

Reg. No. **L9230** Act No. 36 of 1947

syngenta.

A water soluble post-emergent herbicide for the control of annual broadleaf- and grass weeds in Clearfield® Sunflowers.

GROUP

2 HERBICIDE

Active Ingredients Imazapyr (imidazolinone)........ 15 g/ ℓ Imazamox (imidazolinone)....... 33 g/ ℓ

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WARNING

Hazard statements: Suspected of damaging the

unborn child. Very toxic to aquatic life with long-lasting effects.

Precautionary statements: If medical advice is needed, have product container or label at hand. Keep

needed, have product container or label at hand. Keep out of reach of children. Read label carefully and follow all instructions. **Prevention:** Wear protective gloves, protective clothing and eye- or face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Collect spillage. If exposed or concerned, get medical attention. **Storage:** Store locked-up. **Disposal:** Dispose of contents and container to hazardous or special waste collection point.

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



1. WARNINGS:

Hazard statements: Suspected of damaging the unborn child. Very toxic to aquatic life with long-lasting effects.

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

CLEARFIELD® SUNFLOWER...... 70 days

- Handle with care
- Poisonous when swallowed.
- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Store in a cool place away from food, feeds and seed.
- Keep out of reach of children, uninformed persons and animals.
- To avoid injury to other crops, spray equipment used for CAPTORA™ applications must be drained after use and thoroughly cleaned with water before being used to apply other products to crops.
- Use only on qualified CLEARFIELD® Sunflower varieties as registered by the relevant seed companies.

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: Prevention: If medical advice is needed, have product container or label at hand. Keep

out of reach of children. Read label carefully and follow all instructions. Wear protective gloves, protective clothing and eye- or face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Collect spillage. If exposed or concerned, get medical attention. **Storage:** Store locked-up. **Disposal:** Dispose of contents and container to hazardous or special waste collection point.

- Do not inhale fumes or spray mist.
- Wash with soap and water after use and accidental skin contact.
- Do not eat, drink, or smoke while mixing or spraying unless having washed hands and face.
- Avoid spray drift onto other crops, grazing, rivers, dams and any area not under treatment.
- Thoroughly wash and rinse spray equipment after use and dispose of wash water where it will not contaminate crops, grazing, rivers and dams.
- Do not apply where the roots of desirable plants can absorb the chemical.
- TRIPLE RINSE empty container in the following manner: 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.
- Do not re-use the empty container for any other purpose.
- Prevent contamination of food, feed, drinking water and eating utensils.

First Aid and Medical Treatment

- **Eye contact:** Wash affected eyes for at least 15 minutes under running water with eyelids held open.
- Ingestion: Immediately rinse mouth and then drink 200
 300 mℓ water, seek medical attention.
- **Skin contact:** Remove contaminated clothing. Wash thoroughly with soap and water.
- **Inhalation:** Keep patient calm, remove to fresh air, seek medical attention.

Note to doctor: Treat according to symptoms

(decontamination, vital functions), no known specific antidote.

3. RELEVANT SUBSTANCES:

Chemical name		
imazamox (ISO); (RS)-2-(4-isopropyl-4-methyl-5-oxo- 2-imidazolin-2-yl)-5-methoxymethylnicotinic acid		
Classification	Concentration (% w/w)	
114311-32-9	≥ 1,38	

4. RESISTANCE MANAGEMENT:

CAPTORA™ is a group code 2 herbicide, belonging to the Imidazolinone group of herbicides. The product has the acetolactate-synthase (ALS) inhibitor mode of action. In any weed population there are certain weed biotypes that are naturally resistant to herbicides with specific modes of action. The repeated and possibly uninterrupted use of herbicides with the same mode of action, cause these naturally occurring biotypes to become dominant in numbers over time. These resistant weeds are not controlled and the result is experienced as poor weed control, although the herbicide may have been applied at the correct dosage rate and timing. This is also true for CAPTORA™ and other ALS-inhibiting herbicides. Therefore, BASF SA (Pty) Ltd cannot be held responsible for poor control of such resistant weeds, or any losses that may result from the use of CAPTORA™.

The following actions are recommended to delay the selection of resistant weeds:

- It is important to understand and know the modes of action of the different herbicides available.
- Apply only one (1) application of CAPTORA™ per season.
- If any further herbicide applications are required during this season on this land, use herbicides with a different mode of action.

