

Product Name: TENET 500 SC HERBICIDE
APVMA Approval No: 89948/130591



Label Name:	TENET 500 SC HERBICIDE
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Signal Headings:	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
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Constituent Statements:	ACTIVE CONSTITUENT: 500 g/L METAZACHLOR
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Mode of Action:	GROUP 15 HERBICIDE
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Statement of Claims:	Crop: Canola Controls or Suppresses: A range of grasses and broadleaf weeds as per the Directions for Use.
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Net Contents:	1 L to 1000 L
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Restraints:	This section contains file attachment.
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Directions for Use:	This section contains file attachment.
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Other Limitations:	
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Withholding Periods:	HARVEST: NOT REQUIRED WHEN USED AS DIRECTED. When using TENET® Herbicide in a tank mixture with additional products, observe whichever product Harvest Withholding Period is longer.
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GRAZING: DO NOT GRAZE OR CUT FOR STOCKFOOD FOR 13 WEEKS AFTER APPLICATION.
When using TENET® Herbicide in a tank mixture with additional products, observe whichever product Grazing Withholding Period is longer.

Trade Advice:

General Instructions: This section contains file attachment.

Resistance Warning:

RESISTANT WEEDS WARNING
GROUP 15 HERBICIDE
TENET 500 SC is a member of the chloroacetamide group of herbicides and has the inhibitor of very long chain fatty acids (VLCFA inhibitors) mode of action. For weed resistance management TENET 500 SC is a Group 15 herbicide. Some naturally-occurring weed biotypes resistant to TENET 500 SC, and other Group 15 herbicides, may exist through normal genetic variability in any weed population. These resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by TENET 500 SC or other Group 15 herbicides. Do not rely exclusively on TENET 500 SC for weed control. Use as part of an integrated weed management program involving herbicides with other modes of action and non-chemical methods of control. CropLife Australia resistance management strategies are available from your local agricultural chemical supplier or at the Croplife Australia website (www.croplifeaustralia.org.au). Refer to these strategies for details of how to manage the build-up of resistant weeds on your farm. Since occurrence of resistant weeds is difficult to detect prior to use ADAMA Australia accepts no liability for any losses that may result from the failure of TENET 500 SC to control resistant weeds.

Precautions:

Protections:

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS
DO NOT apply under weather conditions, or from spray equipment, which may cause spray drift onto nearby susceptible plants, adjacent crops, or pastures.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT
Highly toxic to aquatic life. DO NOT contaminate streams, rivers or watercourses with the chemical or used containers.

Storage and Disposal:

60 L, 110L (Mini-bulk Returnable Container)
Store in the closed, original container in a dry, cool, well ventilated area out of direct sunlight. Do not tamper with the Micro Matic valve or the security seal. Do not contaminate the container with water or any foreign matter. After each use of the product, please ensure that the Micro Matic coupler delivery system and hoses are disconnected, triple rinsed with clean water and drained accordingly. When the contents of the container have been used, please return the container to the point of purchase. The container remains the property of Adama Australia.

1000 L (Refillable container)
Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Storage must be secure so that contents cannot be tampered with. All locks and/or seals must be in order. If locks or seals are broken prior

to initial use then the integrity of this product cannot be assured. If this occurs, Adama Australia should be advised immediately. This minibulk container is reusable and remains the property of Adama Australia. DO NOT rinse empty container. Empty contents fully into application equipment. Close all valves and return to the point of supply for refill or storage. No other liquid, solid or pesticide product should be put into it. When empty, return to Adama Australia for cleaning, relabelling and refilling.

DrumMUSTER:

Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. This container can be recycled if it is clean, dry, free of visible residues and has the drumMUSTER logo visible. Triple-rinse container for disposal. Dispose of rinsate by adding it to the spray tank. DO NOT dispose of undiluted chemical on site. Wash outside of the container and the cap. Store cleaned container in a sheltered place with cap removed. It will then be acceptable for recycling at any drumMUSTER collection or similar container management program site. The cap should not be replaced, but may be taken separately. If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.

