

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

OzCrop

# Metsulfuron 600 WG

**HERBICIDE**

ACTIVE CONSTITUENT: 600 g/kg METSULFURON METHYL

**GROUP B HERBICIDE**

*For the control of certain brush and broadleaf weeds in native pastures, agricultural non-crop areas, rights of way and commercial and industrial areas, and for the control of certain broadleaved weeds in mung beans, winter cereal crops, grass pastures and pasture renovation as per the Directions for Use table.*

NET CONTENTS:

**100g - 1kg**

**NOT A DANGEROUS GOOD  
ACCORDING TO THE AUSTRALIAN  
DANGEROUS GOODS (ADG) CODE.**

**BATCH NO.**

**DATE OF MANUFACTURE:**

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## DIRECTIONS FOR USE

### RESTRAINTS:

DO NOT store a suspension of OzCrop Metsulfuron 600 WG Herbicide for more than two days otherwise significant breakdown will occur.

DO NOT apply to crops under stress.

DO NOT store tank mixes of OzCrop Metsulfuron 600 WG Herbicide.

DO NOT apply if rainfall is expected within 2 hours (for Woody Weeds 4 hours).

DO NOT use on furrow or flood irrigated crops.

DO NOT apply before the three leaf stage of the crop when used for post emergent weed control.

DO NOT treat newly sown pastures as severe damage may occur.

DO NOT use on pasture seed crops.

DO NOT apply to weeds that are under stress or not actively growing.

### 1. CEREALS: OZCROP METSULFURON 600 WG HERBICIDE ONLY - POST CROP AND WEED EMERGENCE BY GROUND AND AERIAL APPLICATION

CROPS	WEEDS CONTROLLED	STATES	RATE g/ha	WEED GROWTH STAGE AT APPLICATION	CRITICAL COMMENTS
Wheat, Barley, Triticale & Cereal Rye	African Turnip Weed ( <i>Sisymbrium thellungii</i> )	Qld only	5	Apply before the 6 leaf stage.	<b>General</b> Where the two rates are specified, use the higher rate for larger weeds and/or under heavy weed pressures. Where weed growth stage is not specified in the adjacent column, apply when weeds are small (ie. no greater than 5cm in height or diameter) and actively growing. Refer to General Instructions and Crop Safety Directions for further application instructions.
	Amsinckia/Yellow Burweed ( <i>Amsinckia</i> spp.)	WA only	5 or 7		
		NSW, Vic, Tas, SA only			
	Ball Mustard ( <i>Neslia paniculata</i> )	SA only	5		
	Boggabri Weed/Dwarf Amaranth ( <i>Amaranthus macrocarpus</i> )	Qld only	7	Apply at cotyledon to 10cm height or diameter.	
	Colomba Daisy ( <i>Pentzia suffruticosa</i> )	SA only	5		
	Cape Tulip ( <i>Homeria</i> spp.)	WA only			
	Charlock ( <i>Sinapsis arvensis</i> )	NSW, Vic, Tas, SA only			
	Chickpeas (Volunteer) ( <i>Cicer arietinum</i> )	Qld, NSW, Vic, SA only			
	Chickweed ( <i>Stellaria media</i> )	NSW, Vic, Tas, SA only			
Chicory ( <i>Cichorium intybus</i> )	Qld only				
Clover (Subterranean) ( <i>Trifolium subterraneum</i> )	All States				

**1. CEREALS: OZCROP METSULFURON 600 WG HERBICIDE ONLY - POST CROP AND WEED EMERGENCE BY GROUND AND AERIAL APPLICATION – *continued***

CROPS	WEEDS CONTROLLED	STATES	RATE g/ha	WEED GROWTH STAGE AT APPLICATION	CRITICAL COMMENTS
Barley, Cereal Rye, Triticale, Wheat – <i>cont</i>	Common Sowthistle ( <i>Sonchus oleraceus</i> )	Qld, NSW, Vic, Tas only	5	Apply up to the 4 leaf stage.	<i>See Critical Comments previous page.</i>
	Cutleaf Mignonette ( <i>Reseda lutea</i> )	Tas, SA only	7		Spray actively growing large plants, up to the early flowering stage. Plants emerging after spraying may not be controlled.
	Deadnettle ( <i>Lamium amplexicaule</i> )	All States	5		
	Denseflower Fumitory ( <i>Fumaria densiflora</i> )	NSW, SA only			
	Dock (Broadleaf) ( <i>Rumex obtusifolius</i> )	WA only Qld, NSW, Vic, Tas, SA only	5 or 7		
	Faba Beans ( <i>Vicia faba</i> )	Vic, SA only	5	Apply after the 3 node stage.	
	Field Peas ( <i>Pisum sativum</i> )	Vic, Tas, SA, WA only			
		NSW only	7		
	Hare's Ear/Treacle Mustard ( <i>Conringia orientalis</i> )	Vic only	5	Apply after 5 leaf stage.	Use the higher rate when weed populations are dense and majority of weeds are 4 leaf.
	Hogweed/Wireweed ( <i>Polygonum aviculare</i> )	WA only		Apply before the 4 leaf stage.	
NSW, Vic, Tas, SA only		5 or 7			
		Qld only	7	Apply when weeds are cotyledon – 3 leaf stage.	

**1. CEREALS: OZCROP METSULFURON 600 WG HERBICIDE ONLY - POST CROP AND WEED EMERGENCE BY GROUND AND AERIAL APPLICATION – *continued***

CROPS	WEEDS CONTROLLED	STATES	RATE g/ha	WEED GROWTH STAGE AT APPLICATION	CRITICAL COMMENTS
Wheat, Barley, Triticale & Cereal Rye – <i>cont</i>	Indian Hedge Mustard ( <i>Sisymbrium orientale</i> )	All States	5		Heavy populations and/or those suffering cold or moisture stress may not be completely controlled – a tankmix with LVE MCPA 500 is recommended.
	Lincoln Weed ( <i>Diplotaxis tenuifolia</i> )	SA only	7		Apply to actively growing plants from late Winter to Spring. Plants emerging after spraying may not be controlled.
	Lupins ( <i>Lupinus albus</i> )	NSW, Vic, SA, WA only	5		
	Mallee Catchfly ( <i>Silene apetala</i> )	SA only			
	Medic ( <i>Medicago</i> spp.)	All States			
	New Zealand Spinach ( <i>Tetragonia tetragonoides</i> )	Qld only	7	Apply before the 4 leaf stage.	
	Parthenium Weed ( <i>Parthenium hysterophorus</i> )	Qld only	5	Apply up to the 4 leaf stage.	
			7	Apply at the 4 leaf to rosette stage.	
	Paterson's Curse/Salvation Jane ( <i>Echium plantagineum</i> )	Tas, WA only	5		
			NSW, SA only	5 or 7	
	Prickly Lettuce ( <i>Lactuca serriola</i> )	Qld, Vic, Tas, SA only	5 or 7		
			WA only	5	
	Red Pigweed ( <i>Portulaca oleracea</i> )	Qld only		Apply before the 6 leaf stage.	
7			Apply rate when weed populations are dense and majority of weeds are 6 leaf stage.		

