

RESTRICTED USE PESTICIDE
 (GROUND AND SURFACE WATER CONCERNS)
 FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION, AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION. THIS PRODUCT IS A RESTRICTED USE HERBICIDE DUE TO GROUND AND SURFACE WATER CONCERNS. USERS MUST READ AND FOLLOW ALL PRECAUTIONARY STATEMENTS AND INSTRUCTIONS FOR USE IN ORDER TO MINIMIZE POTENTIAL FOR ATRAZINE TO REACH GROUND AND SURFACE WATER.

ACCEPTED
 with COMMENTS
 In EPA Letter Dated
 NOV 14 1996



Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 19713-11

Double-Barrell

HERBICIDE I
 EPA Reg.No. 19713-11

ACTIVE INGREDIENTS:
 Atrazine:(2-chloro-6-isopropylamino-s-triazine)* 40.8%
 Related compounds 2.2%

INERT INGREDIENTS: 57.0%

TOTAL 100.0%

*Contains 4 lbs. a.i. per gallon. Net Contents: 3 Gals.

HERBICIDE II
 EPA Reg.No. 19713-337

ACTIVE INGREDIENT:
 Isooctyl ester of 2,4-dichlorophenoxy-acetic acid* 94.4%

INERT INGREDIENTS: 5.6%

TOTAL 100.0%

*2,4-Dichlorophenoxyacetic Acid equivalent: 62.6% - 6 lbs. a.i per gallon
 Net Contents: 1 Gal.

non-triazine herbicide. Consult with your state Agricultural Extension Service for specific recommendations. Since DOUBLE-BARRELL acts mainly through root absorption, its effectiveness depends on rainfall or irrigation to move it into the root zone. Should weeds develop, a shallow cultivation or rotary hoeing will generally result in better weed control.

DOUBLE-BARRELL is non-flammable. Care should be taken to avoid using DOUBLE-BARRELL near adjacent desirable plants or in greenhouses or injury may occur. To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, as crop injury may result.

Note: The Seller does not recommend the use of DOUBLE-BARRELL in combination with other herbicides or oils except as specifically described on the label or in literature published by the Seller. FAILURE TO FOLLOW ALL PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL, CROP INJURY, OR ILLEGAL RESIDUES.

APPLICATION PROCEDURES
GROUND APPLICATION: Use conventional ground sprayers equipped with nozzles that provide accurate and uniform application. Be certain that nozzles are uniformly spaced and are the same size. Calibrate sprayer before use and recalibrate at the start of each season and when changing carriers. Unless otherwise specified, use a minimum of 10 gallons of spray mixture per acre for all pre-plant surface, pre-emergence, and post-emergence applications with ground equipment.

Use a pump with capacity to: (1) Maintain 35-40 psi at nozzles; (2) Provide sufficient agitation in the tank to keep mixture in suspension; and to (3) Provide a minimum of 20% bypass at all times.

Use centrifugal pumps which provide propeller shear action for dispersing and mixing this product. The pump should provide a minimum of 10 gallons/minute/100 gallon tank size circulated through a correctly positioned sparger tube or jets. Use screens to protect the pump and to prevent nozzles from clogging. Screens placed on the suction side of the pump should be 16-mesh or coarser. Do not place a screen in the recirculation line. Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles. Check nozzle manufacturer's recommendations.

For band application, calculate the amount to be applied per acre as follows:

$$\frac{\text{band width in inches} \times \text{broadcast rate}}{\text{row width in inches}} = \frac{\text{amount needed}}{\text{per acre}} = \frac{\text{amount needed}}{\text{per acre in field}}$$

AERIAL APPLICATION:
 Use aerial application only where broadcast applications are specified. Apply in a minimum of 1 qt. of water for each quart of DOUBLE-BARRELL applied per acre.

For post-emergence treatments on corn and sorghum, apply recommended rate in a minimum of 2 gal. of water/A. Avoid applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

DOUBLE-BARRELL IN WATER APPLICATIONS
 DOUBLE-BARRELL, a liquified formulation, should be mixed with water and applied as a spray. Pour each container in DOUBLE-BARRELL into the tank during or after filling. Hydraulic (jet) or mechanical agitation is recommended during mixing and application to keep the materials in suspension. All return lines to the tank must discharge below liquid level and agitation should not be so violent as to cause air bubbles to form in the liquid. Wash sprayer thoroughly after use.

