

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

QA

# Flumetsulam 800 WG

## HERBICIDE

ACTIVE CONSTITUENT: 800 g/kg FLUMETSULAM

GROUP **2** HERBICIDE

A water dispersible granule formulation for the post-emergence and salvage control of certain broadleaf weeds in winter cereals (including those undersown with clover, lucerne or medics); clover, fenugreek, lathyrus, lucerne, medic, serradella and vetch (Popany only) seed crops and pastures; chickpeas, field peas, lentils, maize, peanuts; and for the preemergence control of certain broadleaf weeds in maize and soybeans as specified in the Direction for Use table.

APVMA Approval No.: 91787/149925

**WG** Formulation Type  
Water Dispersible  
Granule

**BE PROUDLY  
AUSTRALIAN**

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**DIRECTIONS FOR USE****RESTRAINTS:**

DO NOT apply to plants which may be stressed (not actively growing) due to prolonged periods of extreme temperature (less than 5°C or greater than 30°C), moisture stress (water-logged or drought affected), poor nutrition or previous herbicide treatment as reduced levels of control may result.

DO NOT apply post-emergence treatments if rain is likely within 4 hours.

DO NOT irrigate (any method) treated crop or pasture for 48 hours after application.

DO NOT apply to crops affected by disease or by previous herbicide treatment (e.g. triazines or sulfonylureas).

**TABLE 1A. CHICKPEAS, FIELD PEAS, LENTILS, FENUGREEK, LATHYRUS, VETCH (POPANY ONLY) AND SERRADELLA**

<b>CROP</b>	<b>GROWTH STAGES</b>	<b>CROP TOLERANCE</b>	<b>SPRAY ADDITIVES/TANK MIXES</b>
Chickpeas	4 – 6 branches (no later than 6 weeks after emergence)	QA Flumetsulam 800 WG Herbicide usually causes some transient crop yellowing and can cause reddish discolouration and height suppression. Flowering may be delayed resulting in yield suppression	DO NOT use any spray additives, or tank mix any other chemicals with QA Flumetsulam 800 WG Herbicide when using on chickpeas and field peas.
Field peas	2 to 6 nodes (no later than 6 weeks after emergence)	QA Flumetsulam 800 WG Herbicide may cause transient crop yellowing and height suppression. On light soils in dry seasons flowering may be delayed resulting in yield suppression.	
Lentils	4 – 8 fully expanded leaves  <b>DO NOT</b> apply later than 6 weeks after crop emergence	QA Flumetsulam 800 WG Herbicide may cause transient height reduction, crop discolouration and delayed flowering, although yields are normally unaffected. However, stress conditions after application (eg frost, drought, nutrient deficiency, disease) may lengthen the time needed for lentils to recover. In seasons where a dry spring occurs, yields may be suppressed. Tank mixes with other products may result in growth suppression and delayed flowering which can result in yield suppression.	Uptake* Spraying Oil at 500 mL/100 L or BS-1000* at 200 mL/100 L may be applied with QA Flumetsulam 800 WG Herbicide to lentils.
Fenugreek, Lathyrus, Vetch (Popany only)	3 fully expanded leaves onwards		Use QA Flumetsulam 800 WG Herbicide or QA Flumetsulam 800 WG Herbicide plus a wetter only. Tank mixtures with other herbicides are not recommended.
Serradella	3 fully expanded leaves onwards		Uptake* Spraying Oil at 500 mL/100 L or BS-1000* at 200 mL/100 L may be applied with QA Flumetsulam 800 WG Herbicide to serradella.