**1. CEREALS: OZCROP METSULFURON 600 WG HERBICIDE ONLY - POST CROP AND WEED EMERGENCE BY GROUND AND AERIAL APPLICATION – *continued***

CROPS	WEEDS CONTROLLED	STATES	RATE g/ha	WEED GROWTH STAGE AT APPLICATION	CRITICAL COMMENTS
Barley, Cereal Rye, Triticale, Wheat – <i>cont</i>	Rough Poppy ( <i>Papaver hybridum</i> )	NSW, Vic, Tas, SA only	5		
	Saltbush ( <i>Atriplex muelleri</i> )	Qld only		Apply up to the 4 leaf stage.	
			7	Apply at the 4-6 leaf stage.	
	Shepherd's Purse ( <i>Capsella bursapastoris</i> )	NSW, Vic, Tas, SA only	5		
	Skeleton Weed (Suppression only) ( <i>Chondrilla juncea</i> )	NSW, Vic, SA only	7		
		WA only	5		
	Slender Celery ( <i>Apium leptophyllum</i> )	Qld only	5		
	Smallflower Fumitory ( <i>Fumaria parviflora</i> )	SA only			
	Sorrel ( <i>Rumex acetosella</i> )	NSW, Vic, Tas, SA, WA only			
	Soursob ( <i>Oxalis pes-caprae</i> )	NSW, Vic, Tas, SA, WA only			
	Spiny Emex/Doublegee/ Threecornered Jack (s) ( <i>Emex australis</i> )	WA only			
		Qld, NSW, Vic, Tas, SA only	5 or 7		
	Stagger Weed ( <i>Stachys arvensis</i> )	All States	5		
Storksbill/Wild Geranium ( <i>Erodium spp.</i> )	Vic, Tas, SA only				

Some regeneration from underground rootstocks and new germinations may occur late in the season.

Apply after majority of Soursobs have emerged and are actively growing.

**1. CEREALS: OZCROP METSULFURON 600 WG HERBICIDE ONLY - POST CROP AND WEED EMERGENCE BY GROUND AND AERIAL APPLICATION – *continued***

CROPS	WEEDS CONTROLLED	STATES	RATE g/ha	WEED GROWTH STAGE AT APPLICATION	CRITICAL COMMENTS
Wheat, Barley, Triticale & Cereal Rye – <i>cont</i>	Turnip Weed ( <i>Rapistrum rugosum</i> )	All States	5		
	Volunteer Sunflower ( <i>Helianthus annuus</i> )	Qld only	7	Apply at cotyledon to 4 leaf stage.	
		NSW only		Apply at 4 to 8 leaf stage.	
	Wild/Crow Garlic ( <i>Allium vineale</i> )	Vic, Tas only		Apply at cotyledon to 8 leaf stage.	
	Wild Turnip ( <i>Brassica tournefortii</i> )	All States	5	Apply at the 1-2 leaf stage.	

**2. CEREALS: OZCROP METSULFURON 600 WG HERBICIDE MIXTURES - POST CROP AND WEED EMERGENCE BY GROUND AND AERIAL APPLICATION**

For the control of weeds in addition to those listed above the following mixtures with their appropriate timings are recommended. For mixing instructions refer to “Spray Preparation” Section.

CROPS	WEEDS CONTROLLED	STATES	RATE g/ha	CROP STAGE AT APPLICATION	CRITICAL COMMENTS
Wheat, Barley Triticale & Cereal Rye	Capeweed ( <i>Arctotheca calendula</i> ), Wild Radish ( <i>Raphanus raphanistrum</i> )	NSW, Vic only	5 g + 500 mL OzCrop Diuron 500 SC (or 280 g DF) + 500 mL of MCPA 500	3-5 leaf (Zadoks 13-15) NSW only. 5 leaf (Zadoks 15) Vic only.	DO NOT apply to Kamilaroi, Shortim or Olympic Wheat. Apply when weeds are 2-5 leaf.
		SA only	5 g + 500 mL OzCrop Diuron 500 SC (or 280 g DF) + 350 mL of MCPA 500	3 to 5 leaf (Zadoks 13-15).	
		WA only	5 g + 350 mL OzCrop Diuron 500 SC (or 195 g DF) + 400 mL of MCPA 500	3 to 4 leaf (Zadoks 13-14).	Apply when weeds are 2-5 leaf.

**2. CEREALS: OZCROP METSULFURON 600 WG HERBICIDE MIXTURES - POST CROP AND WEED EMERGENCE BY GROUND AND AERIAL APPLICATION – *continued***

CROPS	WEEDS CONTROLLED	STATES	RATE g/ha	CROP STAGE AT APPLICATION	CRITICAL COMMENTS
Wheat, Barley	Capeweed ( <i>Arctotheca calendula</i> ), Wild Radish ( <i>Raphanus raphanistrum</i> )	WA only	5 g + 550 mL OzCrop Terbutryn + 600 mL of MCPA 500	3 leaf – early tillering (Zadoks 13-21).	Apply when weeds are 2-6 leaf.
	Capeweed ( <i>Arctotheca calendula</i> )	SA only	5 g + 550 mL OzCrop Terbutryn		
		NSW only	5 g + 850 mL OzCrop Terbutryn		
		NSW, Vic, SA, WA only	5 g + 1 L Agtryne	3 to 5 leaf stage (Zadoks 13-15).	
Wheat, Barley, Triticale & Cereal Rye		WA only	5 g + 750 mL Bromicide* MA	3 leaf to full tillering (SA, WA only).	Apply when weeds are up to 6 leaf stage.
		Qld, NSW, Vic, Tas, SA only	5 g + 1.4 L Bromicide* MA	5 leaf to full tillering (Qld, NSW, Vic, Tas only).	
		WA only			Apply when weeds are 6-8 leaf.
		Qld, NSW, Vic, Tas, SA only	5 g + 2.1L Bromicide* MA	3 leaf to full tillering (SA only). 5 leaf to full tillering (Qld, NSW, Vic, Tas only).	Apply when weeds are 6-8 leaf.
	Wild Radish ( <i>Raphanus raphanistrum</i> )	Qld only	5 g + 700 mL to 1 L of MCPA 500	Early tillering to before boot (Zadoks 21-39).	Apply the lower rate to seedling weeds (3-6 leaf) and the higher rate on well developed weeds up to rosette.

**2. CEREALS: OZCROP METSULFURON 600 WG HERBICIDE MIXTURES - POST CROP AND WEED EMERGENCE BY GROUND AND AERIAL APPLICATION – *continued***

CROPS	WEEDS CONTROLLED	STATES	RATE g/ha	CROP STAGE AT APPLICATION	CRITICAL COMMENTS
Wheat, Barley, Triticale & Cereal Rye – <i>cont</i>	Wild Radish ( <i>Raphanus raphanistrum</i> )	NSW only	5 g + 700 mL to 1 L of MCPA 500	Apply 700 mL rate after crop has reached 5 leaf stage. Use higher rates after the first node can be felt at the base of the tiller and before swelling of the head can be felt in the tiller.	Apply the lower rate to seedling weeds (3-6 leaf) and the higher rate on well developed weeds up to rosette.
		SA only	5 g + 1.4 L of MCPA 500	Early tillering to before boot (Zadoks 21-39).	Apply when weeds are seedling to rosette.
		WA only	5 g + 1.2 L of MCPA 500	5 leaf- tillering (Zadoks 15-30).	
Wheat, Barley	Wild Radish ( <i>Raphanus raphanistrum</i> )	WA only	5 g + 250 mL Tigrex*/Nugrex*	Wheat: 3 leaf to late tillering (Zadoks 13-30). Barley: 5 leaf to late tillering (Zadoks 15-30).	Apply up to the 4 leaf stage and not more than 10cm in diameter.
Wheat, Barley, Triticale & Cereal Rye	Wild Radish ( <i>Raphanus raphanistrum</i> )	NSW, Vic, Tas, SA, WA only	5 g + 1.1 to 1.6 L of LVE MCPA 500	5 leaf to commencement of flag leaf (Zadoks 15-37).	Apply up to 2-3 leaf stage only.
	Saffron Thistle ( <i>Carthamus lanatus</i> )	NSW, Vic, Tas, SA, WA only	5 g + 1.1 to 1.6 L of LVE MCPA 500	5 leaf through to commencement of flag leaf (Zadoks 15-37)	Spray young rosettes before leaves become spiny.