Each DOUBLE-BARRELL contains one, 3 gallon container of HERBICIDE I and one, 1 gallon container of HERBICIDE II. Refer to the individual product labels for "Precautionary Statements", "Worker Protection Standard" requirements, "Storage and Disposal" and "Environmental Hazards" information. Apply the entire contents of these containers to the target crop once the containers are opened.

IMPORTANT
 This labeling must be in possession of the user at the time of herbicide application. DOUBLE-BARRELL should be used only in accordance with recommendations on this label and where referenced, on the container labels. Keep containers closed to avoid spills and contamination.

GENERAL INFORMATION
 DOUBLE-BARRELL will control most annual broadleaf and grass weeds in corn, sorghum, and certain other crops as specified on this label such as Barnyardgrass, Witchgrass (Panicum Capillare), Yellow Foxtail, Green Foxtail, Wild Oats, Large (Hairy) Crabgrass, Giant Foxtail, Velvetleaf, Morningglory, Lambsquarters, Pigweed, Ragweed, Nightshade, Purslane and Mustard. DOUBLE-BARRELL may be applied before or after weeds emerge. In each case where a range of rates is given, the lower rate should be used on coarse textured soil and soil low in organic matter, and the higher rate should be used on fine textured soil and soil high in organic matter.

Following many years of continuous use of this product and chemically related products, biotypes of some of the weeds listed on this label have been reported which cannot be effectively controlled by this and related herbicides. Where this is known or suspected and weeds controlled by this product are expected to be present along with resistant biotypes, we recommend the use of this product in combinations or in sequence with other registered herbicides which are not triazines. If only resistant biotypes are expected to be present, use a registered

Manufactured By:
Drexel Chemical Company
 P.O. BOX 13327, MEMPHIS, TN 38113-0327

REVISION DATE: 11/12/96

MIXING PROCEDURES (All Uses)

1) Be sure sprayer is clean and not contaminated with any other materials or crop injury or sprayer clogging may result. 2) Fill tank 1/2 full with clean water. 3) Start agitation. 4) Be certain that the agitation system is working properly and creates a rippling or rolling action on the liquid surface. 5) Pour both HERBICIDE I followed by HERBICIDE II into tank. 6) Finish filling tank. 7) Empty tank as completely as possible before refilling to prevent buildup of residue. Maintain agitation to avoid separation of materials. 8) Clean sprayer thoroughly immediately after use by flushing system with water containing a detergent.

DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling. This label must be in possession of the user at the time of application. DOUBLE-BARRELL should be used only in accordance with recommendations on this label and where referenced on the container labels.

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

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), notification to workers, 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.

Personal Protective Equipment required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is:

Coveralls, Waterproof gloves, Chemical-resistant footwear plus socks and Protective eyewear

Failure to follow the "Directions for Use" and precautions on this label may result in poor weed control, crop injury, or illegal residue.

ROTATIONAL CROPS—ALL USES

1. Land treated with DOUBLE-BARRELL should not be planted to any crop except corn or sorghum until the following year or injury may occur.
2. If DOUBLE-BARRELL is applied after June 10, do not rotate with crops other than corn or sorghum the next year or injury may occur.
3. In the High Plains and Intermountain area of the West where rainfall is sparse and erratic or where irrigation is required, use DOUBLE-BARRELL to control weeds in corn only when corn is to follow corn or a crop of untreated corn, or sorghum is to precede other rotational crops.
4. In Western Minnesota and Eastern parts of the Dakotas, Nebraska and Kansas, corn treated with DOUBLE-BARRELL should not be followed with soybeans if the broadcast rate applied was more than 0.27 0.17 DOUBLE-BARRELL per acre (or comparable rate in a band) or injury may occur.
5. Injury may occur to soybeans planted in North Central Iowa and South Central Minnesota the year following a DOUBLE-BARRELL application on Harps, Canisteo, Stroden or other soils having a calcareous surface layer.
6. Do not plant sugar beets, tobacco, vegetables (including dry beans), Spring-seeded small grains or small seeded legumes and grasses the year following DOUBLE-BARRELL application or injury may occur.

