

1125

ACCEPTED

FEB 1982

E.P. 1812-440

# Griffex 4L

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

Contains 4 pounds active ingredient per gallon

<b>ACTIVE INGREDIENTS:</b>		<b>43.00%</b>
Atrazine (2-chloro-4-ethylamino-6-isopropylamino-s-triazine)	.....	42.00%
Related compounds	.....	1.30%
<b>INERT INGREDIENTS:</b>		<b>56.70%</b>

### KEEP OUT OF REACH OF CHILDREN CAUTION

If swallowed, call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

If on skin, wash with plenty of soap and water.

If in eyes, flush with plenty of water. Get medical attention if irritation persists.

If inhaled, remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

See side panel for additional precautionary statements.



**GRIFFIN CORPORATION**  
VALDOSTA, GEORGIA 31601

NET CONTENTS 2 1/2 Gallons

EPA REG. NO. 1812-240  
EPA EST. NO. 1812-GA-3

### 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 sources 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 tipburn.

**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 stilled 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 Northeast Kansas Only Broadleaf and Grass Weed Control

Rate per acre of Griffex™ 4L

Treatment	Broadcast	Pre-plant	Pre-emergence
Grain Sorghum	2.0 gal	2.0 gal	2.0 gal
Sorghum-Sudan Hybrid	2.0 gal	2.0 gal	2.0 gal
Water	20 gal	20 gal	20 gal

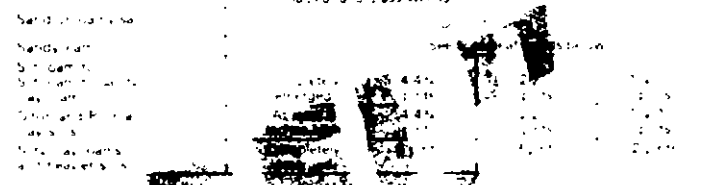
Based on 40 inches of water. When making band applications, reduce the broadcast rate per acre in proportion to the area treated.

**Post-emergence:** Apply to the soil of the weeds or grasses apply post-emergence application of Griffex™ 4L to grasses that are 2 to 4 inches high at the rate indicated in the table below. Weeds should be more than 2 inches high at the time of application.

### Post-emergence Application in Eastern and Central Nebraska and Northeast Kansas Only Broadleaf and Grass Weeds

Rate per acre of Griffex™ 4L

Treatment	Broadcast	Pre-plant	Pre-emergence
Grain Sorghum	2.0 gal	2.0 gal	2.0 gal
Sorghum-Sudan Hybrid	2.0 gal	2.0 gal	2.0 gal
Water	20 gal	20 gal	20 gal



### Post-emergence Application in New Mexico, Oklahoma, and Texas Only Broadleaf and Grass Weeds

Rate per acre of Griffex™ 4L

Treatment	Broadcast	Pre-plant	Pre-emergence
Grain Sorghum	2.0 gal	2.0 gal	2.0 gal
Sorghum-Sudan Hybrid	2.0 gal	2.0 gal	2.0 gal
Water	20 gal	20 gal	20 gal

**Preplant and Pre-emergence:** In New Mexico, Oklahoma, and Texas, apply Griffex™ 4L to grain sorghum and sorghum-sudan hybrids at the rate indicated in the table below. Weeds should be more than 2 inches high at the time of application.

**Post-emergence:** Apply to the soil of the weeds or grasses apply post-emergence application of Griffex™ 4L to grasses that are 2 to 4 inches high at the rate indicated in the table below. Weeds should be more than 2 inches high at the time of application.

**Post-emergence broadleaf weed control with Griffex™ 4L plus emulsifier in water (New Mexico, Oklahoma, and Texas Only):** Apply when weeds are 2 to 4 inches high before boot stage. Treat broadleaf weeds before they reach 6 inches.

**Ground Application:** Broadcast at least 2.0 pints of Griffex™ 4L and 1.0 quart of emulsifier per acre. Use 20-40 gal. of water per acre.

**Aerial Application:** Broadcast 2.0 pints of Griffex™ 4L and 1.0 quart of emulsifier per acre. Use less than 5 gallons of water per acre.

### PRECAUTIONS

Griffex™ 4L is a highly effective broadleaf and grass weed control. It is a triazine herbicide which is active against a wide range of weeds. It is highly effective against annual broadleaf weeds and grasses. It is also effective against perennial weeds and grasses. It is highly effective against weeds and grasses in grain sorghum and sorghum-sudan hybrids. It is highly effective against weeds and grasses in grain sorghum and sorghum-sudan hybrids. It is highly effective against weeds and grasses in grain sorghum and sorghum-sudan hybrids.

### Suggestions For Rotational Crops

1. Soybeans should be planted the year following application.
2. Alfalfa should be planted the year following application.
3. When the soil is not planted for 18 months following application, the soil should be planted with a crop that is tolerant to the herbicide.

