CAUTION

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

F.S.A.

CLOPYRALID 600 ADVANCE

HERBICIDE

ACTIVE CONSTITUENT:
600 g/L CLOPYRALID present as the ISOPROPYLAMINE and MONOETHANOLAMINE SALTS

GROUP 4 HERBICIDE

Crops/Situations:	Barley, canola, fallow land, forestry, industrial and commercial situations, oats, pastures, triticale and wheat.
Controls/Suppresses:	Broadleaf weeds in as specified in the Directions for Use table.

IMPORTANT: READ THE ATTACHED BOOKLET BEFORE USING THIS PRODUCT

FOUR SEASONS AGRIBUSINESS

APVMA Approval No.: 94328/142095

DIRECTIONS FOR USE

IT IS ESSENTIAL to select a rate appropriate to weed size. Best results will be obtained when weeds are actively growing at treatment.

RESTRAINTS

DO NOT apply to weeds which may be stressed (inactive growth) due to prolonged periods of extreme heat or cold, moisture stress (water logging or drought) or previous herbicide treatment as reduced levels of control may result.
DO NOT apply later than the 8 leaf stage of canola.
DO NOT compost material from treated plants or crops before reading the PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS section.
DO NOT spray if rain is likely within 3 hours.
DO NOT apply more than one application per crop.
For PROFESSIONAL use only.

SPRAY DRIFT RESTRAINTS

Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift.
DO NOT allow bystanders to come into contact with the spray cloud.
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. 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 apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application.
DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.
DO NOT apply by a boom sprayer unless the following requirements are met:

- Spray droplets not smaller than a COARSE spray droplet size category.

DO NOT apply by aircraft unless the following requirements are met:

- Spray droplets not smaller than a COARSE spray droplet size category.
- For maximum release height above the target canopy of 3 metres or 25 per cent of wingspan or 25 per cent of rotor diameter, whichever is the greatest, minimum distances between the application site and downwind sensitive areas (see 'Mandatory buffer zones' section of the following table titled 'Buffer zones for aircraft') are observed.

Buffer zones for aircraft

Droplet Size	Fixed Wing Aircraft
	Mandatory Bystander Buffer Zone
Coarse	5 metres
Very Coarse	0 metres

Table 1. WINTER CEREALS

CROP	CROP STAGE	WEED	WEED STAGE	RATE	CRITICAL COMMENTS
Barley, Oats, Triticale, Wheat	Pre-sowing	Capeweed, Volunteer chickpeas and faba bean, Sub clover Vetch	Up to 8 leaf and maximum 10 cm diameter	75 mL/ha + knockdown herbicide	**Pre-sowing:** This rate should only be used in tank mixture with formulations of paraquat/ diquat or glyphosate. Rates of 150-300 mL/ha give good suppression (reduced seed set and up to 80% weed control). 300 mL/ha is required for good control of capeweed and sub-clover. Apply to moist soil and time treatment for major germination of weeds. Good soil moisture and application close to time of weed germination is essential for best control.
	Post-sowing pre-emergence through to 3 leaf	Capeweed, Volunteer faba bean, Sub clover	Pre-emergence	150 to 300 mL/ha	
		Capeweed	Up to 8 leaf and maximum 10 cm diameter	75 mL/ha + 170 g/ha Diuron 900 WG	**Post sowing pre-emergent to 3 leaf:** This rate should only be used in tank mixture with diuron for control of transplants.
	Early post-emergence (2 leaf to jointing)		Cotyledons to 6 leaf and maximum 5 cm diameter	75 mL/ha	**Early post-emergent:** Weeds should be growing actively and not larger than 5 cm diameter.
	4 to 5 leaf through to booting	Capeweed, Soldier thistle	Up to 10 cm diameter (4 to 8 leaf)	150 mL/ha	Weeds should be young and actively growing. Weeds will become stunted and non-competitive soon after application although final results may not show for some weeks. Faba beans and lupins will only be suppressed.
		Volunteer chickpeas, lentils and safflower	Up to 6 leaf	125 mL/ha	
		Volunteer faba beans and lupins	Up to 4 leaf		
	4 to 5 leaf through to booting	Volunteer field peas	Maximum 10 cm high or 6 nodes	75 mL/ha	Weeds should be young and actively growing. Weeds will become stunted and non-competitive soon after application although final results may not show for some weeks. Faba beans and lupins will only be suppressed.
				40 mL/ha + 630 mL/ha LVE MCPA 570	
		Volunteer medic and lucerne (seedlings)	Up to 8 leaf	75 mL/ha	
		Volunteer sub-clover	Up to 6 leaf		
		Volunteer vetch	Runners up to 10 cm maximum 16 leaf	50 mL/ha	

Table 2. WINTER CEREALS: Post-emergence tank mixtures

Weeds should be young and actively growing. Weeds will become stunted and non-competitive soon after application although final results may not show for some weeks. Where a rate range is listed use low rate mixtures for small weeds to 5 cm diameter and higher rate mixtures for weeds up to 10 cm diameter. Use a surfactant such as Wetspray 1000 for granular herbicides or the recommended adjuvant on the partner herbicide label.

