

# CAUTION

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

**TITAN**

# BUTAFENACIL 200 EC

## HERBICIDE

ACTIVE CONSTITUENTS: 200g/L BUTAFENACIL  
4.28g/L POLYETHANOXY (15) TALLOW AMINE

GROUP **14** HERBICIDE



Improves control of a range of grass and broadleaf weeds when tank mixed with non-selective herbicides, in Fallow or prior to the establishment of Cereals, Canola and Pulses.

APVMA Approval No.: 90360/142680

Pack Size: 5L-20L



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|                                                                                                                                               |                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| <b>EC</b>                                                                                                                                     | Formulation Type<br><b>Emulsifiable Concentrate</b> |
| <b>IN A TRANSPORT EMERGENCY</b><br>• DIAL 000 • POLICE OR FIRE BRIGADE                                                                        |                                                     |
| TRANSPORT AND HANDLING NOT<br>A DANGEROUS GOOD ACCORDING<br>TO THE AUSTRALIAN DANGEROUS<br>GOODS (ADG) CODE FOR TRANSPORT<br>BY ROAD AND RAIL |                                                     |

## DIRECTIONS FOR USE

### Restraints:

DO NOT apply by aircraft, apply by ground boom only.  
DO NOT make more than 1 application per season.  
DO NOT apply if heavy rain or storms are forecast within 48 hours.  
DO NOT irrigate to the point of run-off for at least 48 hours after application.  
DO NOT spray weeds which are waterlogged, under stress of any kind or covered with soil or dust.  
DO NOT spray weeds covered with heavy dew.  
DO NOT sow or cultivate for 1 hour after spraying.  
DO NOT use prior to the sowing of crops undersown with pasture species or vetch.  
DO NOT tank mix with other formulations of Butafenacil.  
DO NOT use if other formulations of Butafenacil are to be used in the same season.

### 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 buffer zone table 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 1 to 2 hours before sunset and persist until 1 or 2 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 downwind buffer zones' section of the following table titled 'Buffer Zones for Boom Sprayers') are observed.

| Buffer Zones for Boom Sprayers |                                 |                  |
|--------------------------------|---------------------------------|------------------|
| Tank mix partner               | Mandatory downwind buffer zones |                  |
|                                | Natural aquatic areas           | Vegetation areas |
| Glyphosate                     | 20 metres                       | 0 metres         |
| TITAN Paraquat 360 Herbicide   | 40 metres                       | 20 metres        |
| TITAN Paraquat 250 Herbicide   |                                 |                  |
| TITAN EOS Herbicide            | 20 metres                       | 60 metres        |

Read and follow the label directions on mandatory no-spray zones of the tank mix product.

