### **POISON**

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



# DIQUAT 200

Herbicide

Active Constituent: 200 g/L DIQUAT present as DIQUAT DIBROMIDE MONOHYDRATE

GROUP L HERBICIDE

For pre-harvest crop desiccation and the control of a wide range of broadleaf weeds in certain crops as per Directions for Use.

For application through aircraft and ground equipment.

## IMPORTANT: READ THIS LEAFLET BEFORE USING THIS PRODUCT

#### **4 FARMERS AUSTRALIA PTY LTD**

A.B.N. 51 160 092 428 1 / 70 MCDOWELL STREET, WELSHPOOL, WA 6106 **TEL: (08) 9356 3445 www.4farmers.com.au** 

Batch Number:

Date of Manufacture:

APVMA Approval No: 84436/110412



U.N. No. 3016	BIPYRIDILIUM PESTICIDES LIQUID, TOXIC, ENVIRONMENTALLY HAZARDOUS			
In a Transport	PG III	HAZCHEM 2X		
Emergency Dial <b>000</b> Police or Fire Brigade	Special Poisons Advice: 13 11 26			

## DIRECTIONS FOR USE RESTRAINTS

Best results may be obtained when applicatÚn is made in dull weather or at the end of the day.

DO NOT spray when weeds are under drought stress or when covered with dust or soŠ.

#### Pre-harvest crop desiccation:

Crop	State	Rate *	WHP	Critical Comments			
Cotton (short stapled varieties only)	Qld, NSW, and WA only	2 to 3L/ha^	NIL	Apply when 85% of the bolls are open and remaining bolls are mature. 4Farmers Diquat 200 Herbicide can damage green bolls.			
Dry Beans Dry Peas	All States	2 to 3L/ha^	NIL	Spray as soon as the crop has reached full maturity. Helps overcome slow and uneven ripening and weed problems at harvest.			
Linseed	All States	2 to 3L/ha^	1 day grazing	Spray when the majority of seed heads are mature – 90 to 95% of seed heads have changed from yellow to brown and the seeds rattle inside the bolls. DesiccatÚn reduces the perÚd from maturity to harvest, particularly under wet or humid conditÚns.			
Lupins	All States	2 to 3L/ha^	1 day grazing	Spray as soon as crop has reached full maturity. Helps overcome slow and uneven ripening and weed problems at harvest.			
Mung Beans	Qld, NSW only	2 to 3L/ha^	nŠ	Apply when 80 to 90% of pods are black or brown. DesiccatÚn of weeds and foliage aids timely and efficient harvesting, reduces harvester wear and tear but can increase harvest losses. Harvest 2 to 5 days after spraying.			
Perennial Legume Seed Crops	All States	1.5 to 3L/ha^	nŠ	Lucerne – Spray when 60 to 70% of the pods are brown/bluish and the seeds are yellow/ brown and easSy released from the pods.  Red Clover – Spray when majority of seed heads are brown and the seed is purple.  White Clover – Spray when majority of seeds  White Clover – Spray when majority of seeds			
Pigeon Peas	Qld, NSW only	2 to 3L/ha^	4 days	are hard and yellow.  Spray as soon as the crop has reached full maturity.			
Potato (Haulm desiccatÚn)	All States	3 to 4L/ha^	7 days	Apply as soon as crop is ready to harvest. DO NOT apply during drought perÚds, particularly when the tops wŠI wŠt during the day. In such conditÚns wait at least 3 days after the soŠ has been well moistened by rain or irrigatÚr Leaf kŠI is rapid following spraying and usually complete within 4 days. Stem kŠI may take 10 to 14 days. Lift when desiccatÚn is complete but where possible, wait for 14 days after spraying to allow skin to harden off. Use high water volumes to obtain coverage of dense haulm. Regrowth may occur if seed crops are desiccated early.			
Ground stored  – pre-harvest weed control		1.5L/ha plus 1.2L 4Farmers Paraquat 250	7 days				
Canola	All States	1.5 to 3L/ha^	4 days	Spray when 70% of the pods are yellow and the seeds are browny/bluish and pliable. Canola ripens unevenly and is prone to pod shatter and seed loss. Direct harvest 4 to 7 days after spraying.			
Rice	Qld and NSW only	2 to 3L/ha^	5 days	Spray when the grain is mature – not more than 2 to 3% of the grain is stŠl at the mŠky stage and the grain moisture content must be less than 25%.			
Sorghum	Qld and NSW only	2 to 3L/ha^	1 day grazing	Spray as soon as the seed is mature and the moisture content about 25%.			
Soybeans	Qld, NSW and WA only	2 to 3L/ha^	4 days	Spray when 80% of the pods are yellow/brown and the seeds are ripe – yellow and pliable. DesiccatÚn of weeds and foliage aids timely and efficient harvesting, minimises cost and increases yields. Harvest 4 to 7 days after spraying.			
Sugarcane	Qld and NSW only	2 to 3L/ha^	4 days	30 metres. The sprayed cane and weed growth quickly dries out a good burn and removal of trash prÚr to harvest.			
		High volume hand spraying 200 mL^/200 L water		Spray to visible wetness.			
Sunflower	All States	2 to 3L/ha^	4 days	Spray when the seed is mature, seed moisture 35% and below, kernel full and firm, the disc spongy when broken, florets loose and bracts browning off. Harvesting can commence as soon as vegetative parts of crop are desiccated, usually 7 to 14 days after spraying.			
Sweet Potatoes	Qld only	3 to 4L/ha^	14 days	Apply 2 weeks prÚr to harvesting.			

