



DIRECTIONS FOR USE

RESTRAINTS

SPRAY DRIFT RESTRAINTS

DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. The buffer zones in the relevant buffer zone tables below provide guidance but may not be sufficient in all situations. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.

DO NOT allow bystanders to come into contact with the spray cloud. DO NOT apply unless the wind speed is between 3 and 15 kilometres per hour at the application site during the time of application.

DO NOT apply if there are surface temperature inversion conditions present at the application site during the time of application. These conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise

Recognising a surface temperature inversion

A surface temperature inversion is likely to be present if:

- Mist, fog, dew or a frost have occurred
- Smoke or dust hangs in the air and moves sideways, just above the ground surface
- Cumulus clouds that have built up during the day collapse towards evening
- Wind speed is constantly less than 11 km/hr in the evening and overnight
- Cool off-slope breezes develop during the evening and overnight
- Distant sounds become clearer and easier to hear
- Aromas become more distinct during the evening than during the day.

Spray timing

- Spray during the day wherever possible. Vertical mixing of the air makes surface temperature inversions unlikely and will reduce the risk of drift caused by surface temperature inversions.
- There is a very low risk of surface temperature inversion when there is continuous overcast weather, with low and heavy cloud and/or wind speed remains above 11km/h for the whole period between sunset and sunrise.
- A lack of suitable weather conditions for spraying over extended periods is not an excuse for spraying in unsuitable conditions.

DO NOT apply if crop or weeds are stressed due to dry or excessively moist conditions.

DO NOT apply with spray droplets smaller than VERY COARSE spray droplets according to the ASAE S572.1 definition for standard nozzles.

DO NOT use if rain is likely within 6 hours.

Monitoring and record keeping

Users of this product **MUST** make an accurate written record of the details of each spray application within 24 hours following application and KEEP this record for a minimum of 2 years. The spray application details that must be recorded are: 1- date of use with start and finish times of application; 2- the specific location which must include address and paddock/s sprayed; 3- Product trade name (full name) of the product being used; 4- rate of application which must include the amount of product used per hectare and number of hectares applied to; 5- situation, crop or commodity to which the chemical was applied; 6- wind speed and direction during application; 7- air temperature and relative humidity during application; 8- nozzle brand, model, size, type, and spray system pressure measured during application; 9- height of spray boom from ground ; 10- name and contact details of person applying this product (Additional record keeping and/or details may be required by the state or territory where this product is used).

Watch for changes in weather conditions. Stop spraying immediately if a surface temperature inversion occurs or if spraying conditions become unsuitable for any other reason.

ADVISORY FOR BOOM SPRAYER USE IN CEREALS, FALLOW AND PASTURE 1st OCTOBER TO 15th APRIL
USE IN CEREALS, FALLOW AND PASTURES DURING THE PERIOD 3rd OCTOBER TO 15th APRIL, IT IS ADVISED TO:-

USE NOZZLES THAT PRODUCE **EXTREMELY COARSE (XC) TO ULTRA COARSE (UC) DROPLETS.**

USE HIGHER WATER RATES PER HA, TO GIVE BETTER EFFICACY.

USE SLOWER APPLICATION SPEEDS TO ALLOW OPERATORS TO LOWER BOOM HEIGHTS.

INCREASING DROPLET SIZE AND WATER RATES WHILE REDUCING APPLICATION SPEED WILL ASSIST IN MITIGATING OFF TARGET INVERSION DRIFT DURING SUMMER SPRAYING. EXTREMELY COARSE DROPLETS WILL PRODUCE <3% DRIFTABLE DROPLETS.

BOOM SPRAYERS (ground application)

- DO NOT apply by a boom sprayer unless the following requirements are met:
- spray droplets not smaller than a VERY COARSE (VC) spray droplet size category (minimum XC between 3 October and 15 April - advisory)
 - boom heights 0.5 metres or lower above the target canopy (The higher of either the crop canopy or the targeted weeds)
 - minimum distances between the application site and downwind sensitive aquatic and wetland areas including aquacultural ponds, surface streams and rivers (see Aquatic 'Downwind mandatory no-spray zone' section of the following table titled 'Buffer zones for boom sprayers') are observed.
 - minimum distances between the application site and downwind sensitive crops, gardens, landscaping vegetation, protected native vegetation or protected animal habitat (see Terrestrial 'Downwind mandatory no-spray zone' section of the following table titled 'Buffer zones for boom sprayers') are observed. The buffer zones provide guidance but may not always be completely protective of all agricultural crops.