WEED	WEED STAGE	RATE	CRITICAL COMMENTS
Capeweed	Up to 4 leaf, 10 cm diameter	100 to 150 mL/ha + 20 g/ha Tackle WG	Tackle WG mixes – 2 leaf to 1st node crop stage.
		50 mL/ha + 35 to 50 mL/ha Eclipse† + 315-420 mL/ha LVE MCPA 570	Eclipse†/LVE MCPA mixes – 3 leaf to 1st node. Where 420 mL/ha LVE MCPA added apply from 4-5 leaf to 1st node crop stage.
		50 mL/ha + 5 g/ha Lynx WG + 380 mL/ha LVE MCPA 570	Lynx/LVE MCPA mixes – 4 to 5 leaf to 1st node crop stage.
		50 mL/ha + 625 mL/ha Legacy® MA-X	Legacy MA-X mixes – 3 leaf to 1st node crop stage, but not on barley or Kulin wheat in WA.
Field peas (volunteer), Vetch (volunteer)	Up to 6 node, 10 cm diameter Up to 4 branch,10 cm diameter	50 mL/ha + 35 to 50 mL/ha Eclipse† + 360 to 500 mL/ha Bronco MA-X	Bronco MA-X mixes – 3 leaf to 1st node crop stage.
		50 mL/ha + 35 to 50 mL/ha Eclipse† + 315 to 420 mL/ha LVE MCPA 570	Eclipse†/LVE MCPA mixes – 3 leaf to 1st node. Where 420 mL/ha LVE MCPA is added apply from 4-5 leaf to 1st node crop stage.
		50 mL/ha + 5 g/ha Lynx WG + 315 mL/ha LVE MCPA 570 or 40 mL/ha + 630 mL/ha LVE MCPA 570	Use 40 mL/ha only in combination with LVE MCPA. F.S.A. Clopyralid 600 Advance + LVE MCPA mixes – 4 to 5 leaf to 1st node crop stage.
Vetch (volunteer)	Runners up to 10 cm, maximum 16 leaf	40 mL/ha + 630 mL/ha LVE MCPA 570	4 to 5 leaf through to booting crop stage. Weeds should be young and actively growing. Weeds will become stunted and non-competitive soon after application although final results may not show for some weeks.
Chickpea (volunteer	Up to 4 branch, 10 cm diameter	50 mL/ha + 35 to 50 mL/ha Eclipse† + 360 to 500 mL/ha Bronco MA-X	Bronco MA-X mixes – 3 leaf to 1st node crop stage.
Faba bean (volunteer) Lupin (volunteer)	Up to 4 node, 10 cm tall Up to 6 leaf, 10 cm tall	50 mL/ha + 35 to 50 mL/ha Eclipse† + 315 to 430 mL/ha LVE MCPA 570	Eclipse†/LVE MCPA mixes – 3 leaf to 1st node. Where 430 mL/ha LVE MCPA is added apply from 4 to 5 leaf to 1st node crop stage.
Sub-clover (volunteer) Prickly lettuce Medic (volunteer)	Up to 5 trifoliate, 5 cm diameter Up to 6 leaf, maximum 10 cm diameter Up to 6 leaf, maximum 5 cm diameter	50 mL/ha + 5 g/ha Lynx WG + 315 to 430 mL/ha LVE MCPA 570	Lynx WG/LVE MCPA mixes – 4 to 5 leaf to 1st node crop stage.

WEED	WEED STAGE	RATE	CRITICAL COMMENTS
Prickly lettuce	4 to 6 leaf and maximum 8 cm diameter	75 mL/ha + 630 mL/ha LVE MCPA 570	4 to 5 leaf through to booting crop stage. Weeds should be young and actively growing. Weeds will become stunted and non-competitive soon after application although final results may not show for some weeks.
	Up to 6 leaf, maximum 10 cm diameter		F.S.A. CLOPYRALID 600 ADVANCE + LVE MCPA mixes – 4 to 5 leaf to 1st node crop stage.
Thistles including: Nodding Saffron Scotch Slender Spear Stemless Variegated	Rosettes up to 10 cm maximum diameter	25 mL/ha + 700 mL/ha MCPA 750 or 25 mL/ha + 630 mL/ha LVE MCPA 570	4 to 5 leaf through to booting crop stage. For thistle control, F.S.A. CLOPYRALID 600 ADVANCE rate will depend on density, growth stage, climatic conditions and time of application. Use higher rates for best control where high density and/or large weeds occur. MCPA or 2,4-D mixes apply from 4 to 5 leaf to 1st node crop stage. Weeds should be young and actively growing. Weeds will become stunted and non-competitive soon after application although final results may not show for some weeks.
St Barnaby's thistle	4 to 8 leaf, 5 to 10 cm diameter	25 to 50 mL/ha + 400 to 800 mL/ha 2,4-D Amine 625 or 350 to 700 mL/ha Zulu XT or 700 mL to 1 L MCPA 750	
Sowthistle (common)	Young rosettes up to 8 true leaves	50 mL/ha + 800 mL/ha Enforcer 242 or 5 g/ha Lynx WG + 630 mL/ha LVE MCPA 570	Apply to actively growing young rosettes. Use Uptake† Spraying Oil at 500 mL/100 L of water for improved control with Enforcer 242 tank-mixes or Wetspray 1000 with Lynx/LVE MCPA tank-mixes. Apply tank-mixes from 4 to 5 leaf to 1st node crop stage.
Skeleton weed	5 to 15 cm rosettes	250 mL/ha + 700 mL/ha MCPA 750	Weeds should be a minimum 5 cm in diameter, and actively growing. This rate will give control until harvest and substantially reduce weed numbers the following season. Apply from 4 to 5 leaf to 1st node crop stage.

Table 3. CANOLA

CROP	CROP STAGE	WEED	WEED STAGE	RATE	CRITICAL COMMENTS
Canola	Pre-sowing	Capeweed Volunteer chickpeas and faba bean Sub clover Vetch	Up to 8 leaf and maximum 10 cm diameter	75 mL/ha + knockdown herbicide	**Pre-sowing:** This rate should only be used in tank mixture with formulations of paraquat, paraquat + diquat or glyphosate.
	Post-sowing Pre-emergence to 3 leaf	Capeweed Volunteer faba bean Sub-clover	Pre-emergence	150 to 300 mL/ha	Rates of 150-250 mL/ha give good suppression (reduced seed set and up to 80% weed control). 300 mL/ha is required for good control of capeweed and sub-clover. Apply to moist soil and time treatment for major germination of weeds. Good soil moisture and application close to time of weed germination is essential for best control.

