

**Suspo-Emulsion**

Herbicide for pre and post-emergence control of grasses and broad leaf weeds in sugarcane and maize.

**ACTIVE INGREDIENT CONTENT**

Mesotrione	37.5 g/lit +
S-metolachlor	375 g/lit +
Terbuthylazine	125 g/lit.

**MODE OF ACTION**

LUMAX is a selective herbicide with three active ingredients all with different biochemical modes of action and mechanism of uptake.

Mesotrione acts by blocking the function of the essential plant enzyme HPPD and is taken up by the roots, shoots and leaves of weed seedlings.

S-metolachlor is an inhibitor of cell division and elongation. Mainly taken up by the shoots of germinating seedlings with some uptake via the roots.

Terbuthylazine is an inhibitor of photosynthesis. Mainly taken up by the roots of weed seedlings but some uptake occur via the leaves or shoots.

**SPECTRUM OF ACTIVITY**

LUMAX is active against a wide spectrum of the key grass and broadleaf weeds present in sugarcane and maize. Use rates range from 3.0-4.0 lt/ha depending on weed spectrum.

**Grasses**

Brachiaria platyphylla	Enchioncloa crus-galli
Cenchrus incertus	Eleusine indica
Dactyloctenium aegyptium	Eriochloa spp.
Digitaria spp.	Setaria spp.
Panicum spp.	

**Sedges**

Cyperus esculentus

**Broad leaf weeds**

Abutilon theophrasti	Datura stramonium
Amaranthus spp.	Galinsoga parviflora
Ambrosia spp.	Ipomea hederacea
Atriplex patula	Polygonum spp
Cannabis Sativa	Portulaca oleracea
Capsella bursa-pastoris	Richardia scabra
Chenopodium album	Solanum spp.
Cirsium arvense	Sonchus arvensis

**TOLERANCE**

LUMAX gives excellent crop tolerance when applied up to 10 days pre-planting, pre-emergence or early post emergence of maize and sugarcane.

**RESISTANCE MANAGEMENT**

Naturally occurring biotypes of certain broad leaf species with resistance to triazines or ALS herbicides are known to exist. However no known resistance to the combination of herbicides in LUMAX exist and there are no known instances of cross resistance between this herbicide and other herbicides. As the active ingredients in LUMAX act in three different modes of action this forms an excellent resistance management strategy. However use in rotation with other herbicides with different modes of action and in combination with cultural methods is the best defence against development of resistant weeds.

**DIRECTIONS FOR USE**

On sugarcane LUMAX can be used on plant and ratoon cane as pre and post emergence application. LUMAX can be used in all maize tillage systems from conventional to no till. A burndown herbicide such as GRAMOXONE or TOUCHDOWN FORTE may be tank mixed with LUMAX if emerged weeds are present at the time of application.

CROP	TIME OF APPLICATION	RATE OF APPLICATION LT/HA
Sugarcane plant	Pre-to early post-emergence to weeds	4
* Sugarcane ratoon	Pre-to early post-emergence to weeds	4
Maize	Pre-emergence	4

\* In ratoon and in early post emergence situations it can be tank mixed with **GRAMOXONE 0.5 lt/ha** or **TOUCHDOWN FORTE 1 lt/ha** to kill emerged weeds. Tank mix with GRAMOXONE in ratoon cane can cause damage to cane so should be used inter-row. Do not apply later than spike stage of the crop.

**APPLICATION TECHNIQUE**

**SPRAY EQUIPMENT**

LUMAX 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 spray volumes of 200 lt/ha. AERIAL APPLICATION IS NOT RECOMMENDED.

**MIXING**

The spray tank must be clean, thoroughly rinsed and decontaminated before adding LUMAX.

**Used alone:** Add recommended amount to the spray tank when tank is half full, add rest of the water or fluid fertiliser. Provide sufficient agitation during mixing.

**Tank mixed:** If tank mix partner is a wetttable powder, dry flowable formulation, SC, EC or SL add it while continuing to agitate. Mixing and compatibility may be improved if the flowable is diluted with water before adding to the tank. Add LUMAX next followed by GRAMOXONE or TOUCHDOWN FORTE and a non-ionic surfactant last if needed. Complete filling the spray tank and continue agitation.

- Use the LUMAX preparation within 24 hours. If spraying is delayed some settling may occur. This may not redisperse readily and will require the addition of a compatibility agent.

**COMPATIBILITY**

LUMAX has been tested for physical compatibility with GRAMOXONE, TOUCHDOWN FORTE, DUAL GOLD, KRISMAT and SERVIAN without problems but local testing is necessary for other products before tank mix recommendations.

**OPERATOR SAFETY**

Avoid any contact of skin, eyes or clothing. Avoid inhalation of vapour or spray mist. Do not eat or smoke while handling the product. Wash hands and face before eating, drinking or smoking. If indisposition occurs, stop work, follow First Aid measurers, 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, equipment 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.



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