BUFFER ZONES FOR BOOM SPRAYERS:

Application rate (/ha)	Downwind mandatory no spray zone	
	Aquatic	Terrestrial
Dryland cropping: winter cereals and fallows		
Up to 1.7 L (750 g ae/ha)	10 metres	10 metres
Up to 2.5 L (1100 g ae/ha)	20 metres	20 metres
Up to 5.0 L (2200 g ae/ha)	35 metres	30 metres
Tropical & subtropical uses: Sugar cane		
Up to 2.5 L (1100 g ae/ha)	20 metres	20 metres
Up to 5.0 L (2200 g ae/ha)	35 metres	30 metres
Tropical & subtropical uses: Peanuts		
Up to 1.7 L (750 g ae/ha)	10 metres	10 metres
Pasture		
Up to 6.2 L (2710 g ae/ha)	40 metres	35 metres
Up to 7.26 L (3200 g ae/ha)	55 metres	50 metres
Up to 10.2 L (4500 g ae/ha)	75 metres	70 metres

AERIAL APPLICATION

- DO NOT apply by aerial application unless the following requirements are met:
- spray droplets not smaller than a VERY COARSE (VC) spray droplet size category.
 - release heights 5 metres or lower above the target canopy
 - minimum distances between the application site and downwind sensitive aquatic and wetland areas including aquacultural ponds, surface streams and rivers (see Aquatic 'Downwind mandatory no-spray zone' section of the following table titled 'Buffer zones for aircraft') are observed.
 - minimum distances between the application site and downwind sensitive crops, gardens, landscaping vegetation, protected native vegetation or protected animal habitat (see Terrestrial 'Downwind mandatory no-spray zone' section of the following table titled 'Buffer zones for aircraft') are observed. The buffer zones provide guidance but may not always be completely protective of all agricultural crops.

BUFFER ZONES FOR AIRCRAFT: 3 metre release height or lower above the target canopy

Application rate (/ha)	Downwind mandatory spray zone			
	Fixed wing		Helicopter	
	Aquatic	Terrestrial	Aquatic	Terrestrial
Dryland cropping: winter cereals and fallows				
Up to 1.7 L (750 g ae/ha)	75 metres	70 metres	70 metres	70 metres
Up to 2.5 L (1100 g ae/ha)	95 metres	95 metres	90 metres	85 metres
Up to 5.0 L (2220 g ae/ha)	180 metres	170 metres	150 metres	140 metres
Tropical & subtropical uses: Sugarcane				
Up to 5.0 L (2220 g ae/ha)	180 metres	170 metres	150 metres	140 metres
Tropical & subtropical uses: Peanuts				
Up to 1.7 L (750 g ae/ha)	75 metres	70 metres	70 metres	70 metres

BUFFER ZONES FOR AIRCRAFT: 5 metre release height or lower above the target canopy

Application rate (/ha)	Downwind mandatory spray zone			
	Fixed wing		Helicopter	
	Aquatic	Terrestrial	Aquatic	Terrestrial
Dryland cropping: winter cereals and fallows				
Up to 1.7 L (750 g ae/ha)	130 metres	130 metres	120 metres	110 metres
Up to 5.0 L (2220 g ae/ha)	450 metres	400 metres	250 metres	225 metres
Tropical & subtropical uses: Sugarcane				
Up to 5.0 L (2220 g ae/ha)	450 metres	400 metres	250 metres	225 metres
Tropical & subtropical uses: Peanuts				
Up to 1.7 L (750 g ae/ha)	130 metres	130 metres	120 metres	110 metres

Pasture application by air – 5.0 m release height

Application rate up to 6.2 L/ha, VERY COARSE droplet size, Aerial application

Application rate (/ha)	Downwind mandatory spray zone			
	Fixed wing		Helicopter	
	Aquatic	Terrestrial	Aquatic	Terrestrial
Wind speed range at time of application				
From 3 to 7 kilometres per hour	500 metres	475 metres	300 metres	275 metres
From 7 to 14 kilometres per hour	550 metres	500 metres	300 metres	275 metres