**TABLE 1B. WEEDS CONTROLLED OR SUPPRESSED IN TABLE 1A CROPS**

WEED	WEED GROWTH STAGE		RATE g/ha	CRITICAL COMMENTS
	Up to Leaf No. or	Up to Plant size (cm)		
<b>WEEDS CONTROLLED</b>				
Amsinckia (Yellow burrweed)	10 leaf	10 cm diameter	25	Where recommended, use of either a wetter or Uptake Spraying Oil with QA Flumetsulam 800 WG Herbicide will provide better weed control.  Spray charlock as soon as possible after the autumn break. Larger plants and any affected by stress or grazing prior to treatment may re-grow and flower.
Ball mustard	6 leaf	5 cm diameter		
Charlock	8 leaf	10 cm diameter		
Indian hedge mustard	6 leaf	5 cm diameter		
Lupins	10 leaf	10 cm high		
Marshmallow (Small flowered mallow)	4 leaf	10 cm diameter		
Pheasant's eye	8 leaf	10 cm diameter		
Shepherd's purse	8 leaf	10 cm diameter		
Three-horned bedstraw	6 whorls	10 cm high		
Turnip weed	8 leaf	5 cm diameter		
Volunteer canola	8 leaf	10 cm diameter		
Ward's weed	8 leaf	10 cm diameter		
Wild turnip	6 leaf	5 cm diameter		
<b>SUPPRESSED</b>				
Capeweed (WA only)	4 leaf	10 cm diameter	25	Under ideal growing conditions, QA Flumetsulam 800 WG Herbicide will provide useful suppression of capeweed and doublegee. Best results will be achieved when a pre-emergence herbicide has already been used.  Under ideal growing conditions, QA Flumetsulam 800 WG Herbicide without an adjuvant will give a biomass reduction of 50% - 70% of wild radish. Surviving plants may flower and set viable seed. Best results will occur with treatment in conditions of >5°C with bright sunny conditions and use of higher water rates of 75 - 100 L/ha with fine-medium quality spray droplets to get excellent spray coverage.
Doublegee (Spiny emex) (WA only)	4 leaf	10 cm diameter		
Wild radish	4 leaf	5 cm diameter		

**TABLE 2A. WHEAT, BARLEY, OATS, TRITICALE, CEREAL RYE (INCLUDING THOSE UNDERSOWN WITH CLOVER, LUCERNE OR MEDICS), CLOVER, LUCERNE AND MEDIC CROPS AND MIXED GRASSES/LEGUME PASTURES.**

CROP/SITUATION	GROWTH STAGES	CROP TOLERANCE	SPRAY ADDITIVES/TANK MIXES
Wheat	3 leaf until start of jointing (Zadoks 13 – 31)		Always apply with Uptake Spraying Oil at 500 mL/100 L or a 100% concentrate non-ionic wetting agent such as BS-1000 at 200 mL/100 L.
Barley Oats	Mid-tillering to start of jointing (Zadoks 23 – 31)	Transient stem shortening and crop discoloration may occur, although yields are normally unaffected. Where barley and oats are undersown, a vigorous legume component may lengthen the time needed for the cereal to recover, especially if the cereal is stressed by lack of moisture, trace element deficiency or disease. In severe cases, yields may be suppressed.	Use only with a wetting agent such as BS-1000 when either applying QA Flumetsulam 800 WG Herbicide alone or with partner products in barley and oats.
Stirling barley (WA only)	Apply no earlier than Zadoks 31		
Triticale Cereal rye	Mid-tillering to start of jointing (Zadoks 23 – 31)		Always apply with Uptake Spraying Oil at 500 mL/100 L or a 100% concentrate non-ionic wetting agent such as BS-1000 at 200 mL/100 L.
Medic, lucerne, and clover seed crops, and pastures, including: Barrel medic, Snail medic, Spineless burr medic, Subterranean clover, White clover	2 to 3 trifoliolate leaves onwards	Medic, lucerne and subterranean clover (sub clover) – When QA Flumetsulam 800 WG Herbicide is applied at 25 g/ha + Uptake or wetter, yield reduction may occur when treating Serena medic or Nungarin sub clover. <b>DO NOT</b> apply to lucerne seed crops less than 8 weeks before flowering.	Always apply with Uptake Spraying Oil at 500 mL/100 L or a 100% concentrate non-ionic wetting agent such as BS-1000 at 200 mL/100 L. In lucerne <b>DO NOT use with MCPA.</b> In medics <b>DO NOT use with MCPA.</b>
Grazing lucerne – high rate	4 trifoliolate leaves onwards	Use the 50 g/ha rate in grazing lucerne only. <b>DO NOT</b> apply at 50 g/ha to lucerne used for seed production.	
Fence lines, Stock camps, Stockyards, Commercial areas and pastures including medic, lucerne and clover pastures.	2 to 3 trifoliolate leaves onwards (see Crop Tolerance)		Use Uptake Spraying Oil at 500 mL/100 L.
<b>SALVAGE SPRAY</b>			
Cereals: Wheat, Barley, Oats, Triticale, Cereal rye	Flowering (anthesis) to early dough (Zadoks 61 – 83)	DO NOT apply at 25 g/ha.	
Pastures, Lucerne, Clover, Medics	Advanced seedlings or re-growth after cutting or grazing.		