Safety Directions:	Harmful if swallowed. May irritate the eyes. Avoid contact with eyes. Wash hands after use. WHEN USING TOGETHER WITH OTHER PRODUCTS, CONSULT THEIR LABEL SAFETY DIRECTIONS.
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First Aid Instructions:	If poisoning occurs contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.
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First Aid Warnings:	
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RESTRAINTS

DO NOT apply by aerial application.

DO NOT apply if heavy rain has been forecast within 48 hours.

DO NOT apply to waterlogged soil.

DO NOT apply to crops that are stressed/wilting due to conditions such as frost, too little moisture, disease or nutritional disorders or insect attack.

DO NOT apply products containing metazachlor more than once per season.

SPRAY DRIFT RESTRAINTS

Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift

DO NOT allow bystanders to come into contact with the spray cloud.

DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. The buffer zones in the relevant buffer zone table/s below provide guidance but may not be sufficient in all situations. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.

DO NOT apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application.

DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.

DO NOT apply by a boom sprayer unless the following requirements are met:

- Spray droplets not smaller than a **MEDIUM** spray droplet size category.
- Minimum distances between the application site and downwind sensitive areas (see 'Mandatory buffer zones' section of the following table titled 'Buffer zones for boom sprayers') are observed.

Buffer zones for boom sprayers

Application rate	Mandatory downwind buffer zones	
	Natural aquatic areas	Vegetation areas
Up to maximum label rate	50 metres	20 metres

DIRECTIONS FOR USE

CROP	WEEDS	RATE (L/ha)	CRITICAL COMMENTS
Canola (triazine tolerant varieties)	Annual ryegrass (<i>Lolium rigidum</i>)	0.75 to 1.0 + Low label rate of a registered triazine herbicide	To reduce the risk of crop effects, refer to the Crop Safety and RATE SELECTION, SOIL TEXTURE AND ORGANIC CARBON sections of the GENERAL INSTRUCTIONS before using TENET 500 SC. Use TENET 500 SC as part of an integrated weed management program including cultural techniques, crop rotation, use of pre and post emergent herbicides and rotation of mode of action groups. The efficacy and weed spectrum of TENET 500 SC is enhanced by tank mixing with the low label rate of a registered triazine formulation for triazine tolerant canola i.e. atrazine, simazine or terbutylazine. When targeting annual ryegrass, the lower rate can be used under low weed pressure i.e. ≤ 100 ryegrass plants/m ² . Under higher ryegrass pressure, increase the rate to 1 L/ha. Apply pre-sowing and incorporate by sowing (IBS) using knife points and press wheels. For best results apply just before sowing (refer to Interval between Application and Sowing in GENERAL INSTRUCTIONS). Avoid throwing treated soil into adjacent crop rows when sowing with knife points and press wheels. To optimise weed control apply directly to uncultivated soil. Weed control may be greatly reduced where weed seeds have been buried by cultivation prior to sowing and germinate from depth. Weed control may be adversely affected by; <ul style="list-style-type: none">• uneven application,• application to ridged or cloddy soil,• stubble, plant residue or other ground cover particularly where this exceeds 50%,• germinated and emerged weeds that are not controlled by a knockdown herbicide,• insufficient rainfall within 7 to 10 days after application,• in soils prone to leaching where rainfall which is sufficiently heavy to cause movement of the herbicide out of the weed seed zone. These factors when combined may substantially reduce weed control.
Pre- emergence incorporated by sowing	Feathertop Rhodes grass (<i>Chloris virgata</i>), Fleabane (<i>Conyza bonariensis</i>) Suppression only: Barley grass (<i>Hordeum leporinum</i>), Brome grass (<i>Bromus spp.</i>), Burr medic (<i>Medicago polymorpha</i>), Capeweed (<i>Arctotheca calendula</i>), Wild carrot (<i>Daucus carota</i>)	1.0 + Low label rate of a registered triazine herbicide	

