

Herbicide for the control of grass weeds and broad leaf weeds in sugarcane (and suppression of *Cyperus* spp.)

Active Ingredients; Trifloxysulfuron sodium 1.85%
Ametryn and related products 73.15%

Formulation; Water dispersible granules

MODE OF ACTION

KRISMAT is a selective herbicide for the control of grasses and dicots as well as *Rottboellia* and *Cyperus* in sugarcane. It is absorbed by weeds via the leaves but under good moisture conditions a substantial amount is absorbed by the weeds from the soil via the roots. KRISMAT has two modes of action: ALS inhibition by trifloxysulfuron and photosynthesis inhibition by ametryn.

SPECTRUM OF ACTIVITY

KRISMAT is active against a broad spectrum of grasses and dicots as well as against *Rottboellia* and *Cyperaceae* when applied post emergence in sugarcane at a rate of 2-2.5 kg/ha.

Susceptible weeds (>90% control)

Grass weed species

Brachiaria decumbens
Brachiaria plantaginea **
Brachiaria platyphyla
Digitaria horizontalis ***
Echinochloa colona
Eleusine indica
Leptochloa sp.
Panicum dichotomiflorum
Panicum fasciculatum
Rottboellia exaltata
Sorghum halepense ***

Broad leaves

Altenanthera sp.
Amaranthus sp.
Bidens pilosa
Borreria sp.
Commelina sp.
Croton hirta
Galinsoga sp.
Ipomoea sp.
Nicandra sp.
Polygonum sp.
Portulaca sp.
Sida grandifolia
*Euphorbia heterophylla**

Cyperaceae

Cyperus esculentus
Cyperus rotundus ****
Fimbrostylis milliacea

* When < 6 leaves
** When max 4 tillers
*** When max 4 leaves
**** Partial control (suppression)

TOLERANCE

Plant cane is generally more sensitive than ratoon cane. Early transient phytotoxicity may occur after application of KRISMAT. The symptoms are stunting and yellow banding on the leaves having received the spray. If these symptoms appear then they are outgrown within 30 days and yield is not affected.

ACTIVITY

Under very low moisture conditions, KRISMAT only shows moderate activity on weeds, similar to that of other post-emergence standard products.

DIRECTIONS FOR USE

KRISMAT can be used in plant cane as well as ratoon cane. KRISMAT applications should be made to small actively growing weeds up to 10 cm high especially the difficult to control weeds e.g. *Digitaria* or *Euphorbia*. The primary recommendation is to apply KRISMAT early post (see table) in ratoon cane as well as plant cane. KRISMAT applied at full rate can be recommended as a stand alone broad spectrum post-emergence product.

Tank mixes of KRISMAT with other products e.g. DUAL GOLD at 1.0 lt/ha should be restricted to specific weed situations only e.g. control of *Panicum* spp. If specific weed like *Cyperus* have to be controlled KRISMAT can be applied as a sequential application following another herbicide or to be followed by another herbicide. Local testing is necessary before recommendations can be made. **KRISMAT at 2.0 kg/ha** can also be tank mixed with SERVIAN at 50 gm/ha.

CROP	WEEDS	TIMING	RATE KG/HA	APPLICATION METHOD
Sugarcane 20-70 cm	Broad spectrum dicots, grasses including <i>Brachiaria</i>	Early post 4-8 leaves 3-4 tillers	2.0-2.5 with <i>Brachiaria</i>	Post over the top of sugarcane

ADDITIVES

The use of an additive in the spray mixture is required to improve wetting, contact and activity of KRISMAT. Not all additives are optimal for use with KRISMAT. Non-ionic surfactants are generally suitable additives but local conditions (especially dry weather conditions) dictate the final choice of additive types and rate, a low concentration of surfactants (0.2% v/v) is normally sufficient or 100 ml-200 ml/ha

CROP OIL CONCENTRATES SHOULD NOT BE USED WITH KRISMAT OVER THE TOP OF SUGARCANE.

APPLICATION TECHNIQUE

Spray equipment

KRISMAT may be applied with any medium or high volume sprayer, which is capable of adequate coverage and even distribution. Best results are obtained using flat fan-type nozzle with a minimum of 100 lt. spray volume/ha.

AERIAL APPLICATION OF KRISMAT CAN ONLY BE RECOMMENDED AFTER LOCAL TESTING TO AVOID DRIFT TO NEIGHBOURING SENSITIVE CROPS.

MIXING

KRISMAT is a water dispersible granular formulation which mixes easily with water provided the following mixing procedure is followed. The spray tank must be clean, thoroughly rinsed and decontaminated before adding KRISMAT.

- Fill the spray tank quarter to half full with water.
- Start agitation.
- Add the required quantity of KRISMAT directly to the tank. Continue agitation in the spray tank and allow the product to disperse. If tank mix partner is a solid formulation add it next while continuing to agitate.
- While maintaining agitation continue filling the spray tank until it is 3/4 full, add any liquid tank mix partner (as desired) and continue to agitate.
- After topping up the spray tank with water add the appropriate amount of additive.
- Use the KRISMAT preparation within 24 hours. Spray volume 100-400 litres/ha.

COMPATIBILITY

KRISMAT has been tested for physical compatibility with a range of products without problems but local testing is necessary before tank mix recommendations are defined. KRISMAT is compatible with DUAL GOLD, TOUCHDOWN FORTE, LUMAX and SERVIAN.

OPERATOR SAFETY

Avoid any contact of skin, eyes or clothing. Avoid inhalation of dust or spray mist. Do not eat, drink or smoke while handling the product. Wash hands and face before eating, drinking or smoking. If indisposition occurs, stop work, follow First Aid measures, and call a physician. Wear protective clothing and footwear during application. Wash off splashes of concentrate and spray mixture. After work wash entire body thoroughly with soap. Clean protective clothing and shoes before re-use.

NOTICE TO USER

This pest control product is to be used only in accordance with the directions on this label. It is an offence under the Pest Control Products Act to use or store a pest control product under unsafe conditions.

HAZARD CLASSIFICATION: WHO class III

NOTE: Never give anything by mouth to an unconscious patient and never induce vomiting.

ANTIDOTE: No specific antidote is known. Apply symptomatic therapy.

SHelf LIFE: At least two years from date of manufacturing in original unopened containers.

