CAUTION

KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

TITAN

PINOXADEN 100EC

HERBICIDE

ACTIVE CONSTITUENTS: 100g/L PINOXADEN
25g/L CLOQUINTOCET-MEXYL
SOLVENTS: 583g/L LIQUID HYDROCARBON
100g/L N-METHYL-2-PYRROLIDONE

GROUP **1** HERBICIDE



For the control of key grass weeds and selective spray topping of Wild Oats in Wheat and Barley.

APVMA Approval No.: 85289/141853

Pack Size: 5L-1000L

TITAN AG
CROP PROTECTION

TITAN AG Pty Ltd | ABN 57 122 081 574
15/16 Princes Street, Newport NSW 2106
Tel (02) 9999 6655 | titanag.com.au

EC Formulation Type **Emulsifiable Concentrate**

IN A TRANSPORT EMERGENCY
• DIAL 000 • POLICE OR FIRE BRIGADE

9 **3082**
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains solvent naphtha petroleum, heavy aromatic)
PG III Hazchem •3Z

DIRECTIONS FOR USE

Restraints: DO NOT apply if rainfall is expected within 30 minutes.
DO NOT apply to weeds under stress from factors including very dry, waterlogged, cold, frosty conditions, nutrient deficiency or the use of pre-emergent herbicides.

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 in 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. 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.

CROP	WEED/SITUATION	STATE	RATE/ha	CRITICAL COMMENTS
Barley, Wheat 2 leaf to first awns visible (GS12-49)	Canary Grass (*Phalaris minor*), Paradoxa Grass (*Phalaris paradoxa*) (Annual Phalaris) 2 leaf to end of tillering (GS12-29)	ALL STATES	200 to 250mL plus 500mL TITAN Duelling Spray Adjuvant/100L water	DO NOT apply more than once per crop. **Rate Selection:** Use the lower rate when weeds are actively growing without stress, small in size and of low density. Use the higher rate when growing conditions are not ideal and weeds are under minor stress, larger in size or in high density. Low level or minor stress can be caused by factors including dry conditions, waterlogging, cold or nutrient deficiency, providing they are not severe or of prolonged duration. **Mixtures:** Apply in mixtures for broadleaf weed control only when weeds are actively growing. Mixing with some broadleaf weed herbicides can result in a reduction in grass weed control. Use the higher rate of TITAN Pinoxaden 100EC Herbicide when applying mixtures. **Resistance Management:** DO NOT make more than 1 application of a Group 1 herbicide to a crop in the same season. For suspected Group 1 resistant populations, refer to the Resistant Weeds Warning.
	Wild Oats (Black Oats) (*Avena* spp.) 2 leaf to end of tillering (GS12-29)	Sth NSW, VIC, TAS, SA, WA only	150 to 200mL plus 500mL TITAN Duelling Spray Adjuvant /100L water	
		QLD, Nth NSW only	200mL plus 500mL TITAN Duelling Spray Adjuvant /100L water	
	Selective spray topping of Wild Oats (Black Oats) (*Avena* spp.) (GS30-47) To reduce panicle numbers and/or weed seed viability	ALL STATES		DO NOT apply later than the first awns visible stage (GS49) of the crop. **Application Timing:** Apply TITAN Pinoxaden 100EC Herbicide when the majority of Wild Oats are at the stem elongation stage, up to and including when the flag leaf sheath is just at opening stage (GS30-47). Applications during early stem elongation will provide good control and are most effective in reducing panicle numbers but are less effective in reducing the viability of any weed seed produced. Applications at and beyond the flag leaf fully emerged stage (GS39) will reduce weed seed viability and contribution of seed to the weed seed bank. Carefully monitor weed growth stage to ensure optimum timing of herbicide application and always consider the range in weed growth stages present at application. Late germinating weeds not present at application, will not be controlled. **Mixtures:** Apply in mixtures for broadleaf weed control only when weeds are actively growing. Mixing with some broadleaf weed herbicides can result in a reduction in product efficacy. **Resistance Management:** For suspected Group 1 resistant populations, refer to Resistant Weeds Warning.
	Suppression of Annual Ryegrass (*Lolium rigidium*) 2 leaf to early tillering (GS12-22)	ALL STATES	250 to 300mL plus 500mL TITAN Duelling Spray Adjuvant /100L water	DO NOT apply more than once per crop. To get best results, apply only to actively growing Annual Ryegrass until the start of tillering. DO NOT apply under poor growing conditions or to weeds under stress. **Rate Selection:** Use the lower rates when weed density is light and weeds are small in size. Use the higher rate when weed density is moderate and weed size is large. Preferably apply in a program with a pre-emergent herbicide and avoid applying Group 1 herbicides to high densities of Annual Ryegrass. **Mixtures:** Mixing with some broadleaf herbicides may reduce Annual Ryegrass control. Use the higher rate of TITAN Pinoxaden 100EC Herbicide when applying mixtures. **Resistance Management:** DO NOT make more than 1 application of a Group 1 herbicide to a crop in the same season. For suspected Group 1 resistant populations, refer to the Resistant Weeds Warning.