Pre-plant Surface-Applied, or Pre-emergence Broadleaf or Grass Weeds Controlled

Alligatorweed	Chicory	Ironweed
Annual Morningglory	Cocklebur ²	Jimson Weed
Arrowhead	Coffeebean	Kocia
Artichoke	Creeping Jenny	Lambsquarter
Barnyardgrass (Watergrass) ²	Curley Indigo	Large (Hairy) crabgrass ¹
Bindweed (Hedge, Field, European)	Dandelion	Locoweed
Bitter Wintercress	Dock	Mexican Weed
Boxelder	Duckweed	Morningglory
Buckhorn	Eldeberry	Mustard
Bull Thistle	Giant Foxtail ²	Nightshade
Bulrush	Goldenrod	Nutgrass
Burdock	Green Foxtail	Parrot Feather
Bur Ragweed	Groundcherry	Pennywort
Buttercup	Ground Ivy	Pigweed
Catnip	Hemp	Plantain
Chickweed	Hoary Cress	Poison Ivy
	Honeysuckle	Pokeweed
	Indigo	Poverty Weed

Pre-plant Surface-Applied, or Pre-emergence Broadleaf or Grass Weeds Controlled

Puncturevine	Smartweed	Water Hyacinth
Purslane	Sowthistle	Water Lilly
Ragweed	Stinkweed	Water Primrose
Rush	Sumac	Wild Garlic
Russian Thistle	Sunflower	Wild Lettuce
Sagebrush	Velvetleaf ¹	Wild Oats
Shepard's Pursue	(Buttonweed)	Wild Onions
Sicklepod ¹	Virginia Creeper	Wild Radish
Willow	Witchgrass (Panicum Capillar) ²	Yellow Foxtail

¹Partial control only

²Partial control only on medium and fine-textured soils

Where there are state/local requirements regarding HERBICIDE I use (including lower maximum rates and/or set-backs) which are different from the label, the more restrictive/protective requirements must be followed.

Certain states may have established rate limitations within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state regulations.

CORN

DOUBLE-BARRELL may be applied either before planting, at planting, or after planting as indicated below.

Pre-plant Surface-Applied (Broadleaf and Grass Control):

Use on medium and fine textured soils with minimum tillage or no tillage systems only in CO, IL, IN, IA, KS, KY, MN, MO, MT, NE, ND, SD, WI, WY. Apply the recommended rate of DOUBLE-BARRELL shown in Table 1 up to 30 days prior to planting. On coarse-textured soils, do not apply more than two weeks prior to planting.

Note: To the extent possible, do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.

PRE-EMERGENCE OR AT PLANTING (Broadleaf and Grass Weed Control):

Apply during or shortly after planting prior to weed emergence at the rate indicated in Table 1.

POST-EMERGENCE (Broadleaf and Grass Weed Control):

Apply before weeds exceed 1.5 inches in height before corn exceeds 12 inches in height at rate recommended in Table 1.

TABLE 1

For Control Of Broadleaf and Grass Weeds

Soil Erodibility Classification ²	Plant Residue Amount	Acres per DOUBLE-BARRELL
Highly erodible	30% or more (conservation tillage program)	7.7 to 13.4 12 to 20
Highly erodible	Less than 30% (conventional tillage program)	0.5 to 16.3 15 to 26
Non-highly erodible	No limit	7.7 to 13.4 12 to 20

²As defined by the Soil Conservation Service

NOTE: Drexel DOUBLE-BARRELL is not recommended for pre-plant incorporated application.

FOR Post-emergence Application: If no HERBICIDE I was applied prior to corn emergence, apply at a rate of 3.8 6 acres per DOUBLE-BARRELL broadcast. If a post-emergence treatment is required following an earlier herbicide application, the total HERBICIDE I applied may not exceed 2.5 lbs. (0.33 0.21 DOUBLE-BARRELL) per acre per calendar year.

Broadleaf control (Eastern CO, Western KS, Western NE, NM, OK Pan Handle, West TX, and Eastern WY): On sand, loamy sand, sandy loam, mild to strongly alkaline soil and all recently leveled soil, apply at a rate of no more than 6-2 10 acres per DOUBLE-BARRELL, either pre-plant or pre-emergence. On other soils in these areas, apply rate in Table 1 for broadleaf and grass control.

Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or set-backs) which are different from the label, the more restrictive/protective requirements must be followed. Certain states may have established rate limitations within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations.

PRECAUTIONS FOR ALL APPLICATIONS TO CORN

1. Post-emergence application to corn must be made before corn reaches 12 inches in height.
2. The maximum application rate for corn is 2.5 lbs. a.i. of HERBICIDE I per acre per calendar year. Applications for Quackgrass suppression in corn are restricted to Spring application only. No Fall applications are permitted.
3. To avoid crop injury and illegal residues do not apply more than 5 pts. per acre of HERBICIDE I to corn in any one year.
4. Following harvest of a treated crop, plow (moldboard or disk-plow) and thoroughly till the soil in the Fall or Spring to minimize possible injury to rotational Spring-seeded crops, regardless of the rate used.
5. Do not graze treated area or feed treated forage to livestock for 21 days following application or illegal residues may result.
6. For best control of Velvetleaf and Cocklebur, the application rate cannot be less than 2 lbs. /A active ingredient, either alone or in a tank mix combination.

