

Gardo[®] Gold

syngenta.

Reg. No. **L7736** Act No. 36 of 1947 **N-AR 1007** (Namibia)

A suspension concentrate herbicide in combination with CALLISTO for selective early post-emergence control of most annual grasses and broadleaf weeds in maize.

GROUP	15 5	HERBICIDE
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Active ingredients:

s-metolachlor (α-chloroacetamide).. 312,5 g/l
terbutylazine (triazine)..... 187,5 g/l

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WARNING

Hazard statements: May cause an allergic skin reaction. Causes serious eye irritation. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long-lasting effects.

Precautionary statements: Keep out of reach of children.
Prevention: Do not breathe dust/fumes/gas/mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection. Do not eat, drink, or smoke when using this product. **Response:** If on skin, wash with soap and plenty of water. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Collect spillage. If skin or eye irritation persists, get medical advice/attention. **Storage:** Store locked-up. **Disposal:** Dispose of contents/container in accordance with local regulation.

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1. WARNINGS:

Hazard statements: May cause an allergic skin reaction. Causes serious eye irritation. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long-lasting effects.

- Handle with care.
- Poisonous if swallowed.
- 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:** Call a doctor and present this label.
- **Re-entry:** Do not enter treated area within one (1) day after application unless protective clothing is worn.
- **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 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: Keep out of reach of children.
Prevention: Do not breathe dust/fumes/gas/mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection. Do not eat, drink, or smoke

when using this product. **Response:** If on skin, wash with soap and plenty of water. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Collect spillage. If skin or eye irritation persists, get medical advice/attention. **Storage:** Store locked-up. **Disposal:** Dispose of contents/container in accordance with local regulation.

- 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, applying, or before washing hands and face.
- Do not mix and load within at least 15 meters from boreholes, streams, rivers and dams.
- Do not apply within at least 15 meters from boreholes, streams and rivers.
- Do not apply within 60 meters from dams.
- Ensure that no back siphoning to boreholes or dams takes place when product is applied through the irrigation system.
- Avoid drift of 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 content of the spray tank before destroying the container in the prescribed manner.
- Do not use the empty container for any other purpose.

First Aid and Medical Treatment

If poisoning is suspected stop working immediately and call a doctor. Remove patient to a well-ventilated room or to fresh air. In case of contact with skin, remove clothing and wash the patient or affected body parts thoroughly with soap and water. Rinse eyes with lots of fresh and clean water for at least 15 minutes. If product has been ingested induce vomiting, provided the patient

is conscious, and administer a large quantity of activated medical charcoal. If inhaled move to clean air. If swallowed, repeatedly administer medicinal charcoal in plenty of water. Seek medical advice immediately if a large volume of concentrate was ingested.

Never give anything by mouth to an unconscious person.

Note to doctor: No specific antidote is known – treat symptomatically.

3. RELEVANT SUBSTANCES:

Chemical name	
S-metolachlor	
Classification	Concentration (% w/w)
Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10	≥ 25 - < 30
Chemical name	
terbuthylazine (ISO)	
Classification	Concentration (% w/w)
Acute Tox. 4; H302 STOT RE 2; H373 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10	≥ 10 - < 20
Chemical name	
1,2-benzisothiazol-3(2H)-one	
Classification	Concentration (% w/w)
Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 M-Factor (Acute aquatic toxicity): 1	≥ 0,025 - < 0,05

4. RESISTANCE MANAGEMENT:

GARDO GOLD is a group code 15 and 5 herbicide. Any weed population may contain individuals naturally resistant to **GARDO 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. These resistant weeds may not be controlled by **GARDO GOLD** or any other group code 15 and 5 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. USE RESTRICTIONS:

Do not apply **GARDO GOLD** to inbred parent plants of maize hybrids or to experimental or newly released cultivars without first consulting the manufacturer or seed supplier.

To avoid injury to follow-up crops the following waiting periods should be observed:

Maize, grain sorghum and sugarcane	nil
Grain sorghum	12 months
Groundnuts, soybeans, dry beans, sunflowers, potatoes, forage sorghum and small grains	18 months
All other crops	24 months (a test planting is nevertheless recommended)

Important: The above waiting periods are valid only if the correct dosage rate of **GARDO GOLD** according to soil type was applied and normal or above average rainfall occurred after **GARDO GOLD** application. Where GESAPRIM SUPER (L3914) has been added to **GARDO GOLD** the waiting periods as given on the GESAPRIM SUPER label should be adhered to.