CROP	CROP STAGE	WEED	WEED STAGE	RATE	CRITICAL COMMENTS
Canola *cont'd*	2 to 8 leaf	Capeweed Cotula Saffron thistle Skeleton weed Soldier thistle	Up to 10 cm diameter (4 to 8 leaf)	150 mL/ha	Weeds should be young and actively growing. Weeds will become stunted and will not be competitive soon after application although final results may not show for some weeks. Skeleton weed will only be controlled until harvest. Faba beans and lupins will only be suppressed. For the control of annual grasses, F.S.A. CLOPYRALID 600 ADVANCE may be tank mixed with Firepower or Firepower 900.
		Volunteer chickpeas, lentils and safflower	Up to 6 leaf	125 mL/ha	
		Volunteer faba beans and lupins	Up to 4 leaf		
		Volunteer field peas	Maximum 10 cm high or 6 nodes	75 mL/ha	
		Volunteer medics and seedling lucerne	Up to 8 leaf		
		Volunteer sub-clover	Up to 6 leaf		
		Volunteer vetch	Runners up to 10 cm maximum 16 leaf	50 mL/ha	
	2 to 8 leaf	St Barnaby's thistle	4 to 8 leaf, 5 to 10 cm diameter	75 to 150 mL/ha	F.S.A. CLOPYRALID 600 ADVANCE rate will depend on weed density, growth stage, climatic conditions and time of application. Use higher rates for best control where high density and/or large weeds occur.

Table 4. HERBICIDE TOLERANT CANOLA: Post-emergence 2 to 8 leaf crop stage

CROP	WEED	WEED STAGE	RATE	CRITICAL COMMENTS
Clearfield Canola	Cotula (common) Capeweed	Up to 6 leaf	75 mL/ha + 40 g OnDuty†	Where capeweed is a significant component of the weed spectrum, a tank mix with F.S.A. CLOPYRALID 600 ADVANCE may be needed post-emergence. DO NOT exceed this rate of F.S.A. CLOPYRALID 600 ADVANCE as reduced control of grass weeds may occur.
Triazine Tolerant Canola	Capeweed Lupins (volunteer) Saffron thistle Skeleton weed Soldier thistle plus weeds listed under canola above		150 mL/ha	F.S.A. CLOPYRALID 600 ADVANCE is compatible with atrazine and simazine for use in triazine tolerant canola. Uptake† Spraying Oil at 500 mL/ 100 L of water should be added to this mix for best grass and broadleaf weed control. For the control of annual grass weeds, F.S.A. CLOPYRALID 600 ADVANCE + Farmozine or Simanex + Firepower or Firepower 900 + Uptake† Spraying Oil or an equivalent mineral oil + surfactant mix are compatible and selective to triazine tolerant canola.

Table 5. PASTURES AND FALLOW LAND (Established perennial grass and sub-clover-based pastures) (Boom spray application if not specified)

CROP	CROP STAGE	WEED	WEED STAGE	RATE	CRITICAL COMMENTS
Pastures and fallow land	Post-emergence	Hardhead thistle (creeping knapweed, Russian knapweed)	Actively growing plants. Treat rosette stage prior to stem elongation	**Motorised Hand gun:** 250 mL /100 L of water. **Boom spray:** 1 or 2 L/ha	**NOTE: DO NOT use on Lucerne. Clovers and Medics will be eliminated for at least one year.** **Victoria only**: Use the lower rate only on light soils (sand and sandy loam) where a slightly lower degree of control is acceptable. Use the higher rate on all soil types where complete control is required. Addition of Wetspray 1000 at 0.2% v/v is recommended for treatment of hardhead thistle. Spray between September and April on actively growing plants for effective control. Thorough coverage is essential. Apply in 200 to 250 L of water/ha. **BOOM SPRAYING:** Use the higher rates of F.S.A. CLOPYRALID 600 ADVANCE plus MCPA on multi-crowned plants or rosettes larger than 30 cm in diameter. Spraying may be done at any time during active growth, usually in early winter or spring. Avoid spraying during the dormant winter period or at any time when thistles are not actively growing. DO NOT spray flowering thistles. **PRE-SPRAY MANAGEMENT:** The pasture should be slightly grazed prior to spraying to reduce clover and grass cover and expose the smaller thistles to the spray. The grazed pasture should be left seven days to allow thistles to freshen prior to treatment. **POST-TREATMENT MANAGEMENT:** Response of thistles to treatment with the F.S.A. CLOPYRALID 600 ADVANCE plus MCPA mixture will be slow compared to the standard treatments with 2,4-D or MCPA. If possible, delay grazing of sprayed thistles for 14 days after treatment. **CLOVER DAMAGE:** F.S.A. CLOPYRALID 600 ADVANCE plus MCPA or 2, 4-D mixtures can be very damaging to subterranean clover. The lower rate is no more damaging than label rates of 2, 4-D or MCPA. Use 25 mL/ha mixes when clover is at the 6 trifoliate leaf stage to just prior to flowering. The 35 mL/ha mix will reduce the clover component of the pasture for about two months. Use the 35 mL/ha mix from 6 trifoliate leaf stage and where thistles are large due to early germination. Clover recovery will be quicker during periods of active growth. If clover damage is the major consideration, use the lower F.S.A. CLOPYRALID 600 ADVANCE rate to minimise damage. **MOTORISED HANDGUN (Spot spray):** Treat from rosette stage to early flowering. Thorough spraying is necessary. **DRENCHGUN:** Apply 10 mL of mixture to rosette crown. To multi-crown plants apply 10 mL of mixture to each crown. **Spraytop 250 mixes are for lucerne pasture use only.** Simanex mixes are for silver grass control and for lucerne based pastures only.
				Motorised Hand gun: 250 mL /100 L of water. **Boom spray:** 2 L/ha	
		Thistles including: Nodding Variegated Scotch Spear Slender Saffron St Barnaby's	Treat rosette stage prior to stem elongation	25 or 35 mL/ha + 700 mL/ha to 1 L/ha MCPA 750 **Drench gun:** 25 mL/1 L of water **Motorised Hand gun:** 125 mL/100 L of water	
		St Barnaby's thistle	5 to 8 leaf and 5 to 10 cm diameter	25 to 50 mL/ha + 400 to 800 mL/ha 2, 4-D Amine 625 or 1.5 to 2.5 L/ha 2,4-DB (500 g/L) or 1 L/ha Spraytop 250 or 550 to 830 g/ha Simanex WG + 1 L/ha 2,4-DB (500 g/L)	

