



syngenta

Reg. No. **L7304** Act No. 36 of 1947 **N-AR 0185** (Namibia) **W130600** (Botswana)

A selective systemic post-emergence emulsifiable concentrate herbicide for the control of annual and perennial grasses in crops as indicated. For the chemical ripening and eradication of sugarcane as well as the suppression of grass growth and seeding on verges.

GROUP	1	HERBICIDE
-------	---	-----------

Active Ingredient:
fluazifop-p-butyl

(aryloxyphenoxypropionate)..... 150 g/l

Product names marked ® or ™, the ALLIANCE FRAME the SYNGENTA Logo and the PURPOSE ICON are Trademarks of a Syngenta Group Company



WARNING

Hazard statements:

May cause an allergic skin reaction. Suspected of damaging the unborn child. Very toxic to aquatic life with long-lasting effects.

Precautionary statements:

Prevention: Obtain special instructions before use. Avoid breathing mist or vapours. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. **Response:** If exposed, concerned, or if skin irritation or rash occurs, get medical advice/attention. Collect spillage.

EMERGENCY TEL NO.:
+27 82 446 8946 (Griffon)

UN 3082

Registration holder
Syngenta South Africa (Pty) Ltd
Co. Reg. No. 1998/013761/07
Private Bag X 60
HALFWAY HOUSE, 1685
Tel.: +27 11 541 4000

1. WARNINGS:

Hazard statements: May cause an allergic skin reaction. Suspected of damaging the unborn child. Very toxic to aquatic life with long-lasting effects.

Withholding periods: Minimum number of days between last application and harvest.

DRY BEANS.....	60 days
LUCERNE AND SUGARCANE.....	14 days
MEDIC- AND CLOVER PASTURES.....	32 days
PINEAPPLES.....	7 days
ALL OTHER CROPS.....	40 days

- Toxic to fish.
- Store away from food and feed.
- **Flammable:** Keep away from open flames.
- Keep out of reach of children, uninformed persons and animals.
- **In case of poisoning:** Call a doctor and present this label.
- **Re-entry:** Do not enter treated area within one (1) day after application unless wearing protective clothing.
- **Aerial application:** Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings. Do not spray over, or allow drift to contaminate adjacent areas or water.

Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be efficacious under all conditions because the action and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the weed against the remedy concerned, as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation and the environment, or harm to people or animal or for lack of performance of the remedy concerned due to failure of the user to follow the label instructions or to the occurrence of conditions, that could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

2. PRECAUTIONS:

Precautionary statements: Prevention: Obtain special instructions before use. Avoid breathing mist or vapours. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. **Response:** If exposed, concerned, or if skin irritation or rash occurs, get medical advice/attention. Collect spillage.

- Do not eat, drink, or smoke while handling this product.
- Prevent contamination of food, feed, drinking water and eating utensils.
- Wear rubber gloves and a face shield when handling the concentrate. If you get it in your eyes, flush it out at once. If you get it on your skin, wash it off at once. If you spill it on your clothes, change and wash them.
- Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the container three (3) times with a volume of water equal to a minimum of 10% of that of the container. Add the rinsate to the contents of the spray tank before destroying the container in the prescribed manner.
- While spraying, avoid contact with the spray as much as you can. Avoid spray drift onto other crops or **sugarcane** not ready for harvesting, grazing, rivers, dams, boreholes and areas not under treatment.
- Clean applicator thoroughly after use and dispose of wash water where it will not contaminate crops, grazing, rivers, dams, boreholes and areas not under treatment.
- Do not use empty container for any other purpose.
- Change and wash your work clothes. Wash yourself.

Symptoms of human poisoning: Nausea and vomiting may occur with associated abdominal pain and diarrhea. Severe poisoning may result in death from respiratory failure.

First Aid and Medical Treatment

A lethal dose is approximately 400 ml of **FUSILADE FORTE**. If ingested do not induce vomiting unless an approximately lethal dose or more has been taken. The patient should be taken to the nearest hospital for observation and symptomatic treatment. Skin or eye contamination should

be washed away with plenty of water.

Note to doctor: Patient should be treated symptomatically.

3. RELEVANT SUBSTANCES:

Chemical name	
fluazifop-P-butyl (ISO)	
Classification	Concentration (% w/w)
Skin Sens. 1; H317 Repr. 2; H361d Aquatic Acute 1; H400 Aquatic Chronic 1; H410	≥ 10 - < 20
M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1	

4. RESISTANCE MANAGEMENT:

FUSILADE FORTE is a group code 1 herbicide. Any weed population may contain individuals naturally resistant to **FUSILADE FORTE** and other group code 1 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly and exclusively in programs. These resistant weeds may not be controlled by **FUSILADE FORTE** or any other group code 1 herbicides.