### TANK MIXTURES ON GRAIN SORGHUM

**Igran™ 80W**  
 Use as tank mixture with Griffex™ 4L for control of annual and grass weeds in grain sorghum. Refer to Igran™ 80W label for tank mixture weed control with precautions and limitations.

### SUGARCANE

For control of annual and grass weeds in sugarcane, apply Griffex™ 4L at the rate indicated in the table below. Broadleaf weeds should be 2 to 4 inches high at the time of application. Grasses should be 2 to 4 inches high at the time of application. One additional application may be made after emergence and two additional applications may be made after emergence in the fall.

**Preplant and Pre-emergence:** Apply Griffex™ 4L at the rate indicated in the table below. Weeds should be more than 2 inches high at the time of application.

**Post-emergence:** Apply to the soil of the weeds or grasses apply post-emergence application of Griffex™ 4L to grasses that are 2 to 4 inches high at the rate indicated in the table below. Weeds should be more than 2 inches high at the time of application.

**Preplant and Pre-emergence:** Apply Griffex™ 4L at the rate indicated in the table below. Weeds should be more than 2 inches high at the time of application.

**Post-emergence:** Apply to the soil of the weeds or grasses apply post-emergence application of Griffex™ 4L to grasses that are 2 to 4 inches high at the rate indicated in the table below. Weeds should be more than 2 inches high at the time of application.

2. Apply 1.3 times as needed at 2 quarts in 20-50 gallons of water. A further broadcast or band application is not recommended to suppress weeds. Treat before weeds are seeded 2-5 times a year.

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### CHEMICAL FALLOW

#### Wheat Sorghum fallow

This treatment is recommended for wheat fallow with wheat grass and other following sorghum and other weeds. Do not apply to winter wheat fallow.

Apply 6 pt. to wheat stubble in early fall following wheat harvest. If weeds are present remove them with the sweep net. Minimum 24 hr. interval after application. Plant sorghum into wheat stubble. Do not apply to fallow with stubble if the soil is a surface planter or if the soil is a surface planter. If weeds are present at planting, treat them with a sweep net or herbicide before planting.

Precautions: Do not use on alfalfa, clover, or other legumes. Do not use on alfalfa, clover, or other legumes. Do not use on alfalfa, clover, or other legumes.

Note: Do not graze treated areas until 3 months after application. Do not graze treated areas until 3 months after application.

#### Wheat Corn Fallow (KS NE)

This product controls annual grasses, weeds, and other weeds. Do not use on alfalfa, clover, or other legumes. Do not use on alfalfa, clover, or other legumes.

Apply with ground application.

Follow the label for use rates and pre-treatment for Wheat Sorghum fallow. See label above for additional information.

#### Wheat Fallow Wheat (CO KS MT NE ND SD and WY)

For control of weeds in wheat fallow, apply this product to wheat stubble. Do not use on alfalfa, clover, or other legumes. Do not use on alfalfa, clover, or other legumes.

If weeds are present at planting, remove them with a sweep net or herbicide before planting.

Do not graze treated areas until 3 months after application. Do not graze treated areas until 3 months after application.

Precautions: Do not use on alfalfa, clover, or other legumes. Do not use on alfalfa, clover, or other legumes. Do not use on alfalfa, clover, or other legumes.

Note: Do not graze treated areas until 3 months after application.

#### Rangeland

This product controls annual grasses, weeds, and other weeds. Do not use on alfalfa, clover, or other legumes. Do not use on alfalfa, clover, or other legumes.

For ground application use 3 quarts in 20-50 gallons of water.

For aerial application use 1.5 quarts in 20-50 gallons of water.

Do not graze treated areas until 3 months after application.

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

Apply 1.5 pt. A in fall after frost begins. Do not apply in spring. Perennial range grasses may be established in fall or spring. Do not graze treated areas until 3 months after application.

Rotation of existing stands of perennial range grasses. Fall treatment in Central Great Plains (CO KS MT NE ND SD WY) Apply 1.5 pt. A in fall before ground freezes.

Spring treatment in Southern Great Plains (TX) Apply 1.5 pt. A in spring before April 30. Do not graze treated areas until 3 months after application.

Do not graze treated areas until 3 months after application. Do not graze treated areas until 3 months after application.

Warm season Perennial Range grasses in Midwest

Swift grass

For establishment of annual and perennial grasses in spring, apply 1.5 pt. A in spring before ground freezes.

For establishment of annual and perennial grasses in fall, apply 1.5 pt. A in fall before ground freezes.

Use 1.5 quarts in 20-50 gallons of water for ground application. Use 1.5 quarts in 20-50 gallons of water for aerial application.

New seeding: Apply 1.5 pt. A in fall before ground freezes. Do not apply in spring. Perennial range grasses may be established in fall or spring. Do not graze treated areas until 3 months after application.

Establishment: Apply 1.5 pt. A in fall before ground freezes. Do not apply in spring.

Rotation: Apply 1.5 pt. A in fall before ground freezes. Do not apply in spring.

Note: Do not graze treated areas until 3 months after application to established switchgrass. Treat only once per year.

