



DUAL GOLD 960 EC

Selective herbicide for weed control in maize, beans, sugar cane, cotton, sunflower and peanuts.

Emulsifiable concentrate
GUARANTEE: S-metolachlor 960g/lit.
FLAMMABLE 

FOR USE AS A HERBICIDE ONLY"

KEEP LOCKED OUT OF REACH OF CHILDREN BEFORE USING READ THE ATTACHED LEAFLET.

Shelf Life: At least 2 years from date of manufacture in original unopened containers.

Approved by TPRI, Arusha
 ® = registered trademark of a Syngenta Group Company

Manufactured by: Syngenta Crop Protection AG, Basle, Switzerland

Contact Office:
Syngenta Agro Services AG, Tanzania
 P. O. Box 1777, Dar es Salaam
 Tanzania
 Tel: 022 2110967
 Fax: 022 2112339

syngenta
 Colour band:BLUE



Application Information

Spray Equipment

Dual Gold can be applied with any ground application equipment (tractor mounted sprayer, knapsack sprayer, etc.). Dual Gold is not corrosive to equipment and metal surfaces. Other alternatives are application by Birky sprayer and center pivot irrigation. Clean sprayer thoroughly immediately after use by sufficiently flushing the system with clean water.

Mixing

Mix Dual Gold with water and apply as a spray. Fill the spray tank one-half to three quarter full with water. Add the proper amount of Dual Gold, then add the rest of the water. Provide sufficient agitation during mixing and application to maintain a uniform emulsion. It is important to use clean water.

Volume: 120 - 600 lt. of spray liquid per ha are recommended.

Timing

1. Pre-plant surface-application. Only for minimum tillage or no tillage systems. Dual Gold can be applied up to 45 days before planting certain crops.
2. Pre-plant Incorporation (PPI). Apply Dual Gold to soil and incorporate into the top 5 cm of soil within 14 days before planting using a finishing disk, harrow, rolling cultivator or similar Implement. Use pre-plant incorporated application when a period of dry weather after application is expected.
3. Pre-emergence. Apply Dual Gold during or after planting but before weeds and crop emerge.

Safety Aspects

Precautionary measures

KEEP LOCKED UP OUT OF REACH OF CHILDREN and other unauthorised persons, and animals.

Operator safety

AVOID any contact of skin, eyes or clothing with concentrate or spray mixture. DO NOT breathe vapour or spray mist. DO NOT eat, drink or smoke while handling the product wash hands and face before doing so. If any indisposition occurs, stop work, follow first aid measures, and call a physician. WEAR protective clothing. i.e. for preparation: impermeable gloves, for application: overalls, hat or cap, and solid footwear. AFTER USE, thoroughly clean protective equipment and wash entire body and change clothing. Wash contaminated clothing before re-use.

First Aid

If poisoning is suspected, stop work immediately and call a physician. Show label to the physician. In case of contact with skin, remove contaminated clothing, wash affected body parts immediately with plenty of water and soap. Rinse splashes from eyes with abundant fresh and clean water for several minutes. If inhaled, move to clean air. If swallowed, repeatedly administer medicinal charcoal in plenty of water. Seek medical advice immediately if a large volume of concentrate was ingested. Note: Never give anything by mouth to an unconscious patient and never induce vomiting.

Mode of action

Dual Gold is mainly taken up through the shoots of germinating plants and seedlings. Weeds are therefore killed before emergence, at emergence or shortly after emergence. Roots uptake is less pronounced than shoot uptake.

Spectrum of Activity

Dual Gold is active against most annual grasses and some annual broad-leaved weeds.

Highly susceptible weeds

Brachiaria eruciformis	Chloris virgata
Digitaria sanguinalis	Digitaria ischaemum
Digitaria filiformis	Digitaria horizontalis
Echinochloa crus-galli	Eleusine indica
Galinsoga parviflora	Nicandra physaloides
Panicum dichotomiflorum	Panicum laevifolium
Setaria glauca	Setaria viridis
Setaria verticillata	Setaria faberi
Setaria pallidifusca	Urochloa panicoides

Moderately susceptible weeds

Amaranthus spp	Capsella bursa-pastoris
Cyperus esculentus	Portulaca oleracea
Sorghum bicolor	Sorghum halepense*
*seedlings	

Please Note:

AVOID using Dual Gold where adjacent desirable plants may be injured.

