Product Name: 4FARMERS PYRASULFOTOLE 80 HERBICIDE
APVMA Approval No: 93228/138413

RLP
APPROVED

Label Name:	4FARMERS PYRASULFOTOLE 80 HERBICIDE

Signal Headings:	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Constituent Statements:	ACTIVE CONSTITUENTS: 80 g/L PYRASULFOTOLE 21 g/L MEFENPYR-DIETHYL ALSO CONTAINS 405.2 g/L Liquid Hydrocarbon solvent 384 g/L N-Butyl Pyrrolidinone

Mode of Action:	GROUP 27 HERBICIDE

Statement of Claims:	For the post-emergent control of certain broadleaf weeds in wheat, barley, oats, cereal rye and triticale as specified in the DIRECTIONS FOR USE table.

Net Contents:	500mL to 1000L

Restraints:	This section contains file attachment.

Directions for Use:	This section contains file attachment.

Other Limitations:	

Withholding Periods:	WITHHOLDING PERIODS Harvest NOT REQUIRED WHEN USED AS DIRECTED Grazing/Stockfood Wheat, barley, oats, triticale and cereal rye: When mixed with MCPA: DO NOT GRAZE OR CUT FOR STOCKFOOD FOR 4 WEEKS AFTER APPLICATION When mixed with 4Farmers Bromoxynil 200: DO NOT GRAZE OR CUT FOR STOCKFOOD FOR 8 WEEKS AFTER APPLICATION

Trade Advice:	EXPORT OF TREATED PRODUCE Growers should note that MRL's or import tolerances DO NOT exist in all markets for produce treated with 4Farmers Pyrasulfotole 80 Herbicide. If you are growing produce for export, please check with 4Farmers Australia for the latest information on MRL's and import tolerance before using 4Farmers Pyrasulfotole 80 Herbicide.

General Instructions:	This section contains file attachment.

Resistance Warning:	Resistant Weeds Warning GROUP H HERBICIDE 4Farmers Pyrasulfotole 80 EC Selective Herbicide contains members of the pyrazole (pyrasulfotole) groups of herbicides. 4Farmers Pyrasulfotole 80 EC is a herbicide which inhibits 4-hydroxyphenylpyruvate dioxygenase (4-HPPD). For weed resistance management 4Farmers Pyrasulfotole 80 EC is a Group 27 herbicide. Some naturally-occurring weed biotypes resistant -to 4Farmers Pyrasulfotole 80 EC, and other Group 27 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 may not be controlled by 4Farmers Pyrasulfotole 80 EC or other Group 27 herbicides. Since occurrence of resistant weeds is difficult to detect prior to use, 4Farmers Australia Pty Ltd accepts no liability for any losses that may result from the failure of 4Farmers Pyrasulfotole 80 EC to control resistant weeds. Do not rely exclusively on 4Farmers Pyrasulfotole 80 EC for weed control. Use as part of an integrated weed management program involving herbicides with other modes of action and non-chemical methods of control. Croplife Australia resistance management strategies are available from your local agricultural chemical supplier. Refer to these strategies for details of how to manage the buildup of resistant weeds on your farm.

Precautions:	Re-entry Period: Do not allow entry into treated areas until the spray has dried. When prior entry is necessary, 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.

Protections:	PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT Highly toxic to algae and aquatic plants. DO NOT contaminate streams, rivers or waterways with this product or used containers. DO NOT apply under weather conditions or from spraying equipment that could be expected to cause spray to drift onto wetlands, natural surface waters, neighbouring properties or other sensitive areas. PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS DO NOT apply under weather conditions, or from spraying equipment, that may cause spray to drift and MCPA volatilization onto nearby susceptible plants/crops, cropping lands or pastures.

Storage and Disposal:	STORAGE AND DISPOSAL Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. (Non-refillable containers) 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, triple rinse, break, crush or puncture and deliver empty packaging for appropriate disposal at 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. Empty containers and product must not be burnt. Do not re-use empty container for any other purpose. Returnable containers) If tamper evident seals are broken prior to initial use then the integrity of the contents cannot be assured. Empty container by pumping through dry-break connection system. Do not attempt to breach the valve system or the filling point, or contaminate the container with water or other products. Ensure that the coupler, pump, meter and hoses are disconnected, triple rinsed with clean water and drained after each use. When empty, or contents no longer required, return the container to the point of purchase. This container remains the property of 4Farmers Australia Pty. Ltd.

