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

TITAN
Butroxydim 250 WG
Herbicide

ACTIVE CONSTITUENT: 250g/kg BUTROXYDIM

GROUP A HERBICIDE

For the control of certain grasses in a range of broadacre crops according to the Directions For Use.

IMPORTANT: READ THOROUGHLY BEFORE OPENING OR USING THIS PRODUCT.

APVMA Approval No.: 82121/120619
Net Contents: 500g-50kg

TITAN AG Pty Ltd
15/16 Princes Street, Newport NSW 2106
Telephone 02 9999 6655  Fax 02 9999 0483
www.titanag.com.au

IN A TRANSPORT EMERGENCY
DIAL 000
POLICE OR FIRE BRIGADE

TRANSPORT AND HANDLING
NOT A DANGEROUS GOOD
ACCORDING TO THE AUSTRALIAN
DANGEROUS GOODS (ADG) CODE
FOR TRANSPORT BY ROAD AND RAIL.
DIRECTIONS FOR USE

Restrictions:
DO NOT treat weeds that are not actively growing or are growing under stress. Under such circumstances the biological processes of the weeds slow down and TITAN Butroxydim 250 WG Herbicide transport in the weed can be drastically reduced, resulting in an incomplete kill or suppression only of the weeds.
DO NOT apply to crops or weeds which are suffering moisture stress (waterlogged or drought affected), insect, disease or nutritional disorders, under conditions of prolonged high temperatures or frost affected (or if frosts are imminent) or stress from previous herbicide or foliar fertiliser treatment.
DO NOT apply to annual grass weeds after mid-tillering.
DO NOT apply at flowering stage of weeds.
DO NOT apply at flowering stage of crop.

