

Product overview

Tenet 500 SC is a pre-emergent herbicide registered for pre-sowing application in canola for the control of key annual grass and broadleaf weeds. Tenet provides up to 12 weeks' residual control of a broad spectrum of annual grass and broadleaf weeds, depending on weed species, application rate, tank-mix partner, soil texture and soil moisture. Tenet has increased solubility and soil mobility compared with commonlyused canola pre-emergent herbicides, meaning less rainfall is required to activate the herbicide. ADAMA has introduced new label directions to provide a wider range of application rates to match soil texture, as well as the opportunity to tank-mix with a triazine herbicide in triazine tolerant (TT) canola to broaden the spectrum of weed control. Tenet provides an alternative mode of action for herbicide resistance management in canola.

Mode of action

Tenet contains 500 g/L of the active ingredient, metazachlor, a member of the Group K mode of action herbicides. Metazachlor inhibits the synthesis of very long-chain fatty acids in target weeds, disrupting the development of cell membranes and the growth of leaves, roots and flowers. Metazachlor is absorbed by the roots of germinating seedlings and translocated primarily by the xylem. Once absorbed, susceptible weeds stop growing and no longer compete with the crop. Due to root uptake, weed control may be reduced where susceptible weed seeds germinate from depth.

At a glance

Resistance management	Tenet provides an alternative mode of action for herbicide resistance management in canola.
Broad-spectrum weed control	Tenet controls or suppresses 20 annual grass and broadleaf weeds, the broadest spectrum of any Group K herbicide.
Residual control	Tenet provides up to 12 weeks' residual control of annual grass and broadleaf weeds, depending on weed species, application rate, tank-mix partner, soil texture and soil moisture.
Improved label guidelines	ADAMA has updated the registered label to improve application rate flexibility and crop safety.
Tank-mix with a triazine herbicide in TT canola	A tank-mix of Tenet and a triazine herbicide in TT canola will improve spectrum and efficacy while maintaining crop safety on light-textured soils.

Note that the Group K herbicide mode of action group consists of three sub-groups. Tenet belongs to the chloroacetamides sub-group. Pyroxasulfone (Sakura*), which is commonly applied before sowing winter cereals, belongs to the isoxazoline sub-group. Tenet should also be used in rotation with other commonly-used pre-emergent herbicides in canola (e.g. propyzamide, trifluralin and triallate) to reduce the risk of herbicide resistance development.

Tenet® 500 SC

Rate selection, soil texture and organic carbon

High rainfall following application on light-textured soils with low clay and organic carbon content can significantly increase leaching of the active ingredient though the soil and into the planting furrow, exposing the establishing crop to a higher concentration of herbicide and possible crop damage. ADAMA has introduced new label directions to provide a wider range of application rates, taking into consideration soil texture (Table 1) and organic carbon levels to minimise the risk of crop damage. Undertaking soil tests prior to application of Tenet is recommended to determine clay content and organic carbon levels. As with low clay content soils, paddocks with organic carbon below 1% in the top 10 cm of soil are at greater risk of damage due to the potential for leaching. The use of Tenet is not recommended in those situations.

Table 1: Recommended application rate by soil texture.

Soil texture (% clay)	Maximum application rate (L/ha)^
0–15	0.75
16–30	1.0
31–40	1.5
>40	1.8

[^]Organic carbon must be >1%.

Application rate selection and canola variety

Tenet compliments weed control in all canola production systems, including triazine tolerant (TT), Roundup* Ready (RR), Clearfield* (CL) and conventional varieties, offering flexibility for crop and herbicide rotations. Tenet should be tank-mixed with a low rate of a registered triazine herbicide (e.g. Farmozine®, Simanex® or terbuthylazine) to improve spectrum and efficacy in TT canola varieties grown on suitable soil types (see above). Always refer to the label of the registered triazine herbicide before application.

Incorporation

After applying Tenet pre-sowing, incorporate by sowing with knife points and press wheels within three days of application. Canola safety is improved through the separation of the seed from the treated band. Knife points and press wheels provide good separation of the herbicide and closure of the planting furrow.

Re-cropping guidelines

The minimum cropping interval for all crops, including wheat, durum, barley, oats, field peas, chickpeas, lentils and lupins, is 12 months.

Compatibility

Tenet 500 SC Herbicide is physically compatible with the following herbicides: Wipe Out® 450, Wipe-Out® Pro, Weedmaster* ARGO®, Weedmaster* DST, Spraytop® 250, Elevate® 400 EC, Cavalier®, Stomp* Xtra, Farmozine® 900, propyzamide, Simanex® 900, Terbyne* Xtreme and triallate. Note that Tenet is NOT compatible with glyphosate potassium salt (e.g. Roundup* UltraMax), Gramoxone* 360 Pro or trifluralin. Tenet is physically compatible with the following insecticides: Alpha-Scud® 300, Pyrinex® Super, Strike-Out®, Venom® 240 SC and Trojan*.

Grazing canola guidelines

Crops cannot be grazed or cut for stock food for 12 weeks following application with Tenet.

Table 2: Registered application rates

Crop	Weeds	Rate (L/ha)
Canola Annual ryegrass (triazine tolerant		0.75 – 1.0 + low label rate of Farmozine, Simanex® or terbuthylazine
	Feathertop Rhodes grass, fleabane. Suppression only: Barley grass, brome grass, burr medic, capeweed, wild carrot.	1.0 + low label rate of Farmozine, Simanex or terbuthylazine
Canola	Annual ryegrass	1.5 – 1.8
tolerances)	Barley grass, brome grass, capeweed, deadnettle, field-mouse ear/chickweed, fine leaf erodium, fleabane, milkthistle, shepherd's purse, toadrush, wild oats, wireweed. Suppression only: Clover, dense crassula, oxalis, stinging nettle.	1.8



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