## General weed control:

Crop	Weeds Controlled	State	Rate *	WHP	Critical Comments	
Aquatic areas	Duck Weeds, Red Azolla, Water Hyacinth, Salvinia, MarsŠea, Water LŠies and Water	All States	5 or 10 L/ha	10 days	Apply as an overall spray wetting foliage thoroughly. Clear water is necessary for best results as suspended soŠ particles interfere with herbicidal actÚn. Use the higher rate for heavy infestatÚns or for deep or dirty water.	
	Lettuce		400 mL plus 150 mL Agral per 100 L water			by to wet weeds thoroughly. About ould be sufficient to treat about 1 m <sup>2</sup> .
	CattaŠ and Pond Weeds		5L/megalitre water		Apply by injectÚn spray.	below the surface or as a surface
Asparagus	Broadleaf Weeds	All States	1.4L/ha plus 800 mL Agral in 400 L water/ha	nŠ	Apply to control seedling weeds before spears have emerged.	
Hops	Annual broadleaf and grass weeds	Vic and Tas only	700 mL to 1.4 L/ha^ may be mixed with 1.2 to 1.6 L/ha 4Farmers Paraquat250 and/ or 1.1 kg Simazine Granules	nŠ	Apply as a directed inter-row spray prÚr to crop emerging from winter dormancy, using a minimum of 250 L/ha spray volume to ensure good and even coverage of weeds.  Agral at the rate of 200 mL/100 L water – see Gene Instructúns.  If used with 4Farmers Paraquat 250 Herbicide observe safety directúns for that product.	
Infested areas	Cotton Thistle (Onopordum acanthium)	Tas only	300mL/ha plus 150mL Agral in 100L water	nŠ	Spot spray at the rosette stage before the centre shoot is 15cm tall. The spray should be applied to give complete wetting of the leaf surface. <b>DO NOT</b> use a lower rate or treat at a later growth stage.  Apply as an overall treatment to prevent seeding.	
	Saffron Thistle	All States	2.8L/ha plus 1L Agral in 200L water/ha			
			100 mL plus 70 mL Agral per 15 L knapsack		Alternatively spot spray on the same basis.	
Lucerne	Capeweed and Erodium spp.	All States	350 mL/ha^ in 200 L water	1 day grazing	Early autumn applicatÚn.	Heavy grazing is necessary to reduce lucerne to 2cm in height before spraying.
			700 mL/ha^ in 200 L water		Late winter applicatÚn	
OŠ seed poppies	Weed control	Tas only	300 mL to 1.5 L/ha	1 day grazing	Use in accordance with recommendatÚns made by Department of Primary Industries of the poppy contracting company. <b>DO NOT add Agral or any</b> <b>other wetting agent to the spray solution.</b>	

