

EPA

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1812-240  
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ACCEPTED

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Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under  
EPA Reg. No. 1812-240

**Grifflex 4L**

For Season-long Weed Control in Corn, Sorghum and  
Certain Other Crops

Contains 4 pounds of active ingredient per gallon

ACTIVE INGREDIENTS:	43.30%
Atrazine (2-chloro-6-(4-isopropyl-6-methylpyrimidin-2-ylamino)-1,3,5-triazine)	42.00%
Related compounds	1.30%
INERT INGREDIENTS:	56.70%

**IMMENSE**

**CAUTION**

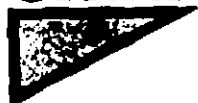
KEEP OUT OF REACH OF CHILDREN

Harmful or fatal if swallowed. Do not get in eyes. Avoid contact with skin, inhalation of vapors or spray mist and contamination of food and feed.

Do not contaminate domestic or irrigation water supplies or lakes, streams, or ponds.

Do not reuse container. Destroy when empty.

**Griffin**



GRIFFIN CORPORATION

VALDOSTA, GEORGIA 31601

NET CONTENTS 2 1/2 Gallons

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**BEST AVAILABLE COPY**

**GENERAL INFORMATION**

Griffex™ 4L herbicide controls most annual broadleaf and grass weeds in corn, sorghum and certain other crops.

Apply at the rates given under each crop before or after weeds emerge. Use lower rates on light soils and low organic matter soils. Use higher rates on heavy soils and high organic matter soils.

Griffex™ 4L acts mainly through root absorption so rainfall or irrigation is needed to move it into the root zone. Should weeds develop, a shallow cultivation or rotary hoeing will generally result in better weed control.

Avoid using Griffex™ 4L near adjacent desirable trees, shrubs, or plants, or injury may occur.

NOTE: Griffin does not recommend Griffex™ 4L in combination with other herbicides or oils except as specifically described on the label.

Griffex™ 4L is non flammable.

**APPLICATION PROCEDURES**

Griffex™ 4L, a liquid formulation, should be mixed with water or liquid fertilizer and applied as a spray. Pour Griffex™ 4L into the tank during or after filling. Hydraulic lift or mechanical agitation is recommended during mixing and application to keep the material 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.

**Ground Application:** Apply Griffex™ 4L in 10-40 gallons of water per acre to assure even coverage unless otherwise specified. Use TeeJet 8002, 8003, or 8004 fan type, or other appropriate nozzles with equal or greater size openings for broadcast applications. Use TeeJet 8002 E or 8004 E or similar nozzles for band applications. Screens in nozzles and in suction and in-line strainers should be no finer than 50 mesh. Use a pump with capacity sufficient to maintain 35-40 psi operating pressure.

**Aerial Application:** Use only where broadcast applications are specified. Apply a minimum of 1 gallon of water for each 2 pints of Griffex™ 4L to be applied per acre. Do not apply where uniform coverage cannot be obtained or where excessive spray drift may occur. Avoid application directly to animals or humans. Flagmen or loaders should avoid inhalation of spray mist or contact with skin and should wash thoroughly before eating and at the end of each day's operation.

**Post-emergence Weed Control with Griffex™ 4L plus Emulsifiable Oil in Water:** The addition of oil to Griffex™ 4L in water sprays may speed the activity of Griffex™ 4L and provide quicker kill of weeds. However, under certain conditions the use of oil may seriously damage corn or sorghum. To minimize the possibility of damage, follow the directions, procedures, and precautions given below.

For combining with Griffex™ 4L, use a crop oil designated for use with Griffex™ 4L containing at least 1% suitable emulsifier. Oils contaminated with water or other materials can cause compatibility problems and crop injury.

**Equipment Procedures for Griffex™ 4L and Emulsifiable Oil:**

1. Thoroughly clean sprayer prior to use. Do not use sprayer contaminated with 2,4-D or other materials as crop damage or sprayer clogging may result.
2. Fill the spray tank with water, allowing for the addition of the Griffex™ 4L.
3. With the agitation system in operation, add the Griffex™ 4L.
4. Add the emulsifiable oil last.
5. Empty the tank as completely as possible before refilling to prevent a buildup of oil in the tank. Keep the agitation system in operation to avoid a separation of the oil from the water in the spray mixture.
6. If an oil film starts to build up in the tank, strain the tank and clean out with a strong detergent solvent.
7. Clean the sprayer thoroughly immediately after use by flushing the system with water containing a detergent.

