

Puma[®] K_{omplete}



Post-emergence weed control in one pass

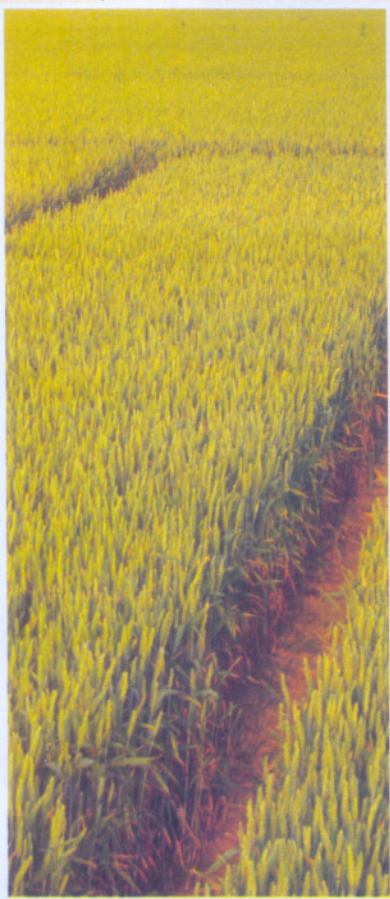


Bayer CropScience

Puma[®] Komplete

Pre-emergence weed control in one pass

Puma[®] Komplete is a Suspension Concentrate (SC) formulation, containing 8g of iodosulfuron-methyl-sodium, 64g of fenoxaprop-p-ethyl and 24g of mefenpyr-diethyl per litre. The combination of the different chemistries that are fully systemic give Puma[®] Komplete superior weed control properties combined with favourable environmental and toxicological characteristics.



Puma[®] Komplete

a double effect - mode of action

Puma[®] Komplete is a combination of two modes of action. Iodosulfuron-methyl-sodium belongs to the B HRAC group which blocks the acetolactate synthase enzymes and inhibits the synthesis of protein in susceptible weeds.

Fenoxaprop-p-ethyl is an aryloxyphenoxy-propionate compound belonging to the A HRAC group which inhibits the biosynthesis of the fatty acids.

Innovation of selective post-emergence grass and dicot weed management

Puma[®] Komplete contains a safener, mefenpyr-diethyl, which selectively accelerates the degradation of the active to non-phytotoxic compounds in the wheat crop. It also enables the active ingredient to act consistently against a broad spectrum of grasses and various dicot weeds.

This breakthrough is characterised by the following Puma[®] Komplete 's technical features:

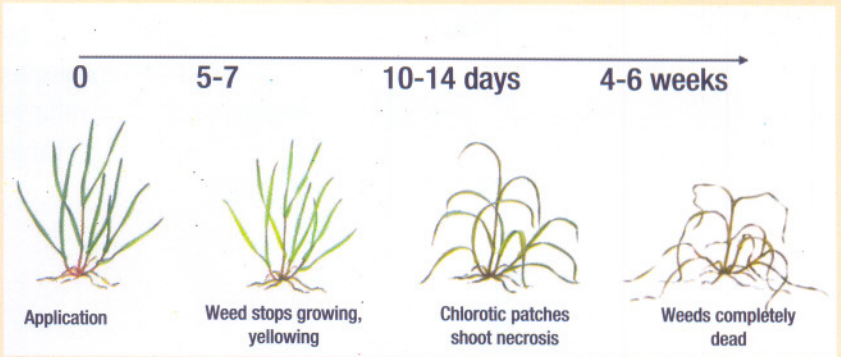
- ➔ Consistently strong on most grass and broad leaf weeds
- ➔ Fully selective in wheat
- ➔ High flexibility in timing
- ➔ Low dose rate

Puma® Complete stops weed competition immediately - after application

The visible symptoms of herbicidal action are arrested growth within the first few days after application and the appearance of chlorotic patches, followed by slow shoot necrosis. Susceptible weeds stop growing almost immediately after post-emergence application and cease to compete with the crop.



Puma® Complete with reliable speed of action e.g. Lolium (ryegrass)



Treatment of small weeds under favourable growing conditions (e.g. warm and humid) will increase the speed of activity

Surfactant

The addition of a non-ionic surfactant (e.g. Mineral oil, Citowett, etc.) is recommended if application is made during dry conditions to enhance the foliar absorption of the active ingredient.



Spectrum of activity

grasses, broad leaf weeds and sedges

Grasses

Couch Grass

Eragrostis spp.

Guinea grass

Rye

Foxtail

Star grass

Wild finger millet

Wild oat

Broad leaf

Amaranthus

Black Bindweed

Black Jack

Black Night Shade

Chinese Lantern

Cleavers

Common Mallow

Devils Thorn

Double Thorn

Fat Hen

Gallant Soldier

Mexican Marigold

Oxalis

Wandering Jew

White Charlock

Yellow Daisy

Datura stramonium

Sedges (Nut Grasses)

Cyperus esculentus

Cyperus rigidifolia

Cyperus rotundus

- Spray timing:
- Broad leaf weeds at 2 - 4 leaf stage.
 - Grasses: at 2 - 3 leaf to beginning of tillering
 - Sedges: at 3 - 4 leaf;
- and generally when > 60% of the weeds spectrum have germinated.