64398 Diquat 200 leaflet-A3.indd 1 12/10/20 1:10 pm

Crop	Weeds Controlled	State	Rate *	WHP	Critical Comments		
Orchards and Vineyards	Capeweed	All States	1.5L plus 1.4L Agral in 700L water per ha plus 1.6L/ha 4Farmers Paraquat 250	NŠ	Under most conditÚns, 4Farmers Paraquat 250 at 1.6 L/ha wŠl give effective control of grasses and broadleaved weeds in orchards, but where heavy infestatÚns of Capeweed occur, 4Farmers Diquat 200 Herbicide should be added to 4Farmers Paraquat 250 at the rate of 1.5 L/ha. For inter-row or around butts, use high volume applicatÚns. For full ground cover use a minimum of 700 mL/ha.  4Farmers Paraquat 250 and 4Farmers Diquat 200 Herbicide have no effect on brown bark but care should be taken when spraying around trees to avoi spray contacting green bark or plant material. There are no harmful soŠ residues.		
Pasture RenovatÚn and establishment	Capeweed and Erodium spp. (StorksbŠI)	All States	750 mL to 1.5 L/ha plus Agral in a minimum of 100 L water	1 day grazing	Apply by boom spray as an overall spray on 'run-do pasture after heavy grazing. Pasture should not be greater than 4cm long when sprayed. Grazing shoube carried out during prevÚus spring, summer and early autumn. Where Capeweed is in the very youn seedling stage (2 or 3 true leaves only) rates may be reduced to 350 mL/ha. Where Capeweed infestatÚr is high, oversowing with new pasture seed by direct drŠling is advisable. Direct drŠl 3 to 7 days after spraying using a pasture mixture suitable to the dis		
	Barley Grass, Brome Grass, SŠver Grass and Sweet Vernal Grass		750 mL to 1.5 L/ha^ plus 1 to 2 L/ha 4Farmers Paraquat 250 in a minimum of 100 L water/ha				
Row crops, vegetables and	Broadleaf weeds	All States	1.4 L/ha^	NŠ	Seedling weeds	4Farmers Paraquat 250 is more generally used for grass and	
market gardens			2.8^ to 4L/ha^ per 200 to 300L water/ha	NŠ	Mature weeds	broadleaf weed control in these situatÚns. However, where broadleaf weeds dominate, particularly Capeweed, 4Farmers Diquat 200 Herbicide should be tank mixed with 4Farmers Paraquat 250 or instead of 4Farmers Paraquat 250 where grass weeds are absent.	
Wheat and Oats	Capeweed Qld, NSW, Vic, Tas and		550mL/ha in 200L of water	NŠ	<b>Small seedlings: DO NOT</b> add wetting agent. Spray when the crop is between the 4 (wheat) or 3 (oats) leaf and early tŠlering stage.		
		SA only	700 mL/ha in 200 L of water	NŠ	Older seedlings: DO NOT add wetting agent. Spray when the crop is between the 4 (wheat) or 3 (oats) leaf and early tŠlering stage.		
Winter cereals	Pre-harvest weed control	All States	1 to 3L/ha^	NŠ	Spray as soon as the crop is fully mature and ready for harvesting. Under wet spring conditÚns, crops can perÚdically become infested with weeds which serÚusly interfere with harvest operatÚns.		
Wheat		NSW only	2 L/ha^	NŠ	Light to moderate stands.	Ensure that spray penetrates deep down into the crop canopy.	
			3L/ha^	NŠ	Moderate to heavy stands.		

<sup>\*</sup> NOTE: Use higher rate for dense or weedy crops.

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

#### **WITHHOLDING PERIOD:**

Grazing:

DO NOT GRAZE OR CUT SPRAYED VEGETATION FOR STOCK FOOD FOR 1 DAY AFTER APPLICATION.

Harvest:

Cotton, dry beans, dry peas, mung beans, asparagus, hops, orchards and vineyards, row crops, vegetables and market gardens, oats, wheat and winter cereals: NOT REQUIRED WHEN USED AS DIRECTED

Pigeon peas, canola, sunflower soybeans, sugarcane: DO NOT HARVEST FOR 4 DAYS AFTER APPLICATION.

Rice: DO NOT HARVEST FOR 5 DAYS AFTER APPLICATION.

Potatoes: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.

Sweet Potatoes: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.

DO NOT USE TREATED WATER FOR HUMAN CONSUMPTION, LIVESTOCK WATERING OR IRRIGATION PURPOSES FOR 10 DAYS AFTER APPLICATION.

## **GENERAL INSTRUCTIONS**

## **USES**

4Farmers Diquat 200 Herbicide is an aqueous solutÚn of diquat, a non-volatŠe herbicide which unique properties. It very quickly kŠls green growth with which it comes into contact and is particularly effective against broadleaved weeds. It is inactivated on contact with the soŠ and crop roots and seeds below the soŠ remain unharmed. It can be safely applied around bushes and trees which have no green bark. It is non-volatŠe, easŠy mixed with water and active at low concentratÚns.

