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#### **POISON**

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

# Engaze<sup>®</sup> 240 SC

#### INSECTICIDE

**ACTIVE CONSTITUENT: 240 g/L SPIROTETRAMAT** 

GROUP 23 INSECTICIDE

For the control of various insect pests in cotton, peanuts and certain fruit and vegetable crops as specified in the DIRECTIONS FOR USE table



#### **DIRECTIONS FOR USE**

#### **RESTRAINTS**

For PROFESSIONAL use only. **DO NOT** re-apply within 7 days of previous spray.

Pineapples – apply product by boomspray 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 three 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.

#### **Boom sprayers**

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

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

Buffer zones for boom sprayers

	Boom height		uffer zones			
Application rate	above the target canopy	Bystander areas	Natural aquatic areas	Pollinator areas	Vegetation areas	Livestock areas
Up to 400	0.5 m or lower	0 m	0 m	0 m	0 m	0 m
mL/ha	1.0 m or lower	0 m	0 m	0 m	0 m	10 m
Up to 750	0.5 m or lower	0 m	0 m	0 m	0 m	0 m
mL/ha	1.0 m or lower	0 m	0 m	0 m	10 m	20 m



### Vertical sprayers

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

- The spray is not directed above the target canopy.
- The outside of the sprayer is turned off when turning at the end of rows and when spraying the outer row on each side of the application site.
- For dilute water rates up to the maximum listed for each type of canopy specified, minimum distances between the application site and downwind sensitive areas (see 'Mandatory downwind buffer zones' section of the following table titled 'Buffer zones for vertical sprayers') are observed.

**Buffer zones for vertical sprayers** 

		Mandatory downwind buffer zones						
Type of target canopy and dilute water rate	Bystander areas	Natural aquatic areas	Pollinator areas	Vegetation areas	Livestock areas			
2 metres tall and smaller, maximum dilute water rate of 1,000 L/ha	0 m	0 m	0 m	0 m	0 m			
Taller than 2 metres (not fully-foliated), maximum dilute water rate of 4,000 L/ha	0 m	0 m	0 m	15 m	15 m			
Taller than 2 metres (fully-foliated), maximum dilute water rate of 4,000 L/ha	0 m	0 m	0 m	5 m	5 m			
Taller than 2 metres (not fully-foliated), maximum dilute water rate of 10,000 L/ha	0 m	10 m	0 m	20 m	20 m			
Taller than 2 metres (fully-foliated), maximum dilute water rate of 10,000 L/ha	0 m	0 m	0 m	10 m	15 m			

#### **Aircraft**

**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 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 downwind buffer zones' section of the following table titled 'Buffer zones
  for aircraft') are observed.

## **Buffer zones for aircraft**

		Mandatory downwind buffer zones					
Type of aircraft	Bystander areas	Natural aquatic areas	Pollinator areas	Vegetation areas	Livestock areas		
Fixed-wing	0 m	0 m	0 m	15 m	90 m		
Helicopter	0 m	0 m	0 m	25 m	60 m		



## **DIRECTIONS FOR USE TABLES**

## VEGETABLE CROPS

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Beans, peas (green) including snow peas and	Green peach aphid (Myzus persicae)	200 mL/ha + adjuvant*	H, G 7 days	Monitor crops and commence applications once local thresholds are reached.  Continue to monitor crops and make a subsequent application as necessary. Do not reached, within 7 days of a provious
sugar snap peas	Silverleaf whitefly ( <i>Bemisia tabaci</i> Biotype B)	400 mL/ha + adjuvant*	For snow peas and sugar snap peas only H, G 3 days	not re-apply within 7 days of a previous Engaze spray.  Do not apply more than a total of 2 applications per crop.  Ensure thorough coverage of the target crop – refer "Application" section in GENERAL INSTRUCTIONS.  * Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.  Note: This use is subject to a CropLife resistance management strategy. Refer to www.croplife.org.au for more information.
Beans (green)	Western flower thrips (Frankliniella occidentalis), tomato thrips (Frankliniella schultzei)	300 – 400 mL/ha + adjuvant*	H, G 7 days	Commence applications at the flower budding growth stage. Use the higher rate when periods of high pest pressure or rapid crop growth are evident or when longer residual control is desired.  Continue to monitor crops and make a subsequent application as necessary. Do not re-apply within 7 days of a previous Engaze spray.  Do not apply more than a total of 2 applications per crop.  Engaze 240 SC is not highly effective against the adult stage of thrips, however a decline in the total thrips population will occur over time as the juvenile stages are controlled.  Ensure thorough coverage of the target crop – refer "Application" section in GENERAL INSTRUCTIONS.  * Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.



CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Brassica	Green peach	200 mL/ha +	Н	Monitor crops and commence applications
vegetables	aphid	adjuvant*	3 days	once local thresholds are reached. Where
(broccoli,	(Myzus	OR		applicable, use the higher rate when
broccolini,	persicae)	Dilute spraying		periods of high pest pressure or rapid crop
Brussels		20 mL/100 L +		growth are evident or when longer residual
sprouts,		adjuvant*		control is desired or when crops are dense
cabbage,	Grey cabbage	200 – 300		or large (e.g. from the commencement of
cauliflower,	aphid	mL/ha +		head formation).
kohlrabi)	(Brevicoryne	adjuvant*		Continue to monitor crops and make
	brassicae)	OR		subsequent applications as necessary. Do
		Dilute spraying		not re-apply within 7 days of a previous
		20 – 30		Engaze spray.
		mL/100 L +		Do not apply more than 3 applications
	011 1 6	adjuvant*		per crop.
	Silverleaf	400 mL/ha +		Ensure thorough spray coverage of the
	whitefly	adjuvant*		target crop. For dilute spraying apply to the point of run-off, using application volumes
	(Bemisia tabaci	OR Dilute enveying		of up to 1000 L/ha – refer "Application"
	Biotype B)	Dilute spraying 40 mL/100 L +		section in GENERAL INSTRUCTIONS.
		adjuvant*		* Always add a specified spray adjuvant
		aujuvani		- refer "Adjuvant" section in GENERAL
				INSTRUCTIONS.
				<b>Note:</b> The green peach aphid and silverleaf
				whitefly uses are subject to CropLife
				resistance management strategies. Refer to
				www.croplife.org.au for more information.
	Diamondback	400 mL/ha +		Monitor crops and commence insecticide
	moth	adjuvant*		applications once local economic spray
	(Plutella	OR		thresholds are reached. Apply at egg hatch
	xylostella)	Dilute spraying		in crops with nil thresholds for damage.
		40 mL/100 L +		Otherwise, apply at egg hatch or very soon
		adjuvant*		after egg hatch to target young larvae.
				Continue to monitor crops and make
				subsequent applications as necessary.
				Generally, spray intervals of 7-10 days are
				suitable. Do not re-apply within 7 days of a
				previous Engaze spray.
				Do not apply more than 3 applications
				per crop. Concentrate spraying is not recommended
				for this use pattern.
				Ensure thorough coverage of the target
				crop – refer to the "Application" section in
				GENERAL INSTRUCTIONS.
				* Always add a specified spray adjuvant
				- refer "Adjuvant" section in GENERAL
				INSTRUCTIONS.
				Note: This use is subject to a CropLife
				resistance management strategy. Refer to
				www.croplife.org.au for more information.



CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Brassica leafy	Green peach	200 mL/ha +	Н	Monitor crops and commence applications
vegetables	aphid	adjuvant*	3 days	once local thresholds are reached. Where
including	(Myzus			applicable, use the higher rate when
bok choy,	persicae)			periods of high pest pressure or rapid crop
Chinese	Grey cabbage	200 – 300		growth are evident or when longer residual
broccoli (gai	aphid	mL/ha +		control is desired or when crops are dense
lum/gai lan/kai	(Brevicoryne	adjuvant*		or large.
lan), Chinese	brassicae)			Continue to monitor crops and make
cabbage (pet	Silverleaf	400 mL/ha +		subsequent applications as necessary. Do
sai/wombok/	whitefly	adjuvant*		not re-apply within 7 days of a previous
haksukai),	(Bemisia tabaci			Engaze spray.
choy sum, gai	Biotype B)			Do not apply more than 2 applications
choy/am				per crop.
soy/kai choy,				Ensure thorough coverage of the target
kale, mibuna,				crop – refer "Application" section in
mustard (leafy)				GENERAL INSTRUCTIONS.
including				* Always add a specified spray adjuvant
Indian mustard				- refer "Adjuvant" section in GENERAL INSTRUCTIONS.
and mustard spinach				Note: The green peach aphid and silverleaf
(komatsuma),				whitefly uses are subject to CropLife
pak choy, tat				resistance management strategies. Refer to
SOY				www.croplife.org.au for more information.
(field and	Diamondback	400 mL/ha +		Monitor crops and commence insecticide
protected	moth	adjuvant*		applications once local economic spray
cropping	(Plutella	OR		thresholds are reached. Apply at egg hatch
systems)	xylostella)	Dilute spraying		in crops with nil thresholds for damage.
a your many	Ayloololla)	40 mL/100 L +		Otherwise, apply at egg hatch or very soon
		adjuvant*		after egg hatch to target young larvae.
		aujavani		Continue to monitor crops and make
				subsequent applications as necessary.
				Generally, spray intervals of 7-10 days are
				suitable. Do not re-apply within 7 days of a
				previous Engaze spray.
				Do not apply more than 2 applications
				per crop.
				Concentrate spraying is not recommended
				for this use pattern.
				Ensure thorough coverage of the target
				crop – refer to the "Application" section in
				GENERAL INSTRUCTIONS.
				* Always add a specified spray adjuvant
				- refer "Adjuvant" section in GENERAL
				INSTRUCTIONS.
				Note: This use is subject to a CropLife
				resistance management strategy. Refer to
				www.croplife.org.au for more information.



CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Celery and	Green peach	200 mL/ha +	Н	Monitor crops and commence applications
rhubarb	aphid	adjuvant*	3 days	once local thresholds are reached. Where
	(Myzus			applicable, use the higher rate when
	persicae)			periods of high pest pressure or rapid crop
	Cotton aphid	200 – 300		growth are evident or when longer residual
	(Aphis gossypii)	mL/ha +		control is desired.
		adjuvant*		Continue to monitor crops and make
	Western flower	300 – 400		subsequent applications as necessary. Do
	thrips	mL/ha +		not re-apply within 7 days of a previous
	(Frankliniella	adjuvant*		Engaze spray.
	occidentalis),			Do not apply more than 2 applications per crop.
	tomato thrips			Engaze 240 SC is not highly effective
	(Frankliniella schultzei),			against the adult stage of thrips, however a
	plague thrips			decline in the total thrips population will
	(Thrips imaginis)			occur over time as the juvenile stages are
	(Thips imaginis)			controlled.
				Ensure thorough coverage of the target
				crop – refer "Application" section in
				GENERAL INSTRUCTIONS.
				* Always add a specified spray adjuvant
				- refer "Adjuvant" section in GENERAL
				INSTRUCTIONS.
				Note: The green peach aphid and cotton
				aphid uses are subject to CropLife
				resistance management strategies. Refer to
				www.croplife.org.au for more information.
Cucurbits	Cotton aphid	200 – 300	Н	Monitor crops and commence applications
(field and	(Aphis gossypii)	mL/ha +	1 day	once local thresholds are reached. Where
protected		adjuvant*		applicable, use the higher rate when
cropping		OR		periods of high pest pressure or rapid crop
systems)		Dilute spraying		growth are evident or when longer residual
		20 – 30 mL/ 100 L +		control is desired or when crops are dense
				or large. Continue to monitor crops and make
	Croon pooch	adjuvant* 200 mL/ha +		subsequent applications as necessary. Do
	Green peach aphid	adjuvant*		not re-apply within 7 days of a previous
	(Myzus	OR		Engaze spray.
	persicae)	Dilute spraying		Do not apply more than 3 applications
	βοισίουση	20 mL/100 L +		per crop.
		adjuvant*		Dilute spraying is recommended for trellised
	Silverleaf	400 mL/ha +		crops (e.g. glasshouse crops).
	whitefly	adjuvant*		Ensure thorough spray coverage of the
	(Bemisia tabaci	OR		target crop. For dilute spraying apply to the
	Biotype B)	Dilute spraying		point of run-off, using application volumes
		40 mL/ 100 L +		of up to 1000 L/ha – refer "Application"
		adjuvant*		section in GENERAL INSTRUCTIONS.
				* Always add a specified spray adjuvant
				- refer "Adjuvant" section in GENERAL
				INSTRUCTIONS.
				Note: These uses are subject to CropLife
				resistance management strategies. Refer to
				www.croplife.org.au for more information.



CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Eggplant,	Green peach	200 mL/ha +	Н	Monitor crops and commence applications
peppers	aphid	adjuvant* OR	1 day	once local thresholds are reached. Where
(capsicum and chilli),	(Myzus persicae)	Dilute spraying		applicable, use the higher rate when periods of high pest pressure or rapid crop
tomatoes	perdicae	20 mL/100 L +		growth are evident or when longer residual
(field and		adjuvant*		control is desired or when crops are dense
protected		OR		or large.
cropping		Concentrate		Continue to monitor crops and make
systems)		spraying - Refer		subsequent applications as necessary. Do not re-apply within 7 days of a previous
		"Application" section in		Engaze spray.
		GENERAL		Do not apply more than 3 applications
		INSTRUCTIONS		per crop.
	Silverleaf	400 mL/ha +		Engaze 240 SC is not highly effective
	whitefly	adjuvant*		against the adult stage of western flower
	(Bemisia tabaci	OR Dilute enroving		thrips, however a decline in the total thrips population will occur over time as the
	Biotype B), western flower	Dilute spraying 40 mL/100 L +		juvenile stages are controlled.
	thrips	adjuvant*		Dilute or concentrate spraying is
	(Frankliniella	OR		recommended for trellised crops (e.g.
	occidentalis)	Concentrate		glasshouse crops).
		spraying - Refer		Ensure thorough spray coverage of the
		"Application" section in		target crop. For dilute spraying apply to the point of run-off, using application volumes
		GENERAL		of up to 1000 L/ha – refer "Application"
		INSTRUCTIONS		section in GENERAL INSTRUCTIONS.
				* Always add a specified spray adjuvant
				- refer "Adjuvant" section in GENERAL
				INSTRUCTIONS. Note: The green peach aphid and silverleaf
				whitefly uses are subject to CropLife
				resistance management strategies. Refer to
				www.croplife.org.au for more information.
Herbs	Green peach	200 mL/ha +	Н	Monitor crops and commence applications
(field and protected	aphid ( <i>Myzus persicae</i> )	adjuvant*	3 days	once local thresholds are reached. Where applicable, use the higher rate when
cropping	Cotton aphid	200 – 300 mL/ha		periods of high pest pressure or rapid crop
systems)	(Aphis gossypii)	+ adjuvant*		growth are evident or when longer residual
,	Western flower	300 – 400 mL/ha		control is desired.
	thrips	+ adjuvant*		Continue to monitor crops and make
	(Frankliniella			subsequent applications as necessary. Do
	occidentalis), tomato thrips			not re-apply within 7 days of a previous Engaze spray.
	(Frankliniella			Do not apply more than 3 applications
	schultzei),			per crop.
	plague thrips			Engaze 240 SC is not highly effective
	(Thrips imaginis)			against the adult stage of thrips, however a
				decline in the total thrips population will occur over time as the juvenile stages are
				controlled.
				Ensure thorough coverage of the target
				crop – refer "Application" section in GENERAL INSTRUCTIONS.
				* Always add a specified spray adjuvant
				- refer "Adjuvant" section in GENERAL
				INSTRUCTIONS.  Note: The green peach aphid and cotton
				aphid uses are subject to CropLife
				resistance management strategies. Refer to
				www.croplife.org.au for more information.



CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Leafy vegetables (except lettuce) including chard, cress, rocket, silverbeet, spinach (field and protected cropping systems)	Green peach aphid (Myzus persicae)	200 mL/ha + adjuvant*	H 3 days	Monitor crops and commence applications once local thresholds are reached. Continue to monitor crops and make subsequent applications as necessary. Do not re-apply within 7 days of a previous Engaze spray.  Do not apply more than 3 applications per crop. Ensure thorough coverage of the target crop – refer "Application" section in GENERAL INSTRUCTIONS.  * Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.  Note: This use is subject to a CropLife resistance management strategy. Refer to www.croplife.org.au for more information.
Lettuce (head lettuce and leafy lettuce) (field and protected cropping systems)	Brown sowthistle aphid (Uroleucon sonchi), currant lettuce aphid (Nasonovia ribisnigri), green peach aphid (Myzus persicae) Western flower thrips (Frankliniella occidentalis)	200 mL/ha + adjuvant*  300 – 400 mL/ha + adjuvant*	H 1 day	Monitor crops and commence applications once local thresholds are reached. Continue to monitor crops and make subsequent applications as necessary. Do not re-apply within 7 days of a previous Engaze spray.  Do not apply more than 3 applications per crop. Engaze 240 SC is not highly effective against the adult stage of thrips, however, a decline in the total thrips population will occur over time as the juvenile stages are controlled. Ensure thorough coverage of the target crop – refer "Application" section in GENERAL INSTRUCTIONS.
Chicory, endive, radicchio (field and protected cropping systems)	Brown sowthistle aphid (Uroleucon sonchi), currant lettuce aphid (Nasonovia ribisnigri), green peach aphid (Myzus persicae)	200 mL/ha + adjuvant*	H 3 days	* Always add a specified spray adjuvant  – refer "Adjuvant" section in GENERAL INSTRUCTIONS. Note: The green peach aphid use is subject to a CropLife resistance management strategy. Refer to www.croplife.org.au for more information.



CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Onions, bulb	Onion thrips ( <i>Thrips tabaci</i> )	200 mL/ha + adjuvant*	H 7 days	Monitor crops and commence applications once local thresholds are reached.
Bulb vegetables excluding onions, bulb	Onion thrips (Thrips tabaci) Western flower thrips (Frankliniella occidentalis), tomato thrips (Frankliniella schultzei), plague thrips (Thrips imaginis)	200 mL/ha + adjuvant* 300 – 400 mL/ha + adjuvant*		Continue to monitor crops and make a subsequent application as necessary. Do not re-apply within 14 days of a previous Engaze spray (onions, bulb). Do not re-apply within 7 days of a previous Engaze spray (bulb vegetables excluding onions, bulb).  Do not apply more than 2 applications per crop.  Engaze 240 SC is not highly effective against the adult stage of thrips, however a decline in the total thrips population will occur over time as the juvenile stages are controlled.  There are certain conditions where Engaze plus adjuvant may cause a minor tip burn on leaves in bulb vegetables. Before treating large areas, a small area should be tested to determine whether crop phytotoxicity is likely.  Ensure thorough coverage of the target crop – refer "Application" section in GENERAL INSTRUCTIONS.  * Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS
Potatoes, sweet potatoes	Green peach aphid (Myzus persicae) Silverleaf whitefly (Bemisia tabaci Biotype B)	200 mL/ha + adjuvant*  400 mL/ha + adjuvant*	H 7 days	Monitor crops and commence applications once local thresholds are reached. Continue to monitor crops and make subsequent applications as necessary. Do not re-apply within 7 days of a previous Engaze spray.  Do not apply more than 3 applications per crop. Ensure thorough coverage of the target crop – refer "Application" section in GENERAL INSTRUCTIONS. * Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS. Note: These uses are subject to CropLife resistance management strategies. Refer to www.croplife.org.au for more information.



CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Sweet corn	Corn aphid (Rhopalosiphum maidis)	200 – 300 mL/ha + adjuvant*	H, G 7 days	Monitor crops and commence applications once local thresholds are reached.  DO NOT apply prior to tassel emergence.  Use the higher rate when periods of high pest pressure or rapid crop growth are evident (e.g. during silking) or when longer residual control is desired or when crop (e.g. corn cob) is advanced.  Continue to monitor crops and make a subsequent application as necessary. Do not re-apply within 7 days of a previous Engaze spray.  Do not apply more than a total of 2 applications per crop.  Ensure thorough coverage of the target crop – refer "Application" section in GENERAL INSTRUCTIONS.  * Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.

## FRUIT CROPS

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Blueberries	Soft brown scale (Coccus hesperidum), white wax scale (Ceroplastes destructor)	40 mL/100 L + adjuvant*	1 day	Following fruit set, monitor crops and commence applications once local pest thresholds are reached. A follow up application may be required at 14-21 days if monitoring indicates it is necessary. Do not re-apply within 14 days of a previous Engaze spray.  Do not apply more than 2 applications per crop.  Ensure thorough coverage of the target crop – refer "Application" section in GENERAL INSTRUCTIONS.  * Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.



CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Citrus	Red scale,	Dilute	Н	Monitor crops and commence applications
Oitius	mussel scale,	spraying	3 weeks	after flowering at the onset of crawler
	white louse	20 – 30	O WCCKS	emergence or when pest numbers reach
	scale (citrus	mL/100 L		economic threshold. Continue to monitor crops
	snow scale)	water plus		and apply a second application 21-35 days
	Show sould)	adjuvant*		after the first application if required.
	Soft brown scale	Dilute	1	Applications to an established pest population
	Soft blown scale	spraying		where mature adults are present and dominate
		30 mL/100 L		the population will be ineffective.
		water plus		Where applicable, use the higher rate under
		adjuvant*		high pest pressure or to provide longer residual
	Pink wax scale,	Dilute	1	control.
	citrus mealybug	spraying		For red scale the higher rate will provide
	(suppression	30 – 40		control where crawlers have settled and
	only)	mL/100 L		whitecaps are visible.
	Offig)	water plus		DO NOT exceed 4.0 L of Engaze per
		adjuvant*		hectare.
		aujuvani		A total of three applications can be made in
				citrus in a twelve month period, however no
				more than two applications should be made
				within 90 days of harvest.
				Apply thoroughly to ensure complete coverage,
				using dilute spraying equipment in up to
				10,000 L/ha water (concentrate spraying is not
				appropriate for this use) – refer "Application"
				section in GENERAL INSTRUCTIONS.
				* Always add a specified spray adjuvant –
				refer "Adjuvant" section in GENERAL
				INSTRUCTIONS.
	Kelly's citrus			Monitor crops from flowering onwards for the
	thrips			presence of Kelly's citrus thrips. Apply
				Engaze, after flowering, once local pest
				thresholds are reached. A single application
				may be suitable where thrips pressure is low.
				Continue to monitor crops and where thrips
				pressure is moderate to high apply a second
				application, no less than 14 days after the first,
				and prior to calyx closure.
				Use the higher rate under high pest pressure
				or to provide longer residual control.
				DO NOT exceed 4.0 L of Engaze per
				hectare.
				Overlapping cropping situations e.g.
				lemons, Valencia oranges: If any maturing fruit
				is present on the tree and is within six weeks of
				harvest, a second application for control of
				Kelly's citrus thrips should be at least 21 days
				after the first and ideally prior to calyx closure.
				A total of three applications can be made in
				citrus in a twelve month period, however no
				more than two applications should be made
				within 90 days of harvest.
				Apply thoroughly to ensure complete coverage,
				using dilute spraying equipment in up to
				10,000 L/ha water (concentrate spraying is not
				appropriate for this use) – refer "Application"
				section in GENERAL INSTRUCTIONS.
				* Always add a specified spray adjuvant –
				refer "Adjuvant" section in GENERAL
				INSTRUCTIONS.



GROP Grapes	<b>PEST</b> Longtailed	RATE Dilute	WHP H	CRITICAL COMMENTS  Monitor crops following bud burst. Commence
Grapes		Dilute	H	Manitar graps following bud burst Commando
	mealybug (Pseudococcus longispinus), tuber mealybug (Pseudococcus virburni), grapevine scale (Parthenolecani um persicae) (suppression only), plague thrips (Thrips imaginis) (suppression only), northern plague thrips (Thrips safrus) (suppression only)	spraying 40 mL/100 L + adjuvant  Concentrate spraying Refer to the Application section. Add adjuvant as recommended *	4 weeks**	applications at the onset of crawler emergence or when pest numbers reach an economic threshold.  To ensure there is sufficient foliage for product uptake do not apply prior to 6 leaf stage (EL 13).  Mealybug and grapevine scale Continue to monitor crops and apply a second application 21 to 28 days after the first application.  Thrips The peak time for thrips damage in grape vines is during flowering and berry set. To obtain optimum thrips suppression, a second application should be applied prior to the anticipated peak thrips activity. The second application should be made no less than 14 days after the initial application. Do not exceed a 28 day interval. At this longer interval, an application of a product from an alternative group chemical group will be required between Engaze applications to provide continual thrips protection.  All pests For all pests applications to an established pest population where mature adults are present and dominate the population will be ineffective. Do not apply more than 2 applications per crop with a minimum 14 days between applications. Apply thoroughly to ensure complete coverage. Apply by dilute or concentrate spraying equipment. Apply the same total amount of product to the target crop whether applying this product by dilute or concentrate spraying, do not use at rates greater than two times the dilute spraying rate (i.e. at a concentration factor greater than 2X) – refer "Application" section in GENERAL INSTRUCTIONS.  * Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.



CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Mangoes	White mango	Fruit less	Н	Monitor crops and commence applications
(Post	scale,	than 50 mm	14 days	from immediately after flowering coinciding
flowering	citrus mealybug	<u>diameter</u>		with crawler emergence. Continue to monitor
applications)	(suppression	Dilute		crops and apply a second application 21-35
	only)	spraying		days after the first application if required. Use
		30 – 40		the higher rate under high pest pressure or to
		mL/100 L		provide longer residual control.
		water plus		Do not apply more than two applications of
		adjuvant* or		Engaze post-flowering (i.e. between fruit set and harvest).
		40 mL/100 L		* Where indicated add a specified spray
		water without		adjuvant - refer "Adjuvant" section in
		adjuvant**		GENERAL INSTRUCTIONS. Refer to
				Warning: Safety to fruit, below, for advice on
		Fruit greater		when adjuvant should NOT be used with
		than 50 mm		Engaze.
		<u>diameter</u>		** When Engaze 240 SC is applied without an
		Dilute		adjuvant for the control of white mango scale
		spraying		or suppression of citrus mealybug, lower levels
		40 mL/100 L		of control may be evident.
		water <u>without</u> adjuvant**		Apply thoroughly to ensure complete coverage
	Pink wax scale	Fruit less		using dilute spraying equipment (concentrate spraying is not appropriate for this use) – refer
	Pilik wax scale	than 50 mm		"Application" section in GENERAL
		diameter		INSTRUCTIONS.
		Dilute		114011400110140.
		spraying		Warning: Safety to fruit
		30 – 40		Engaze can cause damage (drip point injury)
		mL/100 L		to mango fruit under some circumstances. To
		water plus		reduce the risk of such damage when fruit is
		adjuvant*		present on trees;
				Do not spray to excessive run-off
		Fruit greater		Do not use wetting agent type adjuvants
		than 50 mm		Do not mix Engaze with any other product,
		<u>diameter</u> Not		except the specified adjuvant when recommended
		recommended		Do not mix Engaze with any other product,
				including any adjuvant, if any fruit exceeds
				50 mm diameter (width)
				Fruit of the variety Honey Gold has been found
				to be particularly sensitive to Engaze, and for
				some varieties fruit sensitivity may be
				unknown, hence the following additional
				precaution applies:
				Do not mix Engaze with any other product,
				including any adjuvant, when applying to
				fruiting crops of Honey Gold variety or other
				varieties where fruit safety of Engaze plus
				adjuvant is unknown.
				Even when these precautions are followed,
				some fruit damage has occasionally been
				noted in the Honey Gold variety.



CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Mangoes	White mango	Dilute	-	Apply after harvest and after tree pruning (if
(Post	scale,	spraying		performed) to ensure good scale control on
harvest	pink wax scale	30 – 40		new growth. Use the higher rate under high
applications	pilik wax scale	mL/100 L		pest pressure or to provide longer residual
				, , , , , , , , , , , , , , , , , , , ,
– no fruit)		water plus		control.
		adjuvant*		Do not apply within two weeks before the
				beginning of flowering.
		Concentrate		Apply thoroughly to ensure complete coverage.
		spraying		Apply by dilute or concentrate spraying
		Refer to the		equipment. Apply the same total amount of
		Application		product to the target crop whether applying this
		section.		product by dilute or concentrate spraying
		Add adjuvant		methods. For concentrate spraying, do not
		as		use at rates greater than two times the dilute
		recommended		spraying rate (i.e. at a concentration factor
		*		greater than 2X) – refer "Application" section in
				GENERAL INSTRUCTIONS.
				* Where indicated add a specified spray
				adjuvant – refer "Adjuvant" section in
				GENERAL INSTRUCTIONS.
Passionfruit	Red scale	Dilute	Н	Monitor crops and commence applications
		spraying	3 days	immediately after peak flowering coinciding
		20 – 30		with the onset of crawler emergence or when
		mL/100 L		pest numbers reach economic threshold.
		water plus		Continue to monitor crops and apply a second
		adjuvant*		application no less than 21 days after the first
	Citrus mealybug	Dilute		application if required.
	(suppression	spraying		Where applicable, use the higher rate under
	only)	40 mL/100 L		high pest pressure or to provide longer residual
	Offiny)	water plus		control or when crops are dense. For red
		adjuvant*		scale the higher rate will provide control of an
				established population of the pest.
				A total of two applications can be made in
				passionfruit in a twelve month period.
				Apply thoroughly to ensure complete coverage
				using dilute spraying equipment up to 1000
				L/ha (concentrate spraying is not appropriate
				for this use) – refer "Application" section in
				GENERAL INSTRUCTIONS.
				* Always add a specified spray adjuvant –
				refer "Adjuvant" section in GENERAL
				INSTRUCTIONS.
Pineapples	Pineapple	750 mL/ha +	14 days	Monitor crops and commence applications
i illeappies	mealybug	adjuvant*	1 - days	once local pest thresholds are reached. A
		aujuvani		
	(Dysmicoccus			follow up application may be required at 14-21
	brevipes)			days if monitoring indicates it is necessary. Do
				not re-apply within 14 days of a previous
				Engaze spray.
				Do not apply more than 2 applications per
				crop.
				Ensure thorough coverage of the target crop –
				refer "Application" section in GENERAL
				INSTRUCTIONS.
				* Always add a specified spray adjuvant –
				refer "Adjuvant" section in GENERAL
				INSTRUCTIONS.
				Low water volumes are likely to impact the
				efficacy of Engaze, it is therefore
				recommended that a sufficient water volume is
				applied to provide runoff.



CROP	PEST	RATE	WHP	CRITICAL COMMENTS
CROP Pome fruit	PEST Longtailed mealybug (Pseudococcus longispinus), tuber mealybug (Pseudococcus virburni), woolly apple aphid (Eriosoma lanigerum) (suppression only)  San Jose scale (Quadraspidiotus perniciosus)	RATE Dilute spraying 40 mL/100 L + adjuvant*  Concentrate spraying Refer to the Application section. Add adjuvant as recommended *  Dilute spraying 30 mL/100 L + adjuvant*  Concentrate spraying Refer to the Application section. Add adjuvant as recommended *	WHP H 3 weeks	Monitor crops following flowering. Commence applications at the onset of crawler emergence or when pest numbers reach an economic threshold. To ensure there is sufficient foliage for product uptake;  For apples, do not apply prior to petal fall.  For pears, do not apply prior to fruitlets reaching 10 mm in diameter.  Mealybug and woolly apple aphid: Continue to monitor crops and apply a second application 14 to 28 days after the first application.  San Jose scale: Continue monitoring and apply further applications when new generations emerge. Do not re-apply within 14 days of a previous Engaze application.  All pests: For all pests, applications to an established pest population where mature adults are present and dominate the population will be ineffective.  Do not apply more than 3 applications per crop with a minimum 14 days between applications.  Apply thoroughly to ensure complete coverage.
		recommended *		with a minimum 14 days between applications.



