

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

QA

# Terbuthylazine 875 WG

## HERBICIDE

ACTIVE CONSTITUENT: 875 g/kg TERBUTHYLAZINE

GROUP **5** HERBICIDE

For the control of weeds in chickpeas, faba beans, fallows, field peas, lentils, lupins, sorghum and triazine tolerant canola as per the directions for use table.

APVMA Approval No.: 91177/149901

**WG**

Formulation Type  
**Water Dispersible  
Granule**

**BE PROUDLY  
AUSTRALIAN**

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 **QUANTUM  
AGROSCIENCES**

## DIRECTIONS FOR USE

### RESTRAINTS:

DO NOT apply by air.

DO NOT apply to fields where the slope exceeds 3%.

DO NOT apply to waterlogged soil.

DO NOT apply if heavy rains or storms that are likely to cause surface runoff are forecast within two days of application.

DO NOT irrigate to the point of runoff for at least 2 days after application.

DO NOT use as a pre-emergence application in sorghum during the wet season in the Northern Irrigation areas of Western Australia.

DO NOT apply more than 1.2 kg/ha per crop.

### SPRAY DRIFT RESTRAINTS

Specific definitions for terms used in this section of the label can be found at [apvma.gov.au/spraydrift](http://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 COARSE 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 (1.2 kg/ha)	60 metres	20 metres

CROP	SITUATION	WEEDS	RATE kg/ha	CRITICAL COMMENTS
Chickpeas, Faba beans, Field peas, Lupins (not irrigated)  NSW., Vic, S.A., WA, Qld only	Pre-Sowing -	Suppression of: Wild Radish, Doublegee/Spiny emex	0.86 to 1.20	QA Terbutylazine 875 WG Herbicide can be used Pre- Sowing or PSPE. Ensure the crop is sown with at 5 cm. Refer to the APPLICATION section of the label. Use the lower rate on light soils (sandy loams to loamy sands) and the higher rate on heavier soils (loam, silt plus clay 40-60%). The soil should be free of excessive clods, trash and deep furrows. Sufficient rainfall (20 to 30 mm) to wet the soil through the weed root zone is necessary within 2 to 3 weeks of application. NOTE: Some early crop phytotoxicity may be observed particularly on light soils. Heavy, intense rainfall following application may cause crop damage. At the higher rates, avoid overlapping sprays and spraying-out corners.
	Post Sowing, Pre Emergence (PSPE).  Apply to the soil within 2 days after sowing.	Burr medic, Corn gromwell (White iron weed, Sheep weed), Dead nettle, Indian hedge mustard, Long haired poppy, Mint weed, Ox tongue, Prickly lettuce, Shepherd's purse, Sow thistle, Toadrush, Turnip weed, Wild gooseberry, Wild turnip, Wireweed.  <b>Suppression of:</b> Annual ryegrass, Doublegee/Spiny emex, Phalaris, Silver grass, Wild oats, Wild radish	0.60 to 0.86	

CROP	SITUATION	WEEDS	RATE kg/ha	CRITICAL COMMENTS
Canola (TT or Triazine Tolerant varieties only)	Pre-Sowing	Suppression of: Wild Radish, Doublegee/Spiny emex	0.86 to 1.20	QA Terbutylazine 875 WG Herbicide can be used Pre-Sowing or PSPE. Ensure the crop is sown at 5 cm. Refer to the APPLICATION section of the label. Use the lower rate on light soils (sandy loams to loamy sands) and the higher rate on heavier soils (loams, silt plus clay 40-60%). The soil should be free of excessive clods, trash and deep furrows. Sufficient rainfall (20 to 30 mm) to wet the soil through the weed root zone is necessary within 2 to 3 weeks of application.  NOTE: Some early crop phytotoxicity may be observed particularly on light soils. Heavy, intense rainfall following application may cause crop damage. At the higher rates, avoid overlapping sprays and spraying-out corners.
	Post Sowing, Pre Emergence (PSPE). Apply to the soil within 2 days after sowing.	Burr medic, Corn gromwell (White iron weed, Sheep weed), Dead nettle, Indian hedge mustard, Long haired poppy, Mint weed, Ox tongue, Prickly lettuce, Shepherd's purse, Sow thistle, Toadrush, Turnip weed, Wild gooseberry, Wild turnip, Wireweed.  <b>Suppression of:</b> Annual ryegrass, Doublegee/Spiny emex, Phalaris, Wild oats		
	Early Post Emergence	Wild radish, Dead nettle.  <b>Suppression of:</b> Annual ryegrass, Doublegee/Spiny emex, Wild oats, Phalaris	0.60 to 1.20	Apply when weeds are actively growing. Apply up to the 6 leaf stage of canola. Use the higher rate on weeds 6-8 true leaves at time of application. Always add Hasten at 500 mL/100 L water. DO NOT add any other herbicide adjuvant or wetter.