Safety Directions:	Will irritate the eyes, nose and throat and skin. Avoid contact with eyes and skin. Do not inhale vapour or spray mist. When using together with other products, consult their label safety directions. When opening the container and preparing the spray, wear cotton overalls, buttoned to the neck and wrist (or equivalent clothing), elbow-length chemical resistant gloves and face shield or goggles. When using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing). Wash hands after use. After each day’s use, wash gloves, face shield or goggles and contaminated clothing.

First Aid Instructions:	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. If in eyes wash out immediately with water.

First Aid Warnings:	

RESTRAINTS

DO NOT use if rainfall or irrigation is to occur within 2 hours of application.
DO NOT apply to frost affected weeds or if frosts are imminent.
DO NOT apply without adjuvant. See **'Use of Adjuvant/Wetting Agent'** under 'General Instructions'.
DO NOT apply to broadleaf crops, e.g. canola, chickpea, clover, faba bean, lupin, lucerne, medic, vetch.
DO NOT apply to any crop other than wheat, barley, cereal rye or triticale. **DO NOT** apply to oats.
DO NOT apply the Bromoxynil tank mix using aircraft.
DO NOT apply through a mister.

SPRAY DRIFT RESTRAINTS

Specific definitions for terms used in this section of the label can be found at www.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. 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 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.

Tank mix with 56727 - 4FARMERS BROMOXYNIL 200 SELECTIVE HERBICIDE

DO NOT apply by a boom sprayer unless the following requirements are met:

- boom height is no higher than 0.50 - 0.55 m above the ground
- Spray droplets not smaller than a MEDIUM spray droplet size category.
- Minimum distances between the application site and downwind sensitive areas (see 'Mandatory buffer zones' section of the following table titled 'Buffer zones for boom sprayers') are observed.

Buffer zones for boom sprayers

Application rate	Boom height above the target canopy	Mandatory downwind buffer zones		
		Natural aquatic areas	Vegetation areas	Livestock
Up to maximum label rate	0.55 m or lower	20 m	40 m	250 m

Tank mix with 66909 - 4FARMERS LVE MCPA 570 HERBICIDE

DO NOT apply by a boom sprayer unless the following requirements are met:

- Spray droplets not smaller than a MEDIUM spray droplet size category.
- Minimum distances between the application site and downwind sensitive areas (see Mandatory buffer zones section of the following table titled 'Buffer zones for boom sprayers') are observed.

Buffer zones for boom sprayers

Application rate	Mandatory downwind buffer zones		
	Natural aquatic areas	Vegetation areas	Livestock area
Up to maximum label rate	10 m	10 m	20 m

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

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

Buffer zones for aircraft

Type of aircraft	Wind speed at time of application	Mandatory downwind buffer zones		
		Natural aquatic areas	Vegetation areas	Livestock areas
Fixed Wing and Helicopter	from 3 to 8 kilometres per hour	40 m	300 m	200 m
	from 8 to 14 kilometres per hour	40 m	500 m	300 m
	from 15 to 20 kilometres	60 m	700 m	400 m

DIRECTION FOR USE table 1

MIXING PYRASULFOTOLE 80 with 4FARMERS MCPA LVE 570 HERBICIDE

CROP	WEED	STATE	WEED STAGE	RATE per ha	CRITICAL COMMENTS
Wheat, oats, cereal rye, triticale, 3 leaf (Z13) to first node (Z31); **barley,** 5 leaf (Z15) to first node (Z31) #See "Adjuvant/ Crop Oil/ Surfactant/Wetting Agent"	Field pea (Pisum sativum)	All states	2 to 5 leaf	315 to 625 ml + 220 to 440 ml MCPA LVE 570	Under good conditions 4Farmer Pyrasulfotole + MCPA LVE 570 at bottom registered rates will provide satisfactory control of field pea. Use the lower rate where good coverage of each weed can be attained
	Fumitory *(Fumeria densiflora)*		2 to 6 leaf	315 to 625 ml + 220 to 440 ml MCPA LVE 570	Use the lower rate where good coverage of each weed can be attained.
	Indian hedge mustard (*Sisymbrium orientale)*		2 to 8 leaf	315 to 625 ml + 220 to 440 ml MCPA LVE 570	Use the lower rate where good coverage of each weed can be attained
	Lupin, volunteer *(Lupinus* spp.)		2 to 8 leaf	315 to 625 ml + 220 to 440 ml MCPA LVE 570	Use the lower rate where good coverage of each weed can be attained
	Medic, volunteer *(Medicago* spp.)		2 to 4 leaf	625 ml + 440 ml MCPA LVE 570	-
	Paterson's curse *(Echium plantagineum)*		2 to 6 leaf	315 to 625 ml + 220 to 440 ml MCPA LVE 570	Use the lower rate where good coverage of each weed can be attained
	Prickly lettuce *(Lactuca serriola)*		2 to 6 leaf	315 to 625 ml + 220 to 440 ml MCPA LVE 570	Use the lower rate where good coverage of each weed can be attained
	Sowthistle (*Sonchus o/eraceus)*		2 to 8 leaf	315 to 625 ml + 220 to 440 ml MCPA LVE 570	Use the lower rate where good coverage of each weed can be attained.
	Turnip weed *(Rapistrum rugosum)*		2 to 6 leaf	315 to 625 ml + 220 to 440 ml MCPA LVE 570	Use the lower rate where good coverage of each weed can be attained

