutes. If swallowed, vomiting should be induced. (See Precautionary Statements on label).

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.

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 in tank mix combinations with other herbicides is:

(Emulsifiable Concentrates):

- 1. Fill the spray tank 1/4 to 1/3 full with clean water.
- 2. Add recommended rate of TURBO 8EC while recirculating and with agitator running.
- 3. 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 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 nsi.) 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.

Do not apply this product through any type of irrigation system.

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 bruadcast 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 discard in non-crop areas away from water supplies. 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 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:

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- 1. 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.
- 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 and can be resuspended by shaking, then application is possible with good agitation in the spray tank.

COMMERCIAL 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 impregntion 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.

COMMERCIAL IMPREGNATION AND APPLICATION OF TURBO ON DRY BULK FERTILIZER (Cont'd)

TURBO 8EC should be pre-mixed with water to form a sprayable mixture. 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 TURBO 8EC per acre from the appropriate section of this label and refer to the formula below to determine the amount of TURBO 8EC 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.

Pints TURBO 8EC Per Acre 2000 (lbs. Fertilizer Per Acre Pints TURBO 8EC per 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.

SOYBEANS (Except California)

TURBO 8EC is recommended for preplant or shallow incorporated, preemergence, SPLIT SHOT TM and EXTENDED SPLIT SHOT TM 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 BEC 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.

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SPECIAL PRECAUTIONS (SOYBEANS)

Injury to soybeans may occur when TURBO 8EC is used under the following conditions:

- 1. When soils have a calcareous surface area or a pH of 7.5 or higher.
- 2. Due to the sensitivity of certain soybeans varieties, TURBO 8EC is not recommended for use on sensitive varieties, such as Tracy, Semmes, Altona, Vansoy, Coker 102, Coker 156, Portage, Maple Amber, Govan, NKS-1884, Terra-Vig 505, Terra-Vig 606, Vinton 81, Asgrow 6520, AP 55, AP 71 and Narow. Consult your Mobay representative or your seed supplier for information on the tolerance to TURBO 8EC of newly released soybean varieties, prior to use of TURBO.
- 3. When applied in conjunction with soil-applied organic phosphate pesticides.
- 4. Over application or boom overlapping may result in stand loss and soil residues.
- 5. Uneven application or improper incorporation can decrease the level of weed control and/or increase the level of injury.
- 6. 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.
- 9. When heavy rains occur soon after application, especially in poorly drained areas where water may stand for several days.
- 10. 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 ALONE

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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 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.

<u>Preemergence Application</u>: Dry weather following preemergence application of TURBO 8EC may reduce effectiveness. If weeds develop, cultivate 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 the "Application of TUPBO 8EC in Fluid Fertilizers" or "Commercial Impregnation and Application of TURBO 8EC on Dry Bulk Fertilizer" in this label.

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

Annual Grasses:

Annual Broadleaves:

Barnyardgrass
Bluegrass
Broadleaf Signalgrass
Crabgrass
Crowfootgrass
Cupgrass, Prairie
Cupgrass, Southwestern
Foxtails
Goosegrass
Junglerice
Panicum, Fall
Red Rice
Witchgrass

Black Nightshade
Bristly Starbur
Carpetweed
Copperleaf, Hophornbeam
Florida Beggarweed
Florida Pusley
Galinsoga
Jimsonweed
Knotweed
Kochia
Lambsquarter
Pigweeds
Prickly sida/Teaweed

Purslane
Ragweed, Common
Redweed
Russian Thistle
Sesbania
Shepherdspurse
Sicklepod
Smartweeds
Spotted spurge
Spurred anoda
Velvetleaf
Venice Mallow
Wild mustards

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

RECOMMENDED APPLICATION (Broadcast rates) TURBO 8EC 8EC Pints/Acre

TORDO OLO OLO TIRES/ACTE			
	ORGANIC	MATTER	
Soil Texture	0.5 to 3%	Over 3 ⁴ b/	
Coarse ^a / (Loamy sand, sandy loam)	1 1/2 ^{<u>c</u>7}	1 3/4 - 2	
Medium (Loam, silt loam, silt, sandy clay, sandy clay loam)	2 - 2 1/4	2 1/4 - 2 3/4	
Fine (Silty clay, silty clay loam*, clay, clay loam)	2 3/4	2 3/4 - 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.

b/ For preplant incorporated application, use the lower rate range.