**TABLE 2B. WEEDS CONTROLLED IN TABLE 2A CROPS**

WEED	WEED GROWTH STAGE		RATE g/ha	CRITICAL COMMENTS
	Up to Leaf No. or	Up to Plant size (cm)		
Amsinckia (Yellow burrweed)	10 leaf	10 cm diameter	25 + Uptake or wetter	
Ball mustard	6 leaf	5 cm diameter		
Buchan weed	8 leaf	10 cm diameter	<b>Lucerne and/or clover only</b> 25 + wetter + 2.4-DB (500 g/L) 1.5 – 2.5 L/ha	
			<b>Grazing lucerne only</b> 50 + Uptake or wetter	Use the 50 g/ha rate in grazing lucerne only and apply from 4 trifoliolate leaves onwards. DO NOT apply at 50 g/ha to lucerne used for seed production.
Calepina (White ball mustard)	8 leaf	10 cm diameter	25 + Uptake or wetter	
Capeweed	4 leaf	10 cm diameter	25 + Uptake or wetter + bromoxynil (200 g/L) 700 mL/ha	Optimum results are obtained in a competitive pasture. For best results follow up with moderate grazing two weeks after application. In pasture, spray as soon as possible after the autumn break. Larger plants and any affected by stress or grazing prior to treatment may re-grow and flower.
Charlock	8 leaf	10 cm diameter	25 + Uptake or wetter	Spray as soon as possible after the autumn break. Larger plants and any affected by stress or grazing prior to treatment may re-grow and flower.
Cotula (WA only)	4 leaf	10 cm diameter	25 + Uptake or wetter	Use Uptake Spraying Oil at 500 mL/100 L or wetting agent such as BS-1000 at 200 mL/100 L.
Doublegee (Spiny emex)	6 leaf	15 cm diameter	25 + Uptake or wetter + bromoxynil (200 g/L) 700 mL/ha or 25 + wetter + 2.4-DB (500 g/L) 1.5 – 2.5 L/ha	Optimum results are obtained in a competitive pasture. For best results follow up with moderate grazing two weeks after application. In pasture, spray as soon as possible after the autumn break. Larger plants and any affected by stress or grazing prior to treatment may re-grow and flower. Use Uptake Spraying Oil or a wetter with QA Flumetsulam 800 WG Herbicide + bromoxynil tank mix –
Dwarf Marigold (Poverty weed)	10 leaf	15 cm high	15 + Uptake or wetter	
Fat hen	15 leaf	20 cm high	<b>Spring/summer pasture and lucerne only.</b> 25 + Uptake or wetter	Spring and summer pasture and lucerne application only.
			<b>Grazing lucerne only</b> 50 + Uptake or wetter	Use the 50 g/ha rate in grazing lucerne only and apply from 4 trifoliolate leaves onwards. DO NOT apply at 50 g/ha to lucerne used for seed production.

**TABLE 2B. WEEDS CONTROLLED IN TABLE 2A CROPS *continued***

WEED	WEED GROWTH STAGE		RATE g/ha	CRITICAL COMMENTS
	Up to Leaf No. or	Up to Plant size (cm)		
Fumitory	6 leaf	8 cm diameter	25 + 300 mL/ha terbutryn (500 g/L) + wetter	Only use a wetter with QA Flumetsulam 800 WG Herbicide + terbutryn tank mixes.  Note: This mixture is only approved for use in NSW, Vic and Tasmania on pastures.
Hedge mustard, Indian hedge mustard	8 leaf	10 cm diameter	25 + Uptake	
Lupins	10 leaf	10 cm high	25 + Uptake or wetter	
WA blue and narrow leaf lupins (WA only)	4 to 8 leaf		10 + Uptake or wetter	
Marshmallow (Small flowered mallow) seedlings	4 leaf	10 cm diameter	25 + Uptake or wetter, or 15 + wetter + 700 mL/ha bromoxynil-MCPA (200g/L + 200 g/L), or 15 + wetter + 350 mL/ha terbutryn (500 g/L) + 700 mL/ha MCPA amine (500 g/L)	Add a wetter to MCPA/terbutryn or bromoxynil-MCA mixes.  Only use bromoxynil/MCPA and terbutryn + MCPA mixes in cereals that are NOT undersown with clovers, medics or lucerne.
			10 leaf	20 cm diameter
			<b>Grazing lucerne only</b> 50 + Uptake or wetter	Use the 50 g/ha rate in grazing lucerne only and apply from 4 trifoliolate leaves onwards. DO NOT apply at 50 g/ha to lucerne used for seed production.
Paterson's curse (Salvation Jane)	8 leaf	10 cm diameter	25 + Uptake or wetter + bromoxynil (200g/L) 700 mL/ha or 25 + wetter + terbutryn (500 g/L) 300 mL/ha For Mature lucerne only	In pasture, larger plants and any affected by stress or grazing prior to treatment may re-grow and flower. For best results follow up with moderate grazing two weeks after application. With terbutryn, apply in a minimum spray volume of 100 L/ha from the ground or 50 L/ha from aircraft.
Peppergrass seedlings	8 leaf	10 cm diameter	25 + Uptake or wetter	
	10 leaf	15 cm diameter	25 + wetter + 2,4-DB (500 g/L) 1.5 – 2.5 L/ha	
Pheasant's eye	7 leaf	10 cm high	25 + Uptake or wetter	
Shepherd's purse	8 leaf	10 cm diameter		
Three-horned bedstraw	6 whorls	10 cm high		
Turnip weed	8 leaf	5 cm diameter	15 + Uptake or wetter	
	12 leaf	10 cm diameter	25 + Uptake or wetter	
Volunteer canola	8 leaf	10 cm diameter		
Ward's weed				