CROP	CROP STAGE	WEED	WEED STAGE	RATE	CRITICAL COMMENTS
Pastures and fallow land *cont'd*	Post-emergence	Nodding thistle	Rosettes up to 20 cm in diameter	50 mL/ha	Apply the spray from September to October. Apply by boom spray only. **DO NOT** apply to thistles over 20 cm in diameter. When thistles are over 20 cm in diameter use F.S.A. CLOPYRALID 600 ADVANCE plus MCPA (referred to above). **Clover Damage:** Damage to white clover will be no greater than damage with MCPA alone and less than damage from F.S.A. CLOPYRALID 600 ADVANCE plus MCPA mixtures. Damage to sub-clover may be greater than with MCPA or 2,4-D alone. **DO NOT** use for spot treatment.
		Californian thistle	From early buds to flowering (December to February)	**Motorised Hand gun:** 125 mL/100 L of water **Boom spray:** 1 L/ha	Addition of Wetspray 1000 at 0.2%v/v is recommended. Retreatment of regrowth in the year following treatment will usually be necessary to achieve a high level of control. **NOTE:** Clovers and medics will be eliminated for at least one year.
		Lucerne	30 to 40 cm high pre-flowering	150 mL/ha + 1.5 to 2 L/ha Wipe-Out 450 + either 1.3 L/ha MCPA 750 or 1.75 L/ha or 2,4-D Amine 625 or 2.35 L/ha 2,4-D Ester (680 g/L)	Treat healthy, actively growing lucerne in early spring prior to flowering. After grazing or cutting, allow lucerne to regrow for approximately four weeks before treatment. For best control, **DO NOT** re-graze for greater than two weeks after application. For complete control of lucerne in pasture, cultivate approximately one month after herbicide treatment.
Pasture		Groundsel bush	Young seedlings to mature plants	**Motorised Hand gun:** 165 to 250 mL/ 100 L of water	Spray foliage when growth is active. Use the lower rate on young seedlings and the higher rate on plants more than two (2) metres tall or when growth is slow.

Table 6. FORESTRY – Pre-planting: Boom and Aerial Application

FORESTS AND PLANTATION TREES INCLUDING *EUCALYPTUS* Species, *CORYMBIA MACULATA* AND *PINUS* Species			
WEEDS CONTROLLED	**WEED GROWTH STAGE**	**RATE**	**CRITICAL COMMENTS**
Capeweed, Thistles, Volunteer legumes, Flatweed, Fleabanes	Pre-emergent	1 to 3 L/ha	Use the higher rate for extended pre-emergence control (greater than three months).
***PINUS RADIATA* only**			
WEEDS CONTROLLED	**WEED GROWTH STAGE**	**RATE**	**CRITICAL COMMENTS**
Silver wattle (suppression)	Pre-emergence from seeds	3 L/ha	For best results apply F.S.A. CLOPYRALID 600 ADVANCE to bare soil just prior to spring rain or when wattles are expected to germinate. Avoid application to heavy trash situations. A high level of suppression may not be achieved where rain does not fall for an extended period after application (greater than one month), or where very high rainfall occurs after application (greater than 1200 mm/yr).

Table 7. FORESTRY – Post-planting: High volume spraying by hand-gun

FORESTS AND PLANTATION TREES INCLUDING *EUCALYPTUS* Species, *CORYMBIA MACULATA* AND *PINUS* Species			
WEEDS CONTROLLED	**WEED GROWTH STAGE**	**RATE**	**CRITICAL COMMENTS**
Groundsel bush	Young seedlings to mature plants	160 or 250 mL/100 L water	Spray foliage when growth is active. Use the lower rate on young seedlings and the higher rate on plants more than two metres tall or when growth is slow.
Ragwort	Actively growing rosettes up to stem elongation and before flowering	100 to 150 mL/100 L water	Spray from the rosette to the shooting stage of growth. Use the higher rate on large multi-crown plants. Addition of a 100% non-ionic surfactant such as Wetspray 1000 at 0.1% v/v is recommended. Add diquat (200 g/L) at 1 L/100 L water + a surfactant after opening of the first flowers, to prevent the formation of viable seed. Where diquat is added use a directed spray to avoid tree injury.
Silver wattle	Active growth spring to summer	250 mL/100 L water	For effective control apply when bushes are growing actively. Large trees will not show complete necrosis. **HAND-GUN:** Means high volume NOT low volume knapsack. (See GENERAL INSTRUCTIONS – Application). Spray to the point of run-off to give full coverage of leaves and stems. Add organosilicone surfactant (e.g. Pulse†) at 200 mL/100 L for optimum results. Clovers and legumes will be eliminated for at least one year.
Cape ivy	Any growth stage	1.7 L/ha	Application may be made at any time of the year providing foliage is dry at the time. Avoid spraying non-target plants. **Low volume application:** For application by hand held weed wiper or C.D.A. use at dilution with water of 125 mL/L.