CROP	SITUATION	WEEDS	RATE kg/ha	CRITICAL COMMENTS
Lentils (not irrigated)	Pre-Sowing	<b>Suppression of:</b> Wild radish. Doublegee/ Spiny emex	0.86 to 1.20	Lentils are more sensitive to QA Terbutylazine 875 WG Herbicide than other Pulse crops. Do not use on light soils (i.e. sandy loam to loamy sands, less than 40% clay). The crop must be sown at least 5 cm deep. Refer to the Application section of this label. Use the lower rate on light weed infestations. The soil should be free of excessive clods, trash and deep furrows. Sufficient rainfall (20 to 30 mm) to wet the soil through weed root zone is necessary within 2 to 3 weeks of application.  NOTE: Some early crop phytotoxicity may be observed at the high rate. Heavy, intense rainfall following application may cause crop damage. Avoid overlapping sprays and spraying-out corners.
Sorghum	Pre-Sowing AND Post-Sowing Pre-emergence	Bladder ketmia, Caltrop (yellow vine), Dwarf amaranth, Milk thistle (sow thistle) and Pigweed.	1.20	Apply to soil pre-sowing or post-sowing. Refer to the Application section below.
Sorghum	Post-emergence	Boggabri weed, Noogoora burr, Sow thistle (Milk thistle), Turnip weed, Wild gooseberry	1.20	Always add Hasten at 500 mL/100 L water. Apply up to the 5-7 leaf stage of sorghum. Refer to the Acclaim label for complete directions and rate selection.
		All weeds above plus - Annual ground cherry, Apple of Peru, Bathurst burr, Bladder ketmia, Caltrop (yellow vine), Cow vine (peach vine), Dwarf amaranth, Giant (black) pigweed, Pigweed (red), Thorn apples (Datura spp.)	0.95 PLUS Fluroxypyr 200 g/L at 500-750 mL/ha	

CROP	SITUATION	WEEDS	RATE kg/ha	CRITICAL COMMENTS
Application to fallows prior to planting mung beans, soybeans, barley, oats and wheat as directed in the Fallows section of the label (NSW and QLD only)	Pre-emergence	African turnip weed, Burr medic, Corn gromwell (White iron weed, Sheep weed), Dead nettle, Indian hedge mustard, Flax leaf fleabane, Long haired poppy, Mint weed, Ox tongue, Prickly lettuce, Shepherd's purse, Sow thistle/Milk thistle, Toadrush, Wild gooseberry, Wild radish, Wild turnip, Wireweed/ Hogweed ( <i>Polygonum aviculare</i> ).  <b>Suppression of:</b> Annual ryegrass, Bladder ketmia, Boggabri weed, Doublegee/Spiny emex, Dwarf amaranth, Phalaris, Pigweed, Wild oats, Wild radish.	0.86 – 1.2	Apply to moist soil or when rain is imminent and prior to germination of weeds. Use the higher rate where the soil is covered by more than 50% trash/stubble/weeds, for heavy weed pressure or for longer weed control. If weeds are present, cultivate or apply a knockdown-herbicide prior to applying QA Terbutylazine 875 WG Herbicide. QA Terbutylazine 875 WG Herbicide may also be tank-mixed with certain knockdown herbicides. See Compatibility section of the label. Avoid spray overlap and double spraying on headlands and corners. Refer to the Fallows section of the label for plant-back instructions.

