

BEST DOCUMENT AVAILABLE

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

Causes eye irritation. Avoid direct contact or absorption through skin. Do not get in eyes, on skin or on clothing. Wear protective clothing and PVC gloves when spraying. Use protective clothing, PVC gloves and apron and full face shield when handling or mixing concentrates. Avoid breathing vapors or spray mist. Wash thoroughly with soap and water after handling and before eating or drinking. Remove contaminated clothing and wash before reuse.

STATEMENT OF PRACTICAL TREATMENT:
If SWALLOWED: Do not induce vomiting. Call a physician immediately.
If IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.
If ON SKIN: Immediately remove contaminated clothing and wash thoroughly with plenty of soap and water. Get medical attention if irritation persists.

NOTE TO PHYSICIAN: Inducing vomiting as first aid for this substance may result in increased risk of nausea or pneumonia or pulmonary edema caused by aspiration of the liquid when solvent vomiting should be induced only under professional supervision.

For 24 hour emergency assistance call (202) 575-3000.
ENVIRONMENTAL HAZARDS: This product is toxic to fish. Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of waste. Do not apply above weather conditions favor drift from target area.

PHYSICAL OR CHEMICAL HAZARDS: Do not use in bare soil or near water.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal. Store in original container. Do not reuse empty container. Pesticide spray impure or residue that is used according to label instructions must be disposed of according to label or approved state procedure under Section C of the Resource Conservation and Recovery Act. State laws for collection and disposal of a pesticide approved for pesticide containers. Consult label of state or local disposal authorities for approved storage procedure.

NOTICE TO BUYER AND USER: Before use, read carefully the label product contained in the chemical of description on the label and instructions of the applicator. Labels on the label shall read or be accompanied by directions under applicable conditions of use. This is hereby done. The label of this product contains no label under laws or under common law, or under any other law, which may be construed to constitute an offer of insurance or other financial product or service. The applicator shall be responsible for the use of this product and shall be liable for any damage or injury caused by the use of this product. THE USE OF ANY PRODUCT OF THIS COMPANY SHALL BE LIMITED TO THE USE OF THE PRODUCT AS INTENDED BY THE USER. THE USER SHALL BE RESPONSIBLE FOR THE PROPER APPLICATION AND USER'S EXCLUSIVE RESPONSIBILITY SHALL BE LIMITED TO THE RESULTS OF THE PROPER USE.

ALD 10139 L/C



POSTEMERGENCE HERBICIDE FOR CONTROL OF PERENNIAL AND ANNUAL GRASS WEEDS IN COTTON AND SOYBEANS

ACTIVE INGREDIENT:	
butyltin 2 (4-E) (1,1,1-trichloro-2,2,2-trifluoroethyl)phosphorylcholine	46.8%
INERT INGREDIENTS	53.2%
TOTAL	100.0%

*Butyltin butyl
FUSILADE 4E contains 4 pounds active ingredient per gallon.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Refer to Supplemental Label for directions for use. Labeling must be in the possession of the user at the time of pesticide application.

**KEEP OUT
OF REACH
OF CHILDREN**

WARNING

See Side Panel For Additional
Precautionary Statements and
Statement of Practical Treatment

EPA Est. No. 5005-A9-1
EPA Reg. No. 10182-07

Net Contents
ONE QUART
Batch No.

APR 18 1994
L... 10139 L/C

10152-67
-2- BEST DOCUMENT AVAILABLE

Crop Oil Concentrate

Add crop oil concentrate at 1% (1 quart per 25 gallons) of the finished spray volume. Use only nonphytotoxic crop oil concentrates that contain 15-20% surfactant.

OR

Nonionic Surfactant

Add nonionic surfactant at 0.25% (1/2 pint per 25 gallons) of the finished spray volume. Use only nonionic surfactants that contain at least 75% surface active agent. Symptoms often develop faster when crop oil concentrate is used than when nonionic surfactant is used, but there will be little, if any, difference in final control.

Ground Application

Use sufficient spray volume and pressure to ensure complete coverage. With ground equipment, use a minimum of 10 gallons per acre and 30-60 psi pressure. Use 60 psi if grass foliage is dense.

DO NOT USE FLOOD TYPE OR OTHER SPRAY NOZZLE TIPS
WHICH DELIVER COARSE SPRAYS

Aerial Application

Use a minimum of 5 gallons per acre for aerial application.

Cultivation

Cultivation of perennial grasses from 7 days prior until 3 days after application of FUSILADE 4E may reduce control due to 1) destruction of grass foliage which otherwise would adsorb and translocate FUSILADE 4E into rhizomes and stolons; 2) inducing a stress on grass remaining in the uncultivated part of the field, thereby reducing uptake and translocation of FUSILADE 4E. However, cultivation no sooner than 3 days after application will often assist in grass control.