**2. CEREALS: OZCROP METSULFURON 600 WG HERBICIDE MIXTURES - POST CROP AND WEED EMERGENCE BY GROUND AND AERIAL APPLICATION – *continued***

CROPS	WEEDS CONTROLLED	STATES	RATE g/ha	CROP STAGE AT APPLICATION	CRITICAL COMMENTS
Wheat, Barley, Triticale & Cereal Rye – <i>cont</i>	Saffron Thistle ( <i>Carthamus lanatus</i> )	Qld only	5 g + 1.4 L to 2.1 L of MCPA 500	Early tillering to before boot (Zadoks 21-39). Higher rates (above 1.5 L/ha of MCPA 500 only to be used on crops from mid tillering to before boot stage (Zadoks 23-29).	Apply to weeds at seedling to rosette stage. Use the lower rate on seedling weeds and the higher rate on well developed weeds.
		NSW, Vic, Tas, SA, WA only	5 g + 300 mL Lontrel*/Archer*	4 to 5 leaf stage (Zadoks 14-15).	Spray when weeds are young and actively growing. DO NOT apply Lontrel/Archer to a cereal crop if field peas are to be sown the following season unless the cereal stubble is burnt.
	Variegated Thistle ( <i>Silyburn marianum</i> )	Tas only*	5 g + 1.2 L 2,4-D Amine 625	5 leaf to early tillering (Zadoks 15-21).	Apply to weeds at seedling to rosette stage.
		NSW only	5 g + 700 mL to 1.4 L 2,4-D Amine 625	Apply after the first node can be felt at the base of the tiller and before swelling of the head can be felt in the tiller.	Apply to weeds at seedling to rosette stage. Use the lower rate on seedling weeds and the higher rate on well developed weeds.
		Qld only	5 g + 0.9 L 2,4-D Amine 625	Mid tillering to before boot (Zadoks 23-29).	Apply to weeds at the seedling to rosette stage.
		Qld only	5 g + 1.5 L MCPA 500	Early tillering to before boot (Zadoks 21-39).	

## 2. CEREALS: OZCROP METSULFURON 600 WG HERBICIDE MIXTURES - POST CROP AND WEED EMERGENCE BY GROUND AND AERIAL APPLICATION – *continued*

CROPS	WEEDS CONTROLLED	STATES	RATE g/ha	CROP STAGE AT APPLICATION	CRITICAL COMMENTS
Wheat, Barley, Triticale & Cereal Rye	Variegated Thistle ( <i>Silyburn marianum</i> )	NSW, Vic, Tas, SA, WA only	5 g + 840 mL to 1.1 L LVE MCPA 500	Apply from 5 leaf through to commencement of flag leaf (Zadoks 15-37).	Spray at pre-cabbage stage.
Wheat	Slender Thistle ( <i>Carduus tenuiflorus</i> )		5 g + 2.1 L LVE MCPA 500		Moderately susceptible. Spray young rosettes.
Wheat, Barley, Triticale & Cereal Rye		NSW only	5 g + 0.8 L to 1.4 L 2,4-D Amine 625	Apply after the first node can be felt at the base of the tiller and before swelling of the head can be felt in the tiller.	Apply to weeds at seedling to rosette stage. Use the lower rate on seedling weeds and the higher rate on well developed weeds.
	Slender Thistles ( <i>Carduus tenuiflorus</i> and <i>Carduus pycnocephalus</i> )	Tas only*	5 g + 1.4 L 2,4-D Amine 625	5 leaf to early tillering (Zadoks 15-21).	Apply to weeds at seedling to young rosette stage.
Wheat, Barley & Triticale	Climbing Buckwheat/ Black Bindweed ( <i>Fallopia convolvulus</i> )	Qld, NSW only	5 g-7 g + 1 L Tordon* 242/ Trooper*	Apply from early tillering (when the main shoot has 4 to 5 leaves plus 2 or more new tillers have formed) to start of jointing (first node).	For best control apply at early tillering as this weed becomes increasingly difficult to control as it becomes larger.

### 3. CEREALS: OZCROP METSULFURON 600 WG HERBICIDE + GLYPHOSATE - FALLOW/PREPLANT KNOCKDOWN WEED CONTROL

CROPS	WEEDS CONTROLLED	STATES	RATE g/ha	CROP STAGE AT APPLICATION	CRITICAL COMMENTS
Wheat	Refer to Post Crop and Weed Emergence section of this leaflet (Table 1), and the OzCrop Glyphosate 450 Directions for Use.	All States except WA	OzCrop Metsulfuron 600 WG Herbicide 5g or 7g + OzCrop Glyphosate 450 at label rates	Refer to Post Crop and Weed Emergence section of this leaflet (Table 1), and the OzCrop Glyphosate 450 Directions for Use.	DO NOT apply less than 10 days prior to sowing as crop injury may occur, particularly under dry, cold conditions. Apply when weeds are actively growing. Refer to General Instructions and Critical Comments of the respective labels. Use the appropriate rate of each product for the target weed spectrum.
		WA only	OzCrop Metsulfuron 600 WG Herbicide 5g + OzCrop Glyphosate 450 at label rates		
Barley, Cereal Rye and Triticale		All States except WA	OzCrop Metsulfuron 600 WG Herbicide 5g or 7g + OzCrop Glyphosate 450 at label rates		DO not apply less than 6 weeks prior to sowing as crop injury may occur, particularly under dry, cold conditions. Apply when weeds are actively growing. Refer to General Instructions and Critical Comments of the respective labels. Use the appropriate rate of each product for the target weed spectrum.
		WA only	OzCrop Metsulfuron 600 WG Herbicide 5g + OzCrop Glyphosate 450 at label rates		
Mung Beans	Field Crop Desiccation	All States	5g + OzCrop Glyphosate 450 at label rates		Apply when Mung Bean crop is mature and when pods are brown/black. Use the higher rate of glyphosate when crops or weeds are dense and when faster desiccation is required. Speed of desiccation is dependent on crop stage, growing conditions and weather conditions during and after application. This use should be part of an integrated weed management strategy that incorporates herbicides with different modes of action and alternative cultural weed practices.

#### 4. NATIVE PASTURES, RIGHTS OF WAY, COMMERCIAL AND INDUSTRIAL AREAS - GROUND APPLICATION

CROPS	WEEDS CONTROLLED	STATES	RATE			CRITICAL COMMENTS
			BOOM g/ha	HANDGUN g/100L	GAS GUN g/L	
Native Pastures*, rights of way, commercial and industrial areas	Alligator Weed ( <i>Alternanthera philoxeroides</i> )	NSW only	80	–	–	Apply in terrestrial situations only. Follow-up applications over at least two seasons are essential for complete control.
	Apple Box ( <i>Angophora floribunda</i> ), Messmate Stringybark ( <i>Eucalyptus obliqua</i> ), Peppermint Gum ( <i>E. radiata</i> ), Red Gum ( <i>E. blakelyi</i> ), Yellow Box ( <i>E. melliodora</i> )		–	10 + Pulse* Penetrant (200mL/100L)	1 + Pulse* Penetrant (10mL/5L)	Apply to plants up to 4m high. Avoid spraying when plants are stressed. Ensure thorough foliage cover. Results can not be guaranteed where suckers originate from large lignotubers.
	Australian Blackthorn ( <i>Bursaria spinosa</i> )	Qld, NSW, Vic, Tas only	–	10		Apply when bushes are actively growing. Avoid spraying when bushes are stressed.
	Bellyache Bush ( <i>Jatropha gossypifolia</i> )	Qld only	–	10 + Pulse* Penetrant (200mL/100L)	–	Handgun – Spray to thoroughly wet all foliage, but not to cause run-off.