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

TITAN AG CROP PROTECTION

WITHHOLDING PERIODS
Barley, Wheat:
Harvest: NOT REQUIRED WHEN USED AS DIRECTED.
Grazing: DO NOT GRAZE OR CUT FOR STOCKFOOD FOR 21 DAYS AFTER APPLICATION.

GENERAL INSTRUCTIONS
TITAN Pinoxaden 100EC Herbicide should be applied to weeds that are actively growing. Weeds under stress are more difficult to control. Under the influence of low level stresses weeds may still be controlled, but a higher rate of TITAN Pinoxaden 100EC Herbicide is required. As stress becomes more severe weed control may fail. Stress can be caused by a range of factors including dry conditions, waterlogging, cold or nutrient deficiency.

MIXING
Thoroughly clean the sprayer prior to use. For appropriate cleaning instructions, refer to the label of the product sprayed previously. Fill the spray tank to half full with clean water. Start agitation. Add TITAN Pinoxaden 100EC Herbicide by pouring it into the stream of incoming water and continue filling. Add the required amount of TITAN Duelling Spray Adjuvant just before the tank is full and continue agitation.

Mixing Order: Some products may react with other products if they are not mixed in the correct order. The general mixing order of products should be:

1. Water conditioners or buffers
2. Water dispersable granules (WG)
3. Wettable powders (WP)
4. Flowable or suspension concentrates (SC)
5. Emulsifiable concentrates (EC)
6. Water based or soluble concentrates
7. TITAN Duelling Spray Adjuvant

It is important to ensure that each individual component of the tank mix is fully dissolved and in solution before the next product is added to the tank mix, otherwise mixing problems may occur.

APPLICATION
Ground Application: Ensure good spray coverage is obtained. Apply using a minimum of 50L of water/ha using a nozzle delivering a medium spray quality. Spray volumes towards the higher end of the recommended range should be used for dense weed populations, where larger droplet sizes are used or when targeting Annual Ryegrass.

Aerial Application: Apply using a minimum of 20L water/ha and spray at 2 to 3m above the crop. Use a nozzle to deliver a MEDIUM droplet size category spray. Avoid applying if wind speeds are greater than 18km/hour. For aerial application, use TITAN Duelling Spray Adjuvant at 500mL/ha.

COMPATIBILITY
When TITAN Pinoxaden 100EC Herbicide is applied alone or with other compatible products always use TITAN Duelling Spray Adjuvant. TITAN Pinoxaden 100EC Herbicide is compatible with most common broadleaf herbicides. As formulations of other manufacturers' products are beyond the control of TITAN AG and water quality varies with location, all mixtures should be tested prior to mixing commercial quantities.

Weed Control: Some products, including broadleaf herbicides, can result in reduced grass weed control when applied with TITAN Pinoxaden 100EC Herbicide. For the latest information on compatibility of TITAN Pinoxaden 100EC Herbicide with broadleaf herbicides refer to the TITAN Pinoxaden 100EC Herbicide compatibility chart available from your local reseller, TITAN AG local representative, TITAN AG website titanag.com.au or technical advice on (02) 9999 6655.

Crop Injury: Some products can result in crop yellowing or crop injury when applied with crop oils including TITAN Duelling Spray Adjuvant. Refer to the label of mixing partners to determine if they can be used with crop oils. For example, products containing MCPA + Picolinafen, Picolinafen, Diflufenican and Diflufenican + MCPA may cause crop injury when used with crop oils including TITAN Duelling Spray Adjuvant. If necessary, to avoid reduced grass weed control or crop injury, apply TITAN Pinoxaden 100EC Herbicide first and then allow at least 10 days between its application and application of other product.

CLEANING SPRAY EQUIPMENT
After using TITAN Pinoxaden 100EC Herbicide, empty the tank completely and drain the whole system. Thoroughly wash inside the tank using a pressure hose, drain the tank and clean any filters in the tank, pump, line and nozzles.

