



Calaris[®]

syngenta[®]

GROUP 5 | 27 HERBICIDES

PCS No: 02711 UFI: 4P2F-ECN6-K00D-7FRX

CALARIS[®] is a suspension concentrate formulation containing 330 g/l terbuthylazine and 70 g/l mesotrione.

FOR PROFESSIONAL USE ONLY

To avoid risks to human health and the environment, comply with the instructions for use.

CALARIS[®] is a suspension concentrate formulation containing 330 g/l terbuthylazine and 70 g/l mesotrione.

Warning

Harmful if swallowed.

May cause damage to organs through prolonged or repeated exposure.

Suspected of damaging the unborn child.

Very toxic to aquatic life with long lasting effects.

Keep out of reach of children.

Do not eat, drink or smoke when using this product.

Obtain special instructions before use.

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

Wear protective gloves/ protective clothing/ eye protection/ face protection.

Wash skin thoroughly after handling.

IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell.

IF EXPOSED or concerned: Get medical advice/attention.

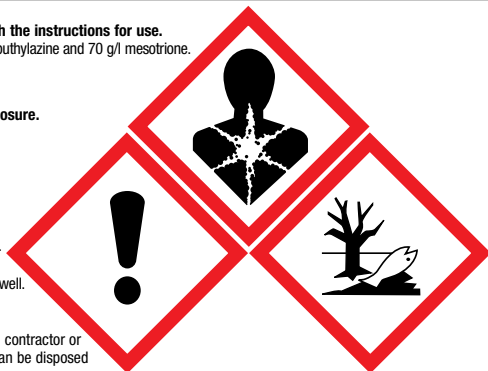
Collect spillage.

Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for triple rinsed empty clean containers which can be disposed of as non-hazardous waste.

A selective herbicide for the control of annual broad-leaved weeds and grasses in forage and grain maize including protected crops grown under plastic.

FOR USE ONLY AS AN AGRICULTURAL HERBICIDE

PLEASE SEE ACCOMPANYING LEAFLET FOR PRODUCT USE DETAILS.



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



Lxxxxxxx IREL/10Z PPExxxxxxx

5 litres

CALARIS

ADDITIONAL PRODUCT SAFETY INFORMATION

(a) Operator protection

WEAR SUITABLE PROTECTIVE GLOVES when handling the concentrate.
FOR USE BY TRACTOR MOUNTED/TRAILED SPRAYERS.

(b) Environmental protection

Do not contaminate water with the product or its container.
Do not clean application equipment near surface water / Avoid contamination via drains from farmyards and roads.

(c) Storage and disposal

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.
RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of safely.
DO NOT RE-USE CONTAINER FOR ANY PURPOSE.

Restrictions

No more than one application is permitted every three years on the same field.
Treatment must not be applied on sands or very light soils.
Residual weed control will be reduced on soils with more than 10% organic matter.
CALARIS contains two active ingredients with different modes of action. Mesotrione is a triketone which disrupts development of plant pigments (4-HPPD inhibitor); terbuthylazine is a triazine which inhibits photosynthesis (photosystem II inhibitor).
Weed control can be reduced if strains of individual weed species develop that are less sensitive to a specific herbicide, or herbicide group.
CALARIS, a formulated mixture of two active ingredients with two different modes of action, will reduce the likelihood of resistance development. There is no known cross resistance between mesotrione or terbuthylazine, or the groups of herbicides to which each belongs.
Furthermore, at the present time, triketones (e.g. mesotrione) are not approved in crops other than maize. There is no similar mode of action in herbicides for other crops and therefore crop rotation will also delay the onset of any resistance to this active ingredient. Where continuous maize is grown, the use of CALARIS for more than two seasons should be avoided.

Crop	Maximum individual dose	Maximum total dose	Maximum number of applications	Latest application time
Forage and grain maize including protected crops grown under plastic	1.5 l/ha	1.5 l/ha	-	Up to 8 leaves unfolded (GS18)

In case of toxic or transport emergency ring +44 (0) 1484 538444 any time.

Authorisation Holder	Marketing Company
Syngenta UK Ltd CPC4, Capital Park, Fulbourn, Cambridge, CB21 5XE Tel: +44 (0)1223 883400	Syngenta Ireland Ltd Block 6, Cleaboy Business Park, Old Kilmeaden Road, Waterford Tel: (051) 377203

*PROTECT FROM FROST.
SHAKE WELL BEFORE USE.*

PROPERTIES OF CALARIS

CALARIS contains mesotrione and terbuthylazine. The uptake is through both the leaves and the root system, thus combining contact action with residual weed control. The product controls a broad spectrum of annual broadleaved weeds and certain grasses. Young weeds are most susceptible to CALARIS.