Cultivation of annual grasses from 7 days prior until 7 days after application of FUSILADE 4E may reduce control due to 1) inducing a stress on grass remaining in the uncultivated part of the field, thereby reducing uptake and translocation of FUSILADE 4E; 2) physical covering of small seedlings with soil which prevents foliage contact by the spray. However, cultivation not sooner than 7 days following application will often assist in grass control.

Band Applications

When making band applications, equipment should be adjusted to provide maximum coverage of grasses in the row (drill). Thorough coverage can be obtained with a nozzle directed to each side of

BEST DOCUMENT AVAILABLE

Ground Application

Use sufficient spray volume and pressure to ensure complete coverage. With ground equipment, use a minimum of 10 gallons per acre and 30-60 psi pressure. Use 60 psi if grass foliage is dense.

DO NOT USE FLOOD TYPE OR OTHER
SPRAY NOZZLE TIPS WHICH DELIVER
COARSE SPRAYS

Aerial Application

Use a minimum of 5 gallons per acre for aerial application.

Cultivation

Cultivation of perennial grasses from 7 days prior until 3 days after application of FUSILADE 4E may reduce control due to 1) destruction of grass foliage which otherwise would adsorb and translocate FUSILADE 4E into rhizomes and stolons; 2) inducing a stress on grass remaining in the uncultivated part of the field, thereby reducing uptake and translocation of FUSILADE 4E. However, cultivation no sooner than 3 days after application will often assist in grass control.

Cultivation of annual grasses from 7 days prior until 7 days after application of FUSILADE 4E may reduce control due to 1) inducing a stress on grass remaining in the uncultivated part of the field, thereby reducing uptake and translocation of FUSILADE 4E; 2) physical covering of small seedlings with soil which prevents foliage contact by the spray. However, cultivation not sooner than 7 days following application will often assist in grass control.

Band Applications

When making band applications, equipment should be adjusted to provide maximum coverage of grasses in the row (drill). Thorough coverage can be obtained with a nozzle directed to each side of the row toward the grass in the row. Application with a single nozzle over the top of the row is not recommended. The use of band applications on perennial grasses may result in reinfestation of the treated band from the untreated middle.

PERENNIAL GRASS CONTROL

For best results, rhizomes or stolons must be cut up by preplant tillage (discing, plowing, etc.) to stimulate maximum emergence of grass shoots. Because rhizomes and stolons are not cut up by preplant tillage in no-till and reduced tillage plantings, a second application is recommended for season-long control. Apply FUSILADE 4E to actively growing grasses.

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND
DOMESTIC ANIMALS
WARNING**

Causes eye irritation. Avoid contact with skin or clothing. Do not get on face or in eyes. Do not get on skin or on clothing. Wear protective clothing and PVC gloves when spraying. Wear protective clothing, PVC gloves and apron and hat. Use shirt when handling or mixing concentrate. Avoid breathing vapors or spray mist. Wash thoroughly with soap and water after handling and before eating or drinking. Remove and launder clothing and wash before reuse.

STATEMENT OF PRACTICAL TREATMENT:

IF SKIN CONTACTED: Do not induce vomiting. Call a physician immediately.

IF IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.

IF ON SKIN: Immediately remove contaminated clothing and wash thoroughly with plenty of soap and water. Get medical attention if irritation persists.

NOTE TO PHYSICIAN: Inducing vomiting is to be avoided for this substance may result in increased risk of chemical pneumonia or pulmonary edema caused by aspiration of the herbicide when vomited. Vomiting should be induced only under professional supervision. For 24 hour emergency assistance call (302) 575-3000.

ENVIRONMENTAL HAZARDS: Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of waste. Do not apply when weather conditions favor drift from target area.

This product is toxic to fish.

In case of a significant spill call CHEMTEC (800) 474-5300.

PHYSICAL OR CHEMICAL HAZARDS: Do not use or store near heat or open flame.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal. Open dumping is prohibited. Do not reuse empty containers. Pesticide spray machine or sprayer that cannot be used according to label instructions must be disposed of according to label or approved state procedures under Subtitle C of the Resource Conservation and Recovery Act. Triple rinse (or equivalent) and dispose of or recycle approved for pesticide containers. Consult label at state or local disposal authorities for approved alternate procedures.

NOTICE TO BUYER AND USER: Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in accordance with directions under approved conditions of use. This is an oral contract. The use of this product contrary to label instructions or under abnormal use conditions is the responsibility of the user. Seller disclaims all other warranties, expressed or implied, including any warranty of fitness for a particular purpose. Seller shall not be liable for consequential, special or punitive damages. THE USE OR HANDLING OF THIS PRODUCT AND SELLER'S STRICT LIABILITY AND USER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE AMOUNT OF THE PURCHASE PRICE.