#### 4. NATIVE PASTURES, RIGHTS OF WAY, COMMERCIAL AND INDUSTRIAL AREAS - GROUND APPLICATION – cont

CROPS	WEEDS CONTROLLED	STATES	RATE			CRITICAL COMMENTS
			BOOM g/ha	HANDGUN g/100L	GAS GUN g/L	
Native Pastures **, Agricultural Non-Crop Areas, Rights of Way, Commercial and Industrial Areas – <i>continued</i>	Blackberry ( <i>Rubus</i> spp.)	All States	–	10 + mineral crop oil (1L/100L)	1 + Pulse* Penetrant (10mL/5L)	Apply when bushes are actively growing. Tas only: Apply after petal fall. Vic only: Apply between December and April. Spray to thoroughly wet all foliage and canes. Ensure peripheral runners are sprayed. In Tasmania, DO NOT apply to bushes carrying mature fruit.
	Bitou Bush/Boneseed ( <i>Chrysanthemoides monilifera</i> )	Qld, NSW, Vic, SA only	–	10	1 + Pulse* Penetrant (10mL/5L)	Spray to thoroughly wet all foliage. Minimise contact with desirable species.
	Bridal Creeper ( <i>Myrsiphyllum asparagoides</i> )	SA only	–	5	–	Apply during mid-June to late August. Follow-up applications over at least 2 seasons will be required for complete control. Water volumes of 500-800 L/ha are recommended to minimize the risk of damage to native vegetation.

**4. NATIVE PASTURES, RIGHTS OF WAY, COMMERCIAL AND INDUSTRIAL AREAS - GROUND APPLICATION – cont**

CROPS	WEEDS CONTROLLED	STATES	RATE			CRITICAL COMMENTS
			BOOM g/ha	HANDGUN g/100L	GAS GUN g/L	
Native Pastures*, rights of way, commercial and industrial areas – <i>continued</i>	Common Bracken ( <i>Pteridium esculentum</i> )	All States	60	10	–	Spray after full frond expansion. Spray to thoroughly wet all foliage, but not to cause run-off. For boom application - adjust boom height to ensure complete spray overlap. Avoid spraying when plants are stressed or in conditions of prolonged dry weather when soils are dry.
	Crofton Weed ( <i>Eupatorium adenophorum</i> )	Qld, NSW only	–	15	–	Spray to thoroughly wet foliage but not to cause run-off. Extra care should be taken to get good spray penetration when spraying bushes situated in thickets. Apply to actively growing weeds up to early flowering. Best results are obtained on younger plants. If regrowth occurs, retreat in the subsequent growth period.

**4. NATIVE PASTURES, RIGHTS OF WAY, COMMERCIAL AND INDUSTRIAL AREAS - GROUND APPLICATION – cont**

CROPS	WEEDS CONTROLLED	STATES	RATE			CRITICAL COMMENTS
			BOOM g/ha	HANDGUN g/100L	GAS GUN g/L	
Native Pastures **, Agricultural Non-Crop Areas, Rights of Way, Commercial and Industrial Areas – continued	Darling Pea ( <i>Swainsona</i> spp.)	NSW only	10	–	–	Apply during Spring.
	Fennel ( <i>Foeniculum vulgare</i> )	NSW only	–	10	–	Apply to actively growing plants.
	Golden Dodder ( <i>Cuscuta australis</i> )	Qld, NSW, Vic, SA only	–	1	–	Apply as a spot spray to point of run-off. Ensure correct coverage of infested area. Apply preflowering.
	Gorse ( <i>Ulex europaeus</i> )	NSW, Vic, Tas, SA only	–	15 + Pulse* Penetrant (200mL/100L)	–	Apply to bushes up to 2m tall. Ensure thorough spray penetration and coverage of the whole plant.
	Great Mullein ( <i>Verbascum thapsus</i> )	NSW only	20 + Pulse* Penetrant (200mL/100L)	–	–	Regrowth may occur if growing conditions are not good. Apply during Spring at times of good soil moisture to rosettes before stem elongation.
	Hawthorn ( <i>Crataegus laevigata</i> )		–	10	–	Apply when bushes are actively growing. Avoid spraying when bushes are stressed. Spray to thoroughly wet all foliage but not to cause run-off.
	Inkweed ( <i>Phytolacca octandra</i> )	Qld, NSW only	–	5	–	Spray to thoroughly wet all foliage but not to cause run-off.
Japanese Sunflower ( <i>Tithonia diversifolia</i> )	NSW only	–	10	–		

#### 4. NATIVE PASTURES, RIGHTS OF WAY, COMMERCIAL AND INDUSTRIAL AREAS - GROUND APPLICATION – *cont*

CROPS	WEEDS CONTROLLED	STATES	RATE			CRITICAL COMMENTS
			BOOM g/ha	HANDGUN g/100L	GAS GUN g/L	
Native Pastures*, rights of way, commercial and industrial areas – <i>continued</i>	Kangaroo Thorn ( <i>Acacia paradoxa</i> )	NSW only	–	10	–	Apply to bushes up to 2.5m high when actively growing.
	Lantana ( <i>Lantana camara</i> )	Qld, NSW only	–	10	2 + Pulse* Penetrant (10mL/5L)	Apply to bushes up to 2m tall. Spray to thoroughly wet all foliage and stems. Spray should penetrate throughout the bush. Should regrowth occur, re-treatment will be necessary.
	Mistflower ( <i>Eupatorium riparium</i> )		–	5	–	Spray to thoroughly wet all foliage but not to cause run-off. Apply to actively growing weeds up to early flowering.
	Noogoora Burr ( <i>Xanthium pungens</i> )	NSW only	–	7.5	–	Apply to actively growing plants. Plants under moisture stress will not be controlled.
	Parthenium ( <i>Parthenium hysterophorus</i> )	Qld only NSW only	7 –	5	– –	<b>Handgun:</b> Spray to thoroughly wet all foliage but not to cause run-off. <b>Boom (Pastures only):</b> Apply up to rosette stage. Spray to thoroughly wet all foliage adjust boom height to ensure complete overlap.



4. NATIVE PASTURES, RIGHTS OF WAY, COMMERCIAL AND INDUSTRIAL AREAS - GROUND APPLICATION – *cont*

CROPS	WEEDS CONTROLLED	STATES	RATE			CRITICAL COMMENTS
			BOOM g/ha	HANDGUN g/100L	GAS GUN g/L	
Native Pastures **, Agricultural Non-Crop Areas, Rights of Way, Commercial and Industrial Areas – <i>continued</i>	Paterson's Curse/ Salvation Jane ( <i>Echium plantagineum</i> )	All States	15	5	–	<b>Boom:</b> Spray to thoroughly wet all foliage. Adjust boom height to ensure correct spray overlap. <b>Handgun:</b> Spray to wet all foliage but not to cause run-off. <b>WA only</b> - Spray plants at early flowering stage (August - September).
	Privet ( <i>Ligustrum</i> spp.)	Qld, NSW only		10	1 + Pulse* Penetrant (10mL/5L)	Apply to bushes up to 3m high. Complete foliar spray coverage is essential for control: partial spray coverage will result in regrowth recovery. DO NOT spray when bushes are stressed.
	Ragwort ( <i>Senecio jacobaea</i> )	NSW, Vic, Tas only	15	5	–	Apply to actively growing plants at rosette to cabbage stage.
	Rubber Vine ( <i>Cryptostegio grandiflora</i> )	Qld only	–	15	–	Apply to bushes up to 3m tall. Apply from October through April when bushes are actively growing. Ensure thorough spray coverage of all foliage and leaders. Incomplete coverage will result in regrowth.