Table 8. FORESTRY – Post-planting: Boom and Aerial Application

FORESTS AND PLANTATION TREES INCLUDING *EUCALYPTUS* Species, *CORYMBIA MACULATA* AND *PINUS* Species			
WEEDS CONTROLLED	**WEED GROWTH STAGE**	**RATE**	**CRITICAL COMMENTS**
Capeweed, Flatweed, Skeleton weed, Thistles (except Hardhead thistle), Volunteer legumes	Actively growing rosettes, seedlings up to 15 cm diameter or height	250 to 500 mL/ha	Cupping of the tip leaves and 'weepy leader' symptoms may occur on certain Eucalyptus spp. and *Corymbia maculata* and are generally transient symptoms and DO NOT result in long- term injury. These symptoms may be more obvious at rates of 500 mL/ha or higher or where mixtures are used on blue gum, shining gum and spotted gum. Where 'weepy leader' effect is a concern use a directed spray. Use the 250 mL/ha rate until three months post-planting and the 500 mL/ha rate for trees three months and older. Use the low rate only under ideal conditions with excellent weed growth and where knockdown control of small weeds is desired. Use the high rate where longer control is required of larger weeds. For the control of annual and certain perennial grasses F.S.A. CLOPYRALID 600 ADVANCE can be tank mixed with Firepower or Firepower 900. See also comments on mixing in DIRECTIONS FOR USE. Uptake Spraying Oil or an equivalent mineral oil + surfactant mix should not be used in tank-mixes with Firepower and F.S.A. CLOPYRALID 600 ADVANCE on sensitive species such as blue gum, shining gum and spotted gum where rates of F.S.A. CLOPYRALID 600 ADVANCE are more than 1 L/ha. Use a 100% non-ionic surfactant such as Wetspray 1000 at 0.1% v/v instead.
Capeweed, Flatweed, Fleabanes, Skeleton weed, Thistles including Hardhead thistle, Volunteer legumes	Actively growing rosettes and seedlings greater than 15 cm diameter or height up to stem elongation and before flowering	1 L/ha	
Californian thistle	From early bud to flowering (December to February)		For best control of California thistle use a wetter such as Wetspray 1000 at 0.1% v/v. A second annual application may also be required for best control.
Ragwort	Small rosettes to larger rosettes up to stem elongation and before flowering	500 mL/ha or 1 L/ha	Spray from the rosette to the shooting stage of growth. For small rosette seedling plants use the lower rate. For large rosette multi-crown and/or perennial plants use the higher rate. Addition of a 100% non-ionic surfactant such as Wetspray 1000 at 0.1% v/v is recommended. Add diquat (200 g/L) at 1 L/100 L water plus a surfactant after opening of the first flowers, to prevent the formation of viable seed. Where diquat is added use a directed spray to avoid tree injury.
Sorrel (suppression only)	Actively growing rosettes, seedlings up to 15 cm diameter or height	3 to 4.25 L/ha	Higher rates give better suppression. At rates greater than 3 L/ha use a directed spray to avoid tree injury.
Silver wattle	Active growth spring to summer (0.5 to 2 m tall)	2.5 L/ha	For effective control apply when bushes are growing actively. Large trees will not show complete necrosis. For boom spraying apply in 150 to 200 L of water/ha. For aerial treatment apply in a minimum of 50 L/ha of water with Uptake† Spraying Oil or an equivalent mineral oil + surfactant mix at 1 L/ha. At rates of 3.5 and 4.25 L/ha for *Eucalyptus* spp. use a directed spray to avoid tree injury. Clovers and legumes will be eliminated for at least one year.
	Active growth spring to summer (2 to 4 m tall)	3.5 L/ha	
	Active growth spring to summer (4 to 8 m tall)	4.25 L/ha	

Note: Where drift is likely to be an issue apply in a minimum of 50 L water/with 25 to 50% by volume of anti-evaporant oil. Mix F.S.A. CLOPYRALID 600 ADVANCE and water first, and then add the anti-evaporant oil. Maintain continuous agitation.

Table 9. INDUSTRIAL/COMMERCIAL SITUATIONS *including RIGHTS OF WAY AND FENCELINES* – Boom Application only

WEEDS CONTROLLED	WEED GROWTH STAGE	RATE	CRITICAL COMMENTS
Capeweed, Thistles, Volunteer legumes, Flatweed, Fleabanes	Pre-emergent	1 to 3 L/ha	Use the higher rate for extended pre-emergence control (greater than three months).
Flatweed, Capeweed, Thistles (except Hard-head thistle), Volunteer legumes, Skeleton weed	Actively growing rosettes, seedlings up to 15 cm diameter or height	250 to 500 mL/ha	Use the low rate only under ideal conditions with excellent weed growth and where knockdown control of small weeds is desired. Use the high rate where longer control is required of larger weeds. For the control of annual and certain perennial grasses F.S.A. CLOPYRALID 600 ADVANCE can be tank-mixed with Firepower or Firepower 900. See also comments on mixing in DIRECTIONS FOR USE.
Flatweed, Fleabanes, Capeweed, Thistles **including** Hardhead thistle, Volunteer legumes, Skeleton weed	Actively growing rosettes and seedlings greater than 15 cm diameter or height up to stem elongation and before flowering	1 L/ha	Use the low rate only under ideal conditions with excellent weed growth and where knockdown control of small weeds is desired. Use the high rate where longer control is required of larger weeds. For the control of annual and certain perennial grasses F.S.A. CLOPYRALID 600 ADVANCE can be tank-mixed with Firepower or Firepower 900. See also comments on mixing in DIRECTIONS FOR USE.
Californian thistle	From early bud to flowering (December to February)		For best control of California thistle use a wetter such as Wetspray 1000 at 0.1% v/v. A second annual application may also be required for best control.
Ragwort	Small rosettes to larger rosettes up to stem elongation and before flowering	500 mL/ha to 1 L/ha	Spray from the rosette to the shooting stage of growth. For small rosette seedling plants use the lower rate. For large rosette multi-crown and/or perennial plants use the higher rate. Addition of a 100% non-ionic surfactant such as Wetspray 1000 at 0.1% v/v is recommended. Add diquat (200 g/L) at 1 L/100 L water plus a surfactant after opening of the first flowers, to prevent the formation of viable seed. Where diquat is added use a directed spray to avoid injury to non-target plants.