CROP	WEED	STATE	WEED STAGE	RATE per ha	CRITICAL COMMENTS
Wheat, oats, cereal rye, triticale, 3 leaf (Z13) to first node (Z31); **barley,** 5 leaf (Z15) to first node (Z31) #See "Adjuvant / Crop Oil / Surfactant / Wetting Agent"	Wild radish *(Raphanus raphanistrum)*	All States	2 to 4 leaf	315 to 625 ml + 220 to 440 ml MCPA LVE 570	DO NOT use the lower rates where excellent coverage is not possible. Where target weeds overlap each other, non target weeds overlap the target weed, ground or standing stubble impedes excellent coverage or crop impedes excellent coverage of all target weeds; increasing the rate up to the high end of recomendations will improve control in most situations. Because high weed density may cause shading of weeds lower in the plant canopy or other factors may impede excellent herbicide leaf contact a follow up application of a suitable herbicide may be required to control plants remaining after a combined application of 4farmers Pyrasulfotole 80 EC and MCPA LVE 570.
			Up to 6 leaf	470 to 625 ml + 330 to 440 ml MCPA LVE 570	Use lower rate where good coverage of each weed can be attained
			Up to 8 leaf	625 ml + 440 ml MCPA LVE 570	-
	Wild turnip *(Brassica tournefortii)*		2 to 8 leaf	315 to 625 ml + 220 to 440 ml MCPA LVE 570	Use lower rate where good coverage of each weed can be attained
	Wireweed *(Polygonum aviculare)*		2 to 8 leaf	315 to 625 ml + 220 to 440 ml MCPA LVE 570	Use lower rate where good coverage of each weed can be attained
	Yellow burrweed *(Amsinkia lycopsoides)*		2 to 6 leaf	470 to 625 ml + 330 to 440 ml MCPA LVE 570	Use lower rate where good coverage of each weed can be attained

DIRECTION FOR USE table 2

MIXING PYRASULFOTOLE 80 WITH 56727 - 4FARMERS BROMOXYNIL 200 SELECTIVE HERBICIDE

CROP	WEED	STATE	WEED STAGE	RATE per ha	CRITICAL COMMENTS
General: Do not use the Pyrasulfotole @ 235 mL + Bromoxynil 200 @ 525mL /Ha OR **Pyrasulfotole @ 315 mL + Bromoxynil 200 @ 670mL/ha rate alone where excellent coverage is not possible.** Increasing the pyrasulfotole rate up to 470 mL/ha combined with 1050 mLs of Bromox 200, or on relevant weeds tank mixing, with further inclusion of MCPA LVE, will improve control in most situations where- target weeds overlap each other, non target weeds overlap the target weed, ground or standing stubble impedes excellent coverage or crop canopy impedes excellent coverage of all target weeds.					
Wheat, cereal rye, triticale, barley - 2 leaf (Z12) to first node (Z31)	Bedstraw (*Gallium* sp.)	All States	2 up to 6 leaf	315 - 470mL plus 700 - 1050mL Bromoxynil 200	-
	Bifora (Bifora testiculata)		2 up to 5 leaf	315 - 470mL plus 525 - 670mL bromoxynil 200	-
	Bindweed (Fallopia convolvulus)		2 up to 4 leaf	235mL + 525mL bromoxynil 200	Subsequent germinations of bindweed may occur after application. Refer to General Instructions - "Weed density" and "Weed emergence after application".
			2 up to 6 leaf	315 - 470mL plus 700 - 1050 mL bromoxynil 200L	
	Capeweed (Arctotheca calendula)		2 up to 6 leaf	235 - 470 mL plus 525 - 1050 mL bromoxynil 200	Use the higher rate on higher density populations.