**TABLE 2B. WEEDS CONTROLLED IN TABLE 2A CROPS *continued***

WEED	WEED GROWTH		RATE g/ha	CRITICAL COMMENTS
	Up to Leaf No. or	Up to Plant size (cm)		
Wild radish	6 leaf	15 cm diameter	25 + Uptake or wetter + bromoxynil (200 g/L) 700 mL/ha or 25 + wetter + MCPA amine (500 g/L) 500 mL	When conditions at spraying are less than ideal (See Restraints above), or when the crop is not competitive, some radish plants may survive to flower and set viable seed. <b>DO NOT use MCPA amine in cereals undersown with clover, medics or lucerne.</b>
Wild radish (cereals)	6 leaf	15 cm diameter	15 + wetter +700 mL/ha bromoxynil/MCPA (200 g/L + 200 g/L) or 15 + Uptake or wetter + 700 mL/ha MCPA amine (500 g/L) or 15 + wetter + 700 mL/ha MCPA amine (500 g/L) + 350 mL/ha terbutryn (500 g/L)	<b>In lucerne DO NOT use MCPA.</b> <b>In medics DO NOT use MCPA.</b> Add Uptake Spraying Oil or wetter to QA Flumetsulam 800 WG Herbicide mixes with MCPA amine and a wetter to QA Flumetsulam 800 WG Herbicide + MCPA/terbutryn or QA QA 800 WG Herbicide + bromoxynil/MCPA mixes. <b>DO NOT use MCPA amine or MCPA amine + terbutryn in cereals undersown with clover, medics or lucerne.</b>
Wild turnip	10 leaf	10 cm diameter	25 + Uptake or wetter	
Wireweed	10 leaf	15 cm diameter	<b>Pasture and lucerne only</b> 25 + wetter + 2,4-DB (500 g/L) 1.5 – 2.5 L/ha	Undersown clovers and lucerne, spring and summer sown pasture and lucerne crops only.

**TABLE 2C. WEEDS SUPPRESSED IN TABLE 2A CROPS**

WEED	WEED GROWTH		RATE g/ha	CRITICAL COMMENTS
	Up to Leaf No. or	Up to Plant size (cm)		
Buchan weed	8 leaf	10 cm diameter	25 + Uptake or wetter	Only use a wetter with QA Flumetsulam 800 WG Herbicide + 2,4-DB tank mixes.
Deadnettle	6 leaf	5 cm diameter	25 + wetter + 2,4-DB (500 g/L) 1.5 – 2.5 L/ha	
Doublegee (Spiny emex)	4 leaf	10 cm diameter	25 + Uptake or wetter	Use the 50 g/ha rate in grazing lucerne only and apply from 4 trifoliolate leaves onwards. DO NOT apply at 50 g/ha to lucerne intended for seed production.  Only use a wetter with QA Flumetsulam 800 WG Herbicide + 2,4-DB tank mixes.
	6 leaf	15 cm diameter	<b>Grazing lucerne only</b> 50 + Uptake or wetter	
Marshmallow (Small flowered mallow)	5 – 8 leaf	10 cm diameter	25 + Uptake or wetter	
New Zealand spinach	4 leaf	5 cm diameter		
Paterson's curse (Salvation Jane)	8 leaf	10 cm diameter		
Peppercress	10 leaf	15 cm diameter	25 + Uptake or wetter	
Stagger weed	6 leaf	5 cm diameter	25 + wetter + 2,4-DB (500 g/L) 1.5 – 2.5 L/ha	
Wild radish	4 leaf	5 cm diameter	25 + Uptake or wetter	

