

TO CAUSE A HAZARD IN THE USE, STORAGE OR DISPOSAL OF THIS SUBSTANCE IS AN OFFENCE

PRECAUTIONS

- 1. Handle with care. Avoid splashing and contact with skin, eyes, nose and mouth.
- 2. Poisonous by swallowing, inhalation and contact with skin.
- 3. WEAR PROTECTIVE CLOTHING i.e. rubber gloves, rubber boots, overalls, hood and respirator when mixing and applying this herbicide.
- 4. On completion of spraying, remove protective clothing and wash hands and face thoroughly with soap and water. Dispose of the wash water in a safe manner in non-cropping areas.
- 5. DANGEROUS TO FISH AND BEES.
- 6. KEEP OUT OF THE REACH OF CHILDREN.
- 7. KEEP APART FROM FOOD AND FOODSTUFFS, seeds and fertilizers.
- 8. Store in original container in a cool dry place and KEEP UNDER LOCK AND KEY.
- 9. Use only on crops for which S-Metolachlor 960EC is registered.
- 10. Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
- 11. DO NOT contaminate drinking pools, dams, rivers, waterways and other water supplies.

EMPTY CONTAINER DISPOSAL:

Triple-rinse empty containers 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 times with a volume of water equal to a third of that of the container. Add the rinsings to the contents of the spray tank before destroying the empty container by perforating and flattening. If possible, offer for recycling.

CLEANING OF APPLICATION EQUIPMENT:

Clean applicator thoroughly after use and ensure that all traces of S-Metolachlor 960EC are removed. Make use of the following method:

- a) Drain tank and rinse tank, spray-boom and hoses with clean water for at least 10 minutes.
- b) Fill the tank with clean water and add to it 1,0 litre of household bleach (sodium hypochlorite) (5%), or 1,5 litres household bleach (3,5%) per 200 litres of water. Rinse hoses and spray-boom and leave in tank for 15 minutes whilst agitating. Drain through nozzle outlets.
- c) Repeat step (b) and thereafter, rinse thoroughly with clean water and dispose of the wash water at a site designated for the disposal of pesticides.

SYMPTOMS OF HUMAN POISONING

Irritation effects on mucous membranes are the common reactions. May cause skin irritation, sensitization or allergic skin reactions. It also causes eye irritation. If large quantities are ingested, nausea, vomiting abdominal distress and diarrhoea may occur.

FIRST AID

Skin contact: Remove contaminated clothing as well as shoes and leather goods. Wash body with non-abrasive soap and lots of water. Persons providing first aid must wear gloves to avoid self-contamination. Seek medical advice if necessary.

Eye contact: Flush eyes immediately with large amounts of clean water for approximately 15 minutes. Occasionally lift the upper and lower lids. If eye irritation persists, get medical attention.

Inhalation: Remove patient to a well-ventilated area and loosen clothing around the neck. Perform artificial respiration and administer oxygen. Keep patient warm and calm. **Seek medical advice immediately.**

Ingestion: Do not induce vomiting. Get medical attention immediately.

NOTE TO PHYSICIAN

No specific antidote. Treat symptomatically and supportively. Keep patient under observation. If patient is unconscious administer oxygen. Perform gastric lavage and catharsis when the victim has gained consciousness. If less than 10mg per kg body weight was ingested, administer 30 - 60g activated charcoal in 150 - 300ml of water.

WARRANTY:

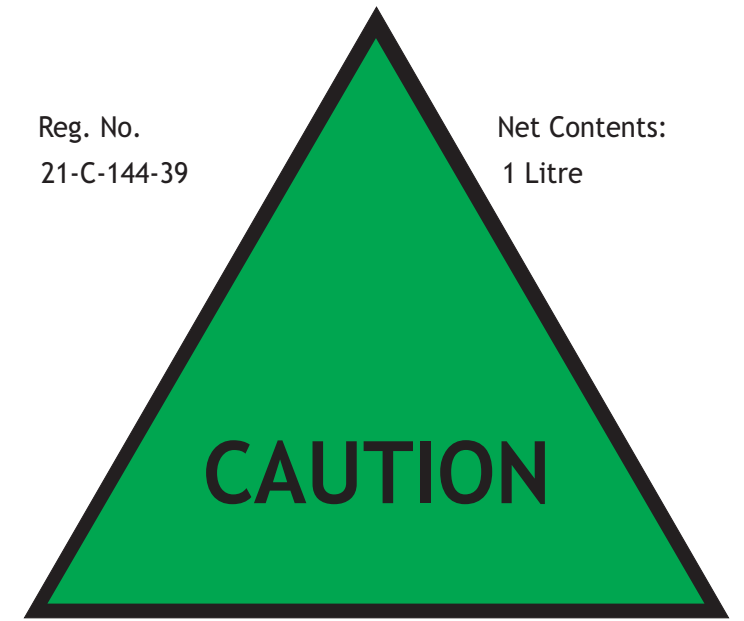
Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not guarantee that it will be effective under all conditions. The activity and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the weeds against the remedy as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animals or for lack of performance of the remedy concerned due to failure by the user to follow label instructions, or to the occurrence of conditions which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

SHELF LIFE: Two years from date of manufacture if kept in the original unopened container under constant cool and dry conditions.