**Note:**

1. Do not use oil in Griffex™ 4L sprays when corn or sorghum is under stress from prolonged cold, wet weather, poor fertility, or other factors or when corn or sorghum is wet and succulent from recent rainfall as crop injury may occur.
2. Do not use oils in sprays when treating inbred lines or any breeding stock as inbreeders may occur.
3. Adding other insecticides, herbicides, liquid fertilizers, or other materials is not recommended because they may cause compatibility problems or crop injury.
4. Store and handle emulsifiable oil carefully. Oil contaminated with even a small amount of water may not emulsify properly when added to the tank.
5. Do not make more than one application of Griffex™ 4L and emulsifiable oil in water per season.
6. All return lines to the tank must discharge below liquid level.

**CORN**

One application will control most annual broadleaf and grass weeds 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.

Griffex™ 4L may be applied either before planting, at planting or after planting at the rate indicated below.

For preplant and pre-emergence applications, nitrogen solutions or complete liquid fertilizers may replace all or part of the water as a carrier of Griffex™ 4L. Do not apply after corn has emerged as there is danger of liquid fertilizers causing crop injury.

**Preplant:** Broadcast in the spring after plowing at the rate indicated below. Apply before, during, or after final seedbed preparation. If soil is tilled or worked after application, avoid deep incorporation of Griffex™ 4L. Best results have been obtained when Griffex™ 4L is applied within two weeks prior to planting.

**Pre-emergence:** Apply during or shortly after planting prior to weed emergence at the rate indicated below.

**Post-emergence:** Apply before weeds exceed 1 1/2 inches in height at the rate indicated below.

Soil texture	Rate per acre of Griffex™ 4L		
	Broadcast in 40 gal of water/A	20 inch band in 50 gal of water/A	13 inch band in 40 gal of water/A
Light soils Sandy, loamy sand and sandy loams	4 pints	3 pints	2 pints
Medium soils Silty and clay loam with low to medium organic matter	4 pints	3 pints	2 pints
Heavy soils Silt and clay loams with medium to high organic matter and clay	6 pints	4 pints	2 pints
Peaty, mucky, and high organic soils Apply post-emergence only	6 pints	4 pints	2 pints

\*Based on 40 inch row spacing. For other band widths, adjust the rate in proportion to the area actually treated.

**Northern Nutgrass or Yellow Nutsedge (*Cyperus esculentus*) Control:** Broadcast 8 pints per acre preplant, pre-emergence or post-emergence before nutgrass is more than 1 1/2 inches high. If applied before nutgrass begins growth, cultivate within 2-3 weeks. If applied after nutgrass has emerged, cultivate within 10-14 days.

**Quackgrass Control on Land Going Into Corn Production System Application:** Broadcast 4 pints per acre in the fall or spring and plow 1-3 weeks later. Broadcast a second application at the rate of 4 pints per acre in the spring before, during, or after planting, but before weeds are 1 1/2 inches high.

**Single Application:** Broadcast 6-8 pints per acre in the fall or spring. Plow 1-3 weeks after application.

**Post-emergence weed control with Griffex™ 4L plus emulsifiable oil in water:**

**Ground Application:** Broadcast 4 pints of Griffex™ 4L and 1 gal. of emulsifiable oil in 20-40 gal. of water per acre after emergence but before weeds reach 1 1/2 inches in height.

**Aerial Application:** Broadcast 4 pints of Griffex™ 4L and 1/2 gal. of emulsifiable oil in no less than 5 gal. of water per acre after weed emergence but before weeds reach 1 1/2 inches.

**PRECAUTIONS**

1. Do not apply more than 8 pints of Griffex™ 4L to corn in any one year.
2. Land treated with Griffex™ 4L should not be planted to any crop except corn until the following year or injury may occur.
3. Following harvest of a treated crop, plow (moldboard or diskplow) and thoroughly till the soil in fall or spring to minimize possible injury to rotational spring-seeded crops, regardless of the rate used.
4. If Griffex™ 4L is applied after June 10, do not rotate with crops other than corn or sorghum the next year or injury may occur.
5. If Griffex™ 4L is used at a broadcast rate higher than 6 pints per acre (or comparable rates in a band application), a crop of untreated corn or sorghum should precede the next rotational crop.
6. In the High Plains and Intermountain areas of the West where rainfall is sparse and erratic or where irrigation is required, use Griffex™ 4L 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.
7. In western Minnesota and eastern parts of the Dakotas, Nebraska, and Kansas, corn treated with Griffex™ 4L should not be followed with soybeans if the broadcast rate applied was more than 4 pints per acre, or comparable rates in a band, or injury may occur.
8. Do not plant sugar beets, tobacco, vegetables, including dry bean, spring-seeded small grains, or small-seeded legumes and grasses the year following Griffex™ 4L application or injury may occur.
9. Do not graze treated area or feed treated forage to livestock for 21 days following application.