**TABLE 3A. DIURON TANK MIXES: WHEAT, BARLEY, OATS, TRITICALE, CEREAL RYE**

**Tank Mixtures: Read all label directions including restraints, spray drift restraints, mandatory no-spray zones, critical comments, withholding periods, regional use restrictions and safety directions for the tank mix products.**

CROP/SITUATION	GROWTH STAGES	CROP TOLERANCE	SPRAY ADDITIVES/TANK MIXES
Wheat	3 leaf until start of jointing (Zadoks 13 – 31)		Always apply with Uptake Spraying Oil at 500 mL/100 L or a 100% concentrate non-ionic wetting agent such as BS-1000 at 200 mL/100 L.
Barley/Oats	Mid-tillering to start of jointing (Zadoks 23 – 31)	Transient stem shortening and crop discoloration may occur, although yields are normally unaffected. In severe cases, yields may be suppressed.	Use only with a wetting agent such as BS-1000 when either applying QA Flumetsulam 800 WG Herbicide alone or with partner products in barley and oats.
Stirling barley (WA only)	Apply no earlier than Zadoks 31		
Triticale Cereal rye	Mid-tillering to start of jointing (Zadoks 13 – 31)		Always apply with Uptake Spray Oil at 500 mL/100 L or a 100% concentrate non-ionic wetting agent such as BS-1000 at 200 mL/100 L.
<b>SALVAGE SPRAY</b>			
Cereals: Wheat Barley Oats Triticale Cereal Rye	Flowering (anthesis) to early dough (Zadoks 61 – 83)	Do Not use more than 25 g/ha.	

**TABLE 3B. DIURON TANK MIXES: WEEDS CONTROLLED IN TABLE 3A CROPS**

WEED	WEED GROWTH STAGE		RATE g/ha	CRITICAL COMMENTS
	Up to Leaf No.	Up to Plant size (cm)		
Capeweed	4 leaf	10 cm diameter	25 + wetter + 100 mL/ha diuron (500 g/L)	Optimum results are obtained in a competitive pasture. For best results follow up with moderate grazing two weeks after application. Larger plants and any affected by stress or grazing prior to treatment may re-grow and flower.
Doublegee (Spiny emex)	4 leaf	10 cm diameter	25 + wetter + 100 mL/ha diuron (500 g/L)	

**TABLE 4. AGRICULTURAL NON-CROP AREAS**

WEED	WEED GROWTH STAGE	RATE g/ha	CRITICAL COMMENTS
Caltrop, Capeweed, Marshmallow (Small flowered mallow) (suppression), Paterson's curse (Salvation Jane), Wild radish	Rosette stage prior to running up to flower	Spot spray: 25 g/100 L	Apply to actively growing rosettes. To ensure complete coverage, spray to the point of runoff. Use Uptake Spraying Oil at 500 mL/100 L.

**TABLE 5A. SEED CROPS (Tasmania only): SUBTERRANEAN CLOVER, RED CLOVER, WHITE CLOVER, ARROWLEAF CLOVER AND LUCERNE**

CROP	GROWTH STAGES	CROP TOLERANCE	SPRAY ADDITIVES/TANK MIXES
Seed crops of Subterranean clover, Red clover, White clover, Arrowleaf clover, Lucerne	1 to 3 trifoliolate leaves onwards	<b>DO NOT apply to lucerne or clover seed crops less than 8 weeks before flowering.</b> <b>DO NOT apply at 40 g/ha to lucerne intended for seed production.</b>	Use Uptake Spraying Oil at 500 mL/100 L or a wetting agent such as BS-1000 at 200 mL/100 L.  In clover and lucerne QA Flumetsulam 800 WG Herbicide may be tank-mixed with 2,4-DB and/or bromoxynil at their respective label rates for complete control of suppressed weeds.