				Engazo
CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Stone fruit	Tuber mealybug (Pseudococcus virburni), longtailed mealybug (Pseudococcus longispinus)	Dilute spraying 40 mL/100 L + adjuvant*  Concentrate spraying Refer to the Application section. Add adjuvant as	H 3 weeks	Monitor crops following petal fall. Commence applications at the onset of crawler emergence or when pest numbers reach an economic threshold. To ensure there is sufficient foliage for product uptake do not apply prior to shuck fall.  Mealybug: Continue to monitor crops and apply a second application 14 to 28 days after the first application.
	Black cherry aphid (Myzus cerasi), black peach aphid (Brachycaudus persicae), San Jose scale (Quadraspidiotus perniciosus)	Dilute spraying 30 mL/100 L + adjuvant*  Concentrate spraying Refer to the Application section. Add adjuvant as recommended *		Aphids: Continue to monitor crops and apply a second application 14 to 21 days after the first application if required.  San Jose scale: Continue monitoring and apply further applications when new generations emerge. Do not re-apply within 14 days of a previous Engaze application.  All pests: For all pests, applications to an established pest population where mature adults are present and dominate the population will be ineffective.  Cherries: Do not apply more than 2 applications per crop for cherries with a minimum 14 days between applications.  Stone fruit other than cherries: Do not apply more than 3 applications per crop, with no more than 2 applications made later than 21 days after shuck fall and with a minimum 14 days between applications.  Apply thoroughly to ensure complete coverage. Apply by dilute or concentrate spraying equipment. Apply the same total amount of product to the target crop whether applying this product by dilute or concentrate spraying, do not use at rates greater than two times the dilute spraying rate (i.e. at a concentration factor greater than 2X) – refer "Application" section in GENERAL INSTRUCTIONS.  * Always add a specified spray adjuvant —
				refer "Adjuvant" section in GENERAL INSTRUCTIONS.



### COTTON

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Cotton	Silverleaf	400 mL/ha +	Н	Monitor crops and commence applications once
	whitefly	adjuvant*	3 weeks	local thresholds are reached. Use the higher
	(Bemisia		0	rate when periods of high pest pressure or rapid
	tabaci)	200 400	G	crop growth are evident, when longer residual
	Cotton aphid	300 – 400	Refer to	control is desired or when crops are well
	(Aphis	mL/ha +	grazing WHP statement	advanced.
	gossypii)	adjuvant*	below.	Continue to monitor crops and make a subsequent application as necessary. Do not
			below.	re-apply within 14 days of a previous Engaze
				spray.
				Do not apply more than 2 applications per
				crop.
				Engaze may not control silverleaf whitefly
				adults and eggs, however a decline in the total
				silverleaf whitefly population will occur over time
				as the juvenile stages are controlled.
				Ensure thorough coverage of the target crop –
				refer "Application" section in GENERAL
				INSTRUCTIONS.
				*Always add a specified spray adjuvant –
				refer "Adjuvant" section in GENERAL
				INSTRUCTIONS.
				<b>Note:</b> These uses are subject to CropLife resistance management strategies. Refer to
				www.croplife.org.au for more information.
	Cotton	400 mL/ha +		Monitor crops and commence applications
	mealybug	adjuvant*		when adults are observed. Apply two
	(Phenacoccus	aujuvant		applications 14 days apart. Do not re-apply
	solenopsis)			within 14 days of a previous Engaze spray.
				Do not apply more than 2 applications per
				crop.
				Ensure thorough coverage of the target crop –
				refer "Application" section in GENERAL
				INSTRUCTIONS.
				*Always add a specified spray adjuvant –
				refer "Adjuvant" section in GENERAL
				INSTRUCTIONS.

## **PEANUTS**

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Peanuts	Pineapple mealybug (Dysmicoccus brevipes), leafhoppers (Austroasca viridigrisea & Anzygina spp.)	400 mL/ha + adjuvant*	H - G 14 days	Monitor crops and commence applications once local pest thresholds are reached. A follow up application may be required at 14-21 days if monitoring indicates it is necessary. Do not reapply within 14 days of a previous Engaze spray.  Do not apply more than 2 applications per crop.  Ensure thorough coverage of the target crop —
	(suppression of low to moderate leafhopper populations only)			refer "Application" section in GENERAL INSTRUCTIONS.  * Always add a specified spray adjuvant – refer "Adjuvant" section in GENERAL INSTRUCTIONS.

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

WITHHOLDING PERIODS (WHP)

Harvest (H):

Peanuts: NOT REQUIRED WHEN USED AS DIRECTED



Eggplant, peppers (capsicum and chilli), tomatoes, cucurbits, lettuce, blueberries: DO NOT HARVEST FOR 1 DAY AFTER APPLICATION

Brassica vegetables, brassica leafy vegetables, celery, chicory, endive, herbs, leafy vegetables (except lettuce), passionfruit, radicchio, rhubarb, snow peas, sugar snap peas: DO NOT HARVEST FOR 3 DAYS AFTER APPLICATION

Beans, bulb vegetables (except onions, bulb), onions (bulb), peas (except snow peas and sugar snap peas), potatoes, sweet corn, sweet potatoes: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION Mangoes, pineapples: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION

Citrus, cotton, pome fruit, stone fruit: DO NOT HARVEST FOR 3 WEEKS AFTER APPLICATION Grapes: DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION

Note: If grapes are likely to be exported as wine, fresh or dried fruit also refer to advice under **Export of treated produce** heading.

## Grazing (G):

Brassica vegetables (including brassica leafy vegetables), chicory: DO NOT GRAZE TREATED BRASSICA OR CHICORY CROPS

Cotton: DO NOT FEED COTTON FODDER, STUBBLE OR TRASH TO LIVESTOCK

Snow peas and sugar snap peas: DO NOT GRAZE OR CUT FOR STOCKFOOD FOR 3 DAYS AFTER APPLICATION

Beans, peas (except snow peas and sugar snap peas), sweet corn: DO NOT GRAZE OR CUT FOR STOCKFOOD FOR 7 DAYS AFTER APPLICATION

Peanuts: DO NOT GRAZE OR CUT FOR STOCKFOOD FOR 14 DAYS AFTER APPLICATION

#### LIVESTOCK DESTINED FOR EXPORT MARKETS

The grazing withholding period only applies to stock slaughtered for the domestic market. Some export markets apply different standards. To meet these standards, ensure that in addition to complying with the grazing withholding period, the Export Slaughter Interval is observed before stock are sold or slaughtered.