Table 10. INDUSTRIAL/COMMERCIAL SITUATIONS *including RIGHTS OF WAY AND FENCELINES – High volume spraying by hand gun*

WEEDS CONTROLLED	WEED GROWTH STAGE	RATE	CRITICAL COMMENTS
Groundsel bush	Young seedlings to mature plants	160 or 250 mL/100 L water	Spray foliage when growth is active. Use the lower rate on young seedlings and the higher rate on plants more than two metres tall or when growth is slow.
Ragwort	Actively growing rosettes up to stem elongation and before flowering	100 to 150 mL/100 L water	Spray from the rosette to the shooting stage of growth. Use the higher rate on large multi-crown plants. Addition of a 100% non-ionic surfactant such as Wetspray® 1000 at 0.1% v/v is recommended. Add diquat (200 g/L) at 1 L/100 L water plus a surfactant after opening of the first flowers, to prevent the formation of viable seed. Where diquat is added use a directed spray to avoid injury to non-target plants.
Silver wattle	Active growth spring to summer	250 mL/100 L water	For effective control apply when bushes are growing actively. Large trees will not show complete necrosis. HAND-GUN: Means high volume NOT low volume knapsack. (See GENERAL INSTRUCTIONS – Application). Spray to the point of run-off to give full coverage of leaves and stems. Add organosilicone surfactant (e.g. Pulse†) at 200 mL/100 L for optimum results.
Cape ivy	Any growth stage	1.6 L/ha	Application may be made at any time of the year providing foliage is dry at the time. Avoid spraying non-target plants. Low volume application. For application by hand-held weed wiper or C.D.A. use at dilution with water of 125 mL/L.

Table 11. AGRICULTURAL NON-CROP AREAS, COMMERCIAL AND INDUSTRIAL AREAS, FORESTS, PASTURES AND RIGHTS-OF-WAY – Stem Injection Application on *Acacia* Species

Mix 1 part F.S.A. CLOPYRALID 600 ADVANCE with 9 parts of water and apply the diluted mix as directed below.

WEED GROWTH STAGE	APPLICATION RATE	CRITICAL COMMENTS
Single stems less than 25 cm diameter at base	1 mL of the diluted mix per cut at 10 to 13 cm centres	Apply to waist high cuts. See GENERAL INSTRUCTIONS – APPLICATION SECTION for application method details. **DO NOT** exceed the recommended spacings from the centre of one cut to the centre of the next cut. Inject each stem of a multi-stem tree where possible.
Multiple stems or more than 25 cm diameter at base	2 mL of the diluted mix per cut at 10 to 13 cm centres	

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

WITHHOLDING PERIODS

Pastures, Fallow land, Industrial and Commercial situations: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.

Cereals and Canola: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.

Cereals (HARVEST): DO NOT APPLY LATER THAN 10 WEEKS BEFORE HARVEST.

Canola (HARVEST): NOT REQUIRED WHEN USED AS DIRECTED.

Forests, except Pinus Species Plantations: DO NOT GRAZE FOR 7 DAYS AFTER APPLICATION.

Pinus Species Plantations: DO NOT GRAZE FOR 14 DAYS AFTER APPLICATION.

TRADE ADVICE
MRLs or import tolerances do not exist in all markets for produce treated with F.S.A. CLOPYRALID 600 ADVANCE. If you are growing produce destined for export, please consult with Four Seasons Agribusiness Pty Ltd for the latest information on MRLs and import tolerances before using F.S.A. CLOPYRALID 600 ADVANCE.

Livestock destined for export markets
The grazing withholding period only applies to stock slaughtered for the domestic market. Some export markets apply different standards. Prior to slaughter of livestock that have grazed on or been fed treated crops or pastures, it is essential you consult your exporter or Four Seasons Agribusiness Pty Ltd to ensure that an appropriate MRL is in place in the importing country.

GENERAL INSTRUCTIONS

MIXING
Tank-mixing: The following order should be followed:
1. Fill the spray tank to 70% full and commence agitation.
2. Add any wettable powders, water dispersible granules or dry flowable formulations with continuous agitation, ensure product is completely dissolved/dispersed before proceeding.
3. Add suspension concentrates followed by dispersible concentrates then suspo-emulsions.
4. Add emulsifiable concentrates including selective grass herbicides or other broadleaf herbicides.
5. Fill the tank to nearly full.
6. Add F.S.A. CLOPYRALID 600 ADVANCE and other soluble liquids.
7. Add Uptake† Spraying Oil or Wetspray 1000.
8. Add water to bring to the final spray volume.

Only mix sufficient spray solution for immediate use and avoid storing.

COMPATIBILITY
Conventional Canola: F.S.A. CLOPYRALID 600 ADVANCE + Uptake† Spraying Oil or an equivalent mineral oil + surfactant mix are compatible and selective.
Triazine Tolerant Canola: Farmozine + F.S.A. CLOPYRALID 600 ADVANCE 600 + Firepower / Firepower 900 + Uptake† Spraying Oil or an equivalent mineral oil + surfactant mix are compatible and selective.
Clearfield Canola: Intervix† + F.S.A. CLOPYRALID 600 ADVANCE are compatible and selective.
F.S.A. CLOPYRALID 600 ADVANCE® 600 is compatible with the following:
Broadleaf Herbicides: 2,4-D Amine, , Artillery, Bronco 400, Bronco MA-X, Cavalier 500, Colt, Diuron 900 WG, Eclipse†, MCPA LVE 570, Ecopar†, Eliminar C†, Elevate, Enforcer 242, Excalibur IVM, Farmozine 900 WG, Flagship 400, Flight EC† , flumetsulam, Legacy MA, LVE MCPA 570, Lynx WG, MCPA 750, Mentor, metsulfuron-methyl, Paradigm, Picoflex, Precept†, Quadrant, Safari 750, Simanex WG, Spray. Seed†, Spraytop 330, Stinger†, sulfometuron methyl, Tackle WG, terbacil/sulfometuron methyl, Terbutrex, Triathlon, Velocity† and Zulu XT.
GRASS HERBICIDES ON BROADLEAF CROPS: Farmozine WG, Firepower, Intervix†, Platinum Xtra 360 and Simanex 900 WG.
GRASS HERBICIDES IN CEREAL CROPS: Atlantis† OD, Countdown, Crusader†, diclofop methyl, Hussar†, Inego 100 EC, Mandate, Mandate XTRA, Monza† and Pentagon 400 WG.
BROAD SPECTRUM HERBICIDES: Diuron 900 WG, Spray.Seed†, Spraytop 250, Spraytop 330, Wipe-Out 450 and Wipe-Out Pro.
ADJUVANTS: Wetspray 1000, Uptake† Spraying Oil or an equivalent mineral oil + surfactant mix and Pulse†.
Forestry: Please consult with Four Seasons Agribusiness Pty Ltd for tank-mix partners.