Directions for use

Crop	Timing	Rates(lt/ha)
Maize	Pre emergence	0.6 -1.6 up to 1.9 in soils with more than 4.0% organic matter content
Beans	or pre plant incorporation	
Sugarcane		
Sunflower		
Peanuts		
Cotton	Pre-emergence or pre-plant incorporation	0.6 - 1.4 up to 1.5 in soils with more than 4.0% organic matter content

Remarks

Use the higher rates in heavier soils or with heavy weed infestation. PPI application may be preferred under dry surface conditions in regions where long periods without rain prevail after application. Incorporation of Dual Gold has to be shallow (5cm).

Dual Gold 960 has to be applied pre-emergence within 2 days following planting For a fully selective use of Dual Gold the cotton roots need to be prevented from direct contact with the herbicide during the early development phase of the crop. Therefore crop injury can be avoided by observing the following precautions. For PPI applications: Incorporation should not exceed 3 cm. Cotton should be planted approx. 3-4cm below the zone of incorporation. Do not apply Dual Gold on pure sand or on loamy sand i.e. on soils with no/low absorption capacity.DO NOT apply Dual Gold where water logging is likely to occur during the period of crop emergence.

Spillage and leakage

Remove heavily contaminated soil layer and bury in a safe place away from water supplies. Collect up spilt material thoroughly and bury it in a safe place or put it in a waste bin or in a plastic bag and dispose of on a landfill-site approved for pesticides. Note: Spilt product must not be re-used.

Product and container disposal

Dispose of surplus product on a landfill site approved for pesticides or bury in a safe place away from water supplies. Dilute surplus application mixture, pour it broadcast on fallow land. Empty the container well, rinse several times and add the rinse solution to the spray tank. Dispose of containers made of cardboard, paper or plastic on a landfill site or burn in a safe place. If burned stay out of smoke. Be sure that the smoke or fumes will not damage nearby plants, crops or trees, or harm animals. DO NOT re-use empty containers for any other purpose.

Storage conditions

Store away from sun and damp, in a well ventilated area apart from food and feed, under lock and key. DO NOT contaminate water, food or feed. AVOID storage below above +35°C.

First Aid

If poisoning is suspected stop work immediately and call a physician. Move the patient away from further contact with the pesticide and place him in a well-ventilated area. Strip off all clothing and wash entire body including hair with soap and water. Rinse eyes with abundant fresh and clean water (for at least 15 minutes). Administer a large quantity of activated medical charcoal. Never give anything by mouth to an unconscious person. In cases of severe discomfort, take patient to a doctor.

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

Hazard Classification: WHO Class III (slightly hazardous)

Shelf-life

At least two years from date of manufacturing in unopened containers.

Environment and wildlife

Dual Gold is classified as toxic to fish, very toxic to algae, harmful to daphnia. DO NOT contaminate water used for irrigation or domestic purposes and water areas, such as ponds, ditches, lakes, drainage systems, etc. by disposal of products waste. Newly treated areas must not be grazed and all livestock is to be kept out.

User's risk

The user bears the risk for damage resulting from factors beyond the manufacturer's control.

Resistant strains of weeds may develop or may exist against which herbicides may be less effective. Since the occurrence of such strains cannot be forecast, neither the manufacturer nor its distributors can assume responsibility for any loss or damage caused by failure to control resistant weeds.

All recommendations for use of the herbicide are based on the current state of the manufacturer's knowledge. Since the manufacturer cannot control the farmers' choice of herbicides, its application, use, storage or processing of the product or other agronomic practices, the manufacturer cannot assume responsibility therefor.

® registered trademark of a Syngenta Group company

© = 2001 Syngenta Crop Protection AG, Basle, Switzerland

Manufacturer: Syngenta Crop Protection AG, Basle, Switzerland

Approved by TPRI,

Before using the product, please read the attached label and accompanying packaging leaflet.

Use pesticides safely

® = registered trademark of a Syngenta Group Company

Emergency Call: Syngenta Alarm Centre,
Huddersfield, UK; Phone: + 44 1484 538 444
Fax: + 44 1484 433 197