ACD 7/81 30R1 A/D



**POSTEMERGENCE HERBICIDE FOR CONTROL
OF PERENNIAL AND ANNUAL GRASS WEEDS**

ACTIVE INGREDIENT:	
butyl 2,4-D (5-(trifluoromethyl)-2-pyridinyloxy)propanoate*	48.5%
INERT INGREDIENTS	<u>53.5%</u>
TOTAL	100.0%

*Real-Map butyl

FUSILADE 4E contains 4 pounds active ingredient per gallon.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. See Supplemental Label for directions for use. This labeling must be in the possession of the user at the time of pesticide application.

**KEEP OUT
OF REACH
OF CHILDREN**

WARNING

See Side Panel For Additional
Precautionary Statements and
Statement of Practical Treatment

EPA Est. No. 5905-AR-1
EPA Reg. No. 10182-07

Net Contents
ONE QUART
Batch No.



RECEIVED
AUG 15 1984
L... ICI 8-3-84

BEST DOCUMENT AVAILABLE

10/12/67

1315



DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. This labeling must be in the possession of the user at the time of application.

General Information

FUSILADE™ 4E is a selective postemergence herbicide for control of annual and perennial grasses in cotton and soybeans. FUSILADE 4E does not control broadleaf weeds or sedges (nutgrass). FUSILADE 4E will provide effective control of grasses in conventional tillage, reduced tillage, and no-till plantings.

Control Symptoms

FUSILADE 4E is a systemic herbicide which moves from the treated foliage into the rhizomes, stolons and growing points of grasses. Excellent control of a wide range of annual and perennial grasses will be obtained with FUSILADE 4E when applied as recommended on this label.

Growth of treated grasses stops soon after application. Symptoms include loss of vigor, yellowing and/or reddening, and necrosis. Symptoms are generally observed within one to three weeks, depending on grass species and environmental conditions.

COTTON

APPLICATION DIRECTIONS

For all states except the irrigated areas of Arizona, California, New Mexico, West Oklahoma and West Texas, consult the use directions for Region A - Areas with adequate rainfall for crop production. For areas of low rainfall and low relative humidity, consult the use directions for Region B - Irrigated areas of Arizona, California, New Mexico, West Oklahoma and West Texas.

Timing

Apply to actively growing grasses before they exceed the recommended growth stages shown on this label.

Spray Additives (Cleared for use on growing crops)

ALWAYS ADD ONE OF THE FOLLOWING:

BEST DOCUMENT AVAILABLE

10/27/67

Crop Oil Concentrate

Add crop oil concentrate at 1% (1 quart per 25 gallons) of the finished spray volume. Use only nonphytotoxic crop oil concentrates that contain 15-20% surfactant.

OR

Nonionic Surfactant

Add nonionic surfactant at 0.25% (1/2 pint per 25 gallons) of the finished spray volume. Use only nonionic surfactants that contain at least 75% surface active agent. Symptoms often develop faster when crop oil concentrate is used than when nonionic surfactant is used, but there will be little, if any, difference in final control.

Ground Application

Use sufficient spray volume and pressure to ensure complete coverage. With ground equipment, use a minimum of 5 gallons per acre and 30-60 psi pressure. Use 60 psi if grass foliage is dense.

DO NOT USE FLOOD TYPE OR OTHER SPRAY NOZZLE TIPS
WHICH DELIVER COARSE SPRAYS

Cultivation

Cultivation of perennial grasses from 7 days prior until 3 days after application of FUSILADE 4E may reduce control due to 1) destruction of grass foliage which otherwise would adsorb and translocate FUSILADE 4E into rhizomes and stolons; 2) inducing a stress on grass remaining in the uncultivated part of the field, thereby reducing uptake and translocation of FUSILADE 4E. However, cultivation no sooner than 3 days after application will often assist in grass control.

Cultivation of annual grasses from 7 days prior until 7 days after application of FUSILADE 4E may reduce control due to 1) inducing a stress on grass remaining in the uncultivated part of the field, thereby reducing uptake and translocation of FUSILADE 4E; 2) physical covering of small seedlings with soil which prevents foliage contact by the spray. However, cultivation not sooner than 7 days following application will often assist in grass control.

Band Applications

When making band applications, equipment should be adjusted to provide maximum coverage of grasses in the row (drill). Thorough coverage can be obtained with a nozzle directed to each side of

BEST DOCUMENT AVAILABLE

the row toward the grass in the row. Application with a single nozzle over the top of the row is not recommended. The use of band applications on perennial grasses may result in reinfestation of the treated band from the untreated middle.

PERENNIAL GRASS CONTROL

For best results, rhizomes or stolons must be cut up by preplant tillage (discing, plowing, etc.) to stimulate maximum emergence of grass shoots. Because rhizomes and stolons are not cut up by preplant tillage in no-till and reduced tillage plantings, a second application is recommended for season-long control. Apply FUSILADE 4E to actively growing grasses.