For Southern and Southeastern states, see section below on IN COARSE (LIGHT) SOILS ONLY.

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

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

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

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

TURBO 8EC Preemergence Application

Soil Texture	Organic Matter	TURBO 8EC (pts/acre)
Coarse Soils (Sand , loamy sand, sandy loam)	0.5 or above	1 1/2 - 2 1/2 ^b /

Not recommended for use on sand with less than 1% organic matter.

SPECIAL PRECAUTIONS:

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

TURBO 8EC plus Overlay Application of SENCOR® Herbicide

TURBO 8EC applied preplant or shallow incorporated followed by an overlay application of SENCOR herbicide will control more broadleaf and g_t ass weeds in soybeans than when either herbicide is used alone.

Refer to the SENCOR 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.

Applications: Apply TURBO 8EC as a preplant or shallow incorporated application up to 14 days before planting at rates listed below. This is followed by SENCOR 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 SENCOR 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 control Buffalobur, Cocklebur, and Sunflower.

Use the higher rate under heavy weed pressures and/or on soils higher in organic matter. Soybean varieties with a high level of metribuzin tolerance are recommended when using the high rate. For maximum control of sicklepod, use a preemergence application.

TURBO 8EC Plus SENCOR 4 Application (Broadcast Rates)

	Preplant Incorpor			Preemergenc	
Soil Texture	Application TURBO 8EC (pts/acre)	- FOLLOWED BY -	SE	lay Applica NCOR 4 (pts ORGANIC MAT 2 to 4%	/acre)
Coarse ^{a/} (Sand, loamy sand, sandy loam)	1 1/2	- followed by -	1/4	1/4	1/4-1/2
Medium (Loam, silt loam, sandy clay loam, silt, sandy clay)	2	- followed by -	1/4	1/4-1/2	, 1/2-3/4
Fine (Silty clay loam*, clay loam, silty clay, clay)	2 3/4	- followed by -	1/4	1/4-1/2	1/2-3/4

TURBO 8EC Plus SENCOR DF Application (Broadcast Rates)

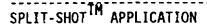
10104	dcast Kates)			
				ergence
	FOLLOWED BY -	_	<u>Overlay Ap</u>	
j.				
(pts/acre)			ORGANIC MA	ATTER
		0.5-2%	2 to 4%	Over 4%
	•			<u> </u>
1 1/2	- followed by -	1/6	1/6	1/6 - 1/3
·	•			
				4
,	fallanad bu	1 /6	1/6 1/3	1/2 1/0
	- tollowed by -	1/6	1/6 - 1/3	1/3 - 1/2
2 3/4	- followed by -	1/6	1/6 - 1/3	1/3 - 1/2
:				
	Preplant Incorpor Application TURBO 8EC (pts/acre) 1 1/2	Preplant Incorporated Application - FOLLOWED BY - TURBO 8EC (pts/acre) 1 1/2 - followed by - 2 - followed by -	Preplant Incorporated Application - FOLLOWED BY - TURBO 8EC (pts/acre) 0.5-2% 1 1/2 - followed by - 1/6	Preplant Incorporated Application - FOLLOWED BY - Overlay Application - FOLLOWED BY - Overlay Application - FOLLOWED BY - SENCOR DF (1 (pts/acre) ORGANIC MARCON O.5-2% 2 to 4% 1 1/2 - followed by - 1/6 1/6 2 - followed by - 1/6 1/6 - 1/3

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

SPECIAL PRECAUTIONS:

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

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.



TURBO 8EC applied preplant or shallow incorporated followed by an preemergence application of TURBO 8EC will control more broadleaf and grass weeds in soybeans than when either herbicide 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 or shallow 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 will control Buffalobur, Cocklebur, and Sunflower.

SPLIT-SHOT APPLICATION
(Broadcast Rates)

		(broadcast kates)		
Soil Texture	Preplant Incorpora Application TURBO 8EC (pts/acre)	ted - FOLLOWED BY -	Preemergence Overlay Application TURBO BEC (pts/acre)	
Coarse ^{a/} (Sand, loamy sand, sandy loam)	1-1 1/2	- followed by -	3/4-1	
Medium (Loam, silt loam, sandy clay loam, silt, sandy clay)	1 3/4-2	- followed by -	3/4-1	
Fine (Silty clay loam*, clay loam, silty clay clay)	2-2 1/2 <u>b</u> /	- followed by -	3/4-1 <u>b</u> /	

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

SPECIAL PRECAUTIONS:

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

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.