Crops

For use only as a herbicide for the control of weeds in forage and grain maize including protected crops grown under plastic. Forage and grain maize may be sprayed pre-emergence on crops grown under plastic and from two to eight leaves stage on open ground crops. DO NOT USE on seed crops or on sweet corn varieties.

Spray timing

Always inspect crop and weed growth stage immediately before spraying.
For best results on open ground crops treat young weed seedlings. See weed control tables for application details.

Weather

For the best results CALARIS should be applied to moist soils when used pre-emergence and to actively growing weeds when used post-emergence. Treatment in poor growing conditions or in dry soil may give less reliable control.

Do not spray when the crop foliage is wet.

AGRICULTURAL PRACTICE

It is not recommended to spray crops suffering stress e.g. when in very cold or drought conditions, or when wide temperature fluctuations are expected or excessive rainfall is expected to follow application. Under these adverse conditions mild to moderate chlorosis may be observed on sprayed leaves. This effect is usually transient and does not affect yield.

Take extreme care to avoid drift onto all plants outside the target area, otherwise damage will result.

Ensure that spray swaths are matched accurately and do not overlap.

WEED CONTROL - RATE OF USE

CALARIS contains an adjuvant system and the addition of an adjuvant or a tank mix wetting agent is not recommended.

For pre-emergence use, apply CALARIS at 1.5 litres per hectare.

For post-emergence use, the recommended dose rate is 1.0 to 1.5 litres per hectare depending on the type of weeds present. When applied after crop emergence, the preferred forage and grain maize crop stage is when 2-6 leaves have been formed.

Annual Broad-Leaved Weeds	Dose rate l/ha	Weed growth stage
Fat hen	1.0	Emergence to start of branching (GS20)
Common chickweed	1.0	Emergence to start of flowering (GS25-GS30).
Black nightshade	1.0	Emergence to 6 leaves
Field pansy	1.0	Emergence to 10 leaves

Annual grasses		
Annual meadow grass*	1.5	Emergence up to mid tiller

* moderate control

Application

Good spray cover is essential and care should be taken to ensure that the sprayer has a matched set of nozzles, the machine is correctly calibrated and adjusted to the correct height above the crop.

Preparation of the spray

Shake the CALARIS container before opening.

Half-fill the spray tank with clean water, add the required amount of CALARIS and agitate while filling the tank. RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinsing 3 times. Add washings to sprayer at time of filling and dispose of container safely. Continue agitation during spraying.

Volume of water

Even cover of the weeds is essential.

Use 200 to 300 litres (maximum) of water per hectare. **The lower rate is preferable** but the higher volume may be necessary where there are dense or well developed weed populations.

Application methods

Apply through a conventional field crop sprayer using a pressure of 2-3 bars. Ensure the sprayer is correctly calibrated before use.

Do not leave spray liquid in the sprayer for long periods (i.e. overnight).

Apply using a medium quality spray at a pressure of at least 2 bar. Apply through conventional crop spraying equipment.

After Use

It is important to wash equipment thoroughly after use to remove all traces of CALARIS as even small amounts may cause damage to crops. Rinse inside of tank with clean water using at least one tenth of the spray tank volume. After flushing through pump and spray lines, drain and repeat procedure.

Disposal of spray tank washings should be in accordance with local, state or national legislation.

Perform superficial cleaning of spray equipment in the field. Application liquids and their residues, products and their residues, emptied containers or packs as well as cleaning and rinsing fluids must not be allowed to enter the water. This also applies to indirect introduction through the sewage system, farmyard and road drains or rainwater and wastewater pipes.

FOLLOWING CROPS AND RECULTIVATION

Recultivation

Ploughing is recommended prior to reseeding. Some slight crop effects may be seen soon after emergence, but these are usually transitory in nature. Maize can be reseeded in case of crop failure.

Rotational crops

Autumn

Winter wheat (including durum wheat), winter barley and rye grass can follow a maize crop treated with CALARIS.

Deep ploughing (greater than 15cm) followed by cultivation is necessary before drilling oilseed rape.

Spring

Forage and grain maize, ryegrass, spring wheat and spring barley may be sown in the spring following application of CALARIS. Do not sow spinach. Sugar and fodder beets, peas, beans, lettuce and cabbages in the year following the application of mesotrione.

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