Two applications of FUSILADE 4E are generally more effective for full season control than a single application of the same total amount.

REGION A - AREAS WITH ADEQUATE RAINFALL FOR CROP PRODUCTION.
(For all states except the irrigated areas of Arizona, California, New Mexico, West Oklahoma and West Texas.)

Apply FUSILADE 4E to actively growing grasses.

Always add either crop oil concentrate or nonionic surfactant at the recommended rates.

USE LOWER RECOMMENDED RATES WHEN:

- Complete wetting of all grass foliage can be achieved.
- A majority of the grass is less than the maximum recommended height.
- Rhizomes or stolons were cut up by preplant tillage.
- Environmental conditions are optimal: abundant soil moisture, warm temperatures and high humidity.

USE HIGHER RECOMMENDED RATES WHEN:

- Complete wetting of all grass foliage can not be achieved.
- A majority of the grass is at the maximum recommended height.
- Rhizomes and stolons were not cut up by preplant tillage.
- One or more environmental conditions is less than optimal: limited soil moisture, cool temperatures or low humidity.

Rhizome Johnsongrass (Sorghum halepense)

Apply 1/4 to 3/4 pint of FUSILADE 4E per acre to johnsongrass when it is 12-18 inches tall and before the boot stage. If re-

BEST DOCUMENT AVAILABLE

growth occurs, apply 1/4 to 1/2 pint per acre when regrowth is 6-12 inches tall. Do not apply a total of more than 1 quart of FUSILADE 4E per acre per season.

Bermudagrass (Cynodon dactylon)

Apply 3/8 to 1 pint of FUSILADE 4E per acre to bermudagrass up to three inches in height or 4-8 inches in stolon (runner) length. Bermudagrass may regrow. For season-long control, make a second application of 3/8 to 3/4 pint per acre 2 to 6 weeks after the first application.

Because bermudagrass is a low-growing perennial, the crop canopy may shield it from herbicide sprays. Coverage may be improved by directing the spray under the crop canopy. Do not apply a total of more than 1 quart of FUSILADE 4E per acre per season.

REGION B - IRRIGATED AREAS OF Arizona, California, New Mexico, West Oklahoma and West Texas.

Apply FUSILADE 4E to actively growing grasses.

For best results, apply FUSILADE within seven days after irrigation.

Always add either crop oil concentrate or nonionic surfactant.

USE LOWER RECOMMENDED RATES WHEN:

- Complete wetting of all grass foliage can be achieved.
- A majority of the grass is less than the maximum recommended height.
- Rhizomes or stolons were cut up by preplant tillage.
- Environmental conditions are optimal: abundant soil moisture, warm temperatures and high humidity.

BEST DOCUMENT AVAILABLE

USE HIGHER RECOMMENDED RATES WHEN:

- Complete wetting of all grass foliage can not be achieved.
- A majority of the grass is at the maximum recommended height.
- Rhizomes and stolons were not cut up by preplant tillage.
- One or more environmental conditions is less than optimal: limited soil moisture, cool temperatures or low humidity.

Rhizome Johnsongrass (Sorghum halepense)

Apply 1/2 to 1 pint of FUSILADE 4E per acre to johnsongrass when it is 12-18 inches tall and before the boot stage. For season-long control, make a second application of 1/2 to 1 pint per acre 2-6 weeks after the first application. Do not apply a total of more than 1 quart of FUSILADE 4E per acre per season.

Bermudagrass (Cynodon dactylon)

Apply 1/2 to 1 pint of FUSILADE 4E per acre to bermudagrass when it is 3 inches in height or 4-8" in stolon (runner) length. For season-long control, make a second application of 1/2 to 1 pint per acre 2-6 weeks after the first application.

Because bermudagrass is a low-growing perennial, the crop canopy may shield it from herbicide sprays. Coverage may be improved by directing the spray under the crop canopy. Do not apply a total of more than 1 quart of FUSILADE 4E per acre per season.

ANNUAL GRASS CONTROL

For grasses not exceeding the growth stages shown in Table 1, and before tillering, apply FUSILADE 4E at the rates recommended in Table 1. Do not apply a total of more than 1 quart of FUSILADE 4E per acre per season.

BEST DOCUMENT AVAILABLE

RESIDUAL ANNUAL GRASS CONTROL

Under conditions where rainfall is adequate following FUSILADE 4E application, soil residual activity may be observed. This may result in control or suppression of new flushes of annual grasses. The amount of residual control is dependent on the FUSILADE 4E rate used, grass density and soil type, with more activity being seen with higher rates on coarse-textured soils low in organic matter.

