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



ACTIVE CONSTITUENT: 99.5g/L QUIZALOFOP-P-ETHYL SOLVENT: 802g/L HYDROCARBON LIQUID

GROUP A HERBICIDE

For the control of certain grass weeds in broadleaf crops as per Directions for Use table.

IMPORTANT: READ THOROUGHLY BEFORE OPENING OR USING THIS PRODUCT.

APVMA Approval No.: 53609/50018



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

#### DIRECTIONS FOR USE Restraints: DO NO

DO NOT apply to crops that are stressed by any cause (such as severe cold weather, disease, drought or waterlogging).

DO NOT apply to weeds that are stressed by any cause (such as weather conditions, drought, waterlogging) or not actively growing. Grass weeds under stress frequently become less susceptible to herbicide activity. This may result in an incomplete kill or suppression of weeds only. DO NOT apply under conditions of high temperature and low humidity.

DO NOT apply if rainfall is expected within 3 hours.

DO NOT apply less than 50L prepared spray/ha - see section "Ground Spraying".

# BOOM SPRAYING: WINTER GROWING WEEDS: ALL STATES.

CROPS	WEEDS CONTROLLED	WEEDS STAGE	RATE/HA	WITHHOLDI	NG PERIOD GRAZING	CRITICAL COMMENTS
Beetroot Cabbage Canola Carrots Cauliflower Chickpeas Clover & subclover pastures Cucumbers• Faba beans Field peas Honey dew melons• Lentils Lucerne Lupins	Annual Ryegrass ( <i>Lolium rigidum</i> ), Brome Grasses ( <i>Bromus</i> spp.) Barley Grass ( <i>Hordeum</i> spp,), Volunteer Barley, Volunteer Wheat Wild Oats ( <i>Avena</i> spp.)		300 mL or 375 mL 250 mL 125 mL or 250 mL			Apply when weeds are actively growing. Use higher rate under heavy weed pressure, and/or when weeds have commenced tillering*. Apply when weeds are actively growing*. Apply when weeds are actively growing. Use the lower rate only under light weed pressure and/or when weeds are at the 1-3 leaf stage. Use higher rate under heavy weed pressure and/or when weeds are tillering. The higher rate will give better or more reliable control*.
Medic pasture Mung beans Navy beans Onions Potatoes Pumpkins• Radish Tomatoes Vetch				12 weeks212 weeks218 weeks210 weeks99 weeks2121 days44 weeks	28 days 28 days - - - - 28 days	

\* Always add a surfactant/wetting agent at the recommended rate. See section on "use of surfactant/wetting agent" for details.

• IMPORTANT: DO NOT apply TITAN Quizalofop-P-Ethyl 99.5 Herbicide before the five true leaf stage of the crop.