To delay herbicide resistance:

- Avoid exclusive repeated use of herbicides from the same herbicide group code. Alternate or tank mix with products from different herbicide group codes.
- Integrate other control methods (chemical, cultural, biological) into weed control programs.

For specific information on resistance management contact the registration holder of this product.

5. DIRECTIONS FOR USE: Use only as indicated.

- **FUSILADE FORTE** is a selective post-emergence grass herbicide and can be applied at any stage of crop and weed development. The later growth stages of grass weeds may, however, require a higher dosage for acceptable control.
- Although **FUSILADE FORTE** has some residual action, it is advisable to wait until the majority of grass weeds have germinated before spraying.
- Rain or irrigation within one (1) hour after application of **FUSILADE FORTE** may necessitate a second spray.
- Although the observable effect of spraying may not be seen for up to three (3) weeks after spraying, **FUSILADE FORTE** does cause the immediate cessation of cell division in the plant and therefore growth.
- The addition of a wetter is not necessary unless the concentration is below 1 ℓ/200 ℓ water when 100 ml COMPLEMENT SUPER (L8169) must be added per 100 ℓ water.

5.1 Follow-up Crops

The following crops may not be planted on treated soil for a period of three (3) months after application: maize, sorghum, wheat or any other grass crop.

5.2 Compatibility

FUSILADE FORTE is not compatible with any form of dimethoate and most other herbicides due to an adverse effect on activity. Where two (2) herbicides have to be applied they must be applied separately with at least a 14-day interval except in the following cases:

5.2.1 Pineapples

For the control of broadleaf weeds add DIURON 800 SC at the registered rates. (See label for details).

5.2.2 Mangoes, citrus, coffee, macadamia nuts and pecan nuts

For the control of broadleaf weeds add DIURON 800 SC at the registered rate. (See label for details).

5.2.3 Grass suppression

Different types of grass react differently to a particular rate of **FUSILADE FORTE** and for this reason it is necessary to experiment with the rate within the recommended limits. Higher rates may cause a temporary browning effect while the period of suppression will be shorter at lower rates. Repeated applications of **FUSILADE FORTE** might result in the multiplication of broadleaf weeds because competition with grasses is reduced. Depending on the climatic conditions and rate, an application of **FUSILADE FORTE** can eliminate 3 - 4 mowings.

5.3 Climatic Conditions

Warm, humid conditions are advantageous for good weed control with **FUSILADE FORTE**. Drought conditions will result in poor or no-weed control.

5.4 Crop Susceptibility

The presence of *Pseudomonas* leaf spot in green bean cultivars, especially if planted early, i.e., September - October, is aggravated when **FUSILADE FORTE** is sprayed onto the plants. The following cultivars are especially prone to *Pseudomonas* leaf spot if planted early in the summer: Slenderette, top crop, wintergreen and harvester. On dry beans necrosis occurs on the cultivars brown harricot and speckled sugar beans. Do not apply to sugarcane intended for use as seedcane.

5.5 Sugarcane Ripening

FUSILADE FORTE stunts or kills young, uncurled leaves and may also kill the growing point. Lateral buds then develop from a few top nodes. Stalk growth is restricted and the unwanted, immature tops of some stalks may eventually break off. This will not result in a reduction of sucrose yield, compared with untreated, commercially harvested crops as long as the recommended period between spraying and harvesting is not exceeded. Higher rates of **FUSILADE FORTE** within the recommended range exaggerate the severity of ripening symptoms. **FUSILADE FORTE** thins out the crop canopy and results in a better crop burn.

Varieties: All varieties respond to **FUSILADE FORTE**.

5.6 Sugarcane Eradication

- Spray actively growing sugarcane in spring or summer when the cane is at least 450 mm tall and fully, or, almost fully tillered.
- Apply in 200 - 300 ℓ water/ha, ensuring adequate coverage of all green foliage.
- Do not add a wetting agent, or mix with any other chemicals.
- On soils with a clay content greater than 8%, do not disturb the soil or plant within 28 days of spraying. Only NCO 376 plantings are recommended.
- On soils with a clay content less than 8%, do not disturb the soil or plant within 56 days of spraying. Only NCO 376 plantings are recommended.
- Some cane re-growth may occur and this can be removed mechanically.
- If broadleaf weeds are a problem they can be eradicated after planting with a herbicide spray such as GRAMOXONE (L1174).

6. APPLICATION:

6.1 General

Avoid chemical drift at all times.