#### 4. NATIVE PASTURES, RIGHTS OF WAY, COMMERCIAL AND INDUSTRIAL AREAS - GROUND APPLICATION – cont

CROPS	WEEDS CONTROLLED	STATES	RATE			CRITICAL COMMENTS
			BOOM g/ha	HANDGUN g/100L	GAS GUN g/L	
Native Pastures **, Agricultural Non-Crop Areas, Rights of Way, Commercial and Industrial Areas – <i>continued</i>	Sweet Briar ( <i>Rosa rubiginosa</i> )	NSW, Vic, Tas, SA only	–	10	1 + Pulse* Penetrant (10mL/5L)	Apply when bushes are actively growing. Avoid spraying when bushes are stressed, when leaf fall has commenced or after the end of February. <b>Handgun:</b> Spray to thoroughly wet all foliage, but not to cause run-off. <u>Vic only</u> - Gasgun - Apply to bushes less than 2m high as application to bushes in excess of 2m high may produce variable results. Apply with shots of 25mL of dilute product.
	Tree of Heaven ( <i>Ailanthus altissima</i> )	NSW only	–			Spray to thoroughly wet all foliage, but not to cause run-off.
	Wait-a-While (Mysore Thorn) ( <i>Caesalpinia decapetala</i> )	Qld, NSW only	–		–	
	Wild Turnip ( <i>Brassica tournefortii</i> )	NSW only	–	5	–	Apply to actively growing plants.

\*\* Will damage legumes in pastures

**5. NATIVE PASTURES, RIGHTS OF WAY, COMMERCIAL AND INDUSTRIAL AREAS, AND FLOODPLAINS - AERIAL APPLICATION BY HELICOPTER**

SITUATION	WEEDS CONTROLLED	STATES	RATE g/ha	CRITICAL COMMENTS
Native Pastures*, rights of way, commercial and industrial areas	Blackberry	NSW, Vic, Tas only	160	Apply when bushes are actively growing. Tas only: Apply after petal fall. DO NOT apply to bushes carrying mature fruit. Vic only: Apply between December and April. Use not less than 100 L prepared spray/ha.
Flood Plains	<i>Mimosa pigra</i>	NT only	50 or 60	Use the higher rate when air temperature exceeds 35°C. Apply in at least 60 L/ha of clean water. Use D6 or D8 nozzles with 45 swirl plates pressurised to 210 kPa to give a large droplet size. Add a non-ionic surfactant. Apply when plant is actively growing. Avoid spraying when plants are stressed.

\* Will damage legumes in pastures

**6. PASTURES, FORESTS, COMMERCIAL AND INDUSTRIAL AREAS, RIGHTS OF WAY, DOMESTIC AND PUBLIC SERVICE AREAS: OZCROP METSULFURON 600 WG HERBICIDE AND ROUNDUP\* HERBICIDE – ALL STATES**

SITUATION	WEEDS CONTROLLED	RATE -AERIAL OR BOOM	RATE-HANDGUN OR KNAPSACK	CRITICAL COMMENTS
Pastures, Forests, Commercial and Industrial areas, Rights of way, Domestic and public service areas	Blackberry ( <i>Rubus</i> spp.)	8.0L Roundup plus 60g OzCrop Metsulfuron 600 WG Herbicide per ha	400mL Roundup plus 3g OzCrop Metsulfuron 600 WG Herbicide per 100L water	For Blackberries, apply from flowering until prior to leaf yellowing. Due to widespread picking of Blackberries by the public, it is not recommended that the product be applied to bushes bearing mature fruit. Use Pulse Penetrant at the rate of 100 mL per 100 L water.
	Bracken ( <i>Pteridium esculentum</i> )	4.0L Roundup plus 30g OzCrop Metsulfuron 600 WG Herbicide per ha		For Bracken, apply when fronds are fully unfurled but prior to first frosts. For boom application, refer to Boom application section. Use Pulse Penetrant at the rate of 100 mL per 100 L of water.

**6. PASTURES, FORESTS, COMMERCIAL AND INDUSTRIAL AREAS, RIGHTS OF WAY, DOMESTIC AND PUBLIC SERVICE AREAS: OZCROP METSULFURON 600 WG HERBICIDE AND ROUNDUP\* HERBICIDE – ALL STATES**

SITUATION	WEEDS CONTROLLED	RATE -AERIAL OR BOOM	RATE-HANDGUN OR KNAPSACK	CRITICAL COMMENTS
Pastures, Forests, Commercial and Industrial areas, Rights of way, Domestic and public service areas – continued	Gorse ( <i>Ulex europaeus</i> ), Lantana ( <i>Lantana camara</i> ), St John's Wort ( <i>Hypericum perforatum</i> ), Sweet Briar ( <i>Rosa rubiginosa</i> )		400mL Roundup plus 3g OzCrop Metsulfuron 600 WG Herbicide per 100L water	For Gorse, apply when actively growing at any time of year, except Spring. Use Pulse* Penetrant at the rate of 100mL per 100L of water. For Lantana, apply when actively growing. DO NOT apply during periods of Summer drought stress. Use Pulse* Penetrant at the rate of 100 mL per 100 L of water. For St John's Wort, apply when actively growing from Spring to Summer. Use Pulse* Penetrant at 100 mL per 100 L of water. For Sweet Briar, apply when in full leaf, prior to leaf fall. Use Pulse* Penetrant at 100 mL per 100 L of water.

**7. TOLERANT GRASS PASTURES OR IN A PASTURE RENOVATION - GROUND APPLICATION**

SITUATION	WEEDS CONTROLLED	STATES	RATE g/ha	CRITICAL COMMENTS
<b>ESTABLISHED PASTURES TOLERANT GRASS SPECIES</b> Perennial phalaris and Perennial cocksfoot (Stands greater than one year old) <b>OR</b> <b>PASTURE RENOVATION</b> Use in rundown pastures to reduce weed burden before sowing with a pasture in the following year	Cape Tulip: Both one and two leaf ( <i>Homeria</i> spp.)	NSW, Vic, Tas, SA, WA only	5	Apply at bulb exhaustion usually during July/early August. More than one year of application may be required to obtain control.
	Annual Clover ( <i>Trifolium</i> spp.)	Qld, NSW, Vic, Tas, SA, WA only		Apply before flowering.
	Dock ( <i>Rumex</i> spp.)		5 - seedlings 10- established	Best results when applied in Spring prior to bolting.
	Doublegee/Spiny Emex/ Three Cornered Jack(s) ( <i>Emex australis</i> )	WA only	5 to 10	Apply up to the 6 leaf stage. Use the higher rate on dense populations
	Erodium/Storksbill/ Wild Geranium ( <i>Erodium</i> spp.)	Vic, Tas, SA only		Use the higher rate on dense populations. Spray before flowering.
	Annual Medics ( <i>Medicago</i> spp.)	NSW, Vic, Tas, SA, WA only	5	For the best results apply before flowering.
	Onion Grass/Guildford Grass ( <i>Romulea rosea</i> )		15	Apply at bulb exhaustion usually late June/July before the onset of browning off caused by fungus. When mixing with glyphosate use 10g/ha.