**TABLE 5B. WEEDS CONTROLLED OR SUPPRESSED IN TABLE 5A CROPS**

WEEDS CONTROLLED	WEED GROWTH STAGE	RATE g/ha	CRITICAL COMMENTS
Charlock	Up to 3½ leaf stage	25 + Uptake or wetter	Use Uptake Spraying Oil at 500 mL/100 L or wetting agent such as BS-1000 at 200 mL/100 L.
Fat hen, Lesser swinecress, Mustards, Shepherd's purse, Wild radish, Wild turnip	Beyond 3½ leaf stage and up to 10 leaf stage	40 + Uptake or wetter	
<b>WEEDS SUPPRESSED</b>			
Capeweed, Chickweed, Fumitory, Spurrey Wireweed	Beyond 3½ leaf stage and up to 10 leaf stage	40 + Uptake or wetter	In clover and lucerne, seedlings of these weeds will be suppressed with QA Flumetsulam 800 WG Herbicide alone. In clover and lucerne, QA Flumetsulam 800 WG Herbicide may be tank-mixed with 2,4-DB and/or bromoxynil at their respective label rates for complete control of suppressed weeds. Only use a wetting agent at 200 mL/100 L with these tank mixes.

**TABLE 6A. SOYBEANS, LUCERNE, MAIZE AND PEANUTS**

CROP	GROWTH STAGES	APPLICATION METHODS	SPRAY ADDITIVES/TANK MIXES	CROP TOLERANCE
Maize	Post-plant pre-emergence (PPPE)	Apply QA Flumetsulam 800 WG Herbicide after planting and before emergence of crop and weeds. Apply to moist soil only.	May be tank mixed with pendimethalin.	
Soybean	Pre-plant Incorporated (PPI)	Incorporate into the soil within 4 hours by making two passes in opposite directions using a combine with trailing harrows or similar equipment, to ensure thorough incorporation.	May be tank mixed with trifluralin or pendimethalin.	Some transitory crop yellowing and height suppression should be expected but yields will be unaffected.
	Incorporated By Sowing (IBS)	Ensure the planting operation is done within 4 hours of application using a combine with trailing harrows or similar equipment, to ensure thorough incorporation.	May be tank mixed with trifluralin or pendimethalin.	
	Post-plant Pre-emergent (PPPE)	Apply QA Flumetsulam 800 WG Herbicide after planting and before emergence of crop and weeds. Apply to moist soil only.	May be tank mixed with pendimethalin.	
Lucerne	Post-emergent Up to 6 trifoliolate leaf stage		DO NOT apply at 50 g/ha to lucerne intended for seed production. Apply with Uptake Spraying Oil at 500 mL/100 L spray volume or with a 100% concentrate non-ionic wetter such as BS-1000 at 200 mL/100 L.	
Peanuts	Post-emergent Up to 6 leaf stage			

**TABLE 6B. WEEDS CONTROLLED OR SUPPRESSED IN TABLE 6A CROPS**

WEED	WEED GROWTH STAGE	RATE g/ha	CRITICAL COMMENTS
<b>WEEDS CONTROLLED</b>			
Annual ragweed, Boggabri weed, Fat hen, Wild radish (IBS and PPPE only)	Pre- emergent	25 or 50	<b>WEED CONTROL:</b> <b>Minimum spray volume 150 L/ha for optimum results.</b> In pre-emergent situations use the higher rate for longer soil residual effect and better suppression of more tolerant weeds (see Weeds Suppressed). In post-emergent situations use 25 g/ha on weeds up to 2 leaf stage and 50 g/ha on larger weeds up to 4 leaf stage and where more residual control is required.
Caltrop, Fat hen, Turnip weed, Wild radish	Post- emergent Up to 4 leaf	25 or 50 + Uptake or wetter	
<b>WEEDS SUPPRESSED</b>			
Black pigweed, Bladder ketmia, Caltrop, Cobbler's pegs	Pre- emergent	25 or 50	<b>WEED CONTROL:</b> <b>Minimum spray volume 150 L/ha for optimum results.</b> In pre-emergent situations use the higher rate for longer soil residual effect and better suppression of more tolerant weeds (see Weeds Suppressed). In post-emergent situations use 25 g/ha on weeds up to 2 leaf stage and 50 g/ha on larger weeds up to 4 leaf stage and where more residual control is required.
Annual ground cherry, Anoda weed, Bladder ketmia, Boggabri weed, Fierce thornapple (Qld only), Red pigweed, Wild gooseberry	Post- emergent Up to 4 leaf	25 or 50 + Uptake or wetter	

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

#### **HARVEST WITHHOLDING PERIODS**

Chickpeas, field peas, lentils, maize, peanuts and soybeans: **NOT REQUIRED WHEN USED AS DIRECTED.**

Winter cereals: **DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION.**

#### **GRAZING/STOCK FOOD WITHHOLDING PERIODS**

Chickpeas, field peas, lentils, peanuts, soybeans, Popany vetch: **DO NOT GRAZE OR CUT FOR STOCK-FEED FOR 4 WEEKS AFTER APPLICATION.**