<table>
<thead>
<tr>
<th>CROP</th>
<th>WEEDS CONTROLLED</th>
<th>WEED STAGE</th>
<th>STATE</th>
<th>RATE /ha</th>
<th>CRITICAL COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chickpeas, Faba beans, Field peas, Lentils, Linseed, Lucerne, Lupins</td>
<td>Annual ryegrass (Lolium rigidum),</td>
<td>2 leaf to early tillering</td>
<td>ALL STATES</td>
<td>80-180g</td>
<td>Always apply with paraffinic oil at 1L/100L of spray solution. For aerial application, apply paraffinic oil at 1L/ha. Use the lower rates for younger weeds growing actively under ideal conditions. Use the higher rates for weeds that are: - predominantly at early tillering, or - present in dense populations, or - growing in poor growing conditions, or - where weed resistance to Group A herbicides is suspected. Due to extreme variations in cross resistance present in annual ryegrass populations there is no guarantee TITAN Butroxydim 250 WG Herbicide will always provide consistently high levels of control but trials have shown higher rates may be expected to perform better than lower rates.</td>
</tr>
<tr>
<td></td>
<td>Barley grass (Hordeum spp.), Brome grass (Bromus spp.), Volunteer cereals - Wheat (Triticum aestivum) - Barley (Hordeum vulgare) - Oats (Avena sativa) - Triticale (x Triticosecale) - Wild oats (Avena spp.)</td>
<td>Zadoks 12-23</td>
<td>80-180g</td>
<td># plus an effective rate of a fop herbicide containing fluazifop, haloxyfop, propazaquofop or quizaofop</td>
<td></td>
</tr>
<tr>
<td>Canola (conventional, TT, “IMI” varieties)</td>
<td>Annual ryegrass (Lolium rigidum) together with any of the following grasses Annual phalaris (Phalaris spp.), Barley grass (Hordeum spp.), Brome grass (Bromus spp.), Volunteer cereals - Wheat (Triticum aestivum) - Barley (Hordeum vulgare) - Oats (Avena sativa) - Triticale (x Triticosecale) - Wild oats (Avena spp.)</td>
<td>2 leaf to early tillering</td>
<td>ALL STATES</td>
<td>80g</td>
<td># plus an effective rate of a fop herbicide containing fluazifop, haloxyfop, propazaquofop or quizaofop</td>
</tr>
<tr>
<td>CROP</td>
<td>WEEDS CONTROLLED</td>
<td>WEED STAGE</td>
<td>STATE</td>
<td>RATE /ha</td>
<td>CRITICAL COMMENTS</td>
</tr>
<tr>
<td>------</td>
<td>-----------------</td>
<td>------------</td>
<td>-------</td>
<td>---------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Lucerne</td>
<td>Echinochloa species</td>
<td>2 leaf to early tillering</td>
<td>QLD, NSW, VIC, NT only</td>
<td>120g or 180g</td>
<td>Always apply with paraffinic oil at 1L/100L of spray solution. For aerial application, apply paraffinic oil at 1L/ha. Use the lower rate for the control of seedling grasses at the pre-tillering growth stage and growing under good conditions. Use the higher rate for control of grasses at the early tillering (2 to 3 tillers) growth stage. Aerial application – see Spraying Instructions.</td>
</tr>
<tr>
<td>Mung beans</td>
<td>- Awnless barnyard grass (E. colona)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navy beans</td>
<td>- Barnyard grass (E. crus-galli)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peanuts</td>
<td>- Japanese millet (E. utilis)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soybeans</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cotton</td>
<td>Digitaria species</td>
<td>2 leaf to 5 leaf but prior to tillering</td>
<td>QLD, NSW only</td>
<td>120g</td>
<td>Always apply with paraffinic oil at 1L/100L of spray solution. For aerial application, apply paraffinic oil at 1L/ha. For the control of pre-tillering grasses only. DO NOT apply to tillered grasses.</td>
</tr>
<tr>
<td>Sunflowers</td>
<td>- Crab grass (D. sanguinalis)</td>
<td></td>
<td>QLD, NSW, VIC only</td>
<td>180g</td>
<td>Always apply with paraffinic oil at 1L/100L of spray solution. For aerial application, apply paraffinic oil at 1L/ha. For the control of grasses from 2 leaf to early tillering only (max. 2 tillers), prior to stem elongation or booting.</td>
</tr>
<tr>
<td>Volunteer cereals</td>
<td>- Wheat (Triticum aestivum)</td>
<td>2 leaf to early tillering</td>
<td>QLD, NSW, VIC only</td>
<td>180g</td>
<td>Always apply with paraffinic oil at 1L/100L of spray solution. For aerial application, apply paraffinic oil at 1L/ha. For the control of grasses from 2 leaf to early tillering only (max. 2 tillers), prior to stem elongation or booting.</td>
</tr>
</tbody>
</table>

# Refer to the label of the partner herbicide for rates and specific directions for use.

Note: Does NOT control winter grass (Poa annua), Silver grass (Vulpia spp.), Nutsedge (Cyperus spp.) and broadleaf weeds.

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

WITHHOLDING PERIODS

WITHHOLDING PERIOD PRIOR TO HARVEST NOT REQUIRED WHEN USED AS DIRECTED.

Canola, Chick peas, Clover, Faba beans, Field peas, Lentils, Linsed, Lucerne, Lupins, Medics, Mung beans, Navy beans, Peanuts, Soybeans, Sunflowers, Vetches: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION.

Cotton: DO NOT GRAZE OR CUT FOR STOCKFEED. DO NOT FEED COTTON TRASH TO LIVESTOCK.
**GENERAL INSTRUCTIONS**

**Stress conditions**

Moisture stress is a particular problem, whether caused by drought or short term stresses, resulting from a combination of high temperatures and low humidity or by prior use of pre-emergence herbicides resulting in stunted root growth of weeds. An irrigation or effective rainfall must occur immediately before or after spraying if these conditions exist. Other stress conditions to avoid include use of pre-emergence herbicides resulting in stunted root growth of weeds, frost, waterlogging and extended cold conditions.