BATCH No.

Date of manufacture:

S-METOLACHLOR 960EC HERBICIDE



HARMFUL IF SWALLOWED

Composition	(Mass/Volume)
S-Metolachlor.....	960g/l
Chemical group: Chloroacetanilide	

A pre-emergence herbicide for the control of most annual grasses, including *Urochloa panicoides* and certain broadleaf weeds in Maize, Soyabeans, Groundnuts, Sugarcane, Cotton and several other crops.

Registered and Distributed by:
Optimum Agro (Pvt) Ltd
12 Highfield Road, Southerton, Harare
Phone Number 0242774725
Email:sales@optiagro.co.zw



DIRECTIONS FOR USE- Use only as directed

PREPARING MIXTURE:

- a) **S-Metolachlor 960EC alone:**
Half-fill spray tank with water and then pour the required amount of S-Metolachlor 960EC into the spray tank whilst agitating continuously.
- b) **S-Metolachlor 960EC in a tank-mixture:**
When flowable or wettable powder formulations of herbicides are mixed with S-Metolachlor 960EC, they must be added first. Metalochlor 960EC diluted with water must be added last, just before the required volume is reached. Ensure thorough agitation of the mixture in the tank during mixing and spraying.

APPLICATION METHODS

Ensure that the equipment is correctly calibrated and is checked regularly during application to ensure even and accurate application. Knapsack sprayers or tractor-mounted boom sprayers may be used. A spray volume of 200-300l/ ha should be used for ground application and can be applied via flat fan-type nozzles, preferably the low drift type to avoid fine droplets. Use 30 - 40l/ha for aerial application. Constant agitation throughout the spray operation is essential. Only clean water should be used.

NOTE: USE A 15-LITRE KNAPSACK SPRAYER.

COMPATIBILITY

S-Metolachlor 960EC is compatible with most broadleaf herbicides when mixed as recommended. The water quality can affect the compatibility of S-Metolachlor 960EC with other products. It is therefore recommended to do a compatibility test prior to use of this product. Tank-mixtures must be applied immediately after mixing. **DO NOT** premix large quantities. **DO NOT** mix S-Metolachlor 960EC with products recommended without consulting a representative of the supplier.

GROUND APPLICATION

S-Metolachlor 960EC can be applied with any high volume sprayer, properly calibrated and fitted with sufficient agitation. Fan type nozzles should ensure even distribution and optional recovery of the spray liquid. A spray pressure of 200 kPa should not be exceeded. The recommended amount of S-Metolachlor 960EC should be applied in at least 150 litres of water per hectare.

AERIAL APPLICATION

For aerial application of S-Metolachlor 960EC, uniform distribution and adequate chemical recovery within a treated area can be achieved where:-

- 1) The selected dosage rate is increased by 10 - 15% to compensate for chemical loss.
- 2) 25 - 30 litres of spray mixture / ha is applied.
- 3) The optimal flight height is 3 metres.
- 4) Relative humidity is above 50% and wind speed is less than 16km/h.

IMPORTANT REMARKS

Rain is essential to leach the product into the zone of the germinating weeds and therefore 10 -15 mm of rain or irrigation is needed within 7 days of application to ensure optimum results. Under drier conditions, weeds may emerge. These should be controlled with a shallow cultivation, which will also incorporate the herbicide into the upper 10 - 20mm of soil. If soil crusting becomes a problem, rotary harrow in the same direction that the rows are planted, to assist maize germination. Harrowing after application may reduce weed control if untreated soil is thrown into deep planter furrows. Ensure that sufficient fertiliser is placed near the seed at planting to promote vigorous seedling growth. Apply S-Metolachlor 960EC preferably with or directly after planting but not later than three days after planting. Always use the lower rates on lighter soils and where the weed pressure is lower.

SPECTRUM OF ACTIVITY:

The following weeds will normally be controlled by S-Metolachlor 960EC at the recommended rates under favourable climatic conditions.