To Rinse: After cleaning the tank as above, quarter fill the tank with clean water and circulate through the pump, lines, hoses and nozzles. Drain and repeat the rinsing procedure twice.

To Decontaminate: Before spraying cereals (except Wheat or Barley), Maize, Sorghum or other sensitive crops, wash the tank and rinse the system as above. Drain and repeat the rinsing procedure. Then quarter fill the tank and add a liquid alkali detergent (eg Surf*, Omo*, Drive*) at 0.5L/100L water and circulate throughout the system for at least 15 minutes. Drain the whole system. Remove filters and nozzles and clean them separately. Finally, flush the system with clean water and allow to drain.

Dispose of all water used for cleaning in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and roots.

RESISTANT WEEDS WARNING
GROUP **1** HERBICIDE

TITAN Pinoxaden 100EC Herbicide has the inhibition of acetyl CoA carboxylase mode of action. For weed resistance management, TITAN Pinoxaden 100EC Herbicide is a Group 1 herbicide. Some naturally occurring weed biotypes resistant to TITAN Pinoxaden 100EC Herbicide and other Group 1 herbicides may exist through normal genetic variability in any weed population. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by TITAN Pinoxaden 100EC Herbicide or other Group 1 herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, TITAN AG Pty Ltd accepts no liability for any losses that may result from the failure of TITAN Pinoxaden 100EC Herbicide to control resistant weeds. Large numbers of healthy surviving weeds can be an indication that resistance is developing. Efforts should be made to prevent seed set of the surviving weeds.

DO NOT make more than 1 application of a Group 1 herbicide with the inhibition of acetyl-CoA carboxylase mode of action to a crop in the same season.

If the user suspects that the target weed population is resistant to herbicides with this mode of action, TITAN Pinoxaden 100EC Herbicide or other Group 1 herbicides should not be used. Strategies to minimise the risk of herbicide resistance are available. The above recommendations should be incorporated into an Integrated Weed Management (IWM) Program. Consult your farm chemical supplier, consultant, local Department of Agriculture or Primary Industries or TITAN AG representative for details.

PRECAUTIONS
DO NOT use human flaggers/markers unless they are protected by engineering controls such as enclosed cabs.

Re-entry Period: DO NOT allow entry into treated areas until the spray has dried unless wearing cotton overalls (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS
DO NOT apply under weather conditions or from spraying equipment that may cause spray to drift onto nearby susceptible plants/crops, cropping lands or pastures.

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

STORAGE AND DISPOSAL
Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Triple rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. 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 500mm 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.

For Returnable Containers: Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

SAFETY DIRECTIONS
Will irritate the eyes, nose, throat and skin. Avoid contact with eyes and skin. DO NOT inhale vapour. When opening the container and preparing spray, wear: cotton overalls buttoned to the neck and wrist; a washable hat; elbow-length PVC gloves; goggles; disposable face mask covering mouth and nose. If product on skin, immediately wash the area with soap and water. If product in eyes, wash it out immediately with water. After each day's use, wash gloves, goggles and contaminated clothing.

FIRST AID
If poisoning occurs contact a doctor or Poisons Information Centre. Phone Australia 131126; New Zealand 0800 764 766. If swallowed, do NOT induce vomiting.

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SAFETY DATA SHEET

Additional information is listed in the safety data sheet (SDS). A safety data sheet for TITAN Pinoxaden 100EC Herbicide is available from TITAN AG Pty Ltd on request. Call Customer Service on (02) 9999 6655 or visit titanag.com.au

CONDITIONS OF SALE: TITAN AG Pty Ltd shall not be liable for any loss injury damage or death whether consequential or otherwise whatsoever or howsoever arising whether through negligence or otherwise in connection with the sale supply use or application of this product. The supply of this product is on the express condition that the purchaser does not rely on TITAN AG's skill or judgment in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of TITAN AG Pty Ltd has any authority to add to or alter these conditions.

Additional statements required by Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia: Combustible liquid. Harmful if swallowed. May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. May damage the unborn child. Toxic to aquatic life with long lasting effects. Precautionary Statements: Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only a well-ventilated area. Wear protective gloves, protective clothing, eye protection and face protection. Avoid breathing mist/vapours/spray. Wash all exposed external body areas thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Contaminated work clothing should not be allowed out of the workplace. IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/ first aider. Do NOT induce vomiting. IF exposed or concerned: Get medical advice/ attention. In case of fire: Use alcohol resistant foam or normal protein foam to extinguish. IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Collect spillage. IF SWALLOWED: Call a POISON CENTER/doctor/physician/first aider if you feel unwell. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Rinse mouth. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.



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