DO NOT spray if any stress conditions are evident just prior to application.

**MIXING**

Add the required amount of TITAN Butoxydim 250 WG Herbicide (see table) directly to the spray tank which should be 50% full with clean water. After the product is fully dispersed, complete filling the tank. The agitation system should be running during mixing and spraying. If agitation ceases and settling occurs, resuspend contents thoroughly before spraying. Ensure that all in-line strainer and nozzle screens in the sprayer are 100 mesh or coarser. Add any other product next.

An oil adjuvant is essential and should be added last to the spray tank. Paraffin oil at a rate of 1L/ha. Paraffin oil must be added to at least 10 times its volume of water especially where a suction (filling) probe is used. The area covered per measured pump pack will depend upon the application rate/ha according to the following table:

<table>
<thead>
<tr>
<th>TITAN Butoxydim 250 WG Herbicide Rate/ha</th>
<th>Hectares covered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 kg</td>
<td>1 kg</td>
</tr>
<tr>
<td>2 kg</td>
<td>2 kg</td>
</tr>
<tr>
<td>3 kg</td>
<td>3 kg</td>
</tr>
<tr>
<td>4 kg</td>
<td>4 kg</td>
</tr>
<tr>
<td>5 kg</td>
<td>5 kg</td>
</tr>
<tr>
<td>10 kg</td>
<td>10 kg</td>
</tr>
<tr>
<td>80g</td>
<td>12.5</td>
</tr>
<tr>
<td>100g</td>
<td>10.25</td>
</tr>
<tr>
<td>150g</td>
<td>6.75</td>
</tr>
<tr>
<td>180g</td>
<td>5.65</td>
</tr>
</tbody>
</table>

**APPLICATION**

**Time of application:** TITAN Butoxydim 250 WG Herbicide is rainfast within 30 minutes. To obtain the maximum benefits of this product, weeds should be sprayed when young and actively growing. Use the lower rates for grasses with up to 4 leaves. Use the higher rates for weeds up to mid-tillering.

**Method of application:** Good spray coverage is essential for maximum results. Spray equipment must be checked and calibrated accurately prior to application.

**Ground application:** Check height of boom above the target weeds to ensure the spray is evenly distributed and a double overlap pattern is obtained. An even distribution of droplets with a MEDIUM to COARSE spray droplet size according to nozzle manufacture specifications that refer to ASAE S572 Standard or the BCPC Guideline is recommended to maximise efficacy and minimise the likelihood of spray drift.

Water volumes per hectare will depend on nozzle selection and ground speed but should be in the range of 50-100L/ha. 100' flat fan nozzles are preferred for use with this product. Use higher volumes of spray to achieve better coverage of dense, vigorous weed infestations. A minimum water volume of 80L/ha is recommended where a Coarse spray quality is being used.

**Aerial application:** The product may be applied through boom or Micronair units in 20-30L of water per hectare. The use of the higher volume is preferred due to more reliable results. Spray quality should be MEDIUM to COARSE (ASAE S572 standard) and swath width should not be wider than recommended for type of plane and application unit. Weed control following aerial application may not be as good as from ground application.

**Sprayer cleanup or decontamination**

Before spraying sensitive crops (which include canola, chickpeas, faba beans, field peas, lupins, lucerne, clover etc.), thoroughly remove all traces of SU herbicides such as TITAN Metulfuron 600 WG Herbicide, TITAN Chlorsulfuron 750 WG Herbicide or TITAN Trasulfuron 750 WG Herbicide or TITAN Carentrazione 400EC Herbicide from mixing and spray equipment immediately after use as recommended on the label for that herbicide.

**CROP SAFETY**

The progression of Canola plants beyond leaf development (Stage 1) to Stem extension (Stage 2) or side shoot development (Stage 2) varies depending on the environmental conditions. Under dry, hostile conditions, Stage 1 can finish as early as the 4 leaf stage. To determine if Stage 3 has commenced, dissect young plants and expose the young growth point to determine if floral initiation or the formation of side shoots has commenced.