## 7. TOLERANT GRASS PASTURES OR IN A PASTURE RENOVATION - GROUND APPLICATION – *continued*

SITUATION	WEEDS CONTROLLED	STATES	RATE g/ha	CRITICAL COMMENTS
<b>ESTABLISHED PASTURES TOLERANT GRASS SPECIES</b> Perennial phalaris and Perennial cocksfoot (Stands greater than one year old) <b>OR</b> <b>PASTURE RENOVATION</b> Use in rundown pastures to reduce weed burden before sowing with a pasture in the following year – <i>continued</i>	Paterson's Curse/ Salvation Jane ( <i>Echium plantagineum</i> )	Qld, NSW, Vic, Tas, SA, WA only	10 or 15	Apply lower rate to small plants. Apply higher rate before bolting/flowering.
	Ragwort ( <i>Senecio jacobaea</i> )	NSW, Vic, Tas, SA only	15	Apply to actively growing plants at the rosette to cabbage stage.
	Sorrel ( <i>Rumex acetosella</i> )	NSW, Vic, Tas, SA, WA only	5 - seedlings 10- established	Best results when applied in Spring prior to seed heads appearing.
	Soursob ( <i>Oxalis pes-caprae</i> )		5 to 10	Use the higher rate on dense stands. Spray before flowering for best results.
Wild Garlic ( <i>Allium vineale</i> )		15	Apply at bulb exhaustion usually July to early August. More than one year of application may be required to obtain control.	

**Note:** Always add a non-ionic surfactant (1000 g ac/L) at 200 mL/100 L of water (0.2% v/v).

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

\* IN TASMANIA 2, 4-D CAN ONLY BE APPLIED BETWEEN 15TH APRIL AND 15TH SEPTEMBER UNLESS OTHERWISE AUTHORISED BY THE REGISTRAR OF PESTICIDES.

**WITHHOLDING PERIOD:**

**CEREALS OZCROP METSULFURON 600 WG HERBICIDE ONLY: NOT REQUIRED WHEN USED AS DIRECTED.**

**CEREALS OZCROP METSULFURON 600 WG HERBICIDE MIXTURES:**

**TANK MIXES AGTRYNE, MCPA 500, 2.4-D AMINE 625, TIGREX, TORDON 242 OR TERBUTRYN:**

**DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.**

**TANK MIXES WITH BROMICIDE MA: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION.**

**MUNG BEANS: DO NOT HARVEST, GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.**

**PASTURES AND OTHER USE SITUATIONS: NOT REQUIRED WHEN USED AS DIRECTED.**

## GENERAL INSTRUCTIONS

OzCrop Metsulfuron 600 WG Herbicide is a selective systemic herbicide which is adsorbed through the roots and foliage with rapid translocation acting by inhibiting cell division in meristems thus stopping growth.

Some crops are extremely sensitive to low concentrations of this product. See "Sprayer Cleanup" section.

Where treatment is delayed or where weeds are not actively growing due to adverse conditions, results may be slow to appear and weeds may only be stunted or suppressed.

Instructions specific for cereals: With the exception of the preplant weed control recommendations, apply at the early post emergence stage of the crop (3 leaf to before booting) when weeds are small (i.e. no greater than 5cm in height or diameter) and actively growing.

Best weed control is obtained when rainfall wets the soil to a depth of 5 to 7.5cm within 4 weeks of application.

Where treatment is delayed or where weeds are not actively growing due to adverse conditions, results may be slow to appear and weeds may be only stunted or suppressed (eg. Indian Hedge Mustard).

OzCrop Metsulfuron 600 WG Herbicide will remain in the soil for a period of time (see Crop Rotation Recommendations).

The persistence of OzCrop Metsulfuron 600 WG Herbicide in the soil is dependent on various environmental conditions e.g. soil pH, temperature, soil moisture and organic matter.

Wet, warm, acid soils high in organic matter favour breakdown of OzCrop Metsulfuron 600 WG Herbicide in the soil. It should be noted that OzCrop Metsulfuron 600 WG Herbicide does not provide a commercially acceptable level of soil residual weed control.

Crops other than wheat, barley, triticale and cereal rye may be extremely sensitive to low concentrations of OzCrop Metsulfuron 600 WG Herbicide residues in the sprayer or in the soil. See "Sprayer Clean-up" and "Crop Rotation Recommendations".

The recommendation of the addition of OzCrop Metsulfuron 600 WG Herbicide to OzCrop Glyphosate 450 and Weedmaster 600CT as a pre-plant knockdown is to enhance the control of certain broadleaf weeds (e. g. Doublegee, Sorrel, Erodium, Clover, Medic and Soursob) and to help prevent (or at least minimise) the risk of resistant weeds occurring. Its purpose is not to provide residual control of weeds.

### **Instructions specific for brush and herbaceous weed control:**

Apply when bushes/plants are actively growing. Where treatment is delayed or bushes/plants are not actively growing due to adverse conditions (such as a period of prolonged dry weather) or if partial spray coverage occurs, results may be slow to appear and subsequent regrowth may occur.

Should regrowth occur, re-treatment at the recommended rate is advised. Re-treatment of blackberries should only be undertaken once regrowth has reached one (1) metre tall - this may not be until two (2) years after the initial application.

For control of bushes previously sprayed with other brush control herbicides or for bushes which may have been burned or slashed ensure two (2) years has elapsed.

Due to the widespread picking of blackberries by the public, it is recommended that the product is not applied to bushes bearing mature fruit.

### **Instructions specific for treatment of pasture or pasture renovation:**

Allow weeds to recover from grazing before application. Docks and Sorrel in particular require fresh leaf growth for adequate uptake of chemicals.

Legumes will be removed from pasture if oversprayed with OzCrop Metsulfuron 600 WG Herbicide.

Some grasses will be damaged in pasture sprayed with the product and biomass production may be reduced for several months. OzCrop Metsulfuron 600 WG Herbicide used on established Perennial Phalaris and/or established Perennial Cocksfoot may cause temporary yellowing and some stunting.



OzCrop Metsulfuron 600 WG Herbicide can severely damage Annual and Perennial Ryegrass.

OzCrop Metsulfuron 600 WG Herbicide does not control/damage Silvergrass (*Vulpia* spp.), Brome Grass (*Bromus* spp.) or Winter Grass (*Poa* spp.).

Sorrel seedlings may germinate after the break in the following year, particularly after cultivation.

The ungerminated clover seed bank is not affected by OzCrop Metsulfuron 600 WG Herbicide application.

Clover vigour is often increased in the year following application where seed banks are reasonable.

The seed set of clover in the year of application of OzCrop Metsulfuron 600 WG Herbicide will be significantly reduced particularly from the Winter-Spring application.

This effect may impact on the clover seed bank therefore re-sowing may be necessary. Where clover seed banks are high re-sowing is not necessary.

For pasture topping situations a combination of OzCrop Metsulfuron 600 WG Herbicide plus glyphosate can be used, however the Crop Rotation recommendations should be observed.

Refer to the Directions of Use section of each product for the appropriate rate and critical comments for the target weed spectrum.

#### **CROP SAFETY**

DO NOT use in winter cereal crops undersown with legume pasture species, e.g. medics, clovers.

DO NOT apply to wheat varieties King, Jacup, Milling and Harrier.

Care should be taken if it is intended to apply OzCrop Metsulfuron 600 WG Herbicide in the same season to a crop already treated with another sulfonylurea herbicide as crop damage may occur. Consult your local agronomist or OzCrop representative.

DO NOT apply other sulfonylurea herbicides in a tank mix with OzCrop Metsulfuron 600 WG Herbicide as a pre-plant application.

Use of this product on land having a soil pH of 5.5 or less may result in some crop retardation, particularly if the crop is stressed – see comment in point below.

DO NOT apply to crops that are stressed by any cause (such as severe weather conditions, drought, waterlogging, excessive soil acidity or alkalinity, poor nutrient status, disease, nematode or insect damage) as crop injury may result.