TABLE 1

ANNUAL GRASS CONTROL

Apply FUSILADE 4E to actively growing grasses.
Apply to grasses no larger than the size indicated in this table.
Always add the recommended rate of nonphytotoxic oil concentrate or nonionic surfactant.
Do not use flood type or other nozzle tips which deliver coarse sprays.

REGION A - AREAS WITH ADEQUATE RAINFALL (FOR ALL STATES EXCEPT THE IRRIGATED AREAS OF ARIZONA, CALIFORNIA, NEW MEXICO, WEST OKLAHOMA AND WEST TEXAS.

USE LOWER RECOMMENDED RATES WHEN:

- Complete wetting of all grass foliage can be achieved.
- A majority of the grass is less than the maximum recommended height.
- Environmental conditions are optimal: abundant soil moisture, warm temperatures and high humidity.

USE HIGHER RECOMMENDED RATES WHEN:

- Complete wetting of all grass foliage can not be achieved.
- A majority of the grass is at the maximum recommended height.
- One or more environmental conditions is less than optimal: limited soil moisture, cool temperatures or low humidity.

<u>Grass Species</u>	<u>Height (Inches)</u>	<u>FUSILADE Rate (Pints/A)</u>
<u>Group 1</u>		
Shattercane/Wildcane/Volunteer milo (<u>Sorghum bicolor</u>)	6-12	1/8 to 3/8
Volunteer corn (<u>Zea mays</u>)	12-24	1/8 to 3/8
Seedling johnsongrass (<u>Sorghum halepense</u>)	4-12	1/8 to 3/8

11/12/67

Group 2

Broadleaf signalgrass (<u>Brachiaria platyphylla</u>)	2-4	1/4 to 3/4
Fall panicum (<u>Panicum dichotomiflorum</u>)	2-4	1/4 to 3/4
Goosegrass (<u>Eleusine indica</u>)	2-4	1/4 to 3/4
Texas panicum (<u>Panicum texanum</u>)	2-4	1/4 to 3/4
Wild oats (<u>Avena fatua</u>)	2-4	1/4 to 3/4
Volunteer oats (<u>Avena sativa</u>)	2-4	1/4 to 3/4
Volunteer wheat (<u>Triticum aestivum</u>)	2-4	1/4 to 3/4

Group 3

Barnyardgrass (<u>Echinochloa crus-galli</u>)	2-4	3/8 to 3/4
Junglerice (<u>Echinochloa colonum</u>)	2-4	3/8 to 3/4
Itchgrass (<u>Rottboellia exaltata</u>)	2-4	3/8 to 3/4
Large crabgrass (<u>Digitaria sanguinalis</u>)	2-4 ^{a/}	3/8 to 3/4
Smooth crabgrass (<u>Digitaria ischaemum</u>)	2-4 ^{a/}	3/8 to 3/4
Southern sandbur (<u>Cenchrus echinatus</u>)	2-4	3/8 to 3/4
Yellow foxtail (<u>Setaria lutescens</u>)	4-6	3/8 to 3/4
Green foxtail (<u>Setaria viridis</u>)	4-6	3/8 to 3/4
Giant foxtail (<u>Setaria faberi</u>)	4-6	3/8 to 3/4
Red rice (<u>Oryza sativa</u>)	1-2 ^{b/}	3/8 to 3/4
Volunteer barley (<u>Hordeum (vulgare)</u>)	2-4	3/8 to 3/4
Tighthead sprangle top (<u>Leptochloa panicoides</u>)	2-4	3/8 to 3/4
Loosehead sprangle top (<u>Leptochloa fascicularis</u>)	2-4	3/8 to 3/4

^{a/}Length of runners or number of leaves
^{b/}Two or three leaves

Retreat at the recommended rate if needed to control late-germinating grasses or regrowth.

When mixed grass populations include grasses from Group 2 or 3, use the higher rate range of FUSILADE for broad-spectrum control.

REGION B - IRRIGATED AREAS OF ARIZONA, CALIFORNIA, NEW MEXICO, WEST OKLAHOMA AND WEST TEXAS.

USE LOWER RECOMMENDED RATES WHEN:

- Complete wetting of all grass foliage can be achieved.
- A majority of the grass is less than the maximum recommended height.
- Environmental conditions are optimal: abundant soil moisture, warm temperatures and high humidity.

USE HIGHER RECOMMENDED RATES WHEN:

- Complete wetting of all grass foliage can not be achieved.
- A majority of the grass is at the maximum recommended height.
- One or more environmental conditions is less than optimal: limited soil moisture, cool temperatures or low humidity.