## RESISTANT WEEDS WARNING

GROUP HERBICIDE

4Farmers Diquat 200 Herbicide is a member of the bipyridyl group of herbicides. The product has the inhibitor of photosynthesis at photosystem I mode of actÚn. For weed resistance management, the product is a Group L herbicide.

Some naturally-occurring weed bÚtypes resistant to the product and other inhibitors of Group L herbicides may exist through normal genetic variabŠity in any weed populatÚn. The resistant individuals can eventually dominate the weed populatÚn if these herbicides are used repeatedly. The resistant weeds wŠl not be controlled by this product or other inhibitors of Group L herbicides.

Since the occurrence of resistant weeds is difficult to detect prÚr to use, 4 Farmers Australia Pty Ltd accepts no liabŠity for any losses that may result from the faŠure of this product to control resistant weeds.

## MIXING

Add the required quantity of 4Farmers Diquat 200 Herbicide to water in the spray tank and agitate to give even mixing. Agitate again if left standing. Use clean water only, as suspended soŠ particles in dirty water wŠI interfere with herbicidal actÚn.

## **APPLICATION**

For best results, an even and complete coverage and good penetratÚn of the spray into the target foliage is necessary. Best results wŠl be obtained when applicatÚn is made in dull weather or at the end of the day. 4Farmers Diquat 200 Herbicide is rapidly absorbed and is not affected by rain falling shortly after applicatÚn.

## **APPLICATION RATES**

For applicatÚn to seedling weeds 4Farmers Diquat 200 Herbicide is generally recommended at 1.4L/ha and 4Farmers Paraquat 250 Herbicide at 1.1L/ha. Use 4Farmers Diquat 200 Herbicide at 2.8 to 4L/ha and 4Farmers Paraquat 250 Herbicide at 2.2 to 3.2L/ha when weeds are the older stages of growth is preferred where grasses are dominant and 4Farmers Diquat 200 Herbicide where there are mainly broadleaf weeds. Best results may be obtained when applicatÚn is made in dull weather or at the end of the

day. This product may also be used with  $200\,g/L$  paraquat products at  $1.4\,L/h$  ha for seedling weeds and 2.8 to  $4\,L/h$ a for older stages of weed growth.

## BOOM SPRAYING

A boom sprayer fitted with flat fan nozzles is preferred to ensure even coverage and to minimise drift. The boom should be set at sufficient height above the crop to provide a complete double overlap of the flat spray pattern. Spray drop arms on booms are useful for dense crops such as potatoes. A minimum spray volume of 100 L/ha is recommended.

## HIGH VOLUME SPOT SPRAYING

Hand-held equipment use 250 mL of product per 100 L of water and spray to visible wetness (about 700 to 1000 L/ha). Use 50 mL product plus 30 mL Agral per 15 litre knapsack.

## **AERIAL APPLICATION**

Flying height, pressure, nozzle size and positÚning on the aircraft should be such as to minimise spray drift. Apply 30 to 60 L of spray per hectare. Avoid spraying in high winds or under temperature inversÚn conditÚns. Wash any spŠlage during fŠling of the aircraft and make sure there are no leaks in the spraying system. Inspect the aircraft regularly for signs of corrosÚn and ensure the paintwork is in good conditÚn.

## CAUTION – USE BY AIRCRAFT

Although this product is no different in drift behavÚur from other chemicals, it has a rapid spotting effect on green foliage and, as with all herbicides, special care must be taken to avoid drift onto adjacent crops. Aircraft operators must not apply during perÚds of thermal (temperature) instabŠity, and should avoid wind conditÚns and flying heights conducive to drift.

## **COMPATIBILITY**

This product mixes readŠy with 4Farmers Paraquat 250 Herbicide, the soŠ residual herbicides Atrazine Granules, Diuron WG and Simazine Granules where prolonged weed control is required as well as a quick knockdown.

#### WEED CONTROL IN ROW CROPS, VEGETABLES AND MARKET GARDENS:

## Pre-planting and pre-crop emergence:

To control weeds in seed beds before sowing, or post-sowing pre-crop emergence, apply as a blanket spray with this product using boom spray equipment or knapsack sprayers.