CROP	WEEDS	RATE (L/ha)	CRITICAL COMMENTS
Canola Pre-emergence incorporated by sowing	<p>Annual ryegrass (<i>Lolium rigidum</i>)</p> <p>Barley grass (<i>Hordeum leporinum</i>), Brome grass (<i>Bromus spp.</i>), Capeweed (<i>Arctotheca calendula</i>), Deadnettle (<i>Lamium amplexicaule</i>), Field-mouse ear chickweed (<i>Cerastium arvense</i>), Fine leaf erodium (<i>Erodium cicutarium</i>), Fleabane (<i>Conyza bonariensis</i>), Milk thistle (<i>Sonchus oleraceus</i>), Shepherd's purse (<i>Capsella bursa-pastoris</i>), Toad rush (<i>Juncus bufonius</i>), Wild oats (<i>Avena spp.</i>), Wireweed (<i>Polygonum aviculare</i>)</p> <p>Suppression only: Clover (<i>Trifolium spp.</i>), Dense crassula (<i>Crassula colorata</i>), Oxalis (<i>Oxalis pes-caprae</i>), Stinging nettle (<i>Urtica dioica</i>)</p>	1.5-1.8 1.8	<p>To reduce the risk of crop effects, refer to the Crop Safety and RATE SELECTION, SOIL TEXTURE AND ORGANIC CARBON sections of the GENERAL INSTRUCTIONS before using TENET 500 SC.</p> <p>Use TENET 500 SC as part of an integrated weed management program including cultural techniques, crop rotation, use of pre and post emergent herbicides and rotation of mode of action groups.</p> <p>When targeting annual ryegrass, use the higher rate where a heavy weed population is expected e.g. >200 plants/m²; and the soil type is suitable for higher rates of TENET 500 SC.</p> <p>Apply pre-sowing and incorporate by sowing (IBS) using knife points and press wheels. For best results apply just before sowing (refer to Interval between Application and Sowing in GENERAL INSTRUCTIONS).</p> <p>Avoid throwing treated soil into adjacent crop rows when sowing with knife points and press wheels.</p> <p>To optimise weed control apply directly to uncultivated soil. Weed control may be greatly reduced where weed seeds have been buried by cultivation prior to sowing and germinate from depth.</p> <p>Weed control may be adversely affected by;</p> <ul style="list-style-type: none"> • uneven application, • application to ridged or cloddy soil, • stubble, plant residue or other ground cover particularly where this exceeds 50%, • germinated and emerged weeds that are not controlled by a knockdown herbicide, • insufficient rainfall within 7 to 10 days after application, • in soils prone to leaching where rainfall which is sufficiently heavy to cause movement of the herbicide out of the weed seed zone. <p>These factors when combined may substantially reduce weed control.</p>
Canola Early post-emergence	Annual ryegrass (<i>Lolium rigidum</i>) Wild oats (<i>Avena fatua</i>)	0.75 + highest label rate of a registered clethodim product for early post-emergent control of annual ryegrass and wild oats in Canola	<p>Use TENET 500 SC as part of an integrated weed management program including cultural techniques, crop rotation, use of pre and post emergent herbicides and rotation of mode of action groups.</p> <p>Before use, refer to the General Instructions for more information on post-emergence applications.</p> <p>Application should be made targeting actively growing, healthy weeds with a maximum of 2 leaves. Ensure good foliar coverage of weeds to maximise control.</p> <p>Apply when the crop has at least one fully expanded true leaf. DO NOT apply after crop stage BBCH 13 and 2 leaf weed stage.</p> <p>When applying TENET with Platinum Xtra 360, apply with Hasteen* Adjuvant at 1 L/100L spray volume or other approved oil adjuvant as per the Platinum Xtra 360 label.</p> <p>For information on other suitable tank mix partners and alternative adjuvants for application with TENET, please contact ADAMA Australia.</p>

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

GENERAL INSTRUCTIONS

TENET 500 SC is a residual herbicide that provides pre-emergence control of selected grass and broadleaved weeds and early post emergence control of annual ryegrass and wild oats when applied with Platinum Xtra and Hasten. It is absorbed by the roots of germinating seedlings and translocated primarily by the xylem.