<u>Grass Species</u>	<u>Height (Inches)</u>	<u>FUSILADE 4E Rate (Pints/A)</u>
Seedling johnsongrass (<u>Sorghum halepense</u>)	4-12	1/2 to 1
Shattercane/Wildcane/Volunteer milo (<u>Sorghum bicolor</u>)	6-12	1/2 to 1
Volunteer corn (<u>Zea mays</u>)	12-24	1/2 to 1
Volunteer oats (<u>Avena sativa</u>)	2-4	1/2 to 1
Volunteer wheat (<u>Triticum aestivum</u>)	2-4	1/2 to 1
Barnyardgrass (<u>Echinochloa crus-galli</u>)	2-4	1/2 to 1
Field sandbur (<u>Cenchrus pauciflorus</u>)	2-4	1/2 to 1
Southern sandbur (<u>Cenchrus echinatus</u>)	2-4	1/2 to 1
Junglerice (<u>Echinochloa colonum</u>)	2-4	1/2 to 1
Large crabgrass (<u>Digitaria sanguinalis</u>)	2-4	1/2 to 1
Prairie cupgrass (<u>Eriochloa contracta</u>)	2-4	1/2 to 1
Southwestern cupgrass (<u>Eriochloa gracilis</u>)	2-4	1/2 to 1
Volunteer barley (<u>Hordeum vulgare</u>)	2-4	1/2 to 1
Red sprangle top (<u>Leptochloa filiformis</u>)	2-4	1/2 to 1
Mexican sprangle top (<u>Leptochloa uninervia</u>)	2-4	1/2 to 1

Retreat at the recommended rate if needed to control late-germinating grasses or regrowth.

Remarks and Precautions

Do not apply a total of more than 1 quart of FUSILADE 4E per acre per season to cotton.

Clean sprayer thoroughly before and after the application of FUSILADE 4E. Failure to clean sprayer thoroughly after application may result in injury to any grass crop subsequently sprayed including corn, sorghum, small grains, sugarcane, rice and turf.

Avoid drift to all other crops and nontarget areas. Grass crops are highly susceptible to FUSILADE 4E.

Do not plant rotational grass crops such as corn, sorghum and cereals within 60 days after last application.

Do not harvest cotton within 90 days of application.

Do not apply after boll set.

Do not graze or harvest for forage or hay.

Do not tank mix FUSILADE 4E with herbicides or other pesticides, with liquid fertilizers or with any other additives except as specified on this label. Sequential application of other herbicides within five days before or after FUSILADE 4E application has sometimes resulted in crop injury and reduced grass control.

Do not apply FUSILADE 4E with recirculating sprayers, ropewick applicators or any similar devices.

Do not apply FUSILADE 4E if rainfall is expected within 1 hour.

SOYBEANS

APPLICATION DIRECTIONS

Apply to actively growing grasses before they exceed the recommended growth stages shown on this label.

Spray Volume and Pressure

Use sufficient spray volume and pressure to ensure complete coverage. With ground equipment, use a minimum of 10 gallons per acre and 30-60 psi pressure. Use 60 psi if grass foliage is dense.

DO NOT USE FLOOD TYPE OR OTHER SPRAY NOZZLE TIPS WHICH DELIVER COARSE SPRAYS

Spray Additives (Cleared for use on growing crops)

ALWAYS ADD ONE OF THE FOLLOWING:

Crop Oil Concentrate

Add crop oil concentrate at 1% (1 quart per 25 gallons) of the finished spray volume. Use only nonphytotoxic crop oil concentrates that contain 15-20% surfactant.

OR

Nonionic Surfactant

Add nonionic surfactant at 0.25% (1/2 pint per 25 gallons) of the finished spray volume. Use only nonionic surfactants that contain at least 75% surface active agent. Symptoms often develop faster when crop oil concentrate is used than when nonionic surfactant is used, but there will be little, if any, difference in final control.

BEST DOCUMENT AVAILABLE

Ground Application

Use sufficient spray volume and pressure to ensure complete coverage. With ground equipment, use a minimum of 5 gallons per acre and 30-60 psi pressure. Use 60 psi if grass foliage is dense.

DO NOT USE FLOOD TYPE OR OTHER
SPRAY NOZZLE TIPS WHICH DELIVER
COARSE SPRAYS

Cultivation

Cultivation of perennial grasses from 7 days prior until 3 days after application of FUSILADE 4E may reduce control due to 1) destruction of grass foliage which otherwise would adsorb and translocate FUSILADE 4E into rhizomes and stolons; 2) inducing a stress on grass remaining in the uncultivated part of the field, thereby reducing uptake and translocation of FUSILADE 4E. However, cultivation no sooner than 3 days after application will often assist in grass control.

Cultivation of annual grasses from 7 days prior until 7 days after application of FUSILADE 4E may reduce control due to 1) inducing a stress on grass remaining in the uncultivated part of the field, thereby reducing uptake and translocation of FUSILADE 4E; 2) physical covering of small seedlings with soil which prevents foliage contact by the spray. However, cultivation not sooner than 7 days following application will often assist in grass control.