#### **EXPORT SLAUGHTER INTERVAL (ESI) – 3 DAYS**

LIVESTOCK THAT HAS BEEN GRAZED ON OR FED TREATED CROPS SHOULD BE PLACED ON CLEAN FEED FOR 3 DAYS PRIOR TO SLAUGHTER.

#### **EXPORT OF TREATED PRODUCE**

Growers should note that suitable MRLs or import tolerances do not exist in all markets for produce treated with Engaze 240 SC. In some situations export requirements may be met by limiting application number and/or imposing a longer withholding period than specified above. If you are growing produce for export, please check with Bayer CropScience Pty Ltd, or your industry body for the latest information on any potential trade issues and their management before using Engaze 240 SC.

Grapes for wine intended for export: Suitable MRLs or import tolerances are established in most, but not all, wine export destinations to allow use up until the stated withholding period for grapes. For the latest information consult with Bayer Crop Science, your winery or the Australian Wine Research Institute (AWRI) before using Engaze in grapes which may be used to make wine for export.

#### **GENERAL INSTRUCTIONS**

#### Adiuvant

Vegetables and herbs (except bulb vegetables, onions, bulb):

For both dilute and concentrate (where applicable) spraying methods, apply Engaze 240 SC with Agridex® Non-lonic Surfactant\* or Hasten® Spray Adjuvant\*. Generally apply Agridex or Hasten at 0.5 to 1.0 L/ha. This can be achieved by adding Agridex or Hasten at 200 mL/100 L of spray mixture, up to a maximum of 1.0 L/ha where application volumes exceed 500 L/ha.

Citrus, grapes, passionfruit, pome fruit, stone fruit:

Apply Engaze 240 SC with Agridex\* or Hasten\* at 50 mL/100 L of spray mixture.

Mangoes:

For both dilute and concentrate (where applicable) spraying methods, apply Engaze 240 SC with Agridex\* or Hasten\* at 50 mL/100 L of spray mixture only when addition of adjuvant is specified in the rate column of the Directions for Use table, and for application when fruit is present on trees, only after referring to Warning: Safety to fruit, in Critical Comments of the



Directions for Use table, for advice on when adjuvant should

NOT be used with Engaze.

Bulb vegetables and onions, bulb: Apply Engaze 240 SC with Agridex\* or Hasten\* at 0.5 to 1.0

L/100 L of spray mixture.

**Cotton:** Apply Engaze 240 SC with Agridex\* or Hasten\* at 1.0 L/ha.

Blueberries: Apply Engaze 240 SC with Hasten\* at 50 mL/100 L.

**Peanuts, pineapples:** Apply Engaze 240 SC with Agridex\* or Hasten\* at 500 mL/ha.

(\*or other specified adjuvant - refer to Bayer Crop Science for information).

#### Mixing

Shake the container well before using. Partially fill the spray tank with clean water and add the required volume of product to the water whilst agitating. Top up the tank with clean water to the required volume. Add the required amount of specified adjuvant. Engaze 240 SC should be applied as soon as possible after mixing.

### **Ground application**

## Vegetable and herb crops, blueberries, peanuts and pineapples

Thorough coverage of the target area is essential. Apply in sufficient water. Use suitable application parameters (nozzles, pressure, boom height, speed, etc.) to ensure thorough and even coverage. Use only MEDIUM spray droplets according to nozzle manufacturer specifications.

### Application using rate per hectare in vegetables and herbs, peanuts and pineapples

Thorough coverage of the target area is essential. Adjust water volumes according to the crop growth stage. **Sweet corn:** Where a standard "over the top" boom spray is used, the use of droppers will help improve spray coverage to the target area i.e. silks and cobs.

# Application using rate per 100 L (dilute spraying) in vegetables (brassica vegetables, cucurbits, eggplant, peppers, tomatoes) and blueberries

- Use a sprayer designed to apply high volumes of water up to the point of run-off and matched to the crop being sprayed.
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient water to cover the crop to the point of run-off. Avoid excessive run-off.
- The required water volume may be determined by applying different test volumes, using different settings on the sprayer, from industry guidelines or expert advice.
- Add the amount of product specified in the Directions for Use table for each 100 L of water. Spray to the point of run-off, to a maximum of 1000 L/ha for vegetable crops.
- The required dilute spray volume will change and the sprayer set up and operation may also need to be changed, as the crop grows.

## Application using concentrate spraying in vegetables (eggplant, peppers, tomatoes)

- Use a sprayer designed and set up for concentrate spraying (that is a sprayer which applies water volumes less than those required to reach the point of run-off) and matched to the crop being sprayed (e.g. air assisted sprayer).
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy using your chosen water volume.
- Determine an appropriate dilute spray volume (See **Dilute spraying** above) for the crop canopy. This is needed to calculate the concentrate mixing rate.
- The mixing rate for concentrate spraying can then be calculated in the following way:

## **EXAMPLE ONLY**

- 1. Dilute spray volume as determined above: For example 1500 L/ha
- 2. Your chosen concentrate spray volume: For example 500 L/ha
- 3. The concentration factor in this example is: 3X (i.e.  $1500 L \div 500 L = 3$ )
- 4. If the dilute label rate is 40 mL/100 L, then the concentrate rate becomes 3 x 40 mL/100 L, that is 120 mL/100 L of concentrate spray.
- The chosen spray volume, amount of product per 100 L of water, and the sprayer set up and operation may need to be changed as the crop grows.



- Do not use at a concentration factor greater than 3X (e.g. at a rate higher than 120 mL/100 L where a dilute spraying rate of 40 mL/100 L is specified).
- Note that the concentrate mixing rate is applicable only to Engaze. The adjuvant rate remains unchanged (i.e. no concentrate factor applies). Refer to the **Adjuvant** section.

For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry Best Practices.

# Special instructions for tree and vine crops (citrus, mangoes, pome fruit, stone fruit, grapes and passionfruit)

#### Dilute spraying

- Use a sprayer designed to apply high spray volumes, up to the point of run-off and matched to the crop being sprayed.
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient water to cover the crop to the point of run-off. Avoid excessive run-off.
- The required spray volume may be determined by applying different test volumes, using different settings on the sprayer, or from industry guidelines or expert advice.
- Add the amount of product specified in the Direction for Use table for each 100 L of water. Spray to the point of run-off, to a maximum of 1,000 L/ha for passionfruit and 10,000 L/ha for citrus crops.
- The required dilute spray volume will change and the sprayer set up and operation may also need to be changed, as the crop grows.