INCORPORATION BY SOWING

Weed control from pre-sowing applications of TENET 500 SC Herbicide is optimised when applied evenly to moist soil just prior to incorporation by sowing and there is sufficient rainfall soon after sowing to ensure activation and uptake of the herbicide by germinating weeds. When applied prior to planting, TENET 500 SC Herbicide should be incorporated by sowing using knife points and press wheels as soon as practicable.

CAUTION: Do not throw treated soil from one sowing furrow into an adjacent furrow as this may result in crop damage.

If emerged weeds are present at the time of application, apply TENET 500 SC with a knockdown herbicide. Weeds germinating in the seed row may not be controlled. Weeds germinating from depth, weeds just about to emerge, or weeds that have emerged which are not controlled by a knockdown herbicide at sowing may not be controlled by TENET 500 SC Herbicide. Weed control may be greatly reduced where weed seeds have been buried by cultivation prior to application. Weed control may also be reduced where there is insufficient soil moisture for herbicide uptake or in soils prone to leaching where rainfall is sufficiently heavy to cause movement of the herbicide out of the weed seed zone.

EARLY POST-EMERGENCE

If applying early post-emergence, best results will be achieved when good contact and coverage of weeds occurs, and weeds have a maximum of two leaves and are actively growing. TENET should be applied with Platinum Xtra 360 (or equivalent clethodim formulation) and Hasten when applying post-emergence. For information on other suitable tank mix partners, please contact ADAMA Australia.

Under good soil moisture conditions, TENET has some residual soil activity. The residual effects on weeds can be reduced when dry soil conditions follow application before the herbicide has moved to the root zone. Best results will be achieved when application is made to moist soil or if approximately 10 mm rain follows within one week of application, but only after the clethodim has had enough time to become rainfast on target weeds (refer to Platinum Xtra 360 label). Vigorous crop growth will assist in suppressing weeds not completely killed and those germinating later.

COMPATIBILITY

TENET 500 SC Herbicide is physically compatible with any one of the following herbicides: Wipe Out® 450, Wipe-Out® Pro, Weedmaster® ARGO®, Weedmaster DST®, Spraytop® 250, Elevate® 400 EC, Talstar® 250 EC, Cavalier, Stomp® Xtra Herbicide, Farmozine 900, propyzamide, Platinum® Xtra 360, Simanex 900, Terbyne, Terbyne Xtreme, triallate and Trilogy®.

TENET 500 SC Herbicide is NOT compatible with glyphosate potassium salt (e.g. Roundup® UltraMax) or Gramoxone® 360 Pro.

CROP SAFETY

Crop selectivity is achieved through separation of the seed from the herbicide treated band. Use knife points and press wheels to provide good separation of herbicide and closure of the planting row. In situations where a concentration of herbicide occurs in the planting row or at the planted crop seed, this may cause crop damage. Therefore, situations such as the following may result in potential crop damage:

- Deep planting furrows where soil infills into the planted furrow via such circumstances as wind or rain
- Heavy rainfall after application and before crop emergence particularly in soils with higher potential for leaching
- Either or both of the above factors combined with rates that are too high for the soil texture and organic carbon levels (refer to the following section on RATE SELECTION, SOIL TEXTURE AND ORGANIC CARBON)

Other stress events on the crop such as frost, waterlogging, disease, insect attack or vigour reductions from other tank mixed herbicides, and vigour reductions from some seed treatments may increase the potential for crop damage.