**TANK MIXTURES ON CORN**

**Dual™ 6E**  
Use as tank mixture for control of certain broadleaf and grass weeds in corn. Refer to Dual™ 6E label for all directions, weeds controlled, precautions, and limitations.  
**Sim-Trol 9DF or Sim-Trol 4L**

Use as tank mixture for control of many annual weeds, including carpetweed, crabgrass, fall panicum, foxtail, lambsquarters, morningglory, pigweed, ragweed, and velvetleaf. Apply before planting, at planting, or after planting, but before crop and weeds emerge, at rates in Table 2a. Use 1:1 ratio for control of above weeds. Use 1:2 ratio for expected heavy infestations of crabgrass and fall panicum. Apply in a minimum of 20 gal. of water/A. Cultivate shortly if weeds develop.

**Preplant:** Apply in spring during or after final seedbed preparation. If soil is tilled or worked after application, avoid deep incorporation. For best results, apply within two weeks before planting.

**Pre-emergence:** Apply during or shortly after planting, but before crop and weeds emerge. Refer to Corn sections of this label and to Sim-Trol 9DF or Sim-Trol 4L label for further directions, limitations and cautions.

**TABLE 2a  
Tank Mixtures with Sim-Trol 9DF or Sim-Trol 4L**

Soil Texture	Sim-Trol 9DF or Sim-Trol 4L		This Product	Sim-Trol 9DF or Sim-Trol 4L
	20 inch band in 50 gal of water/A	13 inch band in 40 gal of water/A		
Sand, loamy sand, sandy loam	2 pt.	1 pt.	1.32 lb.	1.4 lb. 2.67 pt.
Loam, silt loam, silt, clay loam, sandy clay loam, silty clay loam, sandy clay, or silty clay with low organic matter	2.4 pt.	1.3 pt.	1.6 pt.	1.7 lb.
Loam, silt loam, silt, clay loam, sandy clay loam, silty clay loam, sandy clay, or silty clay with medium to high organic matter and clay, including dark prairie soils of the Corn Belt	3 pt.	1.5 pt.	1.92 pt.	2.1 lb.
Heavy soils, peaty, mucky, and high organic soils	3 pt.	1.5 pt.	1.92 pt.	2.1 lb.

\*Based on 40 inch row spacing. For other band widths, adjust the rate in proportion to the area actually treated.

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

**Preplant or pre-emergence (Eastern and Central Nebraska and Northeast Kansas Only)**  
For preplant and pre-emergence applications, nitrogen solutions or complete liquid fertilizers may replace all or part of the water as a carrier for Griffex™ 4L. Do not apply after sorghum has emerged as there is danger of liquid fertilizers causing crop injury.

**Preplant:** Broadcast in the spring after plowing at the rate indicated in the table below. Application may be made before, during, or after final seedbed preparation. If soil is tilled or worked after application, avoid deep incorporation of Griffex™ 4L. Best results have been obtained when Griffex™ 4L is applied within two weeks prior to planting.

**Pre-emergence:** Apply during or shortly after planting prior to weed emergence at the rate indicated in the table below.

**Preplant and Pre-emergence Application**  
(In Eastern and Central Nebraska and Northeastern Kansas Only)

**Broadleaf and grass weed control**

**Rate per acre of Griffex™ 4L**

Soil texture	Rate per acre of Griffex™ 4L		
	Broadcast in 10-40 gal of water A	20 Inch Band* in 5-20 gal of water A	13 inch Band† in 4-14 gal of water A
Sand to sandy loam, eroded slopes and soils low in organic matter		Do not use	
Clay soils (shallow in corporation may improve)	4.4 pints	2.2 pints	1.1 pints (control)

Based on 40-inch row spacing. When making band applications, reduce the broadcast rate per acre in proportion to the area treated.

**Post-emergence:** For the control of broadleaves and grasses, apply post-emergence applications of Griffex™ 4L in no less than ten gallons of water per acre at the rate indicated in the table below. Weeds should not exceed 1 1/2 inches in height at application.