| SITUATION                                                                                                                                                                                                                                                                                                                               | WEEDS CONTROLLED                                                                                                      | RATE                                                                                                                                                                                                                                                                                                       | CRITICAL COMMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>DIRECT DRILLING</b><br>Within 14 days after product application using minimum disturbance sowing equipment<br><b>Conventional (full disturbance), disc seeding, knifepoint and press-wheel seeding systems</b><br><b>Cereals</b><br><b>FALLOWS</b><br>Cultivated or non-cultivated as an aid in establishing or maintaining a fallow | Refer to Table A below<br><br>Fleabane ( <i>Conyza bonariensis</i> ),<br>Sub-Clover ( <i>Trifolium subterraneum</i> ) | 28 to 80mL/ha plus recommended rates of<br>TITAN EOS Herbicide,<br>TITAN Paraquat 360 Herbicide,<br>TITAN Paraquat 250 Herbicide<br>or glyphosate<br><br>50 to 80mL/ha plus recommended rates of<br>TITAN EOS Herbicide,<br>TITAN Paraquat 360 Herbicide,<br>TITAN Paraquat 250 Herbicide<br>or glyphosate | The addition of TITAN Butafenacil 200 EC Herbicide to TITAN EOS Herbicide, TITAN Paraquat 360 Herbicide, TITAN Paraquat 250 Herbicide or glyphosate may improve the speed of brownout of the target weeds as well as improved final control.<br><br>Read and follow all label directions including restraints, spray drift restraints, mandatory no-spray zones, critical comments, withholding periods, regional use restrictions and safety directions for the tank mix products.<br><br>DO NOT make more than 1 application per season.<br><b>RATE SELECTION:</b> Use the higher rate where weeds are stressed, there is significant overlap of target weed leaves, where targeting larger weeds or when applying in spring or summer. |
| <b>DIRECT DRILLING</b><br>Within 14 days after product application using minimum disturbance sowing equipment<br><b>Knifepoint and press-wheel systems</b><br><b>Canola</b><br><b>Pulses</b><br>Lupins<br>Field Peas<br>Faba Beans<br>Chickpeas<br>Lentils                                                                              | Refer to Table A below<br><br>Fleabane ( <i>Conyza bonariensis</i> ),<br>Sub-Clover ( <i>Trifolium subterraneum</i> ) | 28 to 65mL/ha plus recommended rates of<br>TITAN EOS Herbicide,<br>TITAN Paraquat 360 Herbicide,<br>TITAN Paraquat 250 Herbicide<br>or glyphosate<br><br>50 to 65mL/ha plus recommended rates of<br>TITAN EOS Herbicide,<br>TITAN Paraquat 360 Herbicide,<br>TITAN Paraquat 250 Herbicide<br>or glyphosate | <b>SOWING INTERVAL:</b> The interval between application and sowing of a crop should be no less than 1 hour. Refer to the Re-cropping section for more detail.<br><b>SOWING EQUIPMENT:</b> When used prior to sowing Canola and Pulse crops, attention must be paid to equipment setup to ensure crop safety. Refer to the Re-cropping section for further detail.<br><b>ADJUVANT:</b> Always use an adjuvant when applying TITAN Butafenacil 200 EC Herbicide though care should be taken to ensure it is compatible with all other tank-mix partners.                                                                                                                                                                                   |