	Corn gromwell (Buglossoides arvensis)	2 up to 6 leaf	235 - 470 mL plus 525 - 1050 mL bromoxynil 200	Use the lower rate where good coverage of each weed can be achieved.
	Deadnettle (Lamium amplexicaule)	2 up to 6 leaf	235 - 470 mL plus 525 - 1050 mL bromoxynil 200	-
	Doublegee/Spiny emex (Emex australis)	2 up to 4 leaf	235 - 470 mL plus 525 - 1050 mL bromoxynil 200	Use the lower rate for good weed growing conditions.
	Fumitory (Fumaria densiflora)	2 up to 6 leaf	235 - 470 mL plus 525 - 1050 mL bromoxynil 200	Use the higher rate on higher density populations. Insufficient information exists on other fumitory species.
	Indian hedge mustard (Sisymbrium orientale)	2 up to 8 leaf	235 - 470 mL plus 525 - 1050 mL bromoxynil 200	-
	Paterson's curse (Echium plantagineum)	2 up to 6 Leaf	235 - 470 mL plus 525 - 1050 mL bromoxynil 200	Use the lower rate where good coverage of each weed can be achieved.
	Prickly lettuce (Lactuca serriola)	2 up to 6 leaf	235 - 470 mL plus	-

				525 - 1050 mL bromoxynil 200	
	Saffron thistle (Carthamus lanatus)		2 up to 6 leaf	315 - 470mL plus 670 - 1050 mL bromoxynil 200	Use the lower rate where good coverage of each weed can be achieved.
	Shepherd 's purse (*Capsella bursa*-pastoris)		2 up to 6 leaf	235 - 470 mL plus 525 - 1050 mL bromoxynil 200	-
	Annual sowthistle (Sonchus oleraceus)		2 up to 8 leaf	235 - 470 mL plus 525 - 1050 mL bromoxynil 200	-
	Turnip weed (Rapistrum rugosum)		2 up to 8 leaf	235 - 470 mL plus 525 - 1050 mL bromoxynil 200	-

CROP	**WEED**	**STATE**	**WEED STAGE**	**RATE** **per ha**	**CRITICAL COMMENTS**
General: Do not use the 235 mL or 315 mL/ha rate alone where excellent coverage is not possible. Increasing the rate up to 470 mL/ha, or on relevant weeds tank mixing with MCPA LVE, will improve control in most situations where - target weeds overlap each other, non target weeds overlap the target weed, ground or standing stubble impedes excellent coverage or crop canopy impedes excellent coverage of all target weeds.					
Wheat , cereal rye, triticale, barley - 2 leaf (Z12) to first node (Z31)	Volunteer canola (Brassica napus)	All States	2 up to 8 leaf	235 - 470 mL plus 525 - 1050 mL bromoxynil 200	-
	Volunteer chickpeas (Cicer arietinum)		2 up to 6 leaf	235 - 470 mL plus	**Suppression of chickpeas** - will suppress the growth of chickpeas but may not

			525 - 1050 mL bromoxynil 200	
	Volunteer faba beans (Vicia faba)	2 up to 6 leaf	235 - 470 mL plus 525 - 1050 mL bromoxynil 200	-
	Volunteer field peas (Pisum sativum)	2 up to 8 leaf	235mL + 525mL bromoxynil 200	**Suppression of field peas** - will suppress the growth of field peas but may not adequately reduce plant numbers.
			315 - 470mL plus 670 - 1050 mL bromoxynil 200	**Control of field peas.**
	Volunteer lentils (Lens culinaris)	2 up to 6 leaf	235 - 470 mL plus 525 - 1050 mL bromoxynil 200	**Suppression of lentils** -
	Volunteer lupins (Lupinus spp.)	2 up to 8 leaf	235 - 470 mL plus 525 - 1050 mL bromoxynil 200	Use the higher rate on higher density populations.
	Volunteer seedling lucerne (Medicago sativa)	2 up to 6 leaf	235 - 470 mL plus 525 - 1050 mL bromoxynil 200	-
	Volunteer medic (Medicago spp.)	2 up to 6 leaf	235mL + 525mL bromoxynil 200	**Suppression of medic** - will suppress the growth of medic but may not adequately reduce plant numbers.
			315 - 470mL	**Control of medic.**

				plus 670 - 1050 mL bromoxynil 200	
	Volunteer vetch (Vicia sativa)		2 up to 6 leaf	235 - 470 mL plus 525 - 1050 mL bromoxynil 200	**Suppression of vetch** - will suppress the growth of vetch but may not adequately reduce plant numbers.
	Wild radish (Raphanus raphanistrum)		2 up to 4 leaf	235 - 470 mL plus 525 - 1050 mL bromoxynil 200	

