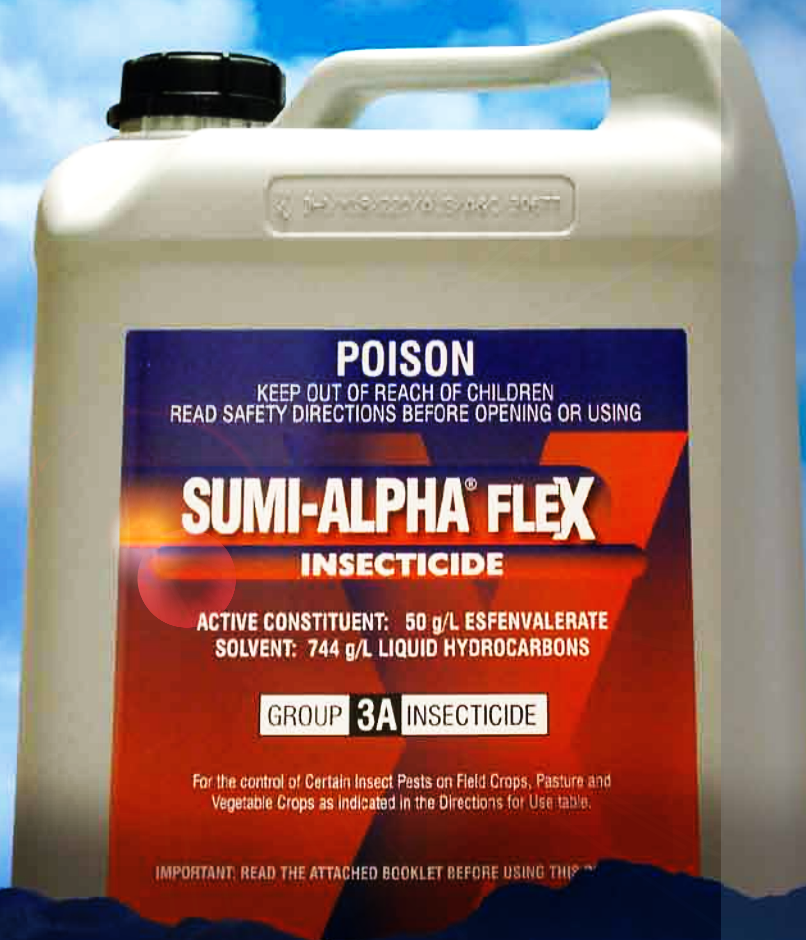
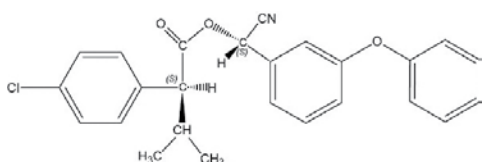


## The **BROADEST** of Broadacre Insecticides



## Flexibility, Versatility, Economy...

**SUMI-ALPHA FLEX** is a broad spectrum synthetic pyrethroid insecticide that contains esfenvalerate as its main active ingredient. Esfenvalerate is the most active of four isomers of fenvalerate, which makes Sumi-Alpha Flex a highly active product at extremely low use rates.



*(S)-a-cyano-3-phenoxybenzyl-(S)-2-(4-chlorophenyl)-3-methylbutyrate*

As is evident from its extensive label, Sumi-Alpha Flex is an extremely versatile insecticide which has the ability to control a range of insects and mites from a diverse range of insect families; larvae & grubs, aphids & jassids, beetles, thrips and also mites.

**In the context of southern broadacre cropping, no other pyrethroid insecticide can rival Sumi-Alpha Flex for the extent of its registrations in cereals, pulse crops, oil seeds and pastures.**

**Not only is it the broadest of broadacre insecticides, but also highly economical because of its low use rates and versatile because of its unique dual purpose formulation. Sumi-Alpha Flex is the obvious choice for the modern cost-and environmentally conscious broadacre farmer.**

Sumi-Alpha Flex is a dual purpose formulation, and can be used as a ULV (concentrated) or EC (conventional, mixed with water) application. There is no need for growers to stock a “spring specific” ULV formulation.



## Key Product Benefits

FEATURE	BENEFIT
Wide range of registrations in traditional southern broadacre crops including cereals, pulse crops, oil seeds, pastures	No need for farmers or dealers to stock multiple products for different crops or pests
Aphid “anti-feed” registration	Allows control of BYDV at a range of rates – from preventive to high end protection against cereal aphid for the grower with serious aphid problems
Dual purpose “Flex” formulation	Allows for conventional EC or ULV type application. No need to stock different products
Low pricing and low rates	Economical control of pests with very little environmental impact