For specific information on resistance management contact the registration holder, BASF SA (Pty) Ltd or the distributor SYNGENTA SA (Pty) Ltd.

5. USE RESTRICTIONS:

- CAPTORA™ can only be used on CLEARFIELD® Sunflower hybrids. Non-CLEARFIELD® hybrids of Sunflower will die if treated with CAPTORA™. (For information on where to obtain CLEARFIELD® Sunflower, please contact your agent or nearest Syngenta SA office).
- Avoid the application of CAPTORA™ to soils with pH (KCl) below 4.5 or above 7.2.
- Avoid overlaps when spraying.
- **DO NOT** use any additional wetters, spreaders or other adjuvants as **CAPTORA™** has already been formulated with optimised amounts of surfactants. The only exception is the addition of Imiboost, refer to 6.1 GENERAL.
- Do not apply when wind velocity exceeds 15 km/h, when temperature inversion conditions exist or when the spray mist may drift onto sensitive crops. Ideally a buffer zone should be established between the area to be sprayed and sensitive crops.
- Sensitive crops include, but are not limited to vegetable crops, cereal and other grain crops and sunflower varieties other than CLEARFIELD® Sunflower.

To avoid possible damage to follow-up crops, the following waiting periods should be taken into consideration after the application of **CAPTORA™**. A test planting is nevertheless recommended.

Crop	Waiting period
CLEARFIELD® Sunflower	None
Wheat	4 months
Maize All maize producing areas (including irrigation)	10 months
All other crops	20 months

NOTE: The above-mentioned waiting periods will only be valid if the correct quantity of CAPTORA™ has been applied and an average or above average rainfall (with a minimum of 350 mm) between application and planting of the following crop has been recorded. When the minimum rainfall, as indicated above, has not been recorded for the season of application, extend the period above by an extra 12 months. Consult the supplier in the event of any uncertainty.

6. DIRECTIONS FOR USE: Use only as indicated.

6.1 General

- CLEARFIELD® is an internationally registered trade mark belonging to BASF and appears in a registered logo including the words "Clearfield® Production System".
- The "Clearfield® Production System" is a combination of agronomically advanced seeds (natural selection) and custom designed herbicides. The CLEARFIELD® name and logo link the seed and herbicide together. These plants are not GMO's.
- The mode of action of **CAPTORA™** involves the uptake by the plant foliage, which is followed by translocation to the growth points. After **CAPTORA™** application, susceptible weeds may show yellowing and weed growth will stop. Susceptible weeds stop growing and either die or are not competitive with the crop.
- CAPTORA™ must only be applied to CLEARFIELD® Sunflower after the 2-leaf stage of the crop (ideally at four leaves). However, do not apply when the leaf canopy of the crop is too large as this could intercept the spray and prevent the herbicide from reaching the targeted weeds.
- Application should be completed by 32 days after planting.
- The weeds must be between the 2- and 6-leaf stage at application and must be actively growing. They should not be under stress (e.g., drought, waterlogged or nutrient imbalances) during application, as this can limit the uptake and translocation of the product, resulting in poor weed control.
- Adequate soil moisture is important for optimum CAPTORA™ activity.
- In regions where water quality is known to be poor, Imiboost can be used to ameliorate the water before adding CAPTORA™.
- Ensure thorough coverage and wetting of the weeds
- Important: Only one (1) application of CAPTORA™ may be made per growing season. In the situation where CLEARFIELD® Sunflowers are replanted for any reason and where CAPTORA™ was applied to the first planting, DO NOT re-apply CAPTORA™ to the second planting.

A shallow cultivation of the soil to no deeper than 5 cm is suggested, so that the option of a pre-emergent grass herbicide can be used at re-planting (refer to the appropriate labels for full recommendations).

• A transient yellowing of crop plants (so-called "yellow flash"), or shortening of the internodes, may occur 5 - 8 days following a CAPTORA™ application. However, no adverse effects on the yield will occur. These effects can be more pronounced if Imiboost has been included in the tank mixture and if crops are growing under stressful environmental conditions. Therefore, ensure that the best agronomic practices are followed including soil preparation, adequate fertilisation and disease control in the seedling phase.

6.2 Compatibility

CAPTORA™ is compatible with Imiboost. Do not mix **CAPTORA™** with any organophosphate or carbamate insecticides.