Band Applications

When making band applications, equipment should be adjusted to provide maximum coverage of grasses in the row (drill). Thorough coverage can be obtained with a nozzle directed to each side of the row toward the grass in the row. Application with a single nozzle over the top of the row is not recommended. The use of band applications on perennial grasses may result in reinfestation of the treated band from the untreated middle.

PERENNIAL GRASS CONTROL

For best results, rhizomes or stolons must be cut up by preplant tillage (discing, plowing, etc.) to stimulate maximum emergence of grass shoots. Because rhizomes and stolons are not cut up by preplant tillage in no-till and reduced tillage plantings, a second application is recommended for season-long control. Apply FUSILADE 4E to actively growing grasses.

BEST DOCUMENT AVAILABLE

Two applications of FUSILADE 4E are generally more effective for full season control than a single application of the same total amount.

Apply FUSILADE 4E to actively growing grasses.

Always add either crop oil concentrate or nonionic surfactant at the recommended rates.

USE LOWER RECOMMENDED RATES WHEN:

- Complete wetting of all grass foliage can be achieved.
- A majority of the grass is less than the maximum recommended height.
- Rhizomes or stolons were cut up by preplant tillage.
- Environmental conditions are optimal: abundant soil moisture, warm temperatures and high humidity.

USE HIGHER RECOMMENDED RATES WHEN:

- Complete wetting of all grass foliage can not be achieved.
- A majority of the grass is at the maximum recommended height.
- Rhizomes and stolons were not cut up by preplant tillage.
- One or more environmental conditions is less than optimal: limited soil moisture, cool temperatures or low humidity.

Rhizome Johnsongrass (Sorghum halepense)

Apply 1/4 to 3/4 pint of FUSILADE 4E per acre to johnsongrass when it is 12-18 inches tall and before the boot stage. If regrowth occurs, apply 1/4 to 1/2 pint per acre when regrowth is 6-12 inches tall. Do not apply a total of more than 1 pint per acre per season.

Bermudagrass (Cynodon dactylon)

Apply 3/8 to 1 pint of FUSILADE 4E per acre to bermudagrass up to three inches in height or 4-8 inches in stolon (runner) length. Bermudagrass may regrow. For season-long control, when 3/8 to 1/2 pint/A has been used, apply 1/2 pint per acre 2 to 6 weeks after the first application.

Because bermudagrass is a low-growing perennial, the crop canopy may shield it from herbicide sprays. Coverage may be improved by directing the spray under the crop canopy. Do not apply a total of more than 1 pint of FUSILADE 4E per acre per season.

BEST DOCUMENT AVAILABLE

✓
Quackgrass (Agropyron repens)

Apply 1/2 to 1 pint of FUSILADE 4E per acre to quackgrass that has 3 to 5 leaves and does not exceed 10 inches in height. Quackgrass may regrow. For season-long control, when the 1/2 pint rate has been used, apply 1/2 pint per acre 2 to 6 weeks after the first application. Do not apply a total of more than 1 pint of FUSILADE 4E per acre per season.

Wirestem muhly (Muhlenbergia frondosa)

Apply 1/4 to 3/4 pint of FUSILADE 4E per acre to wirestem muhly when it is 4 to 12 inches tall. Wirestem muhly may regrow. For season-long control, when 1/4 to 1/2 pint/A has been used, apply 1/4 to 1/2 pint per acre two to six weeks after the first application. Do not apply a total of more than 1 pint of FUSILADE 4E per acre per season.

ANNUAL GRASS CONTROL

For grasses not exceeding the growth stages shown in Table 2, and before tillering, apply FUSILADE at the rates recommended in Table 2. Do not apply a total of more than 1 pint of FUSILADE 4E per acre per season.

RESIDUAL ANNUAL GRASS CONTROL

Under conditions where rainfall is adequate following FUSILADE application, soil residual activity may be observed. This may result in control or suppression of new flushes of annual grasses. The amount of residual control is dependent on the FUSILADE 4E rate used, grass density and soil type, with more activity being seen with higher rates on coarse-textured soils low in organic matter.

ANNUAL GRASS CONTROL

Apply FUSILADE 4E to actively growing grasses.
Apply to grasses no larger than the size indicated in this table.
Always add the recommended rate of nonphytotoxic oil concentrate
or nonionic surfactant.
Do not use flood type or other nozzle tips
which deliver coarse sprays.

USE LOWER RECOMMENDED RATES WHEN:

- Complete wetting of all grass foliage can be achieved.
- A majority of the grass is less than the maximum recommended height.
- Environmental conditions are optimal: abundant soil moisture, warm temperatures and high humidity.

USE HIGHER RECOMMENDED RATES WHEN:

- Complete wetting of all grass foliage can not be achieved.
- A majority of the grass is at the maximum recommended height.
- One or more environmental conditions is less than optimal: limited soil moisture, cool temperatures or low humidity.

