



Falcon[®] Gold

syngenta.

An emulsifiable concentrate herbicide for pre-emergence control of annual grasses and, under certain conditions, also yellow nutsedge, in *Eucalyptus*, pine plantations and sugarcane.

GROUP 15 HERBICIDE

Active Ingredient:

s - metolachlor (α-chloracetamide).. 960 g/l

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WARNING

Reg. No. L5750 Act No. 36 of 1947

Hazard statements: May cause an allergic skin reaction. Causes serious eye irritation. Very toxic to aquatic life with long-lasting effects. May be harmful if swallowed.

Precautionary statements: Keep out of reach of children. **Prevention:** Wear protective gloves/eye protection/face protection. **Response:** If on skin, wash with plenty of soap and water. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention. Wash contaminated clothing before re-use. Collect spillage.

Disposal: Dispose of contents/container to an approved waste disposal plant.

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1. WARNINGS:

Hazard statements: May cause an allergic skin reaction. Causes serious eye irritation. Very toxic to aquatic life with long-lasting effects. May be harmful if swallowed.

- Handle with care.
- Poisonous if swallowed.
- Toxic to fish.
- Store in a cool place.
- Store away from food and feed.
- Keep out of reach of children, uninformed persons and animals.
- **In case of poisoning:** Contact 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 water or adjacent areas.

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 animals 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: Keep out of reach of children. **Prevention:** Wear protective gloves/eye protection/face protection. **Response:** If on skin, wash with plenty of soap and water. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. If eye irritation persists, get medical advice/attention. Wash contaminated clothing before re-use. Collect spillage. **Disposal:** Dispose of contents/container to an approved waste disposal plant.

- Do not inhale the spray mist.
- Avoid skin contact.
- Wash with soap and water after use.
- Wash contaminated clothing after use.
- Do not eat, drink, or smoke while mixing or applying the product or before washing hands and face.
- Avoid drift or spray onto other crops, grazing, rivers, dams and areas not under treatment.
- Clean applicator after use. Dispose of rinsate where it will not contaminate crops, grazing, rivers, dams and boreholes.
- Prevent contamination of food, feed, drinking water and eating utensils.
- Rinse the empty container three (3) times with a volume of clean water equal to a minimum of 10% of the container. Add the rinsate to the contents of the spray tank before destroying the container in the prescribed manner.
- Do not use the empty container for any other purpose.

Symptoms of human poisoning: Sedation, dyspnoea and exophthalmus.

First Aid and Medical Treatment:

If poisoning is suspected immediately call a doctor. Remove patient from further contact with pesticide and place patient in a well-ventilated area. In case of eye contact hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. In case of skin contact, wash with plenty of soap and water. Consult a doctor if irritation persists. If the substance has been swallowed promptly administer a large quantity of milk, egg whites, gelatine solution, or if these are not available large quantities of water. Do not induce vomiting or give anything by mouth to an unconscious person.

Note to doctor: No specific antidote is known. If ingested, induce emesis or lavage stomach. Administration of aqueous

slurry of activated charcoal may be considered. Apply symptomatic therapy.

Important:

Where other herbicides are used in combination with **FALCON GOLD** the restrictions of use as given on the labels of the herbicides concerned, must be adhered to.

3. RELEVANT SUBSTANCES:

Chemical name	Classification	Concentration (% w/w)
Not applicable	Not applicable	Not applicable

4. RESISTANCE MANAGEMENT:

FALCON GOLD is a group code 15 herbicide. Any weed population may contain individuals naturally resistant to **FALCON GOLD** and other group code 15 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly and exclusively in programs. **FALCON GOLD** or any other group code 15 herbicides may not control these resistant weeds.

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. WEEDS CONTROLLED:

The following weed species are normally controlled by a pre-emergence application of **FALCON GOLD** at the dosage rates indicated:

<i>Brachiaria eruciformis</i> <i>Chloris virgata</i> <i>Dactyloctenium aegyptium</i> <i>Digitaria sanguinalis</i> <i>Echinochloa crusgalli</i> <i>Eleusine indica</i> <i>Panicum maximum</i> <i>Panicum schinzii</i> <i>Pseudobrachiaria deflexa</i> <i>Setaria pallide-fusca</i> <i>Setaria verticillata</i> <i>Sorghum verticilliflorum</i> <i>Tragus berteronianus</i> <i>Tragus racemosus</i> <i>Urochloa mosambicensis</i>	sweet signal grass feathertop Chloris crowfoot crab finger grass barnyard grass goose grass common buffalo grass sweet buffalo grass false signal grass red bristle grass sticky bristle grass common wildsorghum small carrotseed grass large carrotseed grass bushveld herringbone grass herringbone grass
Control of the following weeds is variable	
<i>Amaranthus hybridus</i> <i>Amaranthus spinosus</i> <i>Amaranthus thunbergii</i> <i>Chenopodium carinatum</i> <i>Cleome monophylla</i> <i>Commelina benghalensis</i> <i>Cyperus esculentus</i> <i>Datura ferox</i>	common pigweed thorny pigweed red pigweed green goosefoot spindlepod wandering Jew Bengal yellow nutsedge large thorn apple