 $[\]frac{b}{}$ Total not to exceed 3 pts/acre on soils with organic matter less than 3 percent.

TURBO 8EC plus Scepter® Tank Mix Application

TURBO 8EC may be applied with Scepter 1.5 AS as a preplant incorporated, preemergence broadcast or band application, for the control of certain broadleaf weeds and grasses in soybeans. Consult the Scepter label for specific directions on use, recommendations, restrictions and any additional weeds not specified on this label.

Mixing:

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

Application:

For specific application information, refer to "Application" under 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 will control the following annual broadleaf weeds:

Buffalobur Cocklebur Morningglory, pitted Morningglory, smallflower Sicklepod 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 8 EC a/. (pts/Acre)	Scepter 1.5 AS b/ (pts/acre)
Coarse (loamy sand or sandy loam)	1 1/2 5/	1/3 - 1/2
Medium (loam, silt loam, silt, sandy clay, sandy clay loam)	1 3/4 - 2 1/4	1/3 - 1/2
Fine (silty clay, silty clay loam*, clay, clay loam)	2 1/4 - 2 3/4	1/3 - 1/2

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

a/ Higher rate is recommended on soils with organic matter greater than 3%.

by For preemergence application, use the higher rate. For maximum control of moderate to heavy infestations of cocklebur, giant ragweed and sicklepod, use the higher rate and a preplant incorporated application.

For Southern and Southeastern States in coarse soils, see the IN COARSE (LIGHT) SOILS ONLY Section of this label for TURBO 8EC rates.

Special Precautions

For additional precautions, restrictions, limitations and sprayer clean-up information, refer to the appropriate sections of this and the Scepter 1.5 AS label.

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

TURBO 8EC plus Command® 4EC Tank Mix Application

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

Mixing:

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

Application:

For specific application information, refer to "Application" under 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 Command 4EC Application (Broadcast Rates)

TURBO 8EC a/ (Pts/Acre)	Command 4EC (Pts/Acre)
1 1/2-1 3/4 ^b /	1/2 - 3/4
1 3/4 - 2 1/4	1/2 - 3/4
2 1/4 - 2 3/4	1/2 - 3/4
	(Pts/Acre) 1 1/2-1 3/4 b/ 1 3/4 - 2 1/4

^{*}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 ONLY Section of this label for TURBO 8EC 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.

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

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

Do not apply where weather conditions favor drift.

TURBO 8EC IN REDUCED-TILLAGE OR NO-TILL SYSTEM

Application: TURBO 8EC may be applied in combination with Gramoxone® Super, Roundup® or 2,4-D low volatile ester for the control of annual grasses and broadleaf weeds and the suppression of emerged perennial weeds where soybeans are directly seeded into a stale seedbed, cover crop, or in previous crop residues.

Special Precautions: Poor weed control and/or crop injury may result if directions are not followed. Do not use a rib-type press wheel on your no-till planter or crop injury may result. For additional precautions, restrictions, limitations, and sprayer clean-up information, refer to the appropriate sections of the Gramoxone Super, Roundup, 2,4-D low volatile ester and this label.

TURBO 8EC plus Gramoxone Application: Apply 1 1/3 to 2 2/3 pints of Gramoxone with TURBO rates listed below as a preemergence broadcast ground spray. Use the higher rate of Gramowone for weeds 4 to 6 inches tall. Soybeans exposed at the time of application will be killed. Apply in 20 to 60 gallons spray mix per acre. Use the higher volume in fields with heavy weed infestation or with large amounts of previous crop residues. When a surfactant is needed, add Ortho X-7. Spreader or similar non-ionic spreader at 8 fl. ounces per 100 gallons of diluted spray. Refer to the Gramoxone label for rates, directions, limitations and precautions.

TURBO SEC plus Roundup Application: Apply 1 to 1.5 quarts of Roundup with TURBO SEC at the rates listed below as a preemergence broadcast ground spray. Use the higher rates of Roundup for weeds greater than 6 inches tall. Refer to the Roundup label for additional rate information, directions, limitations and precautions.