1.Field Crops

SITUATION AND CROP	WEEDS CONTROLLED	STATE	RATE/ha	CRITICAL COMMENTS
Wheat, Barley	Refer Weeds table	Vic only	325 mL - 1.24 L	Variations between varieties do occur. Check sensitivity and growth stages of varieties before applying. Damage may result if applied too early. Vic only: Apply at tillered to boot stages. NSW, ACT only: Apply when the first node can be felt at the base of a tiller and before swelling of the head can be felt in a tiller. Old only: Apply from mid-tillering (5 to 6 fully emerged main stem leaves plus one or more tillers) to before boot stage (visible swelling of the head at the top of the main stem. SA, Tas only: Apply from completion of tillering to early jointing stage. WA only: Apply from the 5 leaf stage up to jointing stage (Zadoks 15-33). Apply only at 6 leaf stage for cranbrook and jacup wheats (Zadoks 16) to avoid possible damage.
		SA only	355 mL - 1.24 L	
		Qld, NSW, ACT only	634 mL - 1.24 L	
		Tas only	958 mL - 1.24 L	
		WA only	1.24 L	
		Qld, NSW, ACT only	634 mL - 1.24 L	
		SA only	371 mL – 1.27 L	
		Vic only	325 mL - 1.24 L	
		Qld, NSW, ACT only	634 mL - 1.24 L	
		Vic only	325 mL - 1.24 L	
Cereal Rye	Old Only	All States	1.78 – 3.71 L	Post-Emergence
Sugar Cane	All States	All States	325 mL - 1.24 L	Observe the plant back periods given in the table in this leaflet. Must be tank mixed with a knockdown herbicide such as Bazooka 800 SG, Warlord 540, Glypho 450 and Glypho 680, Parquat 250 or Paradat. Select appropriate rate from the weed table. For Skeleton Weed, spraying should only be done 6-8 weeks before anticipated sowing date and subsequent cultivation limited to a minimum.
Stubble/Fallow Spray Prior to Direct Drilling or Sowing, Winter Cereals, Grain legumes (Peanuts Old only), Canola	Broadleaf Weeds	All States	2.63 L	Apply after dough stage of crop. Interval between application and effectiveness is 10-20 days. For dessication of green matter, estimate harvest date and apply spray approximately 14 days earlier. Rain between spraying and actual harvest can negate results. Note: Where thistles are tall and branching above the crop, spraying can turn the branches down into the crop, presenting more stalks to cause header comb blockages. Spraying may increase seed contamination of harvest by accelerating maturity. DO NOT use with undersown legumes that have not set seed.
Harvest Aid or Salvage Spray - Winter Cereals	Refer to Weeds Table			
Potatoes Pre-harvest Preparation	Broadleaf Weeds such as Clover, Variegated Thistle & Cruciferous weeds	Vic, Tas only	1.78 – 3.71 L	Apply approximately 4 to 5 weeks before harvest after the potato haulms have dried off. Use the highest rate where weeds are more than 30 cm in height. For boom spraying apply at least 100 litres of spray mixture per hectare. If grasses such as Rye Grass and Winter Grass are also present add Amitat Herbicide.

Pasture application – 3.0 m release height

Application rate up to 6.2 L/ha, VERY COARSE droplet size, Aerial application

Application rate (/ha)	Downwind mandatory spray zone			
	Fixed wing		Helicopter	
	Aquatic	Terrestrial	Aquatic	Terrestrial
Wind speed range at time of application				
From 3 to 7 kilometres per hour	250 metres	225 metres	150 metres	140 metres
From 7 to 14 kilometres per hour	250 metres	225 metres	180 metres	170 metres

Application rate up to 7.26 L/ha, VERY COARSE droplet size, Aerial application

Application rate (/ha)	Downwind mandatory spray zone			
	Fixed wing		Helicopter	
	Aquatic	Terrestrial	Aquatic	Terrestrial
Wind speed range at time of application				
From 3 to 14 kilometres per hour	475 metres	450 metres	275 metres	275 metres