**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:

**Fallows: DO NOT GRAZE OR CUT SPRAYED VEGETATION FOR STOCK FOOD FOR AT LEAST 1 DAY AFTER APPLICATION**

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

**Canola and Pulses: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 4 WEEKS AFTER APPLICATION**



| Table A               |                                |
|-----------------------|--------------------------------|
| Broadleaved Weeds     |                                |
| Capeweed              | <i>Arctotheca calendula</i>    |
| Cobblers' Pegs        | <i>Bidens pilosa</i>           |
| Tarvine               | <i>Boerhavia diffusa</i>       |
| Volunteer Canola      | <i>Brassica napus</i>          |
| Wild Turnip           | <i>Brassica tournefortii</i>   |
| Shepherd's Purse      | <i>Capsella bursa-pastoris</i> |
| Ward's Weed           | <i>Carrichtera annua</i>       |
| Saffron Thistle       | <i>Carthamus lanatus</i>       |
| Goosefoot             | <i>Chenopodium album</i>       |
| Clammy Goosefoot      | <i>Chenopodium pumilio</i>     |
| Stemless Thistle      | <i>Cirsium acaule</i>          |
| Patterson's Curse     | <i>Echium plantagenium</i>     |
| Double Gee            | <i>Emex australis</i>          |
| Long Storksbill       | <i>Erodium botrys</i>          |
| Common Storksbill     | <i>Erodium cicutarium</i>      |
| Dense-flower Fumitory | <i>Fumaria densiflora</i>      |
| Flatweed              | <i>Hypochaeris radicata</i>    |
| Toadrush              | <i>Juncus bufonis</i>          |
| Deadnettle            | <i>Lamium amplexicaule</i>     |
| Volunteer Lupins      | <i>Lupinus angustifolius</i>   |
| Blue Lupins           | <i>Lupinus cosentinii</i>      |
| Marshmallow           | <i>Malva parviflora</i>        |
| Seedling Lucerne      | <i>Medicago sativa</i>         |
| Medic                 | <i>Medicago</i> spp.           |
| Red Flowered Mallow   | <i>Modiola caroliniana</i>     |
| Volunteer Field Peas  | <i>Pisum sativum</i>           |
| Wireweed              | <i>Polygonum aviculare</i>     |
| Red Pigweed           | <i>Portulaca oleracea</i>      |
| Wild Radish           | <i>Raphanus raphanistrum</i>   |
| Turnip Weed           | <i>Rapistrum rugosum</i>       |
| Sorrel                | <i>Rumex acetosella</i>        |
| Dock                  | <i>Rumex crispus</i>           |
| Mintweed              | <i>Salvia reflexa</i>          |
| Indian Hedge Mustard  | <i>Sisymbrium orientale</i>    |
| Sowthistle            | <i>Sonchus oleraceus</i>       |
| Caltrop               | <i>Tribulus terrestris</i>     |
| Stinging Nettle       | <i>Urtica urens</i>            |
| Vetch                 | <i>Vicia sativa</i>            |
| Volunteer Mung Beans  | <i>Vigna radiata</i>           |
| Grass Weeds           |                                |
| Volunteer Oats        | <i>Avena sativa</i>            |
| Wild Oats             | <i>Avena fatua</i>             |
| Brome Grass           | <i>Bromus diandrus</i>         |
| Soft Brome            | <i>Bromus hordeaceus</i>       |
| Barnyard Grass        | <i>Echinochloa crus-galli</i>  |
| Tall Fescue           | <i>Festuca arundinacea</i>     |
| Northern Barley Grass | <i>Hordeum glaucum</i>         |
| Barley Grass          | <i>Hordeum leporinum</i>       |
| Volunteer Barley      | <i>Hordeum vulgare</i>         |
| Annual Ryegrass       | <i>Lolium rigidum</i>          |
| Witch Grass           | <i>Panicum capillare</i>       |
| Hairy Panic           | <i>Panicum effusum</i>         |
| Annual Phalaris       | <i>Phalaris paradoxa</i>       |
| Volunteer Wheat       | <i>Triticum aestivum</i>       |
| Liverseed Grass       | <i>Urochloa panicoides</i>     |
| Silver Grass          | <i>Vulpia bromoides</i>        |

## GENERAL INSTRUCTIONS

TITAN Butafenacil 200 EC Herbicide quickly kills a wide range of annual grasses and broadleaf weeds when applied directly to the leaf. Effects may not be apparent for 3 days or longer under cool, cloudy conditions. Apply treatments to weeds which have at least 1 true leaf to provide an adequate surface area for herbicide uptake. TITAN Butafenacil 200 EC Herbicide may be used prior to sowing any cereal crop. Weeds should be actively growing at time of treatment.

DO NOT treat weeds under poor growing or dormant conditions (such as occur in drought, waterlogging, disease, insect damage or following frosts) as reduced weed control may result.

Reduced results may also occur when treating weeds heavily covered with dust or silt. Prior herbicide application may also induce stress in weeds. Rainfall occurring up to 6 hours after application may reduce effectiveness. Heavy rainfall within 2 hours after application may wash the chemical off the foliage and a repeat treatment may be required. Delay treatment of plants wet with dew or rain, if water droplets run-off when plants are disturbed. Avoid contact with foliage, green stems or fruit of crops, desirable plants and trees, since severe injury or destruction may result.

## Crop Establishment

TITAN Butafenacil 200 EC Herbicide is recommended for control of emerged weeds prior to crop establishment. Suitable cultivation and/or sowing operations are required to provide seedbed conditions satisfactory for crop germination and development.

Spraying early to control young weeds will favour preparation of suitable seedbeds. On friable soils and where there is only light cover of young weeds, sowing may proceed satisfactorily from 1 day after spraying. In situations of heavy weed growth sowing should be delayed until weed decay and soil conditions allow formation of a satisfactory seedbed.