Puma[®] Komplete

rates of application

Boom Application

1 litre in 150 - 200 litres of water per hectare

Knapsack Application

100 ml per 15-20 litres knapsack, by 10 knapsacks per hectare

Aerial Application

1 litre per 30 litres of water per hectare

Puma[®] Komplete shows – excellent safety – in wheat

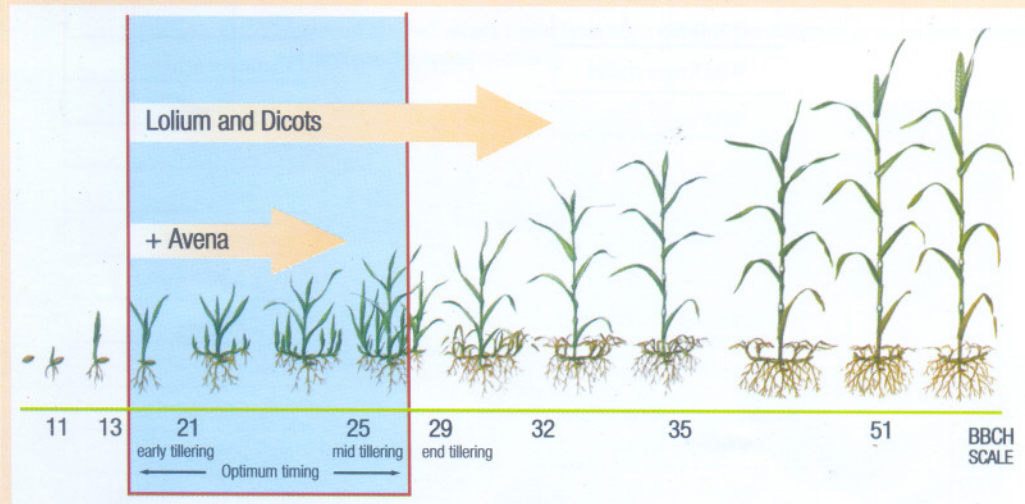
Puma[®] Komplete

Gives the farmer a high degree of application independence

The timing flexibility of Puma[®] Komplete allows the farmer to control grass and dicot weeds in a one pass application. Puma[®] Komplete can be applied as soon as the weeds germinate.

The optimum timing for control is when most weeds have emerged and are between two-leaf and either mid-tillering (for grass weeds) or 2-4 leaf (for dicot weeds). Small, actively growing weeds are more easily controlled and good coverage is easier to obtain.

Optimum application timing of grasses



Treatment at this early stage will reduce the weed competition with the crop and safeguard the yield potential.

This profile implies that Puma[®] Komplete has the timing flexibility to also control weeds at a later stage of growth in the case of delayed application due to adverse weather conditions or working peaks.

This timing characteristics of Puma[®] Komplete give the farmer an additional degree of independence.

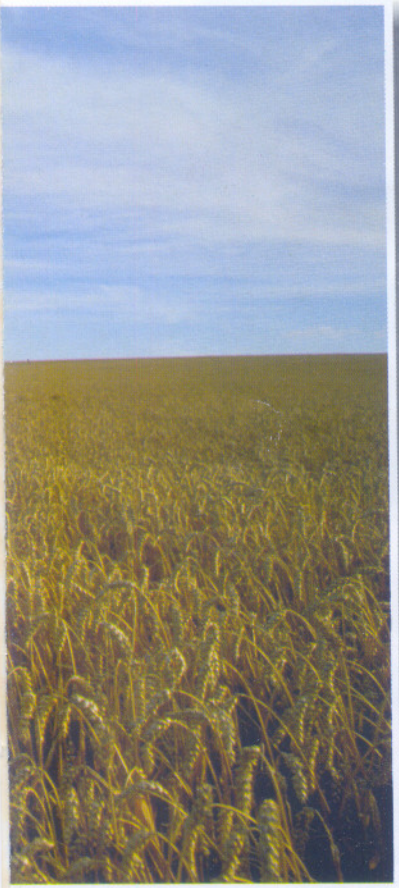


Compatibility

Puma[®] Complete can be tank-mixed with fungicides (except Copper), pyrethroid insecticides and foliar fertilisers.

Crop safety

Puma[®] Complete provides strong and consistent herbicidal activity combined with excellent crop safety, even under sensitive application conditions or delayed application in wheat.



Puma[®]
Komplete 

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NOTE: PESTICIDE USERS ARE REMINDED TO READ AND FOLLOW THE INSTRUCTIONS ON THE PRODUCT LABEL FOR DETAILS OF USAGE BEFORE APPLICATION AT ALL TIMES.

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