Erachiara eruciformis - Sweet signal grass,
Chloris virgata - Feather-top Chloris,
Dactyloctenium aegyptium - Crow's foot,
Digitaria sanguinalis - Crab finger-grass,
Echinochloa crus-galli- Barnyard millet,
Echinochloa colonum - Jungle rice grass,
Eleusine indica - Rapoko grass,
Panicum novermnerve - Black seed panicum,
Setaria pumila -Annual Timothy,
Setaria verticillata - Burgrass,
Urochloa panicoides - Garden urochloa,
Amararathus hybridus - Cape pigweed,
Amaranthus spinosus - Thorny pigweed,
Amaranthus thumbergii - Red pigweed,
Commelina benghalensis - Wandering Jew,
Nicandra physaloides - Apple of Peru.

CROP	% CLAY	l/ha of S-Metolachlor 960EC when used alone, in 150l of water/ha	mls of S-Metolachlor 960EC when used alone/ 15-litre Knapsack	l/ha of Metolachlor 960EC when used with a registered broadleaf herbicide 150l of water/ha	mls of S-Metolachlor 960EC when used with a registered broadleaf herbicide/ 15-litre Knapsack	APPLICATION REMARKS
Maize	<30 >30	1.3 - 1.5 1.5 - 1.9	130 - 150 150 - 190	1.0 - 1.3 1.3 - 1.5	100 - 130 130 - 150	Apply higher rate where there are Atrazine-tolerant grasses. May be pre-plant incorporated or not incorporated.
Cotton	<30 >30			1.0 - 1.1 1.1 - 1.3	100 - 110 110 - 130	Apply as a pre-emergence application. Use with a recommended broadleaf herbicide.
Soyabeans and Groundnuts	<30 >30	1.3 - 1.5 1.5 - 1.9	130 - 150 150 - 190	1.0 - 1.3 1.3 - 1.5	100 - 130 130 - 150	Use any registered broad leaf weed killer. Pre-plant application (Incorporation or non-incorporation).
Potatoes and Cucurbits	<30 >30			1.1 - 1.5 1.5 - 1.9	110 - 150 150 - 190	Apply as in soyabeans immediately after planting but before weeds emerge.
Field and Kidney Beans and Peas	<30 >30	1.3 - 1.5 1.5 - 1.9	130 - 150 150 - 190			Apply as in maize after planting but before weeds emerge.
Sugar cane	<30 >30			1.1 - 1.5 1.5 - 1.9	110 - 150 150 - 190	Apply as in maize before weeds emerge. Use in combination with registered broadleaf herbicides.
Sunflowers	<30 >30	1.3 - 1.5 1.5 - 1.9	130 - 150 150 - 190	1.0 - 1.1 1.1 - 1.3	100 - 110 110 - 130	Apply in combination with a registered broadleaf herbicide.
Tea and Coffee	<30	1.5 - 1.9	150 - 190			Use S-Metolachlor 960EC herbicide alone.
(a) TRANSPLANT	>30	1.5 - 1.9	150 - 190	1.1 - 1.3	110 - 130	Apply in combination with a registered broadleaf herbicide before weeds emerge.
(b) ESTABLISHED At least one season in plantation)	>30 >30	1.5 - 1.9 1.9 - 2.3	150 - 190 190 - 230	1.1 - 1.3 1.3 - 1.5	110 - 130 103 - 150	
Vegetables, Brassicas, Tomatoes	<30 >30	1.3 - 1.5 1.5 - 1.9	130 - 150 150 - 190			Apply over the top of the new transplants within 7 days of transplanting before weeds emerge.

USE RESTRICTIONS

DO NOT use S-Metolachlor 960EC on experimental or newly released cultivars/varieties without first consulting your supplier or the seed company concerned.

DO NOT use S-Metolachlor 960EC on poorly drained soils or soils with a compaction layer, as under these conditions water-logging can occur and the herbicide may cause crop injury.

DO NOT apply S-Metolachlor 960EC to any crop or situation not mentioned on this label. Only apply S-Metolachlor 960EC using an accurate and safe application technique.

Heavy rain on very sandy soils low in organic matter as well as flood irrigation can reduce weed control performance. Optimum weed control is obtained on a fine even seedbed, free of clods, trash and weeds. S- Metolachlor 960EC will also give weed control in stubble mulch or minimum tillage situations. If S-Metolachlor 960EC is used in a tank-mix with other recommended herbicides, consideration should also be given to the restrictions of those respective products.

RESISTANCE MANAGEMENT

S-Metolachlor 960EC is a member of the chloroacetanilide chemical group of herbicides. Any weed population may contain individuals naturally resistant to S-Metolachlor 960EC and other chloroacetanilide chemical group of herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly and exclusively in programs. S-Metolachlor 960EC or any other chloroacetanilide chemical group of herbicides may not control these resistant weeds.

To delay herbicide resistance:

- Avoid exclusive repeated use of herbicides from the same chemical group. Alternate or tank mix with products from different herbicide chemical groups.
- Integrate other control methods (chemical, cultural, biological) into weed control programs.