

# TWIGAMETHALIN<sup>®</sup> 50EC



*A broad spectrum selective and systemic pre-emergence residual herbicide for the control of annual grasses and broad-leaved weeds in wheat and barley.*

ACTIVE INGREDIENT: PENDIMETHALIN 500 G/L

FORMULATION EMULSIFIABLE CONCENTRATE

REGISTRATION NO: PCPB (CR) 0590

MODE OF ACTION : TWIGAMETHALIN is a broad spectrum selective residual herbicide for control of many annual grasses and annual broad-leaved weeds in wheat and barley. It is absorbed through the roots of weeds as they germinate/emerge and leaves of weeds that are already present. The affected plants die shortly after germination or following emergence from the soil. It works by inhibiting cell division and cell elongation..

DIRECTIONS FOR USE: TWIGAMETHALIN is a pre-emergence residual herbicide and best applied to damp soil directly after planting wheat or barley and before either weeds or the crop emerge. The soil should be well-prepared and hushed up without weeds or turf. The spraying should be carried out on freshly prepared soil, at the latest, 5 days after the preparation. All crop seeds must be well covered with soil before spraying. Residual moisture is needed for the activation of TWIGAMETHALIN. If soil is dry at the time of application, rain is needed within 7 days, or irrigation should be done

APPLICATION RATE: Use 3.0 – 3.5 L/ha (300-350ml/ 20 litres of water)

## TARGET WEEDS

### 1. BROAD LEAFED WEEDS

Pigweed - *Amaranthus hybridus*  
Black jack - *Bidens pilosa*  
Mexican marigold - *Tagetes minuta*  
Thorn apple - *Datura stramonium*  
Purslane - *Portulaca oleracea*  
Chinese lantern - *Nicandra physaloides*  
Gallant soldier - *Galinsoga parviflora*  
Wondering jew - *Commelina bengalensis*  
Black bindweed - *Polygonum convolvulus*  
Wild radish - *Raphanus raphanistrum*  
Spurrey weed - *Spergula avensis*  
Fat hen - *Chenopodium spp*  
*Erucastrum arabicacum*  
*Guizotia abyssinica*  
Devils thorn (emex)

### 2. GRASS WEEDS.

Foxtail grass - *Setaria pumila*  
Love grass - *Setaria verticillata*  
Wild oats - *Avena fatua*  
Wild sorghum - *Sorghum halpense*  
Brome grass - *Bromus pectinatus*



COMPATIBILITY: TWIGAMETHALIN is compatible with most commonly used pesticides. However, DO NOT tank mix with any product unless your own prior testing has shown that the combination is physically compatible, effective and non-injurious under your conditions.

PHYTOTOXICITY: TWIGAMETHALIN is not phytotoxic to the crops when used as recommended

BENEFITS

- Twigamethalin kills many weeds shortly after germination or just after emergence thus significantly reduces competition for growth resources between the crop and weeds and the crop can realize its full biological yield potential.
- Being a residual herbicide, Twigamethalin ensures better control of weeds even several days after the application is done.
- Crop tolerance-Twigamethalin is not phytotoxic when used as recommended and at this rates it is tolerated by the crop.
- Broad spectrum-kills both grass and broad leafed weeds in one application
- Ideal for pre-emergence weeds control

AVAILABLE PACKS 200LT, 20LT

HANDLING PRECAUTIONS: Do not smoke drink or eat while using this product.

- Avoid eye contact. Wear safety goggles when handling the product.
- Avoid spray mist and exposure to the product. Wear rubber gloves, mask covering nose and mouth. Wear protective clothing such as long sleeved shirts, long pants and rubber boots when handling the product.
- After application wash yourself and your work clothes.
- Do not enter treated area within 12 hours of application unless protective clothing is worn.

ENVIRONMENT AND WILDLIFE The product is toxic to fish and aquatic invertebrates. Do not contaminate water sources and supplies by disposal of product waste. Keep livestock out of treated areas. TWIGAMETHALIN is not toxic to natural enemies and beneficial insects such as bees and wasps and, soil invertebrates when used at recommended rates.

FIRST AID INSTRUCTIONS

**In case of eye contact:** Flush the eyes with running water for at least 15 minutes while holding eyelids open to help flush out material. Contact a physician immediately.

**In case of skin contact:** Wash contaminated skin with soap and plenty of water. Remove contaminated clothing. If skin irritation persists, contact a physician immediately.

**In case of inhalation:** Remove the patient away from contaminated area and place the patient in a well-ventilated area and give artificial respiration. Keep warm and at rest. Consult a doctor.

**In case of ingestion:** If small amount is swallowed, drink plenty of water and induce vomiting. Repeat until fluid is clear. If a large amount is ingested (i.e. one mouthful), induction of vomiting should be considered if patient is fully conscious and less than 30 minutes has elapsed since ingestion. Never give anything by mouth to an unconscious person. Contact a physician immediately.



LEADERS IN CROP PROTECTION

TWIGAMETHALIN<sup>®</sup> 50EC is a registered trade mark of Twiga Chemical Industries Ltd.