APPLICATION
Droplet size should be of a coarse spray. Use a nozzle type that is designed for the intended application.

Ground Application
Apply in 50 to 100 L water/ha through accurately calibrated equipment.
Hardhead thistle – Apply in 200 to 250 L/ha of water.
Silver wattle – Apply in150 to 200 L/ha of water.

Aerial Application
Apply in not less than 20 L water/ha through accurately calibrated equipment. DO NOT use less than 50 L/ha for Silver wattle.

Motorised High Volume Hand Gun
Apply the recommended mix to give full coverage of leaves and stems through a No. 6-8 tip at 700 to 1500 kPa. Spray volume for effective coverage of dense two metre high Silver wattle should be 30 to 40 litres of spray per 100 m2 of infestation. For larger areas an equivalent would be 3000 to 4000 litres per infested hectare.

Stem Injection
To make a stem injection pocket at waist height, use a 3/4 length axe with a blade of 5-7 cm. The axe cut must be through the bark and deep enough to place all the chemical in contact with the sap wood.
The chemical must be applied immediately after the injection pocket is made. Apply the chemical with a Phillips 5 mL vaccinator fitted with a tree injector kit which can be accurately calibrated. Set vaccinator to deliver 1 mL of the diluted mix.
When treating regrowth less than the width of the axe, ensure chemical does not run out the sides of the cut, as reduced control will result. This can be overcome by using the corner of the axe to make the pocket in the stem.

CLEANING SPRAY EQUIPMENT
Rinse water should be discharged onto a designated disposal area or, if this is unavailable, onto unused land away from desirable plants and water courses.
Partial cleaning (before spraying other labelled or tolerant crops):
After using F.S.A. CLOPYRALID 600 ADVANCE, empty the tank completely and drain the whole system. Thoroughly wash inside the tank using a pressure hose. Quarter fill the tank with clean water and circulate through the pump, line, hoses and nozzles. Drain and repeat procedure twice.
Complete cleaning (before spraying crops that are susceptible to residues of F.S.A. CLOPYRALID 600 ADVANCE):
After using F.S.A. CLOPYRALID 600 ADVANCE, empty the tank completely and drain the whole system. Thoroughly wash inside the tank using a pressure hose. Quarter fill the tank with clean water and circulate as above, then drain. Quarter fill the tank again and add a liquid alkali detergent at 500 mL/100 L water and circulate throughout the system for at least 15 minutes. If using a concentrated laundry detergent use 250 g (or mL)/100 L water. Do not use chlorine based cleaners. Drain, remove filters and nozzles and clean separately. Rinse inside the tank thoroughly using a pressure hose and flush system with clean water.
These tank cleaning recommendations are for F.S.A. CLOPYRALID 600 ADVANCE only. Please consult tank mix partner labels to determine requirements for decontamination.
Rinse water should be discharged onto a designated disposal area or, if this is unavailable, onto unused land away from desirable plants and water courses.

PLANTBACK PERIODS FOR SOUTHERN AUSTRALIAN WINTER DOMINANT RAINFALL AREAS (Sth NSW, VIC, SA, WA):
Required rainfall – *A minimum 25 mm rain event in the post-harvest summer to autumn period, with a subsequent extended period of at least two weeks where the top 10 cm of the soil stays moist is required to enable breakdown of soil residues. Test this by use of a soil probe to see that soil has been thoroughly wet to 10 cm or more, for a period of at least two weeks. Fastest residue breakdown will occur under good soil moisture and warm conditions, which promote microbial activity. Where significant rain (> 25 mm) has fallen in summer to autumn, with soil wetting for at least two weeks, the following plantback periods apply:*

Following Crops	Rate (mL/ha) used previously	Plantback Interval (months)
Clover, chickpea, faba bean, field pea, lentils, lupins, medics and vetch	Up to 150	9
	150 to 250	12
	>250	24

PLANTBACK PERIODS FOR NORTHERN AUSTRALIA SUMMER DOMINANT RAINFALL AREAS (Nth NSW, QLD):
Required rainfall before plantback:
If planting susceptible summer crops – at least 100 mm rain or irrigation.
If planting susceptible winter crops – at least 150 mm rain or irrigation.
For all situations, sufficient rainfall or irrigation to enable soil wetting for at least one week is essential to enable residue breakdown before planting susceptible crops.

Where these requirements have been met the following plantback periods apply:

Following Crops	Rate and plantback interval	
	Up to 40 mL/ha	**> 40 to 150 mL/ha**
Lucerne	9 months	9 months
Chickpea, Cotton, Soybean, Sunflower	3 months	6 months
Maize, sorghum	1 week	2 weeks

Note: Susceptible crops should not be sown for at least two years where F.S.A. CLOPYRALID 600 ADVANCE 600 at more than 150 mL/ha has been used in Northern Australia.

Cereals and canola may be safely planted immediately after application. However, post-emergent weed control may be reduced due to soil disturbance if one week is not allowed after application.