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

**WITHHOLDING PERIODS:**

**HARVEST:**

**NOT REQUIRED WHEN USED AS DIRECTED.**

**GRAZING**

**Chickpeas, Faba beans, Field peas, Lentils, Lupins and Canola: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 6 WEEKS AFTER APPLICATION.**

**Sorghum: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 4 WEEKS AFTER APPLICATION.**

**Fallows: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 6 WEEKS AFTER APPLICATION.**

## **GENERAL INSTRUCTIONS**

QA Terbutylazine 875 WG Herbicide can be used to selectively control weeds in the crops listed in the directions for use table.

When applied pre-emergence, the product is mainly absorbed via the roots. Weeds buried by cultivation may not be effectively controlled. Heavy rainfall on light soils may cause movement of the herbicide out of the weed seed zone, resulting in reduced weed control.

Do not apply to recently burnt stubble/trash. After burning, rainfall or cultivation is required to allow QA Terbutylazine 875 WG Herbicide to reach the soil and not be irreversibly bound by trash.

QA Terbutylazine 875 WG Herbicide is primarily incorporated by rainfall. Sufficient rainfall (20 to 30 mm either as rainfall or irrigation) to wet the soil through the weed root zone is necessary within 2 to 3 weeks of application to make the product effective.

Where soil has a high potential for leaching, heavy rainfall between application and crop emergence may result in crop damage from movement of the herbicide into the crop seed zone.

Delay in activation of this product may result in some weed growth. Results can be variable if seasonal conditions are dry prior to sowing and crops are sown into a dry or low moisture seed bed.

In flood or furrow irrigation situations, complete and continued activation of the product may not occur due to a thin band of dry soil on the surface during or after irrigation.

Mechanical incorporation after application, using light harrows to incorporate the product into the soil not more than 4 cm deep is required to ensure the irrigation water activates this product. Always apply the product to an even un-ridged seedbed.

Dense weed populations and multiple germinations (especially wild radish) may require both a pre-emergent and post emergent herbicide treatment (only one being QA Terbutylazine 875 WG Herbicide) to give acceptable control.

## **INTEGRATED WEED MANAGEMENT STRATEGY FOR TT CANOLA**

The use of this product in TT canola is subject to the current approved Integrated Weed Management Strategy for the use of triazine herbicides in TT canola". The Strategy encompasses: Integrated Weed Management; the specific management of crop plant volunteers and outcrossing to other plants; and triazine herbicide residue management (agronomic and environment).

Compliance with registered label directions and adoption of the principles outlined in the Strategy will assist with implementation of crop management practices that minimise the development of herbicide resistance in treated weeds; reduce the levels of triazine residues in the environment; and manage volunteer plants and outcrossing.

Copies of the Strategy are available from Quantum Agrosiences Holdings Pty Ltd.

Where specific information and farm management assessment is required to assist with application of Integrated Weed Management programs on-farm, particularly in adapting strategies to local conditions, then specific expert advice should be obtained from an appropriate agronomist, consultant, chemical supplier or Departmental adviser.

To minimise herbicide resistance:

- Avoid dry sowing in heavily weed infested paddocks. Wait for a weed germination after the opening rains in weedy paddocks. Use a pre-plant knockdown or cultivation. No weeds should be allowed to survive at this stage.
- DO NOT use QA Terbutylazine 875 WG Herbicide if the area to be treated had a triazine herbicide applied to it last season.
- Watch for escapes, especially in paddocks with a long history of Group C herbicide use.
- DO NOT use Group 5 herbicides in consecutive years.

### **Resistant Weeds Reporting**

Growers should collect plant or seed samples where weeds that are normally susceptible to atrazine, simazine and terbutylazine may be resistant, get them tested and seek professional advice.

### **MIXING**

Do not mix or load within 20 m of any well, dam, intermittent or perennial stream. Partially fill the spray tank with water and maintain agitation while adding the required quantity of QA Terbutylazine 875 WG Herbicide. Agitation should continue after filling and during spraying. If spray is allowed to stand, agitate thoroughly before resuming spraying.

### **COMPATIBILITY**

This product is compatible with Fluroxypyr 200 Herbicide, Fluroxypyr 400 Herbicide, Metolachlor 720 Herbicide, S-Metolachlor 960 Herbicide, Hasten Spray Adjuvant, BS1000 non-ionic surfactant, Uptake Spraying Oil, trifluralin, 2,4-D Amine, glyphosate, Paraquat 250 and Paraquat/Diquat 250 Herbicide and Picloram/2,4-D Amine herbicide. It is advisable that a small-scale compatibility test be carried out prior to tank mixing with other products.