Incorporation of green or decaying vegetation and roots into the seedbed by cultivation or sowing may cause retarded crop emergence, particularly in cold and/or wet conditions.

## MIXING

DO NOT mix, load or apply this product within 20m of any well, sink hole, intermittent or perennial stream.

1. Fill the spray tank with one half the required amount of clean water and add the required amount of TITAN Butafenacil 200 EC Herbicide.
2. Mix well before adding the glyphosate and remaining portion of water.
3. Add any recommended additional herbicide/insecticide/additive.
4. Add the surfactant near the end of the filling process to minimize foaming. Placing the filling hose below the surface of the spray solution will prevent excessive foaming. Removing hose from tank immediately after filling will prevent back siphoning into water source.

When tank mixing with glyphosate please read and follow all mixing instructions on the glyphosate label. Ensure the sprayer is free of any residue of previous spray materials and use spray solutions promptly.

DO NOT use mechanical agitators as these may cause excessive foaming.

Spray tanks, pumps, lines and nozzles should be thoroughly rinsed with clean water following application to prevent corrosion.

TITAN Butafenacil 200 EC Herbicide efficacy is dependent on good coverage of the target weeds. Limited translocation occurs within the plant so inadequate coverage is likely to result in unacceptable control.

## Adjuvants

The following adjuvants can be used with TITAN Butafenacil 200 EC Herbicide.

| Adjuvant                                                                                     | Use Rate (mL/100L of spray water) |
|----------------------------------------------------------------------------------------------|-----------------------------------|
| Alcohol alkoxylates<br>(eg TITAN Wetter 1000 Wetting Agent)                                  | 250mL                             |
| Soyal phospholipid/propionic acid based surfactants<br>(eg TITAN 700 Surfactant)             | 250-350mL                         |
| Esterified and emulsified vegetable oil based products<br>(eg TITAN Duelling Spray Adjuvant) | 500-1000mL                        |

## 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 dispersible granules (WG)
3. Wettable powders (WP)





4. Flowable or suspension concentrates (SC)
5. Emulsifiable concentrates (EC)
6. Water based or soluble concentrates
7. Oils and wetters

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.

#### Water Rate

The total spray volume used when TITAN Butafenacil 200 EC Herbicide is applied should be carefully considered to maximise coverage. Improved water rates generally lead to better coverage of target weeds and as such improved control with contact herbicides such as TITAN Butafenacil 200 EC Herbicide.

| Low weed densities and minimal plant shading | High weed densities or moderate to high plant shading | Applied water volume (L/ha) |
|----------------------------------------------|-------------------------------------------------------|-----------------------------|
| Plant height to 5cm                          | Not recommended                                       | 75 to 150L/ha               |
| Plant height to 10cm                         | Plant height to 5cm                                   | 100 to 150L/ha              |

#### Re-cropping Intervals

TITAN Butafenacil 200 EC Herbicide can be applied prior to the sowing of winter cereals, canola, lupins, lentils, chickpeas, field peas and faba beans. The minimum interval to sowing is 1 hour, except if the conditions specified below are not met.

When used less than 14 days prior to the sowing of a broadleaf crop, it is important that seeding equipment is correctly set up to ensure good separation of soil that may have been treated with TITAN Butafenacil 200 EC Herbicide. It is especially important to ensure that the planting equipment does not drag treated soil back into the seeding trench.

Wet conditions at seeding, particularly with clay based soils, that result in seeding equipment smearing the furrow wall are also at risk of soil treated with butafenacil coming into contact with the emerging crop. This has the potential to reduce crop density but is unlikely to result in ongoing retardation of crop growth. In this case, the seeding operation should be delayed by at least 14 days or until adequate seed separation can be achieved. Disc-seeding systems MUST NOT be used for the sowing of broadleaf crops, particularly Canola, when TITAN Butafenacil 200 EC Herbicide has been used in the 14 days prior to seeding.