TENET has not been evaluated for crop safety on all canola cultivars. On varieties where Tenet has not been evaluated, apply to a small test area to confirm crop safety prior to commercial application. Please contact ADAMA Australia for more information on cultivar tolerance to TENET.

RATE SELECTION, SOIL TEXTURE AND ORGANIC CARBON

Prior to using TENET 500 SC, soil tests should be conducted (if not already available) on all paddocks that are planned to be treated. Metazachlor has moderate soil mobility with the risk of leaching into the seeding zone at concentrations that may cause crop damage depending on the soil texture, organic carbon levels and application rate. To minimize the risk of crop damage from metazachlor concentrating in the planting row or at the planted crop seed, apply TENET 500 SC only at rates recommended for the soil texture as per Table 3 below.

Table 3: Recommended maximum application rate by soil texture

Soil texture (% clay)	TENET 500 SC rate (L/ha)
0-15	0.75
16-30	1.0
31-40	1.5
>40	1.8

In low organic carbon soils, metazachlor is more mobile particularly as the application rate increases. To reduce the risk of damage to establishing crops from metazachlor concentrating in the planting row or at the planted crop seed, **TENET 500 SC should only be applied where the soil organic carbon in the top 10 cm of soil is ≥1%.**

RECROPPING INTERVAL

Crops	Minimal cropping interval
All crops including Wheat, Durum, Barley, Oats, Field peas, Chickpeas, Lupins	12 months

TIMING

For pre-emergence applications, incorporate by sowing as soon as practicable after application of TENET 500 SC Herbicide, but no later than 3 days after application.

For early post-emergence applications, apply TENET 500 SC Herbicide (in a tank mix with Platinum Xtra 360 and Hasten) when the crop has at least one fully expanded true leaf. Ensure weeds are no greater than 2 leaf stage and crop is no greater than BBCH 13.

MIXING

Ensure sprayer and nozzle filters are clean before preparing the spray mixture. Half fill the spray tank with water and, with the agitators in motion, add the correct amount of TENET 500 SC Herbicide directly to the spray tank. Complete filling the tank with agitators in motion. Agitation must continue before and during spraying.

With glyphosate, paraquat, carfentrazone or oxyfluorfen (see compatibility section above):

Prepare only enough spray solution for immediate application and use promptly while maintaining constant agitation. Do not stand overnight. Mixtures with individual products should be tested before mixing or applying in commercial quantities.

Contact your local ADAMA Australia representative for further information.

APPLICATION

Ground sprayers

Apply TENET 500 SC HERBICIDE as a broadcast application using a conventional boom sprayer with either mechanical or by-pass agitation. Spray equipment should be properly calibrated to ensure correct and uniform spray coverage. Use a spray volume of 80 to 250 L/ha. The higher spray volume is recommended when applying early post-emergent on dense grass populations. To minimise off-target drift use the lowest pressure and boom height which provides uniform coverage.

Poor spray coverage and reduced residual control may result from application to ridged or excessively cloddy soil or in situations of high stubble, plant residue or other ground cover. A significant reduction in weed control may result where stubble, plant residue or other ground cover exceeds 50%, and in situations where a 'cold' or incomplete burn of stubble results in a mass of material which can act as a physical barrier between the herbicide and germinating weeds – this can be exacerbated in header trails where there may be greater weed seed numbers and higher levels of plant residue. Weed control can be particularly affected where TENET 500 SC HERBICIDE is applied to a barrier of stubble, plant residue or other ground cover and there is insufficient following rainfall to transfer the herbicide to the soil surface and the germinating weed seeds. Ensure complete and even spray coverage of the soil is achieved.

Aerial sprayers

DO NOT apply TENET 500 SC HERBICIDE by aircraft.

EQUIPMENT CLEAN UP

Thoroughly flush all spray equipment with water following the use of TENET 500 SC Herbicide and before use with other products. If tank-mixed with other products, also follow cleanup procedures recommended for the mixing partner.