FUSILADE FORTE can be applied by ground rig, aircraft or knapsack sprayer (spot treatment). Use only **clean** water and correctly calibrated equipment, operating at pressures of 100 - 300 kPa. Do not apply if rain is expected within one (1) hour.

6.2 Aerial Application

Aerial application of this product may only be done by a registered aerial application operator using a correctly calibrated, registered aircraft according to the instructions of SANS 10118 (Aerial Application of Agricultural Remedies). It is important to ensure that the spray mixture is distributed evenly over the target area and that the loss of spray material during application is restricted to a minimum. It is therefore essential that the following criteria are met:

a) Application parameters:

- **Volume:** A volume of 30 - 35 ℓ/ha is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy or be held responsible for any adverse effects if the product is applied aerially at a lower volume rate than recommended above.
- **Droplet coverage:** A droplet coverage of 30 - 45 droplets per cm² must be recovered at the target.
- **Droplet size:** A droplet spectrum with a VMD of 300 - 350 microns is recommended. Ensure that the production of fine droplets (less than 150 microns - high drift and evaporation potential) is restricted to a minimum.
- **Flying height:** The height of the spray boom should be maintained at 3 - 4 metres above the target. Do not spray when aircraft is in a climb, at the top or during a dive, or when banking.

b) Equipment:

- Use suitable atomising equipment (hydraulic nozzles or rotary atomisers) that will produce the desired droplet

size and coverage but which will ensure the minimum loss of product either through endodrift (within target field) or exodrift (outside target field).

- The operator must use a setup that will produce a droplet spectrum with the lowest possible relative span.
- All nozzles/atomisers should be positioned within the inner 60 - 75% of the wingspan to prevent droplets from entering the wingtip vortices.

c) Meteorological conditions:

- The difference in temperature between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8°C. The addition of a suitable anti-evaporant is recommended if the VMD of the droplets is less than 200 - 250 microns.
- Stop spraying if the wind speed exceeds 15 km/h or reduces to less than 5 km/h.
- Aerial application of **FUSILADE FORTE** must not be done under turbulent, unstable conditions during the heat of the day when rising thermals and downdrafts occur.
- Also note that the application of this product under temperature inversion conditions (spraying in or above the inversion layer) may lead to the following:
 - Reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage).
 - Damage to other sensitive crops and or non-target areas through the movement of the suspended spray cloud away from the target field.
- Under the following climatic conditions it can cause serious damage as far as 3 to 5 km from the nearest spray path of the aircraft:
 - Cloudy weather with relative humidity above 80% and low air movement of less than 5 k/h. When such conditions prevail, aerial application should **NOT** be carried out where sensitive crops, crop seedlings, deciduous fruit trees and grape vines in budding or early development stages are present within 5 km of the nearest spray path of the aircraft.
- Ensure that the aerial spray operator knows which fields to spray. Supply the precise identification to the operator of the fields to be sprayed preferably by means of a map or GPS coordinates. Indicate to the operator adjacent environmental sensitive areas or sensitive neighbouring crops, beehives, or water sources that could be affected by the pesticide.

Obtain assurance from the aerial spray operator that the above requirements will be met and that relevant data will be compiled in a logbook and kept for future reference.

6.2 Conventional Applications

Crop	Dosage	Remarks
As a grass herbicide		
Vegetables Potatoes (v/d Plank) Brussel sprouts Carrots Peas	1.67 - 3.33 ℓ/ha	<ul style="list-style-type: none">• Apply at a post-emergence stage to seedlings up to the 6-leaf stage.*• If sprayed at a later stage or if the weeds are physiologically far advanced, a higher
Fruit Banana		

Conventional Applications cont.

Crop	Dosage	Remarks
Fruit Citrus ** Coffee ** Deciduous fruit Grape vines Groundnuts Hops Macadamias ** Mangoes ** Pecans ** Pineapples **	1.67 - 3.33 ℓ/ha	dosage may be required. • FUSILADE FORTE can be applied aerially to annual grasses as indicated.
Row crops Dry beans Forestry Soybeans		
Pastures Lucerne		
Vegetables Green beans Onions (seedbeds and transplanted)	0.83 - 1.67 ℓ/ha*	
Pastures Medic and clover pastures		
Flowers Ornamentals and flowers		
Spot treatment on the above crops	A 1.67% FUSILADE FORTE solution plus COMPLEMENT SUPER at 100 ml/100 ℓ water	• Apply in early summer on active growth using a knapsack sprayer. • This treatment will control grasses listed and also suppress common couch (<i>Cynodon dactylon</i>) and couch paspalum (<i>Paspalum paspalodes</i>)*.
For grass control on patios, paths, drive ways, etc.	83 ml/5ℓ water	• Spot treatment application.
* See WEED SPECIES LIST A, B, C and D.		
** For the control of broadleaf weeds see COMPATIBILITY.		

