

DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be carefully read in order to obtain safe and successful use of this product.

GENERAL INFORMATION

CALLISTO contains mesotrione a foliar applied herbicide for selective control of annual broad-leaved weeds. The activity of CALLISTO is mostly by foliar uptake and to some extent by soil uptake. CALLISTO is rapidly absorbed through the leaves and moves to the growing point.

Crops

For use only as a herbicide for the control of weeds in forage maize and grain maize. DO NOT USE on forage maize and grain maize seed crops or on sweetcorn varieties.

Spray Timing

Always inspect crop and weed growth stage immediately before spraying.

For best results treat young weed seedlings. See weed control tables for application details.

CONDITIONS FOR USE

Crops

Forage maize and grain maize may be sprayed any time from the two to eight leaf stage.

Weather

For the best results CALLISTO should be applied when the weeds are actively growing i.e. in warm humid weather with adequate soil moisture. Treatment in poor growing conditions or in dry soil may give less reliable control.

Do not spray when weed or crop foliage is wet.

AGRICULTURAL PRACTICE

It is not recommended to spray crops suffering from 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 dicotyledonous plants outside the target area. Take extreme care to avoid drift onto all crops outside the target area, otherwise crop damage will result.

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

RESISTANCE MANAGEMENT

CALLISTO is a 4-HPPD inhibitor, disrupting development of plant pigments which are essential for photosynthesis. This inhibition causes leaf chlorosis and eventual death of sensitive weed species. It's mode of action is different from other herbicide groups, and there is no known cross resistance in weeds which exhibit reduced sensitivity to other herbicides. Weed control may be reduced if strains of individual species less sensitive to CALLISTO develop.

The use of CALLISTO in programmes or tank mixtures with a broad-leaved weed herbicide possessing a different mode of action will reduce the likelihood of resistance developing in broad-leaved weeds e.g. Fat hen, Black nightshade, Common amaranth. At the present time there is no similar mode of action in herbicides for crops other than forage maize and grain maize and therefore crop rotation will also delay the onset of any resistance. Where continuous forage maize and grain maize are grown the use of CALLISTO for more than two seasons should be avoided.

HERBICIDE

WEED CONTROL

Rate of use

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

The recommended dose rate is 0.75 to 1.5 litres per hectare depending on the type of weeds present and on their growth stage.

ANNUAL BROAD-LEAVED WEEDS	DOSE RATE L/HA	WEED GROWTH STAGE
Fat hen	0.75	Emergence to 12 leaves (or 20 cm)
Black nightshade	0.75	Emergence to 10 leaves (or 15 cm)
Common amaranth	0.75	Emergence to 8 leaves (or 10 cm)
Redshank	0.75	Emergence to 6 leaves (or 10 cm)
Common chickweed	0.75	Emergence to 10 cm diameter
Oilseed rape volunteers	0.75	Emergence to 6 leaves
Charlock	0.75	Emergence to flowering
Field pansy	0.75	Emergence to 6 leaves

ANNUAL GRASSES	DOSE RATE L/HA	WEED GROWTH STAGE
Cocksbur grass	1.5	Emergence to 1 tiller

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.

Apply using a medium quality spray (BCPC) at a pressure of at least 2 bar.

Apply through conventional crop spraying equipment.

Preparation of the spray

Shake the CALLISTO container before opening.

Half-fill the spray tank with clean water, add the required amount of CALLISTO and agitate while filling the tank. On emptying the container, 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 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).

After Use

It is important to wash equipment thoroughly after use to remove all traces of CALLISTO 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.

FOLLOWING CROPS AND RECULTIVATION**Recultivation**

Ploughing is recommended prior to reseeded. Some slight crop effects may be seen soon after emergence, but these are usually transitory in nature. Forage and grain maize can be re-seeded immediately in case of crop failure.

Rotational cropsAutumn

Winter wheat (including durum wheat), winter barley and ryegrass can follow a forage maize and grain maize crop treated with CALLISTO.

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

Spring

Forage maize and grain maize, ryegrass, spring wheat and spring barley may be sown in the spring following application of CALLISTO, do not sow any other crop at this time.

PROTECT FROM FROST.

SHAKE WELL BEFORE USE.

HERBICIDE

SAFETY PRECAUTIONS

(a) Operator protection

Engineering control of operator exposure must be used where reasonably practicable in addition to the following Personal Protective Equipment:

WEAR SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when handling the concentrate.

WEAR SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces.

However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

WASH SPLASHES from skin immediately.

WASH HANDS AND EXPOSED SKIN before meals and after work.

(b) Environmental protection

To protect aquatic organisms respect an unsprayed buffer zone distance to water bodies in line with LERAP requirements.

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.



DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5 m of the top of the bank of a static or flowing water body, unless a Local Environmental Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1 m of the top of a ditch which is dry at the time of application. DO NOT ALLOW DIRECT SPRAY from hand-held sprayers to fall within 1 m of the top of the bank of a static or flowing water body. Aim spray away from water.

This product qualifies for inclusion within the Local Environmental Risk Assessment for Pesticides (LERAP) scheme. Before each spraying operation from a horizontal boom sprayer, either a LERAP must be carried out in accordance with CRD's published guidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for three years.

(c) Storage and disposal

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.

KEEP IN ORIGINAL CONTAINER tightly closed in a safe place.

EMPTY CONTAINER COMPLETELY, and dispose of safely.

CALLISTO



IRRITANT



**DANGEROUS
FOR THE
ENVIRONMENT**

Contains 100 g/l (9.1% w/w) mesotrione as a suspension concentrate.

IRRITATING TO EYES.

VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

Keep out of reach of children.

Keep away from food, drink and animal feeding stuffs.

When using do not eat, drink or smoke.

This material and its container must be disposed of in a safe way.

Use appropriate containment to avoid environmental contamination.

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

THE (COSHH) CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH REGULATIONS MAY APPLY TO THE USE OF THIS PRODUCT AT WORK

IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL HERBICIDE

For use on: Forage and grain maize

Maximum individual dose: 1.5 litres/hectare

Maximum number of treatments: 1 per crop

Latest time of application: 8 leaves stage

READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.

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In case of toxic or transport emergency ring 01484 538444 any time