#### Clean up

Thoroughly clean the sprayer using the following procedure when you have finished spraying. Mix only as much spray solution as needed. Immediately after spraying, clean equipment thoroughly using this procedure. Wear appropriate protective clothing.

1. Flush tank, hoses, boom and nozzles with clean water.
2. Prepare a cleaning solution of either 250mL of ALL CLEAR DS per 100L of water or 300mL of household chlorine bleach (containing 4% chlorine) per 100L of water. Ensure bleach used is fresh as it can degrade significantly over time resulting in a reduction in cleaning ability.
3. When available, use a pressure washer to clean the inside of the spray tank with this solution. Take care to wash all parts of the tank, including the inside top surface and lid.
4. Completely fill the sprayer with the cleaning solution to ensure contact of the cleaning solution with all internal surfaces of the tank and plumbing. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system and in cases where there is the possibility of heavy build-up of residues, the cleaning solution may need to be left in the tank overnight to ensure adequate decontamination of the tank.
5. Flush hoses, spray lines and nozzles for at least 1 minute with the cleaning solution.
6. Dispose of rinsate from steps 1 to 5 in an appropriate manner.
7. Repeat steps 2 to 5.
8. Remove nozzles, screens and strainers and clean separately in the cleaning solution after completing the above procedures. Be careful with filters, as they can be a main source of contamination.
9. Rinse the complete spraying system with clean water.

The above method is only effective if the cleaning solution comes into contact with every surface or contact point that may contain even minute butafenacil herbicide residues.

#### COMPATIBILITY

TITAN Butafenacil 200 EC Herbicide is compatible with any one of the following products:

paraquat + diquat, 360g/L paraquat, 250g/L paraquat, prosulfocarb, trifluralin, triallate, triasulfuron, atrazine, simazine, S-metolachlor, metribuzin, diuron, isoxaflutole, 2,4-D Ester 680.

As formulations of other manufacturer's products are beyond the control of TITAN AG Pty Ltd and the quality of water may vary with location, all mixtures should be tested prior to mixing commercial quantities.

TITAN Butafenacil 200 EC Herbicide must NOT be tank mixed with other formulations of Butafenacil.

#### RESISTANCE WEEDS WARNING

TITAN Butafenacil 200 EC Herbicide is a member of the pyrimidiniones group of herbicides. TITAN Butafenacil 200 EC Herbicide has the inhibitor of protoporphyrinogen oxidase mode of action. For weed resistance management TITAN Butafenacil 200 EC Herbicide is a Group 14 herbicide. Some naturally occurring weed biotypes resistant to TITAN Butafenacil 200 EC Herbicide and other Group 14 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 Butafenacil 200 EC Herbicide or other Group 14 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 Butafenacil 200 EC Herbicide to control resistant weeds.

GROUP **14** HERBICIDE

#### PRECAUTIONS

DO NOT enter treated areas until the spray has dried, unless wearing cotton overalls buttoned to the neck and wrist (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 which 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 trees or other plants or on areas where their roots may extend or in location where the chemical may be washed or moved into contact with their roots.

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

Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.

#### STORAGE AND DISPOSAL

Store in 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.

#### SAFETY DIRECTIONS

Will irritate the eyes. May irritate the skin. Avoid contact with eyes and skin. When using together with other products, consult their label safety directions. When opening the container and using the product, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), elbow-length chemical resistant gloves and face shield or goggles. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

#### FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126; New Zealand 0800 764 766.

#### SAFETY DATA SHEET

Additional information is listed in the safety data sheet (SDS). A safety data sheet for TITAN Butafenacil 200 EC 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:  
Causes eye irritation. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.  
Precautionary Statements: Do not breathe dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Avoid release to the environment. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell. If eye irritation persists: Get medical advice/attention. Collect spillage. Dispose of contents/container in accordance with local/regional/national regulations.