<u>Grass Species</u>	<u>Height (Inches)</u>	<u>FUSILADE 4E Rate (Pints/A)</u>
<u>Group 1</u>		
Shattercane/Wildcane (<u>Sorghum bicolor</u>)	6-12	1/8 to 3/8
Volunteer corn (<u>Zea mays</u>)	12-24	1/8 to 3/8
Seedling johnsongrass (<u>Sorghum halepense</u>)	4-12	1/8 to 3/8
<u>Group 2</u>		
Wild proso millet (<u>Panicum miliaceum</u>)	4-8	1/4 to 1/2
Broadleaf signalgrass (<u>Brachiaria platyphylla</u>)	2-4	1/4 to 3/4
Fall panicum (<u>Panicum dichotomiflorum</u>)	2-4	1/4 to 3/4
Goosegrass (<u>Eleusine indica</u>)	2-4	1/4 to 3/4
Texas panicum (<u>Panicum texanum</u>)	2-4	1/4 to 3/4
Wild oats (<u>Avena fatua</u>)	2-4	1/4 to 3/4
Volunteer Oats (<u>Avena sativa</u>)	2-4	1/4 to 3/4
Volunteer Wheat (<u>Triticum aestivum</u>)	2-4	1/4 to 3/4

BEST DOCUMENT AVAILABLE

Group 3

Barnyardgrass (<i>Echinochloa crus-galli</i>)	2-4	3/8 to 3/4
Junglerice (<i>Echinochloa colonum</i>)	2-4	3/8 to 3/4
Itchgrass (<i>Rottboellia exaltata</i>)	2-4	3/8 to 3/4
Large crabgrass (<i>Digitaria sanguinalis</i>)	2-4 ^{a/}	3/8 to 3/4
Smooth crabgrass (<i>Digitaria ischaemum</i>)	2-4 ^{a/}	3/8 to 3/4
Southern sandbur (<i>Cenchrus echinatus</i>)	2-4	3/8 to 3/4
Yellow foxtail (<i>Setaria lutescens</i>)	4-6	3/8 to 3/4
Green foxtail (<i>Setaria viridis</i>)	4-6	3/8 to 3/4
Giant foxtail (<i>Setaria faberi</i>)	4-6	3/8 to 3/4
Red rice (<i>Oryza sativa</i>)	1-2 ^{b/}	3/8 to 3/4
Volunteer Barley (<i>Hordeum vulgare</i>)	2-4	3/8 to 3/4
Woolly Cupgrass (<i>Eriochloa villosa</i>)	2-4	3/8 to 3/4
Tighthead Sprangle Top (<i>Leptochloa panicoides</i>)	2-4	3/8 to 3/4
Loosehead Sprangle Top (<i>Leptochloa fascicularis</i>)	2-4	3/8 to 3/4

^{a/}Length of runners or number of leaves
two or three leaves

1/2 rates of 1/8 to 1/2 pint/acre have been used, retreat at a rate up to 1/2 pint/acre if needed to control late germinating grasses or regrowth. Do not apply a total of more than 1 pint of FUSILADE 4E per acre per season.

When mixed grass populations include grasses from Group 2 or 3, use the higher rate range of FUSILADE 4E for broad-spectrum control.

Remarks and Precautions

Do not apply a total of more than 1 pint of FUSILADE 4E per acre per season to soybeans.

Clean sprayer thoroughly before and after the application of FUSILADE 4E. Failure to clean sprayer thoroughly after application may result in injury to any grass crop subsequently sprayed including corn, sorghum, small grains, sugarcane, rice and turf.

Avoid drift to all other crops and nontarget areas. Grass crops are highly susceptible to FUSILADE 4E.

Do not plant rotational grass crops such as corn, sorghum and cereals within 60 days after last application.

Make last application before bloom.

Do not graze or harvest for forage or hay.

Do not tank mix FUSILADE 4E with herbicides or other pesticides, with liquid fertilizers or with any other additives except as specified on this label. Sequential application of other herbicides within five days before or after FUSILADE 4E application has sometimes resulted in crop injury and reduced grass control.

BEST DOCUMENT AVAILABLE

Do not apply FUSILADE 4E with recirculating sprayers, ropewick applicators or any similar devices.

Do not apply FUSILADE 4E if rainfall is expected within 1 hour.

Conversion Table

FUSILADE 4E Rate to be Applied

<u>lb ai/A</u>	<u>Pints/A</u>	<u>fl oz/A</u>	<u>A/gal</u>
1/8	1/4	4	32
3/16	3/8	6	21.3
1/4	1/2	8	16
3/8	3/4	12	10.7
1/2	1	16	8

FUSILADE 4E contains 4 pounds of active ingredient per gallon.

J-10-21B/FUS

BEST DOCUMENT AVAILABLE