Warning: Possible damage to triazine sensitive crops

- Where soils have been treated with lime to correct the soil pH, the possibility of crop damage increases dramatically in fields where triazines were previously applied. This is due to the triazine molecules being replaced on the clay complex with calcium cations and the triazine thus becoming more available in the soil-water complex.
- No triazine sensitive crops should be planted in the season after the soil pH adjustment has been done with lime. This applies even if triazines were used at crop rotation rates in previous years. Only maize should be planted in the season directly after soil pH adjustment with lime.
- Triazine sensitive crops include all broadleaf crops e.g., different bean crops, sunflowers and all cereals e.g., wheat.
- These warnings however do not guarantee that no damage would be experienced to even the following maize crop as large volumes of previously applied triazines might now be available depending on the volume of lime applied and the rainfall experienced.

Warning: Possible increased efficacy, phytotoxicity and residual action

- Increasing the soil pH levels above 7 could produce conditions for increased efficacy and reduced selectivity. This increased pH may also result in increased soil residual action by certain herbicides influencing the choice of following crops especially under irrigation.
- In situations where pH adjustments has been done, take

care when sulphonyl urea herbicides, triazolopyrimidine sulfonanilide herbicides and imidazolinone herbicides, which are all sensitive to soil pH fluctuations, have been used or are about to be used.

Contact your local SYNGENTA representative to discuss crop rotation and crop protection programs to follow before embarking on any pH adjustment program.

6. DIRECTIONS FOR USE: Use only as indicated.

6.1 Compatibility

The compatibility of **GARDO 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.

GARDO GOLD is compatible with AGRAL 90 (L2967), BREAKTHRU (L5895), CALLISTO (L6795), COMPLEMENT SUPER (L8169), GESAPRIM SUPER (L3914), TOUCHDOWN FORTE HITECH (L7305), TRONIC (L3685), PENETREX (L4914) and SOLITAIRE (L6962).

6.2 Mixing Instructions

Shake well before use. Replace cap after pouring.

- Ensure the sprayer is clean and not contaminated.
- Calculate carefully the required amount of spray mixture in order to prevent any left over in the spray tank after treatments.
- Fill half of the spray tank with clean water, start agitation, add the calculated and measured quantity of product and continue to refill the spray tank with agitation.
- Continue agitation during mixing and application to maintain a uniform spray mixture. Add the CALLISTO first to the water.
- Then add the other suspension concentrate **GARDO GOLD** and only thereafter the emulsifiable concentrates (EC)
- Lastly, add the adjuvant and then continue to fill the tank to the required level with water while agitating.
- When TOUCHDOWN FORTE HITECH is applied with **GARDO GOLD** plus CALLISTO, the TOUCHDOWN FORTE HITECH should be added to the spray mixture last. Fill the spray tank then to the required volume with water.
- Ensure continuous agitation whilst the spray tank is filled with product and water as well as when applying.
- Tank mixtures should be applied immediately and should not be allowed to stand in the spray tank for extended periods.

6.3 Application Techniques

6.3.1 Ground application

Spray equipment

- For the application of **GARDO GOLD** tractor boom

sprayers are recommended. Stop spraying at wind speeds higher than 5 m/s.

- All application equipment has to be properly calibrated before use, with regard to forward speed, flow rate and evenness of distribution.
- With tractor boom sprayers volume rates of 200 - 400 ℓ/ha are best.

Rinsing

- Rinse empty containers three (3) times and add the rinsate to the spray mixture.
- Flush the sprayer with clean water after application or at the end of the day by spraying the rinsate at a dilution rate of at least 1:10 (spray mixture: rinsate) on the crop. Also clean the filters.

Timing

- Use as indicated on the CALLISTO label or as described in 7.1 of this label.

7. APPLICATION RATES:

7.1 MAIZE - Post-emergence application

- **GARDO GOLD** plus CALLISTO must be applied post-emergence when the target grasses are smaller than the 2 - 3-leaf stage; and broadleaf weeds are smaller than the 2 - 6-leaf stage.
- **Recommended adjuvants:** In all post-emergence applications of CALLISTO plus **GARDO GOLD** an adjuvant must be used. The following adjuvants are recommended:
 - AGRAL at 200 ml/100 ℓ spray volume
 - BREAKTHRU at 50 ml/100 ℓ spray volume
 - COMPLEMENT SUPER at 100 ml/ha
 - PENETREX at 500 ml/100 ℓ spray volume
 - SOLITAIRE at 100 ml/100 ℓ spray volume
 - TRONIC at 500 ml/ha
- This post-emergence application should be preceded by a pre-emergence application of CALLISTO, DUAL GOLD, GARDOMIL GOLD, GESAPRIM 90 WG or GESAPRIM SUPER as indicated on the registered labels.
- **GARDO GOLD** can be applied in tank mixes with CALLISTO and TOUCHDOWN FORTE HITECH on glyphosate tolerant maize to provide knock-down and residual control.
- Any individual plants that do not contain the glyphosate tolerant gene would die when sprayed with glyphosate based products e.g., TOUCHDOWN FORTE HITECH. The utmost care should be taken not to apply this tank mixture to non-glyphosate tolerant maize. Follow the label instructions for the application of this tank mixture to glyphosate tolerant maize as described on the TOUCHDOWN FORTE HITECH label.
- When tank mixing **GARDO GOLD** with CALLISTO and TOUCHDOWN FORTE HITECH, ammonium sulphate e.g., VELOCITY GLYFO must be used to correct the water quality status of the water; no adjuvants may be used; no other triazine may be added to this tank mixture and the TOUCHDOWN FORTE HITECH and CALLISTO labels should be followed carefully.
- **GARDO GOLD** plus CALLISTO may not be applied with any other glyphosate containing product other than