**Post-emergence Application\*\***  
(weeds should not be more than 1 1/2 inches high)

**Rate per acre of Griffex™ 4L**

Weeds to be controlled and soil texture	Rate per acre of Griffex™ 4L			
	Stage or height of sorghum at treatment	Broadcast in 10-40 gal of water A	20 inch band* in 5-20 gal of water A	13 inch band† in 4-14 gal of water A
Sand or loamy sand	Broadleaf and grass weeds		Do not use	
	Broadleaf weeds below		Do not use	
Sandy loam	At least 6 inches high	4.4 pints	2.2 pints	1.1 pints
		4.4 pints	2.2 pints	1.1 pints
Silt loam to silty loam to sandy clay loam	At least 6 inches high	4.4 pints	2.2 pints	1.1 pints
		4.4 pints	2.2 pints	1.1 pints
Clean and Pullman clay soils	At least 6 inches high	4.4 pints	2.2 pints	1.1 pints
		4.4 pints	2.2 pints	1.1 pints
Silty clay loams and heavier	At least 6 inches high	6 pints	3 pints	2 pints
		6 pints	3 pints	2 pints

**Post-emergence Application\*\***  
(weeds should not be more than 1 1/2 inches high)

**Rate per acre of Griffex™ 4L**

Weeds to be controlled and soil texture	Rate per acre of Griffex™ 4L			
	Stage or height of sorghum at treatment	Broadcast in 10-40 gal of water A	20 inch band* in 5-20 gal of water A	13 inch band† in 4-14 gal of water A
Sandy loams and heavier soils in Oklahoma, New Mexico, Texas, West Kansas, Colorado, and desert regions of Arizona and California only	At least 6 inches high	2 1/2 pints	1 1/4 pints plus surfactant	5/8 pints plus surfactant
		4 1/2 pints	2 1/8 pints plus surfactant	1 1/8 pints plus surfactant

**Post-emergence broadleaf weed control with Griffex™ 4L** plus emulsifiable oil in water (New Mexico, Oklahoma, and Texas only). Apply when sorghum is 6 to 10 inches high and before boot stage. Treat broadleaf weeds before they reach 6 inches.

**Ground Application:** Broadcast 2 1/2 pints of Griffex™ 4L and 1/2 gal of emulsifiable oil in 20-40 gal. of water per acre.

**Aerial Application:** Broadcast 2 1/2 pints of Griffex™ 4L and 1/2 gal of emulsifiable oil in no less than 5 gallons of water per acre.

**PRECAUTIONS**

1. Heavy rains immediately following application tend to result in excessive concentrations of herbicide in seed furrow, resulting in possible crop injury. Applications to furrows planted sorghum should not be made until furrows are leveled, plowed in. Deep planter marks or seed furrows should also be leveled before application.
2. 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.
3. Do not plant any rotation crops other than those specified in the Suggestions For Rotational Crops Section below for 18 months following application.
4. Do not graze or feed forage from treated areas for 21 days following application.
5. Following harvest or a treated crop, plow (moldboard or disk plow) and thoroughly till the soil in fall or spring to minimize possible injury to rotational spring seeded crops, regardless of the rate used.

**Suggestions For Rotational Crops.**

1. Sorghum or corn may be planted the year following treatment.
2. All other rotational crops may be planted 18 months after application.
3. When the broadcast rate used does not exceed 2 1/2 pints per acre, fall wheat may be planted 15 months after application.

**TANK MIXTURES ON GRAIN SORGHUM**

**Igran® 80W**  
Use as tank mixture for control of certain broadleaf and grass weeds in grain sorghum. Refer to Igran 80W label for all directions, weeds controlled, precautions, and limitations.

**SUGARCANE**

For control of many annual broadleaf and grass weeds including amaranths, crabgrass, broadleaf, Flora's paintbrush, joxals, junglerice and wiregrass. Broadcast 2-4 quarts in 20-50 gallons of water A for adequate coverage of the soil surface at time of planting or ratooning, but before cane emerges. One additional application may be made over cane as it emerges, and two additional applications may be made interline after emergence as directed spray.

For control of emerged palmetto weed (Florida only). Apply 0.8 - 1.2 pints in at least 40 gallons of water/A as a directed spray. Add 2 quarts of surfactant for each 50 gallons of spray. Thoroughly cover weed foliage.