Datura stramonium
Galinsoga parviflora
Nicandra physaloides
Portulaca oleracea

thorn apple
gallant soldier
Apple of Peru
purslane

Important:

Yellow nutsedge (*Cyperus esculentus*) - the control of *C. esculentus* can be improved provided the following conditions are met:

- Thorough ploughing with a mouldboard plough immediately proceeds planting.
- A relatively fine, even and firm seedbed is prepared.
- Herbicide application is followed by at least 10 - 20 mm of soft penetrating rain (or irrigation) to leach the herbicide into the soil prior to the emergence of *C. esculentus* (normally 7 - 10 days after ploughing). These conditions are more likely to occur during the latter half of the planting season (November). More rain is required on heavier soils to obtain good results. This is the reason for poor control which is sometimes obtained on turf soils.
- Rainfall following herbicide application but before emergence of *C. esculentus* is necessary for optimum *C. esculentus* control. For this reason application of **FALCON GOLD** should be made at/or immediately after planting into moist soil.
- When planting into dry soil (insufficient moisture for *C. esculentus* germination) application should be timed as close as possible to, but definitely before the first rains.

6. DIRECTIONS FOR USE: Use only as indicated.

6.1 Compatibility

The compatibility of **FALCON GOLD** with other products may be influenced by the formulation of the products involved as well as the quality of the water. Since the formulation of other products may change without the knowledge of Syngenta and the quality of water may vary from farm to farm, a physical compatibility test should always be carried out prior to application.

FALCON GOLD is compatible with GESAPAX® 500 SC (L2784), SENCOR® 480 SC (L2827), VELPAR 75 DF (L5432), GRAMOXONE® (L1174), DIURON 800, MCPA and 2,4-D amine as recommended on this label.

6.2 Mixing Instructions

Replace cap after use.

- Half-fill the spray tank with water, then pour the required amount of **FALCON GOLD** into the spray tank while the water is being stirred. Top-up with water to the final volume required.
- When **FALCON GOLD** is tank mixed with SENCOR 480 SC, VELPAR 75 DF, GESAPAX 500 SC, DIURON 800 SC or 2,4 - D amine or MCPA as recommended, these compounds should be added to the water first. **FALCON GOLD** should be added last, just before the required volume is reached. When GRAMOXONE is included in a tank mixture it should be added last, only after all the other products have been added and properly mixed, just prior to the final volume being obtained.

Ensure thorough agitation of the mixture in the tank during mixing and spraying.

Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank.

6.3 Application Techniques

6.3.1 Ground application

FALCON GOLD may be applied with any medium- or high-volume sprayer properly calibrated and which is equipped with an efficient agitation mechanism. Choice and arrangement of fan type spray nozzles should be such as to ensure even distribution and optimal recovery of the herbicide. The recommended amount of **FALCON GOLD** should be applied in at least 200 ℓ water/ha.

6.3.2 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 be met:

a) Application parameters:
(Pre-emergence)

- **Volume:** A volume of 30 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 20 - 30 droplets/cm².
- **Droplet size:** A droplet spectrum with a VMD of 350 - 400 microns. 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 set-up 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.
- Aerial application of this product must not be done under turbulent, unstable conditions during the heat of the day when rising thermals and downdraughts 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.
- **FALCON GOLD** and **FALCON GOLD** plus GESAPAX 500 SC may be applied aerially provided that the spray mixture is distributed evenly over the target area and the loss of spray material during application is restricted to a minimum.

It is essential to obtain assurance from the aerial spray operator that the above requirements are met.

6.4 Application Rates

SUGAR CANE

Pre-emergence application

- Apply 1 - 1.6 ℓ/ha **FALCON GOLD** on all soil types as a pre-emergence treatment. The higher rate is recommended on soils with more than 35% clay and on all soil types where *P. maximum* is a problem and/or for improved control of *C. esculentus* and/or for longer residual control.
- Apply **FALCON GOLD** at 2 ℓ/ha if the soil organic matter content exceeds 1%, and the clay content exceeds 35%.
- Because it is not always possible to apply the herbicide prior to weed emergence, it is recommended to add 1.5 ℓ/ha GRAMOXONE to the above-mentioned **FALCON GOLD** spray mixture where weeds have started to emerge.
- To obtain good broadleaf weed control, it is recommended to add GESAPAX 500 SC at a rate of 2 - 3 ℓ/ha to the **FALCON GOLD**. The lower rate (2 ℓ/ha) is recommended for light to medium soils and the higher rate (3 ℓ/ha) for medium to heavy soils. Good control of broadleaf weeds can also be obtained by adding VELPAR 75 DF to **FALCON GOLD** at the following rates: 0.6 kg/ha (5 - 15 % clay), 0.7 kg/ha (16 - 35% clay) and 0.8 kg/ha (> 35% clay). This combination will only provide good weed control when applied and followed by good rain or irrigation prior to weed emergence. Use VELPAR 75 DF on ratoon cane only. **Do not use VELPAR 75 DF on plant cane.** For full particulars regarding VELPAR 75 DF, consult the relevant label.
- Alternatively, the broadleaf weeds can be controlled post-emergence with MCPA or 2,4-D amine. For full particulars consult the respective labels.