CROP	WEED	STATE	WEED STAGE	RATE per ha	CRITICAL COMMENTS
General: Do not use the 235 mL or 315 mL/ha rate alone where excellent coverage is not possible. Increasing the rate up to 470 mL/ha, or on relevant weeds tank mixing with MCPA LVE, will improve control in most situations where - target weeds overlap each other, non target weeds overlap the target weed, ground or standing stubble impedes excellent coverage or crop canopy impedes excellent coverage of all target weeds.					
Wheat , cereal rye, triticale, barley - 2 leaf (Z12) to first node (Z31) (cont'd)	Wild radish *(Raphanus raphanistrum)*	**All States**	Up to 6 leaf	315 - 470mL plus 670 - 1050 mL bromoxynil 200	**See General comments for this table -** Further to general comment - because high weed density may cause shading of weeds lower in the plant canopy or other factors may impede excellent herbicide leaf contact a follow up application of a suitable herbicide may be required to control plants remaining after an application of this mix of herbicide.
	Wild turnip (Brassica tournefortii)		2 up to 8 leaf	235 - 470 mL plus 525 - 1050 mL bromoxynil 200	-

				235mL + 525mL bromoxynil 200	**Suppression of wireweed** - will suppress the growth of wireweed but may not adequately reduce plant numbers.
	Wireweed (Polygonum aviculare)		2 up to 6 Leaf	315 - 470mL plus 670 - 1050 mL bromoxynil 200	**Control of wireweed.**
	Yellow burrweed (Amsinkia lycopsoides)		2 up to 6 leaf	315 - 470mL plus 670 - 1050 mL bromoxynil 200	-

GENERAL INSTRUCTIONS

4Farmers Pyrasulfotole 80 EC is a selective pyrazole (which inhibits 4-HPPD - Group 27) herbicide. It is predominantly a foliar herbicide with limited activity via the soil. 4 F a r m e r s Pyrasulfotole 80g/L EC will not reliably control weeds that emerge after spraying. Results are best under good growing conditions and application to weeds or crop under stress should be avoided. 4Farmers Pyrasulfotole 80g/L EC will substantially reduce the growth of many weeds rather than give complete plant kill.

Refer to the **Critical Comments** in the **Directions for Use table** above and further information in the following **General Instructions,** which includes;

1. **Adjuvant/crop oil/surfactant/wetting agent**
2. **Application**
   a) *Mixing*
   b) *Spraying equipment*
   c) *Sprayer clean up*
3. **Other factors Influencing weed control**
   a) *Application time of day*
   b) *Effect of climate*
   c) *Weed coverage*
   d) *Weed density*
   e) *Weed stage*
   f) *Weed emergence after application*
4. **Compatibility**
5. **Crop safety**
6. **Crop rotation recommendations**

It is important that all parts of the **General Instructions** are read in conjunction with the **Directions for Use table.**

Adjuvant/Crop Oil/Surfactant/Wetting agent

A recommended adjuvant must be used in conjunction with **4Farmers Pyra 80 + MCPA tank mixtures** The recommended adjuvants include spray grade liquid ammonium sulphate at 500 grams active or the crop oil Speedy Spray (0.5 to 1% v/v), Supercharge ® at 0.75% v/v or Take Up at 0.5% v/v. The use of Hasten at 0.5% v/v may reduce speed of control compared to Hasten at 1% v/v.

For **4Farmers Pyra+ Bromoxynil tank mixtures** with other products in wheat, barley, cereal rye or triticale. Recommended adjuvants are Hasten (1%v/v) Supercharge ® at 0.75% v/v or Take Up at 0.5% v/v. The use of The use of BS1000 or Ammonium sulphate may result in reduced weed control.

Consult 4Farmers Australia Pty. Ltd. for information on other adjuvants.
DO NOT use non ionic surfactants, e.g. BS 1000 unless tank mixing with Hussar® OD or Imtrade Maddog® selective herbicides. For mixtures with compatible products refer to the table **Adjuvant Recommendation with Compatible Products** in the **Compatibility** section (section 4) below.