2. Pastures, Non-agricultural, Industrial

SITUATION AND CROP	WEEDS CONTROLLED	STATE	RATE/ha	CRITICAL COMMENTS
Improved Pasture containing Clovers Pastures – non legumes, Rights of Way & Industrial	Refer Weed Table	Qld, NSW, ACT, Tas, SA only	634 mL – 1.24L	Clover must be well covered by the grass or extensive damage may result.
		Qld, NSW, ACT, Tas, SA, WA only	1.24 – 7.26 L	Control of most perennial weeds, but due to the rooting habits of most species control may take a number of years. Damage may result to legumes in pasture.
		Vic only	1.24 - 10.2 L	Boom Spraying
			108- 958 mL/100L	Spot Spraying
Pastures – Direct Drilling or Surface Sowing	Charlock, Clover, Medics, Mustards, Paterson's Curse, Saffron, Slender, Variegated and Spear Thistles, Turnip Weed, Wild Radish, Wild Turnip As Above plus: Capeweed, Wireweed, Storksbill/Erodium, Flatweed, Horehound (seedlings), Skeleton Weed, Nodding or Star Thistles St John's Wort All of Above plus grasses	Qld, NSW, ACT, Vic, Tas, SA, WA only	1.24 – 2.32 L (Aerial Application)	Apply to young, actively growing weeds. SOWING: DO NOT sow pasture seed for at least 21 days after application. If soil moisture is dry, delay sowing for at least 30 days.
			1.24 - 1.78 L (Ground Application)	
			5.10 – 7.26 L (Aerial or Ground)	
			As above plus Agricrop Propon or Bazooka 800 SG, Warlord 540, Glypho 450 and Glypho 680	
Lawns, Playing fields	Refer Weed Table	Qld, NSW, ACT only	2.1-4.4 mL/L of water or 2.27 L – 4.5 L/ha	Wet foliage thoroughly. DO NOT mow lawn for 1 week before and at least 1 week after application. DO NOT use on Buffalo grass (WA only)
		WA only	56.8 mL/10-15 L water/100 m2	

3.Spot Spraying

SITUATION AND CROP	WEEDS CONTROLLED	STATE	RATE/ha	CRITICAL COMMENTS
Spot Spraying (All Situations)	Refer to Weed Table	All States	1/100th of rate on Weed Table per 10 L water per 100 m ²	Apply through Knapsack. Thorough wetting of weed is essential.

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.
IN TASMANIA, THIS PRODUCT MAY ONLY BE USED FROM 15 APRIL to 15 SEPTEMBER UNLESS OTHERWISE PERMITTED BY THE REGISTRAR OF PESTICIDES.

WITHOLDING PERIOD (WHP): PASTURES, CEREAL CROPS – DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.
HARVEST WITHOLDING PERIOD: NOT REQUIRED WHEN USED AS DIRECTED.
DO NOT GRAZE TREATED TURF OR LAWN; OR FEED TURF OR LAWN CLIPPINGS FROM ANY TREATED AREA TO POULTRY OR LIVESTOCK.

WEED TABLE:

Note: Where weeds are to be sprayed in a CROP or PASTURE use only the rates given for the crop in the table below. In most cases this will give control, however some hard to kill weeds or those in advanced stages of growth may only be suppressed eg. *Rumex* spp. (Docks) and *Polygonum* spp. (Wireweed, Climbing Buckwheat) are killed to ground level only.

WEEDS	APPLICATION RATE PER HA								CRITICAL COMMENTS
	CROP						PASTURE NON-LEGUMES		
	Vic	SA	TAS	NSW, ACT	Qld	WA	Vic	NSW, ACT, TAS, SA, Qld, WA only	
<i>Amaranthus</i> spp.	–	–	–	1.24 L	–	–	–	–	–
Angled Onion	–	–	–	–	–	–	5.1 L	1.24 L-2.63 L	Spray when buds forming or early flowering.
Apple of Sodom	–	–	–	–	–	–	–	4.48-5.1 L	–
Bathurst Burr	–	–	–	1.24 L	–	–	2.63-5.1 L	2.63-5.1 L	Spray from seedling to pre-flowering. Use higher rate as plant matures.
Black Knapweed	–	–	–	–	–	–	5.1 L	–	Spray before flowering. DO NOT cultivate these infestations.
Buffalo Burr	–	–	–	–	–	–	–	1.24-1.78 L (Not Qld & WA)	Spray from seedling to pre-flowering. Use higher rate as plant matures.
California Burr	–	–	–	1.24 L	–	–	2.63-5.1 L	1.78-2.63 L (not SA)	Spray from seedling to pre-flowering. Use higher rate as plant matures.
Caltrop	–	–	–	958 mL -1.24 L	–	–	2.63-5.1 L	–	Spray from seedling to pre-flowering. Use higher rate as plant matures.
Cape Tulip	–	–	–	–	–	1.78 L	5.1 L	2.63-5.1 L	Spray before flowering.
Capeweed	1.24 L	1.24 L	1.24 L	819 mL-1.24 L	–	–	–	3.86-5.1 L	Spray up to rosette stage.
Charlock	634 mL	634 mL	1.24 L	634 mL	–	–	–	1.24 L	Spray up to rosette stage.