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Post-emergence application

Since **FALCON GOLD** has no post-emergence activity, it will not control emerged weeds. It may, however, be applied post-emergence provided it is applied in mixture

with a suitable post-emergence herbicide, which will kill the emerged weeds. Such treatments are recommended below:

No.	Treatment	Dosage
1	FALCON GOLD plus GESAPAX 500 SC plus GRAMOXONE	Apply per hectare: <ul style="list-style-type: none"> 1 - 1.6 ℓ FALCON GOLD in tank mix with 2 - 3 ℓ GESAPAX 500 SC plus 1.5 ℓ GRAMOXONE. Do not add a surfactant to this treatment.
2	FALCON GOLD plus GESAPAX 500 SC	Apply per hectare: <ul style="list-style-type: none"> 1 - 1.6 ℓ FALCON GOLD in tank mix with 6 ℓ GESAPAX 500 SC. Add a non-ionic surfactant at a rate of 0.2% by volume.
3	FALCON GOLD plus GESAPAX 500 SC plus MCPA or 2,4 -D Amine	Apply per hectare: <ul style="list-style-type: none"> 1 - 1.6 ℓ FALCON GOLD in tank mix with 4 - 5 ℓ GESAPAX 500 SC plus 3.5 ℓ MCPA - potassium salt (400 g ae/ℓ) or 3 ℓ of 2,4 - D amine (480 g ae/ℓ). Add a non-ionic surfactant at a rate of 0.2% by volume.
4	FALCON GOLD plus DIURON 800 SC plus GRAMOXONE	Apply per hectare: <ul style="list-style-type: none"> 1 - 1.6 ℓ FALCON GOLD in tank mix with 2 - 2.5 ℓ DIURON 800 SC plus 1.5 ℓ GRAMOXONE. Do not add a surfactant to this treatment.
5	FALCON GOLD plus SENCOR 480 SC plus GRAMOXONE	Apply per hectare: <ul style="list-style-type: none"> 1.0 - 1.6 ℓ FALCON GOLD in tank mix with 2 ℓ SENCOR 480 SC plus 1.5 ℓ GRAMOXONE. Do not add a surfactant to this treatment. SENCOR 480 SC should only be used on soils of between 6 - 35% clay.

Important:

- All five above-mentioned post-emergence treatments should be applied no later than the 3-leaf stage of the grass weeds.
- Treatments 1, 4 and 5, which contain GRAMOXONE, may be applied up to the 3-leaf stage of the crop.
- Treatment 2, which contains only **FALCON GOLD** and GESAPAX 500 SC, may be made by means of an overhead application, up to the 5-leaf stage of the crop. After the 5-leaf stage the spray must be directed between the sugarcane rows.
- Treatment 3 which contains either MCPA or 2,4 -D amine, should preferably be directed between the sugarcane rows. After the 5-leaf stage of the crop the spray must be directed between the sugarcane rows.
- The rate of **FALCON GOLD** in all five above-mentioned treatments and the rates of GESAPAX 500 SC in treatment 1 should be selected according to the directions under pre-emergence application.
- The rate of GESAPAX 500 SC in treatment 3 should be

selected according to the density of the grass infestation and the prevailing climatic conditions.

- Treatments 2 and 3 may not always give satisfactory control of *P. maximum*.
- Use the higher dosage rate of DIURON 800 SC in treatment 4 for longer residual control.
- Apply **FALCON GOLD** at 2 ℓ/ha if the soil organic matter content exceeds 1% and the clay content exceeds 35%.

Eucalyptus SPP. AND PINE PLANTATION

- FALCON GOLD** can be applied immediately after transplanting of the young trees on a well-prepared weed-free seedbed.
- Should weeds have emerged at the time of planting it is recommended that a tank mix of GRAMOXONE and **FALCON GOLD** be applied prior to planting.
- Apply GRAMOXONE at the rates as recommended by the manufacturer. The GRAMOXONE will kill the emerged weeds and create a pre-emergence situation for **FALCON GOLD** to act effectively.
- If grass weeds have emerged after the trees have been planted, the **FALCON GOLD** application may be followed one (1) week later by AGIL® 100 EC (L4694) or a similar compound as recommended by the manufacturer, to kill the emerged grasses. The following **FALCON GOLD** rates are recommended:

Application rates of FALCON GOLD:

Soil type	% Clay	FALCON GOLD (ℓ/ha)
Sand/loamy sand/sandy loam	0 - 20	1.0
Sandy clay loam	21 - 30	1.3
Sandy clay loam/sandy clay	> 30	1.6 - 2.0

Use the higher rate where the soil organic matter content exceeds 1%.

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