CALLISTO 104 mℓ/ha		
Plus GARDO GOLD 416 - 1 562 mℓ/ha		Plus a recommended adjuvant
Week control	Botanical name	common name
4	<i>Amaranthus hybridus</i>	common pigweed
4	<i>Crotalaria sphaerocarpa</i>	mealie <i>Crotalaria</i>
4	<i>Galinsoga parviflora</i>	gallant soldier
4	<i>Hibiscus trionum</i>	bladder weed
4	<i>Tagetes minuta</i>	khaki weed
4	<i>Xanthium strumarium</i>	cocklebur

CALLISTO 104 mℓ/ha		
Plus GARDO GOLD 624 - 1 562 mℓ/ha		Plus a recommended adjuvant
Week control	Botanical name	Common name
The above-mentioned weeds plus		
4	<i>Cleome monophylla</i>	spindlepod
4	<i>Datura ferox</i>	large thorn apple
4	<i>Datura stramonium</i>	thorn apple

CALLISTO 156 mℓ/ha		
Plus GARDO GOLD 624 - 1 562 mℓ/ha		Plus a recommended adjuvant
Week control	Botanical name	Common name
The above-mentioned weeds plus		
8	<i>Bidens bipinnata</i>	Spanish blackjack
8	<i>Bidens pilosa</i>	blackjack
8	<i>Datura ferox</i>	large thorn apple
8	<i>Galinsoga parviflora</i>	gallant soldier
8	<i>Tagetes minuta</i>	khaki weed

CALLISTO 156 mℓ/ha		
Plus GARDO GOLD 938 - 1 562 mℓ/ha		Plus a recommended adjuvant
Week control	Botanical name	Common name
The above-mentioned weeds plus		
4	<i>Citrullus lanatus</i>	bitter apple

CALLISTO 208 mℓ/ha		
Plus GARDO GOLD 832 - 1 562 mℓ/ha		Plus a recommended adjuvant
Week control	Botanical name	Common name
The above-mentioned weeds plus		
4	<i>Commelina benghalensis</i>	benghal wandering Jew
4	<i>Ipomoea purpurea</i>	common morning glory

4	<i>Tribulus terrestris</i>	dubbeltjie
8	<i>Cleome monophylla</i>	spindlepod
8	<i>Hibiscus trionum</i>	bladder weed

CALLISTO 208 mℓ/ha		
Plus GARDO GOLD 1 242 - 1 562 mℓ/ha		Plus a recommended adjuvant
Week control	Botanical name	Common name
The above-mentioned weeds plus		
4	<i>Digitaria sanguinalis</i>	crab fingergras
4	<i>Eleusine indica</i>	goose grass
8	<i>Amaranthus hybridus</i>	common pigweed
8	<i>Commelina benghalensis</i>	Benghal wandering Jew
8	<i>Ipomoea purpurea</i>	common morning glory
8	<i>Tribulus terrestris</i>	dubbetjie

CALLISTO 260 mℓ/ha		
Plus GARDO GOLD 1 040 - 1 562 mℓ/ha		Plus a recommended adjuvant
Week control	Botanical name	Common name
The above-mentioned weeds plus		
4	<i>Hibiscus cannabinus</i>	kenaf
8	<i>Citrullus lanatus</i>	bitter apple
8	<i>Digitaria sanguinalis</i>	crab fingergrass
8	<i>Eleusine indica</i>	goose grass

CALLISTO 260 mℓ/ha		
Plus GARDO GOLD 1 562 mℓ/ha		Plus a recommended adjuvant
Week control	Botanical name	Common name
The above-mentioned weeds plus		
8	<i>Crotalaria sphaerocarpa</i>	mealie <i>Crotalaria</i>
Up to 80% suppression of the following weeds		
8	<i>Chloris virgata</i>	feathertop Chloris
8	<i>Cyperus esculentus</i>	yellow nutsedge
8	<i>Hibiscus cannabinus</i>	kenaf
8	<i>Urochloa panicoides</i>	herringbone grass
8	<i>Xanthium strumarium</i>	cocklebur

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