## Post-emergence inter-row weed control:

Use shielded nozzles for rapid control of weeds in inter-row spaces of row crops, after crop seedlings have emerged, or when transplanted crops are established. **Direct the spray so that it does not touch the crop.** 

#### Pre-harvest crop desiccation:

Green crop foliage and weeds can serÚusly interfere with harvesting operatÚns of a number of crops. This product can be used to facŠitate harvesting by desiccating weeds, accelerating the drying of crops and reducing the moisture content of seeds. Drying costs are reduced, harvesting delays and associated risks avoided.

#### **Misting Application:**

The use of misting machine is not recommended for broad hectare spraying. If operators do not use this product through misting machines, they must be cut back to run at half-throttle, thus preventing the productÚn of fine droplets, the inhalatÚn of which may be dangerous. When misting with this product for weed control in confined spaces, or where there is a risk of exposure to spray mist, wear waterproof footwear, waterproof protective clothing, impervÚus gauntlet length gloves (rubber or PVC), goggles, face mask and respirator covering the nose and mouth and capable of fŠtering spray droplets. A high efficiency type particulate respirator is recommended but in any event use a respirator, which complies with the requirements of AS1716 (Standards AssociatÚn of Australia). Further advice on safety equipment should be obtained from a safety equipment manufacturer. It should be noted that beards may reduce the efficiency of respirators.

#### WARNING

**Markers:** If possible fixed markers should be used. If necessary to use human markers, they should be fully informed and should observe all the safety directÚns and precautÚns contained in this leaflet.

**Human Markers:** Must avoid exposure to the spray mist, eg. By always working upwind and where possible standing at least 50 metres beyond the edge of the target area. Protective clothing such as broad-brimmed hat, goggles, half-face respirator, waterproof jacket and pants, gloves and boots should be worn. A high efficiency type particulate respirator is recommended, but in any event a respirator which complies with the requirements of AS1716 (Standards AssociatÚn of Australia) should be used. DO NOT touch or walk through freshly treated crops.

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

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

#### PROTECTION OF LIVESTOCK

Domestic pets and poultry – keep away from treated areas. Low hazard to bees. No special precautÚns are required.

## PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

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

#### **STORAGE**

Store in the closed, original container in a cool, well-ventŠated area. DO NOT store for prolonged perÚds in direct sunlight. Store in a locked room or a place away from chŠdren, animals, food, feedstuffs, seed and fertŠisers.

Do not contaminate seed, feed or foodstuff. Do not re-use container for any purpose.

#### **DISPOSAL**

#### 10 L, 20 L Containers

Triple-rinse containers before disposal. Dispose of rinsate or any undŠuted chemical according to state/territory legislative requirements. This container can be recycled if it is clean, dry, free of visible residues and has the drumMUSTER logo visible. Wash outside of the container and the cap. Store cleaned container in a sheltered place with cap removed. It wŠI then be acceptable for recycling at any drumMUSTER collectÚn or simŠar container management program site. The cap should not be replaced, but may be taken separately

## 110 L, 1000 L Containers

Empty contents fully into applicatÚn equipment. Close all valves and return to point of supply for refŠl or recycling.

## SAFETY DIRECTIONS

Very dangerous. Poisonous if absorbed by skin contact, inhaled or swallowed. WŠI irritate the eyes, nose, throat and skin. Avoid contact with eyes and skin. DO NOT inhale spray mist. When preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist, washable hat, elbow-length PVC gloves, face shield or goggles, and half-face respirator or disposable respirator.

If clothing becomes contaminated with product or wet with spray, remove clothing immediately. If product on skin, immediately wash area with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and face shield or goggles, respirator and if rubber wash with detergent and warm water, and contaminated clothing.

## FIRST AID

If poisoning occurs, contact a doctor or Poisons InformatÚn Centre (Phone Australia 131126).

If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

## SAFETY DATA SHEET

For further informatÚn please refer to the Safety Data Sheet. For a copy visit our website at www 4farmers com au

## CONDITIONS OF SALE

This product complies with the specificatÚns in its statutory registratÚn. Implied terms and warranties are excluded. 4Farmers' liabŠity for breach of the express or any non-excludable implied warranty is limited to product replacement or purchase price refund. The purchaser must determine suitabŠity for intended purpose and take all proper precautÚns in the handling, storage and use of the product including those on the label and/or safety data sheet faŠing which 4Farmers shall have no liabŠity.

64398 Diquat 200 leaflet-A3.indd 2 12/10/20 1:10 pm

<sup>^</sup> WETTING AGENT: Add Agral at the rate of 200 mL/100 L or BS1000 at 160 mL/100 L of prepared spray unless otherwise specified.