When treatment is followed by severe stress (such as drought, prolonged cold, waterlogging or frosty conditions) crop yellowing and growth retardation may occur.

Crops normally recover without loss in yield. Disease, nematode or insect damage following application may also result in crop injury.

#### **SPRAY PREPARATION**

OzCrop Metsulfuron 600 WG Herbicide is a dry flowable formulation to be mixed with water and applied as a spray. Partially fill the spray tank with water.

Using the OzCrop Metsulfuron 600 WG Herbicide measuring cone provided, measure the amount of OzCrop Metsulfuron 600 WG Herbicide required for the area to be sprayed.

Add the correct amount of OzCrop Metsulfuron 600 WG Herbicide to the spray tank with the agitation system engaged. Top up to the correct volume with water.

**THE MATERIAL MUST BE KEPT IN SUSPENSION AT ALL TIMES BY CONTINUOUS AGITATION.**

When prepared spray solution has been allowed to stand, thoroughly re-agitate before using.

In tank mixes OzCrop Metsulfuron 600 WG Herbicide must be in suspension before adding the companion herbicide or surfactant.

For application of OzCrop Metsulfuron 600 WG Herbicide in liquid fertiliser, slurry the OzCrop Metsulfuron 600 WG Herbicide in water then thoroughly mix the slurry into the liquid fertiliser.

Check compatibility before mixing OzCrop Metsulfuron 600 WG Herbicide in fertiliser solutions.

DO NOT add a surfactant/wetting agent.

## COMPATIBILITY

OzCrop Metsulfuron 600 WG Herbicide is compatible with the commonly used broadleaf herbicides Agtryne\*, Bromicide\* MA, Kamba\* 500, Broadstrike\*, Eclipse, OzCrop Diuron (liquid Flowable and 900WG), OzCrop Terbutryn 500, Jaguar\*, Lontrel\*/Archer\*, LVE MCPA 500, MCPA 500, Metribuzin, Starane\*, Nugrex/Tigrex\*, Tordon\* 242, Tordon\* 75-D, Trooper\*, 2,4-D Amines 625 and non-selective glyphosate herbicides (e.g. OzCrop Glyphosate 450). OzCrop Metsulfuron 600 WG Herbicide

OzCrop Metsulfuron 600 WG Herbicide	Biological Compatibility		
	Wild Oats	Annual Ryegrass	Phalaris
Puma*	Yes	–	No
Hoegrass*	Refer to notes on OzCrop Metsulfuron 600 WG/Diclofop Methyl based products or OzCrop Metsulfuron 600 WG/Tristar mixtures	Refer to notes on OzCrop Metsulfuron 600 WG/Diclofop Methyl based products or OzCrop Metsulfuron 600 WG/Tristar mixtures	No
Nugrass*			
Tristar* Advance			No
Achieve	No	No	No
Mataven* 90	No	–	–

DO NOT mix OzCrop Metsulfuron 600 WG Herbicide with Achieve\* and Mataven\* 90.

## NOTES ON OZCROP METSULFURON 600 WG/DICLOFOP METHYL BASED PRODUCTS OR OZCROP METSULFURON 600 WG HERBICIDE/TRISTAR MIXTURES.

- OzCrop Metsulfuron 600 WG Herbicide and diclofop methyl based products or Tristar Advance can be tank mixed, but when this mixture is used, some reduction in grass weed control can be expected.
- For heavy infestation of grass weeds, control may be inadequate - Vic. and Tas. only.
- Significant reduction in grass weed control should be expected - SA only.
- OzCrop Metsulfuron 600 WG Herbicide and diclofop methyl based products or Tristar Advance are not a recommended mixture because they result in significant reduction in grass weed control and/or crop damage - WA only.
- Consult company representatives for further information or advice.

is compatible with the commonly used insecticides chlorpyrifos and omethoate. Some increased temporary crop yellowing may occur when OzCrop Metsulfuron 600 WG Herbicide is applied as a tank mix with these insecticides.

To extend the weed range, add MCPA 500, 2,4-D Amine 625, Diuron (Flowable and WG) and Terbutryn at label rates (Vic only). The compatibility of OzCrop Metsulfuron 600 WG Herbicide with grass herbicides varies between products and weed species (refer following table).

## USE OF SURFACTANT/WETTING AGENT

**Instructions specific for cereals:** Always add a non-ionic surfactant (1000 g. ac/L) at 100 mL/100 L of final spray volume (0.1% volume/volume). The use of spraying oils is not recommended.

**Note:** DO NOT add a surfactant/wetting agent when OzCrop Metsulfuron 600 WG Herbicide is tank mixed with Terbutryn or Diuron (Flowable and WG).

**Instructions specific for brush and herbaceous weed control:** If a specific surfactant/wetting agent is not listed in the Directions for Use table, or when mixing glyphosate use a non-ionic surfactant (1000 g. ac/L) at 100 mL/100 L of final spray volume (ie 0.1% volume/volume).

When an organosilicone penetrant (Pulse) is recommended in the Directions for Use table and with all gasgun applications, use 10 mL/5 L or 200 mL/100 L of final spray volume (ie 0.2% volume/volume).



When a mineral spray oil (eg Caltex Sprayplus\*) is recommended in the Directions for Use table, use 1 L/100 L of final spray volume (ie 1% volume/volume).

**Instructions specific for treatment of pasture and pasture renovation:** Always add a non-ionic surfactant a (1000 g. ac/L) at 200 mL/100 L of final spray volume (0.2% volume/volume).

### **BOOM SPRAY APPLICATION**

Use a boom spray property calibrated to a constant speed and rate of delivery to ensure thorough coverage and a uniform spray pattern.

Adjust boom height to ensure correct spray overlap.

Avoid spraying where drift can go onto crops, are likely to be planted to crops and non target pastures as injury may occur. Avoid overlapping and shut off spray booms while starting, turning, slowing or stopping as injury to the crop may result.

**Cereals:** Apply a minimum of 50 L prepared spray/ha.

**Pasture:** Apply a minimum of 70 L prepared spray/ha.

**Other use patterns:** Apply in a minimum of 150 L prepared spray/ha. Increase to 200L prepared spray/ha or more in dense stands.

### **AERIAL APPLICATION**

Avoid spraying in still conditions and in winds likely to cause drift onto adjacent sensitive crops or fallow areas likely to be planted to these crops – see Crop Rotation Recommendations. Turn off spray boom whilst passing over creeks and dams.

DO NOT apply when a temperature air inversion is likely to occur.

Use of Micronair equipment is not recommended due to greater drift potential. Apply in a minimum of 20 L/ha water. Application in a higher water volume of 30 L/ha will improve the reliability of weed efficacy.

**Other use patterns: *helicopter only***

Apply in a minimum of 100 L per ha on Blackberries or 60 L per ha on *Mimosa pigra* and up to 200 L prepared spray/ha.

Higher water volumes may be necessary to ensure adequate coverage where bushes are large and terrain is

steep. Spray with a properly calibrated helicopter using the half overlap opposite pass technique.

### **HANDGUN APPLICATION**

#### ***Pastures and Other use patterns***

Spray foliage and canes until wet. Ensure coverage is uniform and complete. Use pressures of 550-750 kPa (80-100psi) depending on target species and size of bush. Use larger nozzles and higher pressures for largest bushes. Example:

Size No. 4 or 5 spray nozzle:

small individual bushes or broadleaf weeds

- less than 1m high

Size No. 5 or 6 spray nozzle:

medium sized bushes - 1.2m high

Size No. 7 or 8 spray nozzle:

large bushes 2-3m high or of a large diameter

**Note:** Use large spray nozzle/high volume for blackberry regrowth.

Spray using a wide cone setting as much as possible. Use even, side-by-side spray pattern moving up from the base to the top of the bush as leaves are wet.