Crop	Dosage	Remarks
As a sugarcane ripener		
Ground application	200 - 250 ml/ha	• Apply by knapsack with overhead

All varieties except N14	200 - 250 ml/ha	boom in 50 - 200 ℓ water/ha.
Aerial application All varieties except N14	225 - 275 ml/ha	• Apply in 30 - 35 ℓ water/ha.
Comments Sugarcane ripening <ul style="list-style-type: none"> For variety N14 use a rate of 333 ml/ha for ground application and 367 ml/ha for aerial application. The requirements for a good response from FUSILADE FORTE as a ripener are: <ul style="list-style-type: none"> Vigorous growth of the sugarcane (indicated by more than eight (8) green leaves together with long upper internodes). Sufficient soil water to promote vigorous growth for about five (5) weeks after FUSILADE FORTE was applied. Juice purities should be lower than 85% when FUSILADE FORTE is applied. After spraying, conditions for a high photosynthesis rate are required. This is ensured by: <ul style="list-style-type: none"> Good soil water supply. Sunlight and acceptable temperatures. Good plant nutrient status. Good plant health. Timing when using FUSILADE FORTE as a ripener: <ul style="list-style-type: none"> Apply 4 - 10 weeks before harvest. Do not apply during months of June to September. When crop growth is rapid, the time between spraying and harvesting will be shorter than when conditions are cooler and growth is slower. (Refer to SASRI Information sheet 12.3). Crops must be growing actively when sprayed, i.e., not suffering from nutrient, moisture or any other stress factor. 		
Sugarcane eradication		
Ground application (for conservation tillage) Variety NCO 376 plantings	5 ℓ/ha	• See notes.

Crop	Dosage	Remarks
As a growth inhibitor		
On verges, roadsides, orchards and waterways.	417 - 625 ml/ha	• Slash the grass to the preferred length and apply in 250 - 300 ℓ water/ha. • Ensure sufficient leaf surface for good foliar uptake. • Repeat when necessary.

WEED SPECIES LIST

A	Application rate: 0.83 ℓ/ha	
	Grass growth stage at application: Seedlings to 6-leaf stage	
	Botanical name	Common name
	<i>Avena fatua</i> <i>Lolium multiflorum</i> <i>Phalaris canariensis</i> <i>Triticum aestivum</i>	common wild oats Italian ryegrass canary seed grass volunteer wheat
B	Application rate: 1.67 ℓ/ha	
	Grass growth stage at application: Seedlings to 6-leaf stage	
	Botanical name	Common name
	<i>Bromus uniloides</i>	rescue grass
	<i>Chloris virgata</i>	feathertop chloris
	<i>Echinochloa colona</i>	awnless
	<i>Echinochloa crusgalli</i>	barnyard grass
	<i>Eragrostis curvula</i>	weeping love grass
	<i>Eragrostis pilosa</i>	slender meadow grass
	<i>Eragrostis plana</i>	fan love grass
	<i>Hordeum murinum</i>	wild barley
	<i>Panicum maximum</i>	common buffalo grass
C	Application rate: 2.5 ℓ/ha	
	Grass growth stage at application: Seedlings to 6 leaf stage	
	Botanical name	Common name
	<i>Digitaria sanguinalis</i>	crab finger-grass
	<i>Eleusine indica</i>	goose grass
	<i>Eragrostis aspera</i>	rough love grass
D	<i>Paspalum dilatatum</i>	common paspalum
	<i>Urochloa panicoides</i>	herringbone grass
	Application rate: 3.33 ℓ/ha	
	Grass growth stage at application: -	
	Botanical name	Common name
	<i>Brachiaria eruciformis</i>	sweet signal grass
	<i>Cynodon dactylon</i> *	common couch
	<i>Paspalum paspalodes</i> *	couch paspalum
	<i>Sporobolus africanus</i>	ratstailgrass

* **NOTE:** Broken rhizomes only. Re-growth may occur on well-established *Cynodon dactylon* and *Paspalum paspalodes*.

COMPLEMENT®, **FUSILADE®** and **GRAMOXONE®** are registered trade marks of a Syngenta Group Company.

© **SYNGENTA AG, 2000**. Copyright of this document is reserved. All unauthorised reproduction is forbidden.

SA Reg.: 15-09-2009