# BOOM SPRAYING: SUMMER GROWING WEEDS: ALL STATES.

CROPS	WEEDS CONTROLLED	WEEDS Stage	RATE/HA	WITHHOLDING PERIOD		CRITICAL COMMENTS
				HARVEST	GRAZING	-
Beetroot Cabbage Cauliflower Carrots Cucumbers• Green beans Honey dew melons• Lucerne Mung beans Navy beans Onions Peanuts Potatoes Pineapples Pumpkins• Radish Soybeans Sunflower Tomatoes	Awnless Barnyard Grass ( <i>Echinochloa colona</i> ), Barnyard Grass ( <i>Echinochloa crusgalli</i> )	3 leaf to early tillering	500mL or 750mL	14 days 9 weeks 14 weeks 10 weeks	- - -	Apply when weeds are actively growing. Use higher rate under heavy weed pressure, and/or when weeds have commenced tillering*.
	Couch Grass ( <i>Cynodon dactylon</i> )	2-4 leaf seedling	500mL	14 days 5 weeks 9 weeks - 12 weeks	- 28 days - 28 days 28 days	Apply when weeds are actively growing. This rate will only control seedling Couch Grass which is less than 2 months old and established from seed*.
	Dinebra ( <i>Dinebra retroflexa</i> )	3 leaf to early tillering	250mL or 375mL	12 weeks 12 weeks 18 weeks 11 weeks 10 weeks	28 days - 11 weeks - - - 28 days	Apply when weeds are actively growing. Use higher rate under heavy weed pressure, and/or when weeds have commenced tillering*.
	Crowsfoot Grass ( <i>Eleusine indica</i> )	2 leaf to early tillering	500mL	7 days 9 weeks 21 days		Apply when weeds are actively growing*.
	Foxtail Millet ( <i>Setaria italica</i> )	2 leaf to early tillering	250mL or 500mL	12 weeks 9 weeks 4 weeks		Apply when weeds are actively growing. Use higher rate under heavy weed pressure, and/or when weeds have commenced tillering*.
	Columbus Grass ( <i>Sorghum</i> <i>xalmum</i> ), Johnson Grass ( <i>Sorghum halepense</i> ), Liverseed Grass ( <i>Urochloa panicoides</i> )	2 leaf to 3 tiller	500mL or 750mL			
	Rhodes Grass ( <i>Chloris gayana</i> ), Stink Grass ( <i>Eragrostis cilianensis</i> )	3 leaf to early tillering	250mL or 500mL			
	Queensland Blue Grass ( <i>Dichanthium sericeum</i> )	3 leaf to early tillering	500mL			Apply when weeds are actively growing*.
	Summer Grass ( <i>Digitaria ciliaris</i> )	3 leaf to early tillering	500mL or 1000mL			Apply when weeds are actively growing. Use higher rate under heavy weed pressure, and/or when weeds have commenced tillering*.

\* Always add a surfactant/wetting agent at the recommended rate. See section on "use of surfactant/wetting agent" for details.

• IMPORTANT: DO NOT apply TITAN Quizalofop-P-Ethyl 99.5 Herbicide before the five true leaf stage of the crop.



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

WITHHOLDING PERIOD HARVEST BEETROOT, CAULIFLOWER, CUCUMBERS: DO NOT HARVEST FOR 14 DAYS BEFORE HARVEST. CABBAGE, FIELD PEAS, HONEY DEW MELON, PUMPKINS, SUNFLOWERS: DO NOT APPLY LATER THAN 9 WEEKS BEFORE HARVEST. CARROTS, POTATOES: DO NOT APPLY LATER THAN 10 WEEKS BEFORE HARVEST. CHICKPEAS, FABA BEANS, LENTILS, MUNG BEANS, NAVY BEANS, VETCH, SOY BEAN: DO NOT APPLY LATER THAN 12 WEEKS BEFORE HARVEST. CANOLA, PEANUTS: DO NOT APPLY LATER THAN 11 WEEKS BEFORE HARVEST. GREEN BEANS: DO NOT APPLY LATER THAN 11 WEEKS BEFORE HARVEST. GREEN BEANS: DO NOT APPLY LATER THAN 5 WEEKS BEFORE HARVEST. LUPINS: DO NOT APPLY LATER THAN 5 WEEKS BEFORE HARVEST. ONIONS: DO NOT APPLY LATER THAN 18 WEEKS BEFORE HARVEST. PINEAPPLES: DO NOT APPLY LATER THAN 7 DAYS BEFORE HARVEST. RADISH: DO NOT APPLY LATER THAN 21 DAYS BEFORE HARVEST. TOMATOES: DO NOT APPLY LATER THAN 4 WEEKS BEFORE HARVEST. GRAZING CANOLA, CHICKPEAS, FABA BEANS, FIELD PEAS, GREEN BEANS, LENTILS, LUCERNE, LUPINS, MUNG BEANS, NAVY BEANS,

CANOLA, CHICKPEAS, FABA BEANS, FIELD PEAS, GREEN BEANS, LENTILS, LUCENNE, LOPINS, MONG BEANS, NAVY BEANS, SOYBEANS, VETCH: DO NOT GRAZE OR CUT FOR STOCK FEED FOR 28 DAYS AFTER APPLICATION. CLOVER, MEDIC PASTURES (EXCEPT LUCERNE), SUB CLOVER: DO NOT GRAZE OR CUT FOR STOCK FEED FOR 14 DAYS AFTER APPLICATION. PEANUTS, SUNFLOWERS: DO NOT GRAZE OR CUT FOR STOCK FEED FOR 11 WEEKS AFTER APPLICATION.