### **APPLICATION**

DO NOT apply when wind speed is less than 3 or greater than 20 kilometres per hour or during weather conditions when surface temperature inversions can develop. Apply by ground boom only in a minimum of 50 L/ha. Use only COARSE spray droplet size category.

### **APVMA Compliance Instructions for Mandatory COARSE or Larger Droplet Size Categories**

#### **Important Information**

These instructions inform users of this chemical product and how to lawfully comply with the requirement of a COARSE or larger spray droplet size category for spray application. Spray droplet size categories are defined in the ASAE S572 Standard (Newer name may also be shown as ASABE) or the BCPC guideline. Nozzle manufacturers may refer to one or both to identify droplet size categories, but for a nozzle to comply with this requirement, the manufacturer must refer to at least one.

Complying with the label requirement to use a specific droplet size category means using the correct nozzle that will deliver that droplet size category under the spray operation conditions being used. The APVMA has approved only the following specific methods for choosing the correct nozzle. Use one of the methods specified in these instructions to select a correct nozzle to deliver a COARSE or larger droplet size category.

#### **Instructions for Ground Application – for COARSE droplet size or larger categories**

##### **Mandatory Instructions for Ground Applications**

USE ONLY nozzles that the nozzles' manufacturer has rated to deliver a COARSE, a VERY COARSE or an EXTREMELY COARSE droplet size category. Choose a nozzle specified to provide the droplet size category required in the label Spray Drift Restraints.

DO NOT use a higher spray system pressure than the maximum the manufacturer specifies for the selected nozzle to deliver the droplet size category required in the label Spray Drift Restraint.

### **Pre-sowing Application**

Apply to moist soil or when rain is imminent and prior to germination of weeds up to a week before sowing. The soil should be free of excessive clods, trash and deep furrows.

Crop safety relies on crop seeds germinating below the QA Terbutylazine 875 WG Herbicide treated soil. Heavy rain after application, on ridged soil in particular, may cause damage from QA Terbutylazine 875 WG Herbicide washed into the seed furrow. Crops should be preferably sown with minimum tillage sowing equipment (fitted with knife points or blades less than 12 mm wide and generally placed on a 20 cm tyne spacing). For crop safety, maintain slow to moderate speed to avoid leaving deep furrows. Ensure even placement of the seed below treated soil. The use of press-wheels can help seed row closure and reduce treated soil falling close to seed. Do not use a combination of both press-wheels and a covering device or chains when sowing.

Sowing with disc-seeders may lead to unacceptable crop damage due to shallow, uneven seeding depth and treated soil coming into contact with seeds.

### **Post Sowing Pre Emergence (PSPE)**

#### **Pulse crops must be sown to at least 5 cm.**

Heavy rain after application onto ridged soil in particular may cause crop damage for QA Terbutylazine 875 WG Herbicide washed into the seed furrow. At the higher rates in Pulse crops, avoid overlapping sprays and spraying out corners. In Pulse crops sowing with disc-seeders may lead to unacceptable crop damage due to uneven seeding depth and treated soil coming into contact with seed.

Apply within 2 days of sowing to soil which is relatively flat after the sowing operation. Heavy rain after application onto ridged soil in particular may cause crop damage from QA Terbutylazine 875 WG Herbicide washed into the seed furrow. At the higher rates, avoid overlapping sprays and spraying out corners.

### **Post Emergence Application**

QA Terbutylazine 875 WG Herbicide can be applied to Triazine Tolerant Canola up to 6-leaf stage and sorghum up to 5-7 leaf stage of the crop. Always add Hasten at 500 mL/100 L water.

### **Fallow Application**

QA Terbutylazine 875 WG can be applied to a fallow to provide pre-emergence control of certain weeds emerging prior to sowing nominated crops below. Apply to moist soil or when rain is imminent and prior to germination of weeds. If weeds are present, cultivate or apply a knockdown-herbicide prior to applying QA Terbutylazine 875 WG Herbicide. QA Terbutylazine 875 WG Herbicide may also be tank-mixed with certain knock-down herbicides. See Compatibility section of the label.