SORGHUM

SORGHUM AND SORGHUM-SUDAN HYBRIDS (GRAIN AND FORAGE TYPES)

Apply before planting, at planting, or after planting. See Corn section for weeds controlled.

Pre-plant Surface-Applied (Broadleaf and Grass Control): Use on medium- and fine-textured soil with minimum-tillage or no-tillage systems only in CO, IL, IN, IA, KS, KY, MN, MO, MT, NE, ND, SD, WI, WY.

Under dry conditions, irrigation after application is recommended to move HERBICIDE I into the soil.

Note: To the extent possible, do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.

PRE-EMERGENCE (BROADLEAF AND GRASS CONTROL)

Apply at rate shown in Table 1 before weeds exceed 1.5 inches in height and before sorghum exceed 12 inches in height.

FOR POST-EMERGENCE APPLICATION

If no HERBICIDE I was applied prior to sorghum emergence, apply at a rate of 3-3.6 acres per DOUBLE-BARRELL broadcast. If a post-emergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 lbs. HERBICIDE I (0.33 0.21 DOUBLE-BARRELL) per acre per calendar year.

Do not apply pre-plant in AL, AR, FL, GA, LA, MS, NC, NM, OK, SC, TN, or TX. Do not apply pre-emergence in NM, OK, or TX, except in northeast OK and the TX Gulf Coast and Blackland areas.

Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or set-backs) which are different from the label, the more restrictive/protective requirements must be followed. Certain states may have established rate limitations within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations.

In case of planting failure, sorghum or corn may be replanted. Do not make a second broadcast application, or injury may occur. If originally applied in a band and sorghum or corn is replanted in untreated row middles, this product may be applied in a band to the second planting.

POST-EMERGENCE (BROADLEAF AND GRASS WEED CONTROL):

Apply before weeds exceed 1.5 inches in height at the rate indicated in Table 2. Application may be made up to sorghum reaching 12 inches in height.

TABLE 2

Post-emergence Broadleaf and Grass Weed Control in Sorghum

Soil Texture	Minimum Height of Sorghum at Treatment	Broadcast* Rate / DOUBLE-BARRELL
Sand or loamy sand	DO NOT USE	DO NOT USE
Sandy loam		12.8 to 22.3 20 to 35
Silt loam to sandy clay loams	Completely emerged	7.7 to 13.4 12 to 20
Oilon and Pullman clay soils	At least 6 inches high	7.7 to 13.4 12 to 20
Silty clay loams and heavier soils	Completely emerged	7.7 to 13.4 12 to 20

***FOR POST-EMERGENCE APPLICATION**

If there has been no previous soil application to the crop, the maximum rate is 3-3.6 acres per DOUBLE-BARRELL. If there has been a previous soil application to that crop, do not exceed a total of 0.33-0.21 DOUBLE-BARRELL per acre per calendar year.

PRECAUTIONS FOR ALL APPLICATIONS TO SORGHUM

1. Post-emergence application to sorghum must be made before sorghum reaches 12 inches in height.
2. The maximum application rate for sorghum is 2.5 lbs. HERBICIDE I per acre per calendar year. Application for quackgrass suppression in sorghum is restricted to a Spring application only. No Fall applications are permitted.
3. Heavy rains immediately following application tend to result in excessive concentrations of herbicide in seed furrow, resulting in possible crop injury. Applications to furrow-planted sorghum should not be made until furrows are leveled (plow-in). Deep planter marks or seed furrows should also be leveled before application.
4. Application made to sorghum growing under stress caused by minor element deficiency or to sorghum growing on highly calcareous soils may result in crop injury.
5. Do not graze or feed forage from treated areas for 21 days following application or illegal residues may result.
6. Following harvest of a treated crop, plow (moldboard or disk-plow) and thoroughly till the soil in the fall or spring to minimize possible injury to rotational spring-seeded crops, regardless of rate used.
7. Injury may occur if both this herbicide, pre-plant surface, pre-plant or pre-emergence, and an at-planting systemic insecticide applied in-furrow are used.