For blackberries, do not ignore runners to the side or the top of the bush and ensure spray penetrates larger bushes to wet foliage and canes.

### **GAS GUN APPLICATION**

#### ***Pastures and Other use patterns***

Apply to ensure good coverage of all foliage is achieved. The use of a suitable marker dye is recommended.

### **SPRAYER CLEAN-UP**

Immediately after spraying thoroughly remove all traces of OzCrop Metsulfuron 600 WG Herbicide from mixing and spray equipment as follows:

1. Drain tank, then flush tank, boom and hoses with clean water for a minimum of 10 minutes.
2. Fill the tank with clean water then add 300mL household chlorine bleach (containing 4% chlorine) per 100L of water. Flush through boom and hoses then allow to stand for 15 minutes with agitation engaged, then drain.

3. Repeat step 2.
4. Nozzle and screens should be removed and cleaned separately. To remove traces of chlorine bleach, rinse the tank thoroughly with clean water and flush through hoses and boom.

**Caution:** DO NOT use chlorine bleach with ammonia. All traces of liquid fertilizer containing ammonia, ammonium nitrate or ammonium sulphate must be rinsed with water from the mixing and application equipment before adding chlorine bleach solution. Failure to do so will release a gas with a musty chlorine odour which can cause eye, nose, throat and lung irritation.

DO NOT clean equipment in an enclosed area.

### RESISTANT WEEDS WARNING

OzCrop Metsulfuron 600 WG Herbicide is a member 

GROUP	<b>B</b>	HERBICIDE
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 of the Sulfonylureas group of herbicides. OzCrop Metsulfuron 600 WG Herbicide has the inhibitors of acetolactate synthase mode of action. For weed resistance management OzCrop Metsulfuron 600 WG Herbicide is a Group B herbicide. Some naturally-occurring weed biotypes resistant to OzCrop Metsulfuron 600 WG Herbicide and other Group B 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 OzCrop Metsulfuron 600 WG Herbicide or other Group B herbicides. Some populations of Annual Ryegrass and a few broadleaf weeds are already known to be resistant to OzCrop Metsulfuron 600 WG Herbicide and other ALS inhibitor herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, OzCrop Pty Ltd accepts no liability for any losses that may result from the failure of OzCrop Metsulfuron 600 WG Herbicide to control resistant weeds.

To prevent, or at least minimise the risk of resistant weeds occurring, use OzCrop Metsulfuron 600 WG Herbicide in tank mixes (if appropriate) and/or rotations with herbicides having different modes of action effective on the same weed species.

Large numbers of healthy surviving weeds can be an indication that resistance is developing. Efforts should be taken to prevent seed set of these survivors.

DO NOT apply OzCrop Metsulfuron 600 WG Herbicide alone for fallow and preplant knockdown weed control.

DO NOT make more than one application of an ALS inhibitor herbicide to a crop, either preplant, incorporated-by-sowing or post crop and weed emergence.

If the user suspects that an ALS inhibitor resistant weed is present, OzCrop Metsulfuron 600 WG Herbicide or other ALS inhibitor herbicides should not be used.

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 OzCrop representative.

### CROP ROTATION RECOMMENDATIONS

The use of OzCrop Metsulfuron 600 WG Herbicide may prevent early re-establishment of legumes and grasses after treatment. The period that residues persist in the soil will vary according to site conditions such as climate, soil pH, presence of soil microorganisms, soil temperature, soil moisture and the rate used. Breakdown is fastest in warm wet acid soil and slower in cold dry alkaline soils. Land previously treated with OzCrop Metsulfuron 600 WG Herbicide should not be rotated to crops other than those listed in the table following. Tolerance of other crops (grown through to maturity) should be determined on a small scale before sowing into larger areas. The OzCrop Metsulfuron 600 WG Herbicide treated area may be replanted to any of the specified crops after the interval indicated in the following table:

Soil pH*	Minimum Recropping Interval			
	10 days	6 weeks	9 months	14 months
5.6 - 8.5	Wheat	Barley Cereal Rye Triticale	Chickpeas, Faba Beans, Linseed Lucerne, Lupins, Medics**, Oats, Peas, Canola, Safflower, Subterranean** Clover	Japanese Millet, Maize. Panorama Millet, White French Millet, Sorghum, Soybeans, Sunflower

8.6 and above Tolerance of crops (grown through to maturity) should be determined on a small scale, in the previous season, before sowing into larger areas.

\*\* Involves natural regeneration of Subterranean Clover and Medics.

The OzCrop Metsulfuron 600 WG Herbicide treated area may be replanted to any of the specified pasture species after the interval indicated in the following table:

Soil pH*	Pasture Species	Rate g/ha	Minimum rainfall	Minimum recrop interval
5.5 and below	Sub Clover <sup>(a)</sup> and Haifa White Clover	5	150mm	12 weeks
		10		20 weeks
		15		20 weeks
	Cocksfoot spp. and Phalaris spp.	5		8 weeks
		10		8 weeks
		15		16 weeks
Perennial Ryegrass spp. and Fescue spp.	5	100mm	16 weeks	
	10	150mm	16 weeks	
	15		20 weeks	
5.6-6.5	Sub Clover <sup>(a)</sup> , Haifa White Clover, Perennial Ryegrass spp. and Fescue spp	Bioassay <sup>(b)</sup>		
	Cocksfoot spp. and Phalaris spp.	5, 10	175mm	12 weeks
		15	Bioassay <sup>(b)</sup>	
6.6 and above	Bioassay <sup>(b)</sup>			

(a) Varieties: Junee, Karridale, Seaton Park and Trikkala.

(b) Tolerance of pasture species should be determined on a small scale, in the previous season, before sowing into larger areas

\* Soil pH is to be determined by laboratory analysis using the 1:5, Soil water suspension method.

For rates higher than 15 g/ha the following applies:

- For soils with a pH below 7 (1:5 soil: water method) a minimum period of 12 months should elapse before oversowing treated areas with grasses or legumes. It is suggested that small areas be oversown 1-2 months prior to the planned time for sowing to check for possible harmful residues.
- For soils with a pH greater than 7 or if planting any other crop, DO NOT replant without first consulting the local OzCrop representative.

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

Injury to or loss of desirable trees or vegetation may result from failure to observe the following:

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 or allow spray to drift onto adjacent crops and non-target desirable plants, or onto agricultural land scheduled to be planted to other crops as injury to the crop may occur.

## **PROTECTION OF LIVESTOCK**

A nil withholding period is applicable for OzCrop Metsulfuron 600 WG Herbicide. It is recommended, however, not to graze treated areas for 2 to 3 days to ensure product efficacy.

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

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

## **STORAGE AND DISPOSAL**

KEEP OUT OF REACH OF CHILDREN. Store in the 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 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**

Harmful if swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. When opening the container and preparing spray wear elbow-length PVC gloves and goggles. If applying by hand, wear cotton overalls, over normal clothing, buttoned to the neck and wrist, a washable hat and elbow-length PVC gloves. If product on skin, immediately wash area with soap and water. If product or spray in eyes, wash it out immediately with water. Wash hands after use. After each day's 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 which is available from the supplier.

**CONDITIONS OF SALE:** OzCrop Pty Ltd has no control over storage, handling and manner of use of this product. Where this material is not stored, handled or used correctly and in accordance with directions, no express or implied representations or warranties concerning this product (other than non-excludable statutory warranties) will apply. OzCrop Pty Ltd accepts no responsibility for any loss arising from incorrect storage, handling or use.

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Safe Work Australia:

Very toxic to aquatic life with long lasting effects.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.