6.3 Mixing Instructions

- Three-quarter fill the spray tank with clean water.
- Measure the required volume of CAPTORA™ and premix this with at least 10 ℓ water before adding to the spray tank. If any other product is to be mixed with CAPTORA™ pre-mix the required volume of product in similar fashion.
- Agitate the water in the spray tank and, if necessary, add Imiboost first, allowing for sufficient mixing before adding the CAPTORA™.
- Fill the spray tank with water to the required level while maintaining agitation to ensure thorough mixing of the spray mixture before spraying commences.
- Maintain agitation while spraying.
- The prepared spray mixture must not be left in the spray tank for any length of time, e.g., overnight.

All spray applications must be made with suitable equipment that is in good working order and correctly calibrated to give the desired coverage for that particular method of application.

Crop	Dosage ℓ/ha	Directions for application
Clearfield® SUNFLOWER	1 ℓ	• CAPTORA™ SHOULD ALWAYS BE PART OF A PROGRAM
sente		 APPLICATION. Always start the program by using a pre-emergent grass herbicide, namely DUAL® GOLD (L5749) or METAGAN® GOLD (L5748). Best amorgant application
5)	08	 CAPTORA™ must be applied at the 2 - 6-leaf stage of the weeds. Any grass weeds must be treated before tillering starts. The sunflower seedlings must be between the 2-

Crop	Dosage ℓ/ha	Directions for application
Clearfield® SUNFLOWER	1 €	and 6-leaf stages. It is therefore important to apply when most weeds have emerged together with consideration of the crop stage, but do not delay application beyond this time as reduced efficacy can be expected for older weeds. THE TIMING OF THIS APPLICATION SHOULD BE COMPLETED BY 32 DAYS AFTER PLANTING.
(6),		Ground application • Apply Captora™ in 150 -
		250 \(\ext{ water/ha.}
	66	Aerial application is not recommended.

TABLE 1: WEEDS CONTROLLED BY CAPTORA™ WHEN APPLIED FOLLOWING THE USE OF A PRE-EMERGENT GRASS CONTROL PRODUCT, NAMELY DUAL® GOLD OR METAGAN® GOLD.

GRASSES		
Botanical name	Common name	
Digitaria sanguinalis	crab finger grass	
Dinebra retroflexa	cat's tail grass	
Dactyloctenium aegyptium	crow foot grass	
Eleusine indica ss africanum	goose grass	
BROADLEAVES		
Botanical name	Common name	
Amaranthus hybridus	common pigweed	
Amaranthus viridus	slender Amarathus	
Chenopodium album	white goosefoot	
Chenopodium carinatum	green goosefoot	
Chenopodium pumilio	clammy goosefoot	
Commelina benghalensis	wandering Jew	
Convolvulus sagittatus	bind weed	
Cucumis myriocarpus	striped wild cucumber	
Datura ferox	large thorn apple	
Datura stramonium	common thorn apple umbrella milkweed	
Euphorbia helioscopia		
Euphorbia heterophylla Hibiscus trionum	painted euphoria	
Portulaca oleracea	4-10	
Richardia brasiliensis	purslane Mexican Richardia	
	tall khaki weed	
Tagetes minuta Tribulus terrestris	1	
Tribulus terrestris	devil thorn	

Also refer to the spectrum of weeds controlled by the preemergent grass control herbicides, mentioned above.

Weed species such as *Bidens* spp., *Datura* spp., *Tagetes minuta*, *Xanthium strumarium* and some others that germinate erratically, even during the latter part of the season, may not be effectively controlled up to harvest.

TABLE 2: SUPPRESSION OF BETWEEN 60 - 90% OF THE FOLLOWING WEEDS WILL BE ACHIEVED WITH CAPTORA™ FOLLOWING THE USE OF THE

REGISTERED PRE-EMERGENT GRASS HERBICIDES NAMELY, DUAL® GOLD OR METAGAN® GOLD.

NAMELY, DUAL® GOLD OR METAGAN® GOLD.		
GRASSES		
Botanical name	Common name	
Panicum schinzii	Sweet buffalo grass	
BROADLEAVES		
Botanical name	Common name	
Acanthospermum hispidum Bidens pilosa Bidens formosa Crotalaria sphaerocarpa Ipomoea purpurea Schkurhia pinnata Xanthium strumarium	upright starbur blackjack cosmos wild lucerne morning glory dwarf marigold large cockle bur	

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