2. Application

Ensure that complete and even spray coverage of all weeds is achieved.
Please refer also to the SPRAY DRIFT RESTRAINTS and MANDATORY BUFFER ZONES in the RESTRAINTS section of this label.

a) Mixing

Half fill the spray tank with water, then with agitators in motion, add any compatible granular products if required, then add the correct amount of 4Farmers Pyrasulfotole 80 EC Selective Herbicide directly into the spray tank. Add other relevant compatible herbicides, then adjuvant or crop oil as recommended. Complete filling the tank with agitators in motion. Agitation must continue before and during spraying.

b) Spraying Equipment

Ground Sprayers – Use only Low and or Standard boom sprayers as recommended and must be fitted with by- pass or mechanical agitation. It is recommended that 50 to 100 L water/ha is applied. However in the case of advanced weeds (greater than 4 leaf at application), heavy weed density (causing shading of weeds) or heavy crop canopy (causing shading of weeds), it is recommended that a spray volume in the range 70 - 150 L water/ha is used as adequate coverage is critical to ensure control.

The use of a nozzle that will deliver a MEDIUM spray is recommended. The use of flat fan nozzles is recommended.

Aerial application – When tank mixed with MCPA only

Apply in a minimum of 30 L water per hectare.

Effective weed control will only be achieved where good coverage of each weed leaf surface is achieved, on actively growing weeds. Weed size needs to be considered in conjunction with weed density. If an aerial application is to be considered, then treat target weeds at the earliest possible growth stage.

The rate of product applied should be increased (up to a maximum of 625 mL/ha pyrasulfatole and 440 mL/ha MCPA) to improve reliability when applying with aircraft. Use a recommended spray oil as the adjuvant rather than ammonium sulphate when applying by aircraft.

Misters: DO NOT apply through a Mister

c) Sprayer Clean Up

The sprayer must be thoroughly cleaned before being used again to spray crops other than winter cereals.

Warning: The rubber components present in some spraying units have shown they may be affected by exposure to undiluted 4Farmers Pyrasulfotole 80 EC. To reduce the risk of the rubber components of the spraying unit being adversely affected by exposure to the product, it is recommended that the spray unit be thoroughly cleaned after each use.

Cleaning procedure: Ensure that the following operation is carried out in an area that is clear of waterways, desirable vegetation and tree roots, and preferably in an area where drainings can be contained.

Fill the boom tank with water, rinse and repeat this procedure (i.e. fill and rinse the tank twice) then remove and clean all filters (inline and nozzle) separately. A boom cleaner should be used in this process to provide an effective cleaning technique for 4Farmers Pyrasulfotole 80 EC. This should be done immediately after spraying is finished to prevent dried residues

adhering to the tank/lines/filters.

When a tank mixture of 4Farmers Pyrasulfotole 80 EC with a compatible product has been used, more rigorous cleaning of the sprayer may be required than when using 4Farmers Pyrasulfotole 80 EC alone. Refer to the compatible product label for appropriate instructions in this event.

3. Other Factors Influencing Weed Control

a) Application time of day

Optimum performance of 4Farmers Pyrasulfotole 80 EC occurs when it is applied in warmer temperatures with good light intensity. To maximise efficacy apply 4Farmers Pyrasulfotole 80 EC during the day, at least 1 hour before sunset, particularly if followed by low overnight temperatures.

b) Effect of climate

Activity of 4Farmers Pyrasulfotole 80 EC Selective Herbicide will be reduced if weeds are stressed. Optimum results will be obtained if good temperature, good light intensity and good soil moisture exists at application.

Rainfast period

DO NOT use if rainfall or irrigation is to occur within 2 hours of application.

Temperature

DO NOT apply to frost affected weeds or if frosts are imminent.

The use of 4Farmers Pyrasulfotole 80 EC Selective Herbicide at 670 mL/ha may provide better control of weeds during frosty periods.

c) Weed coverage

Reduced control will occur where target weeds overlap each other, non target weeds overlap the target weed, ground or standing stubble impedes excellent coverage or crop impedes excellent coverage of all target weeds. Increasing the 4Farmers Pyrasulfotole 80 EC rate up to 670 mL/ha will improve control in most situations. Because weed overlap may cause shading of weeds lower in the plant canopy or other factors may impede excellent herbicide leaf contact, a follow up application of a suitable herbicide may be required to control plants remaining after an application of 4Farmers Pyrasulfotole 80 EC.

d) Weed density

For reliable control good contact must be made with each plant. High weed density may cause shading of plants lower in the weed canopy. In dense weed or crop stands a follow up application of a suitable herbicide may be required to control remaining plants.