**Precautions:** (1) Do not apply after close in. (2) Do not apply more than 10 quarts A to any one crop of cane.

For control of alexandergrass, large crabgrass, palmetto (artillery) weed and spiny amaranth use only one of the following methods at planting or ratooning (Florida only):

1. Apply 4 quarts in 20-50 gallons of water A, pre-emergence, broadcast or banded. Follow with one or two broadcast or banded over the top applications as needed, post-emergence to sugarcane and weeds, at 2 quarts in 20-50 gallons of water A. Treat before weeds exceed 1.8 inches in height.

2. Apply 3-4 times as needed, at 2 quarts in 20-50 gallons of water A, either broadcast or banded over the top, post-emergence to sugarcane and weeds. Treat before weeds exceed 2.5 inches in height.

**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. Apply 6 pt. to wheat stubble immediately following wheat harvest. If weeds are present remove them with a sweep plow or other suitable implement after application. 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.

**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:** Do not graze or feed forage from treated area to livestock. 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.

Apply with ground equipment only. 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 control of cheatgrass (downy brome, chess), common lambsquarters, field pennycress, Kochia, mustard, Russian thistle, wild lettuce, and suppression of volunteer wheat during fallow period of a wheat-fallow-wheat rotation, apply 1.2 pt. in 10-40 gal. of water A for ground application 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.

If weeds are present at application and this product is used alone, use either an approved contact herbicide before or after treatment, or tillage after treatment.

Use tillage to control weeds which escape during fallow period. Till before planting. For this product applied alone or in tank mixture with Paraquat CL, plant at least 2 inches deep and 12 months or more after application.

**Precautions:** (1) Do not use on sand soil. (2) Do not treat eroded hillsides, caliche and rocky outcroppings or exposed calcareous subsoil. (3) Do not treat soils of the Rosebud and Canyon Series in western NE and adjoining counties in CO and WY. (4) Do not treat soils with calcareous surface layers. (5) Avoid spray overlap.

**Note:** Do not graze treated areas within 6 months after applications.

**Rangeland**

This product controls certain weeds, including cheatgrass, downy brome, chess, tumble mustard, sagewort, and annual or common broomweed. Use lower rate where cheatgrass is major problem weed, use higher rate for other weeds.

For ground applications use a minimum of 10 gal. of water A.

For Aerial applications use a minimum of 5 gal. of water A.

See Application Procedures for additional information.

**Establishment of perennial range grasses (CA, ID, NV, OR, UT, WA)**

Apply 1.6 - 2 pt. A in fall after rains begin but before ground freezes. Perennial range grass may be seeded when rain begins the next fall following treatment. Plant in deep furrows such as those made by a deep furrow rangeland drill. Treated areas may be grazed 7 months after seeding. However, to provide sufficient time for establishment of desirable range grasses, treated areas should not be grazed until the fall following seeding.

Renovation of existing stands of perennial range grasses: Fall treatment in Central Great Plains (CO, KS, MT, NE, ND, SD, WY). Apply 1.6 - 2 pt. A in fall before ground freezes.

Spring treatment in Southern Great Plains (OK, TX). Apply 2 pt. A in spring before April 30. Do not apply to crested and intermediate wheatgrasses. Do not cut or feed range grass hay. Do not graze treated areas within 7 months following fall application or 3 months following spring application. Apply only once per year.

**Warm Season Perennial Range Grasses - Midwest**

**Switchgrass**  
For control of many annual broadleaf grass weeds including cheatgrass, foxtails (joint, green and yellow), lambsquarters, pigweed, ragweed, smartweed, and velvetleaf.

For ground application use a minimum of 15 gal. of water A.

Use only on loam, silt loam, silty clay loam, and silty clay soils with at least 1 percent organic matter.

**New Seeding:** Apply 2 qt. A after planting but before weeds emerge. Prepare a good, firm seedbed. Plant 1/2 inch deep with a grassland drill (preferred method) or a conventional drill. If a conventional drill is used on prepared seedbeds, remove all tension from the disk openers. For best results, siltpack or roll after planting. Clip weeds that escape in July or August. Avoid clipping switch grass seedlings.

**Established stands:** Apply 2 qt. A in April or early May, before weed emergence.

**Rotational crops:** See "Rotational crops" in Corn section.

**Note:** Do not cut for hay. Do not graze treated areas within 4 months following application at seeding or 3 months following application to established switchgrass. Treat only once per year.

Dual trademark of CIBA GEIGY for metholachlor U.S. patent No. 3,937,730  
Igran trademark of CIBA GEIGY for terbutryn U.S. Patent No. 3,634,062

**NOTICE:** Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, express or implied, extends to the use of this product contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

CPN 0925  
CLN 10-82