#### Nonselective Weed Control On Noncropland

This product provides long term weed control on industrial sites, highway medians and shoulders, railroad right of ways, lumber yards, petroleum tank farms and in noncrop areas on farms such as around buildings, equipment and fuel storage areas, along fences and lanes.

Apply before or soon after weeds begin growth. Make postemergence applications when weeds are young and actively growing. Use the higher rates on fine clay and muck soils. Use sufficient water to assure thorough coverage.

Annual broadleaf and grass weeds including barnyardgrass, cheatgrass, crabgrass, lambs quarters, foxtail, ragweed, puncturevine and turkey mullein. Apply 1.5-2.5 gallons per acre.

Hard to kill annual and perennial broadleaf and grass weeds (including bluegrass, burdock, Canada thistle, dogfennel, orchardgrass, plantain, quackgrass, purpletop, riddtop, and smooth bromel). Apply 2.5-5 gallons per acre.

Hard to kill biennial and perennial weeds including bull thistle and soathistle. Apply 5-7.5 gallons per acre.

For longer residual control in regions of high rainfall and a long growing season, apply 5-7.5 gallons per acre.

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 expressly 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.

19200  
CIBA GEIGY

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS & DOMESTIC ANIMALS**  
**CAUTION**

Harmful if swallowed. Avoid inhalation of spray mist. Do not get in eyes. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

**ENVIRONMENTAL HAZARDS**

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

**DIRECTION FOR USE**

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

**STORAGE AND DISPOSAL**

Do not reuse container. Destroy when empty.

**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 of injury may occur.

**NOTE:** Griffex 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 jet 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 2 pints of **Griffex™ 4L** to be applied per acre. Do not apply where uniform coverage can be obtained or where excessive spray drift may occur. 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 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 or designated for use with **Griffex™ 4L** containing at least 1% suitable emulsifier. Oils contaminated with water or other materials can cause compatibility problems and/or 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 still remaining in the tank.
- 6 If an oil film starts to build up in the tank, drain the tank and clean out with a strong detergent solution or 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 raising inbred lines or any breeding stock as injury 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-flowered crabgrass, giant foxtail, velvetleaf, nutgrass, quackgrass, pigweed, ragweed, nightshade, purslane, and mustard.

**Griffex™ 4L** may be applied either before planting, 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 plowing or after final seedbed preparation. If soil is wet or worked after application, a 1/2 inch 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		
	8 bands in 10-40 gal of water/A	20 inch band in 5-20 gal of water/A	13-inch band in 4-16 gal of water/A
Light soils Sandy, loamy sands and sandy loams	4 pints	2 pints	1 1/2 pints
Medium soils Silt and clay loams that are low in organic matter	4 pints	2 1/2 pints	1 1/2 pints
Heavy soils Silt and clay loams with medium to high organic matter and clays	6 pints	3 pints	2 pints
Peats, mucks, and high organic clays (Apply post emergence only)	6 pints	3 pints	2 pints

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

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

**Quackgrass Control on Land Going into Corn Production:** Split Application: Broadcast 4 pints per acre in the fall or spring and plow 1-2 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 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 (or disboard or dischisel) 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 for 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 other arid 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 in 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 for comparable rate in a band or injury may occur.
  - 8 Do not plant legume, bean, or vegetable (including dry beans) spring seeded crop grains or small seeded legumes and grasses the year following **Griffex™ 4L** application or injury may occur.
  - 9 Do not graze treated areas or feed the 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. See Dual™ 6E label for all directions. Weeds controlled: ... and ...

**Sim Trol 9DF or Sim Trol 4L**  
 Use as tank mixture for control of many annual broadleaf and grass weeds, crabgrass, fall panicum, foxtail, lamb's ears, and pigweed. See Sim Trol 9DF or Sim Trol 4L label for all directions. Weeds controlled: ... and ...

**ASPE**

**TABLE 2a**  
**Tank Mixtures with Simazine on Corn**

Simazine	Sim Trol 9DF or Sim Trol 4L	Rate per acre
1.0 lb	1.0 lb	1.0 lb
1.5 lb	1.5 lb	1.5 lb
2.0 lb	2.0 lb	2.0 lb
2.5 lb	2.5 lb	2.5 lb
3.0 lb	3.0 lb	3.0 lb
3.5 lb	3.5 lb	3.5 lb
4.0 lb	4.0 lb	4.0 lb
4.5 lb	4.5 lb	4.5 lb
5.0 lb	5.0 lb	5.0 lb
5.5 lb	5.5 lb	5.5 lb
6.0 lb	6.0 lb	6.0 lb
6.5 lb	6.5 lb	6.5 lb
7.0 lb	7.0 lb	7.0 lb
7.5 lb	7.5 lb	7.5 lb
8.0 lb	8.0 lb	8.0 lb
8.5 lb	8.5 lb	8.5 lb
9.0 lb	9.0 lb	9.0 lb
9.5 lb	9.5 lb	9.5 lb
10.0 lb	10.0 lb	10.0 lb