DO NOT use the minimum specified rate where excellent coverage of each weed through the canopy is not possible. For dense weed populations, increasing the rate to 670 mL/ha will improve control in most situations. Because high weed density may cause shading of weeds lower in the plant canopy a follow up application of a suitable herbicide may be required to control plants remaining after an application of 4Farmers Pyrasulfotole 80 EC.

Where crop or weed density is high, water volume should be increased as recommended in the **Application** section (section 2) above.

e) Weed stage

Apply when weeds are actively growing. In most situations the rate specified for each weed size will give satisfactory control. Under certain conditions such as:

*high crop or weed density
*later germinations
*abnormal weed growth including early flowering
- higher rates of 4Farmers Pyrasulfotole 80 EC Selective Herbicide up to 670 mL/ha may be required.

4Farmers Pyrasulfotole 80 EC Selective Herbicide may not effectively control:

* regrowth of suppressed weeds;
* transplanted weeds;
* weeds growing under stress from previous herbicide applications.

Weed emergence after application

4Farmers Pyrasulfotole 80 EC Selective Herbicide will not reliably control following germinations of weeds. A follow up application of a suitable herbicide may be required to control remaining plants or plants that emerge after application. The use of 4Farmers Pyrasulfotole 80 EC Selective Herbicide at 670 mL/ha will provide better control of weed emergence following application.

4. Compatibility

Observe the more rigorous of the recommended crops and crop safety restrictions for the 4Farmers Pyrasulfotole 80 EC and companion herbicide labels when tank mixing. When mixing with other herbicides increased crop effects may occur. For the latest information on mixing 4Farmers Pyrasulfotole 80 Herbicide with other products contact 4FARMERS Australia.

5. Crop Safety

4Farmers Pyrasulfotole 80 EC Selective Herbicide generally shows good crop selectivity when used as directed. Thefollowing will help minimise crop effects.

Selective crops

- DO NOT apply to crops under sown with legumes or to broadleaf pastures.
- DO NOT apply to any crop other than wheat, barley, oats, cereal rye or triticale.
- DO NOT apply to hay crops unless boom overlap growth reduction is accepted.

Recommended growth stage

Tank Mix with MCPA 2-ethylhexyl ester

- Wheat, oat, triticale and cereal rye should be applied at minimum 3 leaf stage (Z13 growth stage).
- Barley should be at minimum 5 leaf stage (Z15 growth stage), before application of 4Farmers Pyrasulfotole 80 EC Selective Herbicide and MCPA 2-ethylhexyl ester. Consult your local agronomist for the latest advice on varieties which require later growth stage applications to avoid the effects of LVE MCPA.
- DO NOT apply later than Z31 (first node).

Tank Mix with Bromoxynil

- Wheat, barley, triticale and cereal rye should be a minimum 2 leaf stage (Z12 growth stage), before application.
- DO NOT apply later than Z31 (first node). Although Pyrasulfatole may be applied to Z31, shading of weeds from advanced crop means that Pyrasulfatole and bromoxynil tank mixes should be applied onto young crop.
- Optimum results are achieved when sprayed 4 - 6 weeks after sowing onto maximum 4 leaf weeds when cereals have usually 2 to 5 leaves (Z12-Z21).

Agronomic and environmental factors

• Some crop yellowing and growth retardation may occur within 2 to 5 weeks of application. Where 4Farmers Pyrasulfotole 80 EC Selective Herbicide up to 670 mL/ha is applied, any effects will be negligible and rapidly dissipate except in areas of boom overlap. In boom overlap areas, growth retardation may occasionally remain until spring. Grain yield will not be compromised.

• Growth retardation and discolouration may be increased if the crop is affected by root disease, (e.g. cereal cyst nematode, rhizoctonia, take-all etc), nutritional stress, waterlogging, drought stress, excessively cold conditions or previous herbicide treatment.

• DO NOT apply to cereals that are physically damaged (e.g. by hail, wind, insect attack).

• DO NOT apply to crops not actively growing, e.g. due to cold and wet conditions or drought stress.