Barley, cereal rye, oats, triticale, wheat, grass pastures: **DO NOT GRAZE FOR 3 DAYS AFTER APPLICATION.**

**DO NOT CUT FOR STOCK FOOD OR HARVEST FOR SEED FOR 4 WEEKS AFTER APPLICATION.**

Maize: **DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION.**

Clover, fenugreek, lathyrus, lucerne, medic, serradella: **DO NOT GRAZE OR CUT FOR STOCK FOOD OR HARVEST FOR SEED FOR 3 DAYS AFTER APPLICATION.**

## **EXPORT OF LIVESTOCK**

When QA Flumetsulam 800 WG Herbicide is used as directed and the above WHP's for grazing and cutting for stock food are observed, livestock fed treated commodities are considered acceptable to slaughter for export. However, export requirements are subject to change. Consult your exporter for updated information about specific export market requirements before feeding treated animal feeds to livestock.

## **GENERAL INSTRUCTIONS**

### **MIXING**

Quarter-fill the spray tank and add the required amount of QA Flumetsulam 800 WG Herbicide. Add Uptake Spraying oil or the wetting agent last (if used). Maintain agitation during spraying. Only mix sufficient spray solution for immediate use and avoid storing.

When tank mixing: QA Flumetsulam 800 WG Herbicide should be added to the spray tank first, followed by wettable powders or other dry flowable formulations, suspension concentrates (e.g. Verdict\* 520 Herbicide) and then Uptake Spraying Oil or wetting agent last (if used).

### **APPLICATION**

Apply QA Flumetsulam 800 WG Herbicide in 50 to 150 litres of water per hectare through an accurately calibrated boom sprayer.

For aircraft application apply QA Flumetsulam 800 WG Herbicide in no less than 30 L/ha of water through accurately calibrated equipment.

The product should be applied by an accurately calibrated ground rig or aircraft delivering medium quality spray droplets.

Best results are achieved where applications are made on warm (greater than 5°C), sunny days applying more than 50 L/ha of total spray volume (preferably more than 75 L/ha) and where spray coverage is maximised.

### **COMPATIBILITY**

Always allow 7 days between application of a grass herbicide and QA Flumetsulam 800 WG Herbicide in chickpeas and field peas.

In lentils, adjuvant, broadleaf or grass herbicide, insecticide and foliar fertiliser tank mixes may result in transient height reduction, crop discolouration and delayed flowering, although yields are normally unaffected. However, stress conditions after application (e.g. frost, drought) may lengthen the time needed for lentils to recover and in years where a dry spring occurs, yields may be suppressed.

QA Flumetsulam 800 WG Herbicide is compatible with the following:

#### **Adjuvants**

Uptake\* Spraying Oil, Hasten\* Spray Adjuvant, BS-1000

#### **Broadleaf herbicides**

Atrazine, Clopyralid 750 g/kg and 300 g/L formulations, Imazethapyr, Basagran M60 Herbicide, MCPA amine, Fluroxypyr, Bromoxynil, MCPA ester, Stomp 330E Herbicide, 2,4-DB, MCPA sodium salt, Terbutryn, Diflufenican (lentils and field peas only), Metsulfuron, Tordon 242 Cereal Herbicide, Diflufenican + Bromoxynil, trifluralin.

#### **Grassweed herbicides**

Clethodim (lentils only), Simazine, Tristar, Advance Selective Herbicide, Diclofop-methyl (ryegrass only), trifluralin, Haloxyfop, Paraquat, Clodinafop, Wildcat Selective Herbicide (wild oats only).

#### **Insecticides**

Dimethoate, esfenvalerate (lentils only), chlorpyrifos, omethoate

#### **Fungicides (lentils only)**

Carbendazim, chlorothalonil, mancozeb

#### **Foliar fertilizers**

Broadacre zinc (lentils only)

## CLEANING SPRAY EQUIPMENT

After using QA Flumetsulam 800 WG Herbicide, empty the tank completely and drain the whole system. Thoroughly wash inside the tank using a pressure hose. Drain the tank and clean any filters in the tank, pump, lines and nozzles.

**To rinse:** After cleaning the tank as above, quarter fill the tank with clean water and circulate through the pump, lines, hoses and nozzles. Drain and repeat the rinsing procedure twice.