TURBO 8EC plus 2,4-D low volatile ester Application: Apply 1.0 lb active ingredient (ai) per acre of 2,4-D low volatile ester with TURBO 8EC at the rates listed below as a early preplant surface application. Application is recommended 30 days prior to planting. Refer to the 2,4-D low volatile ester label for additional rate information, directions, limitations and precautions.

<u>Weeds Controlled</u>: TURBO 8EC herbicide combinations will control the weeds listed in the TURBO 8EC alone section. Refer to the Gramoxone, Roundup or 2,4-D low volatile ester labels for additional weeds controlled.

NO-TILL OR REDUCED-TILL APPLICATION
(Broadcast Rates)

1 Di Oudease Mae	
Soil Texture	TURBO 8EC Pints/acre ^a /
Coarse ^{b/} (Loamy sand, sandy loam)	1 1/2 - 2 1/4
Medium (loam, silt loam, silt, sandy clay, sandy clay loam)	2 1/4 - 3
Fine (Silty clay, silty clay loam ^C /, clay, clay losa)	3 - 3 3/4

Use low rate range for low trash level or soils with less than 3% organic matter. Use the higher rate range for high trash level or soils with greater than 3% organic matter.

EXTENDED SPLIT-SHOT APPLICATION

An early preplant (surface-applied or shallow incorporated) application of TURBO 8EC, followed by a preemergence surface 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 decrease the need for tillage and/or contact herbicides for the control of existing vegatation prior to planting, while providing residual control of weeds after planting.

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 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 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 contact herbicide, such as Roundup or Gramoxone.

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

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.

EXTENDED SPLIT-SHOT APPLICATION

(Broadcast Rates)

Soil Texture ^a /	Early Preplant Application TURBO 8EC pts/acre	- FOLLOWED BY -	Preemergence Overlay Application TURBO 8EC pints/acre
Cnarse ^{a/} (Sand, loamy sand, sandy loam)	1 1/2 - 2	-followed by-	3/4 - 1 1/4
Medium (Loam, silt loam, sandy clay loam, silt, sandy clay)	1 3/4 - 2 1/4	-followed by-	1 - 1 1/2
Fine (Silty clay loam*, clay loam, silty clay, clay)	2 - 2 1/2 ^b /	-followed by-	1 1/4 - 1 3/4 b/

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

 $\frac{b}{}$ Total not to exceed 3 3/4 pints of TURBO 8EC/acre per use season.

CROP ROTATION RECOMMENDATIONS a/
aiting Period After Application of TURBO 8ECb/

4 1/2 MONTHS	8 MONTHS	r Application of TURBO 8E 12 MONTHS	18 MONTHS
Winter Barley	Corn	Alfalfa	Onions
Winter Wheat	Cotton	Asparagus	Sugar Beets
	Peas	Forage Grasses	And Other Root Crops
	Potatoes	Lentils	•
	Rice	Sainfoin	
	Soybeans	Sugarcane	
	Spring Barley	Tomatoes	•
	Spring Wheat	Other Crops not	
•		listed (except	
		root crops	<u> </u>

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.

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.

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.

STORAGE AND DISPOSAL

PESTICIDE DISPOSAL: Do rot 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.

<u>CONTAINER DISPOSAL</u>: 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 authorites, by burning. If burned, stay out of smoke.

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 Mobay Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Mobay Kansas City Emergency Response Telephone No. is 816-242-2582, or contact Chemtrec at 800-424-9300.

Command is a Reg. TM of FMC Corp.
Gramoxone is a Reg. TM of ICI Americas, Inc.
Roundup is a Reg. TM of Monsanto Co.
Scepter is a Reg. TM of American Cyanamid Co.
SENCOR is a Reg. TM, SPLIT-SHOT and EXTENDED SPLIT-SHOT are TM's of Bayer AG, Germany.
X-77 is a Reg. TM of Chevron Chemical Co.

YLDIO

Base Pre-Reg (6148)

U.S. LABEL

Reason To Issue: To add claims for sequential early postemergence application of Scepter following TURBO on soybeans.

EPA Reg. No. 3125-366

Date of Draft: 4/21/87 (Pre-Reg) (H)

TURBOTM SEC

Herbicide



Under the Federal Insecticide, Fungicide, and Rodentialde Act. as amended, for the pesticide registered under EPA Reg. No.