### Concentrate spraying (grapes, mangoes: post-harvest only, pome fruit, stone fruit)

- Use a sprayer designed and set up for concentrate spraying (that is a sprayer which applies spray volumes less than those required to reach the point of run-off) and matched to the crop being sprayed.
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy using your chosen spray volume.
- Determine an appropriate dilute spray volume (See **Dilute spraying** above) for the crop canopy. This is needed to calculate the concentrate mixing rate.
- The mixing rate for concentrate spraying can then be calculated in the following way: EXAMPLE ONLY
  - 1. Dilute spray volume as determined above: For example 1500 L/ha
  - 2. Your chosen concentrate spray volume: For example 750 L/ha
  - 3. The concentration factor in this example is 2X (i.e.  $1500 L \div 750 L = 2$ )
  - 4. If the dilute label rate is 30 mL/100 L, then the concentrate rate becomes 2 x 30, that is, 60 mL/100 L of concentrate spray.
- The chosen spray volume, amount of product per 100 L of water, and the sprayer set up and operation may need to be changed as the crop grows.
- Do not use at a concentration factor greater than 2X (e.g. at a rate higher than 80 mL/100 L where a dilute spraying rate of 40 mL/100 L is specified).
- Note that the concentrate mixing rate is applicable only to Engaze. The adjuvant rate remains unchanged (i.e. no concentrate factor applies). Refer to the **Adjuvant** section.

For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry best practice.

#### Cotton

Apply as a blanket spray or banded spray ensuring thorough coverage of the foliage. Apply in a minimum of 80 L/ha. Use only MEDIUM spray droplets according to nozzle manufacturer specifications.

### **Aerial application**

## (beans, cotton, cucurbits, peanuts, peas, potatoes, sweet corn, tomatoes only)

Engaze must only be applied by aircraft (fixed-wing or helicopter) fitted with accurately calibrated equipment. Apply a minimum total spray volume of 30 L/ha (preferably 50 L/ha for sweet corn) with nozzles (e.g. Micronaire rotary atomisers, CP nozzles or conventional hydraulic nozzles) set to MEDIUM spray quality according to nozzle manufacturer specifications. A spray drift minimisation strategy should be employed at all times when applying this product. Do not apply Engaze using Ultra Low Volume (ULV) methods. **Sweet corn:** It is advisable that spray applications commence no later than early tasselling to ensure there is adequate early control of corn aphid infestations prior to silking. Further enhancement of aircraft application can be achieved through modification of spray patterns (e.g. reduced swath width), increased water volume (e.g. from 30 L/ha to 50 L/ha), and the use of Global Positioning Systems (GPS) as an aid during spray applications.



## **INSECTICIDE RESISTANCE WARNING**

### GROUP 23 INSECTICIDE

For insecticide resistance management Engaze 240 SC Insecticide is a Group 23 insecticide.

Some naturally occurring insect biotypes resistant to Engaze 240 SC and other Group 23 insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if Engaze 240 SC or other Group 23 insecticides are used repeatedly. The effectiveness of Engaze 240 SC on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, Bayer CropScience Pty Ltd accepts no liability for any losses that may result from the failure of Engaze 240 SC to control resistant insects.

Engaze 240 SC may be subject to specific resistance management strategies. For further information contact your local supplier, Bayer Crop Science representative or local agricultural department agronomist.

#### **COMPATIBILITY**

Do not mix Engaze with Amistar® or Du-Wett®.

Do not mix Engaze with any other product, except the specified adjuvant when recommended, when applying to fruiting mango crops.

For further information on the compatibility of Engaze 240 SC with other products, contact your local Bayer Crop Science representative.

#### **PRECAUTION**

### Re-entry or re-handling

DO NOT enter treated areas until spray has dried. If 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.

## Citrus - where spray application volumes exceed 7,500 L/ha

DO NOT perform medium or high exposure activities such as hand thinning or pruning in citrus for 3 days after application, unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.

Low exposure activities such as scouting, weed control and irrigation can be performed once spray has dried.

## **INTEGRATED PEST MANAGEMENT**

Fruit tree crops - Engaze may have an adverse effect on predatory mites where IPM is practiced.

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

Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.

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

Application of Engaze 240 SC to crops/plants other than those specified on this label may cause symptoms of phytotoxicity.

**Caution:** Phytotoxic symptoms have occasionally been observed when Engaze is applied to crops in protected cropping environments. This may be exacerbated when applied in tank mixtures.

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

## PROTECTION OF HONEY BEES AND OTHER INSECT POLLINATORS

Spirotetramat has systemic action. However, the use of this product as directed is not expected to have adverse effects on bees.

## STORAGE AND DISPOSAL

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

Triple rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. Do not burn empty containers or product. Do not re-use empty container for any other purpose.



#### SAFETY DIRECTIONS

May irritate the eyes. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. When using together with other products, consult their label safety directions. When opening the container, preparing 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, if applying by spraying equipment carried on the back of the user wear cotton overalls, over normal clothing, buttoned to the neck and wrist and elbow-length chemical resistant gloves. If product on skin immediately wash area with soap and water. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves and contaminated clothing.

#### **FIRST AID**

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

#### **SAFETY DATA SHEET**

Additional information is listed in the Safety Data Sheet, which can be obtained from www.crop.bayer.com.au.

#### **EXCLUSION OF LIABILITY**

This product must be used strictly as directed, and in accordance with all instructions appearing on the label and in other reference material. So far as it is lawfully able to do so, Bayer CropScience Pty Ltd accepts no liability or responsibility for loss or damage arising from failure to follow such directions and instructions.

Agridex® and Engaze ® are Registered Trademarks of the Bayer Group.

APVMA Approval No.: 94723/143450

FOR 24 HOUR SPECIALIST ADVICE IN EMERGENCY ONLY PHONE 1800 033 111

#### **GHS STATEMENTS**

•May cause an allergic skin reaction. •Suspected of damaging fertility or the unborn child. •May cause respiratory irritation.

•Do not handle until all safety precautions have been read and understood. •Avoid breathing spray mist. •IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. •IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE or doctor/physician if you feel unwell. •IF exposed or concerned: Get medical advice/attention. •Store locked up.