# **GENERAL INSTRUCTIONS**

TITAN Quizalofop-P-Ethyl 99.5 Herbicide is an emulsifiable concentrate herbicide used post emergence for the control of certain grass weeds in specified broadleaf crops. TITAN Quizalofop-P-Ethyl 99.5 Herbicide is a systemic herbicide, which is rapidly absorbed and readily translocates from the treated foliage to the root system and growing points of the plant. Applications made to grass weeds stressed due to insufficient moisture or cold temperatures may result in unsatisfactory control.

## **RESISTANT WEEDS WARNING**

TITAN Quizalofop-P-Ethyl 99.5 Herbicide is a



member of the "Fop" (aryloxyphenoxy propianate) group of herbicides. TITAN Quizalofop-P-Ethyl 99.5 Herbicide has the inhibitors of acetyl coA carboxylase mode of action. For weed resistance management TITAN Quizalofop-P-Ethyl 99.5 Herbicide is a Group A Herbicide. Some naturally occurring weed biotypes resistant to TITAN Quizalofop-P-Ethyl 99.5 Herbicide and other Inhibitors of acetyl coA carboxylase 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 Quizalofop-P-Ethyl 99.5 Herbicide or other inhibitors of acetyl coA carboxylase.

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 failure of TITAN Quizalofop-P-Ethyl 99.5 Herbicide to control resistant weeds. Strategies to minimise the risk of herbicide resistance are available.

Consult your farm chemical supplier, consultant, local Department of Agriculture or Primary Industries or local TITAN AG Representative.

# TIME OF APPLICATION

For maximum benefit, weeds should be sprayed when young and actively growing. Application may be made at any stage of crop growth (except to curcurbit crops), but sufficient time must be allowed for the prescribed withholding period to expire before harvest and/or grazing or cutting for stockfeed.

IMPORTANT: DO NOT apply TITAN Quizalofop-P-Ethyl 99.5 Herbicide to curcurbit crops before the five true leaf stage.

# SPRAY PREPARATION

If spray equipment has been previously used for the application of sulfonylurea herbicides eg TITAN Metsulfuron 600 WG, TITAN Triasulfuron 750 WG Herbicide, TITAN Chlorsulfuron 750 WG, ensure that the recommended spray cleanup procedure for the product previously sprayed has been followed, before using the equipment for the application of TITAN Quizalofop-P-Ethyl 99.5 Herbicide.

# **USE OF A SURFACTANT/WETTING AGENT**

TITAN Quizalofop-P-Ethyl 99.5 Herbicide may be used with either of the following adjuvant system:

- A non-ionic surfactant (1000 gai/L strength) at 100 mL/100L (i.e. 0.1% 1) v/v) and a mineral spray oil at 1 L/100L of final spray volume (ie 1% v/v).
- 2) A non-ionic surfactant (1000 gai/L) at 200 mL/100L of final spray volume (i.e. 0.2% v/v).

DO NOT use non-ionic surfactant + mineral oil adjuvant system on vegetable crops, use a non-ionic surfactant only.