ACTIVE INGREDIENTS:

Metolachlor, 2-chloro-N-(2-ethyl-6-methylphenyl)-N-(2-methyoxy-1-methyl-thyl) acetamide 70%

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

15%

AMENDMENT TO PREVIOUSLY REGISTERED LABELING

ADD THE FOLLOWING:

(SOYBEANS)

SEQUENTIAL APPLICATION OF SCEPTER FOLLOWING TURBO:

If needed, application of TURBO alone or in a registered tank mix according to directions on the label, may be followed by an early postemergence application of Scepter 1.5 AS for control of cocklebur. Apply 1/3 pint of Scepter in a minimum of 20 gallons of water per acre when cockleburs are less than 6 inches tall and are actively growing. 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 i.5 AS 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 pints 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 1.5 AS only in the states where it is registered as listed on the product label.

Apply Scepter 1.5 AS 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. 366-6293.YLD

Base Pre-Reg (6293)

70%

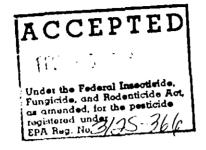
U.S. LABEL

Reason to Issue: Revise in line with

Date of Draft: 11/11/87 (Pre-Reg) (H)

field comments.

EPA Reg. No. 3125-366



TURBOTM 8EC Herbicide

ACTIVE INGREDIENTS:

Metolachlor, 2-chloro-N-(2-ethyl-6-methyl-

phenyl)-N-(2-methyoxy-1-methylethyl) acetamide

Metribuzin, 4-amino-6-(1,1-dimethylethyl)-3-

(methylthio)-1,2,4-triazin-5(4H)-one

AMENDMENT TO PREVIOUSLY REGISTERED LABELING

ADD THE FOLLOWING:

POTATOES (Except California)

TURBO 8 EC is recommended as a preemergence broadcast spray for the control of certain broadleaf weeds and grasses in potatoes.

Application: Apply with ground (except air blast sprayers) or aerial spray equipment as a preemergence broadcast application. Apply after planting but before crop emergence or after drag-off if this operation is part of the normal cultural practice.

Weeds Controlled: TURBO 8 EC, applied preemergence to potatoes according to directions, will effectively control:

Annual Grasses:

Barnyardgrass Broadleaf signalgrass Crabgrass Crowfootgrass Cupgrass, Prairie Cupgrass, Southwestern **Foxtails** Goosegrass Junglerice Nutsedge, Yellow Panicum, Fall Red Rice Witchgrass

Annual Broadleaves:

Black nightshade Carpetweed Galinsoga Jimsonweed Lambsquarter Piqweeds Prickly sida Ragweed, Common Russian thistle Sesbania Shepherdspurse Sicklepod Smartweed, Pennsylvania Velvetleaf Venice Mallow Western hairy nightshade Wild Mustards

TURBO 8 EC will suppress (reduce the competition of) cocklebur, common purslane, hairy nightshade, Johnsongrass (seedling), Kochia, sandbur, and volunteer sorghum."

RECOMMENDED APPLICATIONS

(Broadcast Preemergence Rates)

		Pints/Acre
Soil Texture	0.5 TO 3%	MATTER Over 3%
Coarse (<u>a/</u> Loamy sand, sandy loam)	2 - 2 1/2	2 1/2 - 3
Medium/Fine (Loam, silt loam, silt, sandy clay, sandy clay loam, silty clay, silty clay loam, clay, clay loam)	3 - 3 1/2	3 1/2 - 4

a Do not use on sand soils.

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

SPECIAL PRECAUTIONS:

Do not apply within 24 hours of application of other pesticides.

Do not use TURBO 8EC at or after potatoes have emerged.

Applications to Atlantic, Shepody, Chip Bell, Bell Chip and Centennial varieties may cause crop injury, especially under adverse weather conditions and when higher label rates are used.

Do not apply to sweet potatoes or to yams.

Do not plant sensitive crops such as onions, lettuce, sugar beets, cole crops and cucurbits during the next growing season following applications of TURBO 8 EC or injury may occur.

Do not harvest within 60 days after application.

Do not use on muck or peac soils.

Postemergence Sequential Applications with SENCOR:

TURBO 8EC may be followed by a postemergence application of 1/2 to 1 pint/acre of SENCOR 4 or 1/3 to 2/3 pennds/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 label for SENCOR 4 or SENCOR DF.