**COMPATIBILITY**

Avoid the use of water containing high levels of bicarbonates. Levels greater than 50 ppm have been demonstrated to reduce the efficacy of ‘Dim’ herbicides such as TITAN Butoxydim 250 WG Herbicide. Where water containing bicarbonates is being used; the addition of TITAN Spray Grade Ammonium Sulphate Herbicide Adjuvant @ 2.0% v/v may assist to ameliorate this issue.

The following recommendations are based on results from field and laboratory tests with TITAN Butoxydim 250 WG Herbicide plus 0.5% TITAN Paraffinic Spraying Oil. Compatibility is defined as acceptable physical mixing, nil or generally transient crop effect and grass control within 10% of that from TITAN Butoxydim 250 WG Herbicide alone. Performance of any tank mix will be better if the maximum rate of TITAN Butoxydim 250 WG Herbicide is used and the weed growth stages are according to the label. Always refer to the label of the partner product for rates and any specific guidelines and restraints for the crop or situation.

**Compatible Herbicides:**

| Canola: TITAN Atrazine 900 WG herbicide, TITAN Simazine 900 WG Herbicide, TITAN Clomazone 360 Herbicide, TITAN Clexodim 240 Herbicide (maximum rate of 375mL/ha) & herbicides containing fluzifop, propaquizafop, quizalofop.

**Pasture, clover based (not brome grass):** TITAN Flumesulam 800 WG Herbicide, TITAN Bromoxynil 250 Selective Herbicide, TITAN LVE MCPA 570 Herbicide (max rate 0.5 L/ha; some clover vigour reduction possible), TITAN Diflufenican + MCPA Selective Herbicide, TITAN Diflufenican 25 + Bromoxynil 250 Selective Herbicide, TITAN Hermes 520 Herbicide, TITAN Clethodim 240 Herbicide, TITAN Simazine 900 WG Herbicide, herbicides containing fluzifop, propaquizafop or quizalofop.

**Compatible Insecticides:**

Pulses: TITAN Mancozeb 750 DF Fungicide, TITAN Proxymidine 500 Fungicide.

**Compatible Trace Elements:**

Pulses: TITAN Mancozeb 750 DF Fungicide, TITAN Proxymidine 500 Fungicide.

**RESISTANT WEEDS WARNING**

TITAN Butoxydim 250 WG Herbicide is a member of the Cyclohexanedione (DIM) group of herbicides. The product has the inhibitors of acetyl CoA carboxylase mode of action. For weed resistance management, the product is a Group A herbicide.

Some naturally occurring weed biotypes resistant to the product and other Group A 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 this product or other Group A 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 this product to control resistant weeds.

**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 plant cereal crops for a period of 4 weeks after application of TITAN Butoxydim 250 WG Herbicide.
PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT
Highly toxic to algae and aquatic plants. DO NOT contaminate dams, rivers or streams 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. 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 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
Harmful if swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. Avoid inhaling dust. When preparing product for use wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length pvc gloves and goggles. If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each days 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.

SAFETY DATA SHEET
Additional information is listed in the safety data sheet (SDS). A safety data sheet for TITAN Butroxydim 250 WG Herbicide is available from TITAN AG Pty Ltd on request. Call Customer Service on (02) 9999 6655 or visit www.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: Harmful if swallowed. Causes skin irritation. Suspected of damaging fertility or the unborn child. Very toxic to aquatic life with long lasting effects. Precautionary: Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Specific treatment (see on this label). IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell. IF exposed or concerned: Get medical advice/attention. If skin irritation occurs: Get medical advice/attention. Rinse mouth. IF ON SKIN: Wash with plenty of water. Collect spillage. Take off contaminated clothing and wash it before reuse. Store locked up. Dispose of contents/container in accordance with local/regional/ national regulations.