DO NOT use non-methylated spray oils of crop origin (eg Cocacide<sup>†</sup> oil, Synetrol<sup>†</sup> oil) as spray adjuvants

#### **COMPATIBILITIES**

TITAN Quizalofop-P-Ethyl 99.5 Herbicide is compatible with the Sertin<sup>†</sup> 186 EC, Sertin<sup>†</sup> Plus, Grasidim<sup>†</sup> and Select<sup>†</sup>. The recommended surfactant/wetting agent for these tank mixes is the non-ionic surfactant and mineral spray oil adjuvant system. TITAN Quizalofop-P-Ethyl 99.5 Herbicide is compatible with the insecticides deltamethrin, Le-mat<sup>+</sup>, Rogor<sup>+</sup>, methomyl, endosulfan, the fungicides carbendazim and mancozeb and the herbicide clopyralid when using the non-ionic surfactant and mineral oil adjuvant system.

TITAN Quizalofop-P-Ethyl 99.5 Herbicide is compatible with the herbicide diflufenican when used with the non-ionic surfactant only adjuvant system.

DO NOT add crop oil to tank mixtures of TITAN Quizalofop-P-Ethyl 99.5 Herbicide/diflufenican. Application of TITAN Quizalofop-P-Ethyl 99.5 Herbicide/ diflufenican tank mix may result in temporary crop effects, which usually appear as yellow or white bleaching on the leaves. New growth and subsequent yield, however, will not be affected.

# **TO MINIMISE CROP EFFECTS**

To minimise crop effects apply TITAN Quizalofop-P-Ethyl 99.5 Herbicide a minimum of 5 days prior to diflufenican application or a minimum of 10 days after diflufenican application. (14-21 days if weeds have been stressed).

# **GROUND SPRAYING**

Use sprayers with flat fan or hollow cone nozzles at 210-350 kPa to give an even distribution of droplets with no less than 50% of the spray volume in the 150-300 micron range. 110° flat fan nozzles are preferred. Use between 50 and 100 litres of prepared spray/ha, the higher spray volume gives more reliable results. If weeds are large and the crop canopy is dense, increase the volume to 150 litres prepared spray/ha. For proper spray coverage adjust the boom and nozzle height according to the specification listed by the nozzle manufacturers. Ensure the spray is evenly distributed and a double overlap spray pattern is obtained. Avoid overlapping boomspray widths and shut off spray booms while starting, slowing or stopping.

# SPRAYER CLEANUP

Thoroughly clean all traces of TITAN Quizalofop-P-Ethyl 99.5 Herbicide from application equipment immediately after use. Flush tank, pump, hoses and boom with several changes of water after removing nozzle tips and screens (clean those parts separately). Failure to thoroughly clean the equipment may result in injury to subsequently sprayed cereal and grass crops.

# PRECAUTION

Re-Entry Period: DO NOT allow entry into treated areas until the spray has dried. When prior entry is necessary, wear chemical resistant gloves. Clothing must be laundered after each day's use.

# PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT plant cereal crops into the treated area for a period of 18 weeks after application of TITAN Quizalofop-P-Ethyl 99.5 Herbicide.

DO NOT apply under weather conditions, or from spraying equipment, that may cause spray to drift onto nearby susceptible plants/crops, cropping land or pastures.

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

DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

#### STORAGE AND DISPOSAL

Store in the closed original container in a cool, well-ventilated area, as cool as possible. DO NOT store for prolonged periods in direct sunlight. DO NOT store tank-mixes of TITAN Quizalofop-P-Ethyl 99.5 Herbicide with other materials. When storing, keep from contact with fertilisers, fungicides and seeds. Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. If recycling, replace cap and return clean container to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the container below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

# SAFETY DIRECTIONS

Will irritate the eyes and skin. When preparing spray wear cotton overalls buttoned to the neck and wrist and a washable hat, and elbow-length PVC gloves and face shields or goggles. If product in eyes, wash out immediately wash with water. Wash hands after use. After each day's use wash gloves, face shields or goggles and contaminated clothing.

#### **FIRST AID**

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.

# MATERIAL SAFETY DATA SHEET

Additional information is listed in the material safety data sheet (MSDS). A material safety data sheet for TITAN Quizalofop-P-Ethyl 99.5 Herbicide is available from TITAN AG Pty Ltd on request. Call Customer Service on (02) 9986 2943 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.

† Other trademarks