For applications to furrow-irrigated bedded sorghum in Arizona and California and for post-emergence applications plus emulsifiable oil, see additional precautions under these sections of this label.

Suggestions for Rotational Crops:

See "Suggestions for Rotational Crops" at the end of Corn Section.

CHEMICAL FALLOW

WHEAT-SORGHUM-FALLOW

This treatment controls annual broadleaf and grass weeds following wheat harvest and in the following sorghum crop when grown under minimum tillage. One DOUBLE-BARRELL treats 2.5-4-8-8-4 to 14 acres. Apply to wheat stubble immediately following wheat harvest. If weeds are present, remove them with a sweep plow or other suitable implement after application or use an approved contact herbicide before or after application of DOUBLE-BARRELL. Plant sorghum into wheat stubble the following Spring with minimum disturbance of the soil. Use a surface planter or a planter leaving a shallow furrow. If weeds are present at planting, remove them with a sweep plow or other suitable implement before planting.

For the list of weeds controlled, see Rotational Crops - All Uses.

Precautions:

1. Use only on silt loam or finer textured soil.
2. Wheat-sorghum-fallow cropping sequence must be followed.
3. Do not apply following sorghum harvest.

Note: To avoid illegal residues, do not graze or feed forage from treated area to livestock. To avoid illegal residues and crop injury do not plant any crop other than those on this label within 18 months following treatment.

WHEAT-CORN-FALLOW (KS, NE): This product controls Cheatgrass (Downy Brome, Chess), Kochia, Mustards, Pigweed, Russian Thistle, Wild Lettuce, Wild Sunflower, and Volunteer Wheat during period after wheat harvest. Weed control may extend into following corn crop grown under minimum tillage.

Follow directions for use, notes, and precautions in the "Wheat-Sorghum-Fallow" section above, substituting corn for references to sorghum.

WHEAT-FALLOW-WHEAT (CO, KS, MT, NE, ND, SD, and WY): For pre-emergence and control of Cheatgrass (Downy Brome, Chess), Common Lambsquarters, Field Pennygrass, Kochia, Mustard, Russian Thistle, Wild Lettuce, and suppression of Volunteer Wheat during fallow period of a wheat-fallow-wheat rotation, broadcast one DOUBLE-BARRELL per 7.5 to 14.4-12 to 23.5 acres on all soils except those listed under "Precautions". For control of Pigweed and Wild Sunflower, use the higher rate. Apply to stubble ground. Treat only once during same fallow period.

CONIFERS

For control of annual broadleaf and grass weeds prior to transplanting, after transplanting or in established conifers (including Douglas Fir, Grand Fir, Noble Fir, White Fir, Austrian Pine, Bishop Pine, Jeffrey Pine, Knobcone Pine, Loblolly Pine (Shore Pine), Monterey Pine, Ponderosa Pine, Scotch Pine, Slash Pine, Blue Spruce, and Sitka Spruce): Broadcast 4.9 to 3.8 3 to 6 DOUBLE-BARRELL per acre in a minimum of 10 gals of water by ground before weeds are 1.5 inches tall. Apply to established trees between Fall and early Spring while trees are dormant. For applications prior to transplanting allow sufficient precipitation to activate atrazine before transplanting.

In areas where Spring and Summer rainfall is inadequate to activate HERBICIDE I, apply during fall prior to spring transplanting.

For the list of weeds controlled, see Rotational Crops - All Uses.

STORAGE AND DISPOSAL

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

STORAGE INSTRUCTIONS:

Store in a cool dry location. Avoid storage at high temperatures. Keep container tightly sealed. Avoid contamination with acids or alkalis. Do not stack more than 2 pallets high to prevent crushing. Keep containers away from any source of puncture. Store in original container only.

Pesticides should be separated during storage to prevent cross contamination of other pesticides, fertilizer, food and feed. Storage area should preferably be locked to prevent admittance by unauthorized or unknowledgeable persons. If the container is damaged and leaking or material has been spilled follow these procedures:

1. Cover spill with absorbent material
2. Sweep into disposal container.
3. Wash area with detergent and water and follow with clean water rinse.
4. Do not allow to contaminate water supplies.
5. Dispose of according to instructions below.

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

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

WARRANTY—CONDITION OF SALE:

OUR RECOMMENDATIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended, and other influencing factors in the use of this product are beyond the control of the Seller. Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith. In no case shall Drexel or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by Drexel Chemical Company and is accepted as such by the Buyer.