PRECAUTION

Re-entry

Do not allow entry into treated areas until the spray has dried. If prior entry is required wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.

RESISTANT WEEDS WARNING

GROUP	4	HERBICIDE

F.S.A. CLOPYRALID 600 ADVANCE is a member of the pyridines group of herbicides. The product has the disrupters of plant cell growth mode of action. For weed resistance management, the product is a Group 4 herbicide. Some naturally occurring weed biotypes resistant to the product and other disrupters of plant cell growth 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 the product or other disrupters of plant cell growth herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Four Seasons Agribusoness 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 Four Seasons Agribusiness Pty Ltd representative.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

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

Composts and mulches – DO NOT apply F.S.A. CLOPYRALID 600 ADVANCE to crops or pastures that will be used for the production of compost or mulches or mushroom substrate. Such compost or mulch made from plant material treated with F.S.A. CLOPYRALID 600 ADVANCE 600 may cause damage to susceptible crops and plants.

Susceptible crops and plants include, but are not limited to chickpeas, clover, cotton, faba beans, field peas, fruit trees, lentils, lupins, lucerne, medics, ornamentals, potatoes, safflower, tomatoes, vegetables, grape and kiwifruit vines, vetches, and wattles. **Field peas, faba beans, lentils and vetches are particularly susceptible and should not be sown the season following an application of F.S.A. CLOPYRALID 600 ADVANCE at 250 mL/ha.**

Where F.S.A. CLOPYRALID 600 ADVANCE residue carryover from use rates of less than 250 mL/ha is suspected and susceptible crops are to be planted, test the treated area as follows:

- *Field bioassay – where rain allows, plant a small area of the susceptible crop four to six weeks before desired planting date and take note of any symptoms of injury. If any herbicide symptoms are observed, only plant either canola or a cereal (see recommendation for northern and southern Australia below).*
- *Pot bioassay – where not practical to do field bioassay, plant a small number of seeds of the susceptible crop into pots containing soil from the treated field. Do this four to six weeks before desired planting date. If any herbicide symptoms are observed, only plant either canola or a cereal (see recommendation for northern and southern Australia below).*

Stubble from treated crops – ensure that harvesters effectively spread crop straw and do not leave a heavy 'header trail' after harvest. Burn (if legal in the area), bale and remove, slash or incorporate stubble as soon as practical after harvest and as long as possible before planting next year to allow microbial breakdown of any residues in straw. Heavy stubble loads may carry more residues into the following season. **Where there is a heavy stubble burden and/or non-wetting soils, soils with low organic matter, grazing that causes surface sealing and reduced water penetration or F.S.A. CLOPYRALID 600 ADVANCE has been applied late in the previous season and less than the recommended rain amount have occurred from application to planting the susceptible crop (see below), only plant a winter or summer cereal or canola.**

Planting crops following use of F.S.A. CLOPYRALID 600 ADVANCE in previous crop – planting crops 'dry' without significant rain (see below) in the 'autumn break' increases the risk of injury to susceptible crops. This practice should be avoided, or only plant a winter or irrigated summer cereal crop or canola. **In severely dry conditions, where < 30% of average annual rainfall and/or less than the minimum rain (see below) has fallen between application and planting the next year, only plant a winter or summer cereal or canola.**

PROTECTION OF LIVESTOCK

DO NOT graze or cut treated crops for stock food except as specified under WITHHOLDING PERIODS.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

F.S.A. CLOPYRALID 600 ADVANCE 600 has low toxicity to fish, birds, honey bees, livestock, earthworms and aquatic organisms. **DO NOT** contaminate streams, rivers or watercourses with chemical or used containers.

STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight.

***drumMUSTER* Containers**

This container can be recycled if it is clean, dry, free of visible residues and has the *drumMUSTER* logo visible. Triple rinse container for disposal. Dispose of rinsate by adding it to the spray tank. Do not dispose of undiluted chemical on site. Wash outside of the container and the cap. Store cleaned container in a sheltered place with cap removed. It will then be acceptable for recycling at any *drumMUSTER* collection or similar container management program site. The cap should not be replaced, but may be taken separately.

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.

Returnable Containers (110 L, 200 L)

Do not tamper with the valve or the security seal. Do not contaminate the container with water or any foreign matter. After each use of the product, please ensure that the coupler delivery system and hoses are disconnected, triple rinsed with clean water and drained accordingly. When empty or contents no longer required, close all valves and return to the point of supply for refill or storage. The container remains the property of Four Seasons Agribusimess Pty Ltd.

Refillable Containers (1000 L)

Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

SAFETY DIRECTIONS

Harmful if absorbed by skin contact or swallowed. Will irritate the skin. May irritate nose and throat. Avoid contact with eyes and skin. Do not inhale vapour or spray mist. When using together with other products, consult their safety directions. When opening the container, preparing the spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow length chemical resistant gloves. In addition, when preparing the product for use wear face shield or goggles. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

FIRST AID
If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26, New Zealand 0800 764 766. If swallowed, do not induce vomiting.

Warning – May cause allergy in sensitive individuals.

SAFETY DATA SHEET
For further information refer to the Safety Data Sheet which is available from the supplier.

CONDITIONS OF SALE
The sale, supply, storage, use and application of this product is beyond the control of the manufacturer, and, subject to this provision, all warranties, conditions, rights and remedies express or implied under common law, statute or otherwise, in relation to the sale, supply, storage, use or application are excluded. Four Seasons Agribusiness Pty Limited and its associated entities shall not accept any liability whatsoever (including consequential loss) or however arising (including negligence) for any damage, injury or death connected with the sale, supply, storage, use or application of this product except for liability which cannot be excluded by statute.

† Other trademarks

Causes serious eye damage

IN A TRANSPORT EMERGENCY DIAL 000 POLICE OR FIRE BRIGADE	**FOR SPECIALIST ADVICE IN AN EMERGENCY ONLY, CALL 1800 033 111 (24 HOURS)**

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