**To decontaminate:** Before spraying sensitive crops (which include canola, cotton, faba beans, lupins, sorghum and sunflowers), wash the tank and rinse the system as above. **Quarter fill the tank and add** an alkali detergent (e.g. SURF, Cold Water SURF Concentrate, Dynamo Matic Concentrate, OMO or DRIVE at 500 mL/100 L of water or the powder equivalent at 500 g/100 L) and circulate throughout the system for at least fifteen minutes. Drain the whole system. Remove filters and nozzles and clean them separately. Finally flush the system with clean water and allow to drain. Chlorine based cleaners are not recommended.

Nufarm Tank and Equipment Cleaner\* is not recommended.

Rinse water should be discharged onto a designated disposal area or, if this is unavailable, onto unused land away from desirable plants and watercourses.

## RESISTANT WEEDS WARNING

GROUP	2	HERBICIDE
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QA Flumetsulam 800 WG Herbicide is a broadleaf herbicide with no annual ryegrass activity and is a member of the triazolopyrimidine sulfonanilide (sulfonamide) group of herbicides. The product has the acetolactate synthase (ALS) inhibitor mode of action.

For weed resistance management, the product is a Group 2 herbicide. Some naturally occurring weed biotypes resistant to the product and other Group 2 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 2 herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, Quantum Agrosiences Holdings Pty Ltd accepts no liability for any losses that may result from the failure of the product to control resistant weeds. Strategies to minimise the risk of herbicide resistance are available. Contact your farm chemical supplier, consultant, local Department of Agriculture, or local Quantum Agrosiences Holdings representative.

## PRECAUTIONS'

### MINIMUM RECROPPING PERIODS

Cereal rye, medics, triticale, wheat, maize, soybeans: May be planted at any time after application of QA Flumetsulam 800 WG Herbicide.

Barley, chickpeas, clover, field peas, Lucerne, oats and peanuts: Allow 3 months to elapse after application before sowing these crops.

Canola, cotton, faba beans, fenugreek, lathyrus, lentils, lupins, serradella, sorghum, sunflowers, Popany vetch: On deep soils (with no impermeable sub-horizon), cotton, sorghum and sunflowers may be planted 3 months after application of QA Flumetsulam 800 WG Herbicide. Canola, faba beans and lupins are more sensitive and may be planted 9 months after application of QA Flumetsulam 800 WG Herbicide. On shallow, duplex, low organic matter soils with an impermeable sub-horizon within the root zone (30 cm deep or less) these crops should NOT be planted until 2 years after application of QA Flumetsulam 800 WG Herbicide.

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

Refer to MINIMUM RECROPPING PERIODS for crop rotation information. Crops susceptible to QA Flumetsulam 800 WG Herbicide include but are not limited to canola, cotton, faba beans, lupins, sorghum and sunflowers.

DO NOT flood irrigate any treated crop or pasture for 48 hours after application. Where other types of irrigation are used, for example sprinklers, DO NOT irrigate to the point of runoff for at least 48 hours after application.

**DO NOT** apply to waterlogged soils or if heavy rain is expected within 48 hours of application.

Dangerous to aquatic plants and susceptible crops.

**DO NOT** contaminate dams, waterways or drains with the product or its containers.

**DO NOT** apply under weather conditions, such as dead calm or excessive wind, or from spraying equipment producing small droplets that may cause spray to drift onto adjacent areas, particularly wetlands, waterbodies, watercourses, susceptible crops or land to be planted with susceptible crops.

#### **PROTECTION OF LIVESTOCK**

DO NOT graze or cut treated crops for stock food except as specified under withholding periods. Poisonous plants may become more palatable after spraying; therefore livestock should be kept out of the area until the plants have died down.

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

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

#### **STORAGE AND DISPOSAL**

Keep out of reach of children.

Store in the closed, original container in a securely locked, dry, cool, well-ventilated area out of 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.

#### **SMALL SPILL MANAGEMENT**

Sweep up material and contain in a refuse vessel for disposal in the same manner as for containers (see STORAGE AND DISPOSAL section).

#### **SAFETY DIRECTIONS**

Product will irritate the eyes. When handling the granules avoid contact with eyes. If product in eyes, wash it out immediately with water. Wash hands after use.

#### **FIRST AID**

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

#### **SAFETY DATA SHEET (SDS)**

Additional information is listed in the Safety Data Sheet (SDS) which is available from the supplier.

#### **CONDITIONS OF SALE**

Quantum Agrosiences Holdings 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 Quantum Agrosiences Holdings Pty Ltd's skill or judgement in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of Quantum Agrosiences Holdings Pty Ltd has any authority to add to or alter these conditions.