### **FOLLOWING CROPS**

QA Terbutylazine 875 WG Herbicide is broken down by microbial activity, which is favoured by moist soil. Soil which is intermittently dry and moist over the plant-back period may result in longer plant backs. Observe the following plant-back intervals between the date of application to a fallow crop and the planting date of the following crops:

Crop to be planted after QA Terbutylazine 875 WG Herbicide	QA Terbutylazine application rate 0.86 kg/ha	Minimum rainfall or irrigation	QA Terbutylazine application rate 1.2 kg/ha	Minimum rainfall or irrigation
Chickpeas, Faba peas, Field peas, Lentils, Lupins and Canola	3 months	105 mm	4 months	140 mm
All other crops	6 months	175 mm	6 months	175 mm
Sorghum, TT Canola	Not Required			

These plant-backs are based on normal seasonal rainfall (or irrigation) and need both the months and rainfall minimums. If there is a prolonged dry period and there are isolated heavy falls, the plant-back interval may need to be longer than indicated by the rainfall totals and further advice should be sought from Quantum Agrosiences Holdings Pty Ltd.

### RE-ENTRY PERIOD

Do not allow entry into treated areas for 8 days. When prior entry is necessary, wear cotton overalls buttoned to the neck and wrist over normal clothing and Chemical resistant gloves. Clothing must be laundered after each day's use.

### RESISTANT WEEDS WARNING

<b>GROUP 5 HERBICIDE</b>
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QA Terbutylazine 875 WG is a member of the triazines group of herbicides. QA Terbutylazine 875 WG has the inhibitor of photosynthesis at photosystem II mode of action. For weed resistance management QA Terbutylazine 875 WG is a Group 5 Herbicide. Some naturally occurring weed biotypes resistant to QA Terbutylazine 875 WG and other triazine 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 QA Terbutylazine 875 WG or any other Group 5 herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, Quantum Agrosiences Holdings Pty Ltd accepts no liability for any losses that may result from the failure of QA Terbutylazine 875 WG to control resistant weeds.

### PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with the product or used containers. After application of QA Terbutylazine 875 WG Herbicide, DO NOT irrigate crop to the point of run-off, unless it can be retained on farm.

**TT canola: DO NOT** use or apply this product post-emergence on raised beds or where furrows have been created in the soil for the purpose of holding or channelling water. DO NOT use in channels or drains.

### 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. DO NOT apply or drain or flush-equipment on or-near desirable trees-or other plants or on areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots. DO NOT apply on sites where surface water from heavy rain can be expected to run off to areas containing, or to be planted with susceptible crops or plants. DO NOT plant crops other than those recommended on this label for at least 6 months following the most recent application of up to 1.2 kg per hectare.

## **STORAGE AND DISPOSAL**

Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Single-rinse or shake remainder into spray tank. Do not dispose of undiluted chemicals on site. 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**

May irritate the eyes. Avoid contact with eyes and skin. When opening the container, mixing, loading and preparing spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length chemical resistant gloves and half facepiece respirator with dust cartridge or canister. When preparing product for use and if applying by boom spray equipment, wear cotton overalls, over normal clothing, buttoned to the neck and wrist and a washable hat, elbow-length chemical resistant gloves and half facepiece respirator with dust cartridge or canister. When using the prepared spray wear cotton overalls buttoned to the neck and wrist (or equivalent clothing). In addition, when using the prepared spray by lay-by application equipment wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), a washable hat, elbow-length chemical resistant gloves and half facepiece respirator with dust cartridge or canister. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, respirator and if rubber wash with detergent and warm water, and contaminated clothing.

## **FIRST AID**

If poisoning occurs, contact a doctor or Poisons Information Centre, Phone Australia 13 1 1 26.

## **SAFETY DATA SHEET**

Additional information is listed in the safety data sheet (SDS) which is available from the supplier.

## **CONDITION OF SALE**

Quantum Agrosiences Holdings 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 Quantum Agrosiences Holdings Pty Ltd's skill or judgement in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of Quantum Agrosiences Holdings Pty Ltd has any authority to add to or alter these conditions.