6. Crop Rotation Recommendations

Minimum re-cropping intervals apply for all crops following 4Farmers Pyrasulfotole 80 EC Selective Herbicide application. Recropping intervals are dependent on the rate of product applied. Areas that receive double rates (boom overlaps) may show symptoms of damage in sensitive crops. This is generally restricted to discolouration (bleaching) of the crop but may also result in biomass reduction or reduced yields in some situations.

For advice on crops not listed below, contact the manufacturer, 4Farmers Australia Pty. Ltd.

Rainfall/irrigation -winter and summer recropping

For crops listed as requiring a minimum amount of rainfall or irrigation in combination with a set recropping interval; rainfall and irrigation totaling less than the stated amount in the tables below following use of 4Farmers Pyrasulf 80 EC may result in an extended recropping interval; patchy rain, withextended dry periods may also result in an extended recropping intervals, even when rainfall exceeds the minimum stated. If in doubt, seek specialist advice.

Dry conditions or less than the recommended minimum rainfall and irrigation

Where less than the minimum rain has fallen between application and planting the next year, it isrecommended to only plant a cereal.

pH

Application to soils with a pH greater than 8.4 (soil in water) has not been tested and is not recommended.

Recropping symptoms are reduced on acid soils (pH < 6.5 soil in water, pH < 6.0 in $CaCl_2$) .

Tank mixture with other herbicides
In the event that a tank mixture of 4Farmers Pyrasulfotole 80 EC and another herbicide has been used, the longer recropping interval of the tank mix products should be observed for the crop in question.

Crop - winter sown	**4Farmers Pyrasulfotole 80 EC rate applied**	**Minimum rainfall/ irrigation required**	**Recropping Interval**
Wheat, barley, oats, triticale	up to 625 mL/ha	-	3 weeks
Canola, clover*, chickpea, faba bean*, field pea, lentil*, lucerne, lupin, vetch	470 mL/ha	250 mm	9 months
Alkaline or neutral soils Canola, chickpea, field pea, lucerne, lupin, vetch	625 mL/ha**	250 mm	..
Acid soils (pH < 6.5 in water, pH < 6.0 in CaCl2) Canola, chickpea, clover, faba bean, field pea, lentil, lucerne, lupin, medic, vetch	625 mL/ha	250 mm	

Crop - winter sown	**4Farmers Pyrasulfotole 80 EC rate applied**	**Minimum rainfall/ irrigation required**	**Recropping Interval**
Alkaline soils Lentil, medic Note: On soils with free limestone do not use this product above 1 L/ha unless substantial biomass reduction (medic)or discolouration (lentil, medic) is accepted in areas of boom overlap	625 mL/ha (see note in Crop column)	500 mm	21 months

For winter recropping, transient biomass reduction or discolouration may occur where recropped following 4Farmers Pyrasulfotole 80 EC application. When used as directed grain yield is not compromised where transient biomass reduction or discolouration occurs.

* Where 4Farmers Pyrasulfotole 80 EC at 670 mL/ha is applied on alkaline soils, recropped areas that receive double rates (boom overlaps) may show increased symptom's of damage in crops such as clover, faba bean and lentil. This is generally restricted to discolouration (bleaching) of the crop but may also result in biomass reduction or reduced yields in some situations.
**Where 4Farmers Pyrasulfotole 80 EC at 670 mL/ha is applied on alkaline soils,

recropped areas that receive double rates (boom overlaps) may show increased symptoms of damage in crops such as canola, field pea, lentil, lupin, medic and vetch. This is generally restricted to discolouration (bleaching) of the cropbut may also result in biomass reduction or reduced yields in some situations.

Crop - summer sown	**4Farmers Pyrasulf 80 EC rate applied**	**Minimum rainfall required**	**Recropping Interval**
Maize, sorghum	up to 625 mL/ha	-	8 weeks
Cotton, soybean, sunflower	up to 470 mL/ha	300mm	14 months
Mung bean	up to 625 mL/ha***	300 mm	14 months
Cotton, soybean, sunflower	up to 625 mL/ha***	500 mm	14 months

For summer recropping, transient biomass reduction or discolouration may occur where recropped after 4Farmers Pyrasulfotole 80 EC application . When used as directed grain yield is not compromised where transient biomass reduction or discolouration occurs.

***Where 4Farmers Pyrasulfotole 80 EC at 670 mL/ha is applied, recropping areas that receive double rates (boom overlaps)may show increased symptoms of damage. This is generally restricted to discolouration (bleaching) of the crop but may also result in biomass reduction in some situations.