# SUMI-ALPHA<sup>®</sup> FLEX

## For Control of Pests in **Cereal Crops** (Refer to product label for detailed recommendation)



CROP	PEST	RATE/HA
Winter sown cereals (wheat, barley, oats, triticale)	Webworm	70 mL
	Cereal aphids Vectors of Barley Yellow Dwarf Virus (BYDV)	100 to 300 mL
	Cutworm	70 mL (WA only)
	Redlegged earth mite Blue oat mite	Pre-emergence "bare earth" rate: 100 mL Post-emergence rate: 50 to 70 mL
Wheat Oats Barley	Anthelid caterpillar	150 to 300 mL
	Native budworm	130 to 330 mL
	Suppression of: Southern armyworm Common armyworm	330 mL



Cereal aphid \*

Sumi-Alpha Flex has been shown to be extremely effective for reducing the incidence of BYDV. A program approach consisting of two sprays at 3 and 7 weeks post emergence is sufficient to prevent **Cereal aphid** colonization, reduce aphid feeding damage and prevent transmission of the virus.



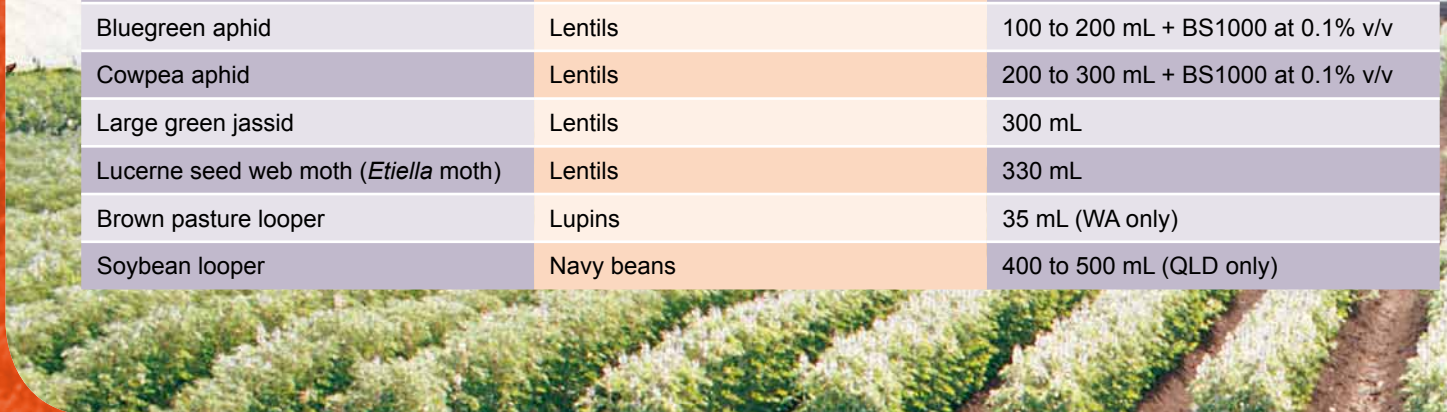
Cutworm larva <sup>Δ</sup>

Sumi-Alpha Flex will also give suppression of **Southern and Common armyworm**. However, because of the sheer numbers in which they occur and the irreversible nature of the damage they cause (complete severance of stems or haulms), complete control is difficult to achieve. A single application may not be enough to completely eradicate infestations and multiple applications may be required.

## For Control of Pests in **Pulse Crops** (Refer to product label for detailed recommendation)



PEST	CONTROLLED IN	RATE/HA
Plague thrips	Broad beans/faba beans Chickpeas Field peas Lentils Lupins Pigeon peas	130 mL
Native budworm ( <i>H. punctigera</i> )	Broad beans/faba beans Chickpeas Field peas Lentils Lupins Mung beans Navy beans Pigeon peas	130 to 330 mL 400 to 500 mL (QLD only)
False native budworm ( <i>H. punctifera</i> )	Lentils	330 mL
Redlegged earth mite	Broad beans/faba beans Chickpeas Field peas Lentils Lupins	Pre-emergence "bare earth" rate: 100 mL Post emergence rate : 50 to 70 mL
Blue oat mite	Broad beans/faba beans Chickpeas Field peas Lentils Lupins	Pre-emergence "bare earth" rate: 100 mL Post emergence rate : 50 to 70 mL
<i>Helicoverpa armigera</i>	Chickpeas Mung beans Navy beans Pigeon peas	400 or 500 mL (QLD only)
Cutworm	Field peas Lupins	70 mL (WA only)
Pea weevil	Field peas	330 mL
Bluegreen aphid	Lentils	100 to 200 mL + BS1000 at 0.1% v/v
Cowpea aphid	Lentils	200 to 300 mL + BS1000 at 0.1% v/v
Large green jassid	Lentils	300 mL
Lucerne seed web moth ( <i>Etiella</i> moth)	Lentils	330 mL
Brown pasture looper	Lupins	35 mL (WA only)
Soybean looper	Navy beans	400 to 500 mL (QLD only)



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Pea weevil damage <sup>Δ</sup>



Etiella larva <sup>Δ</sup>

Field peas should be monitored for **Pea weevil** adults regularly from the time of first flowering until the crop starts to dry. Commence spraying once the economic threshold of 2-3 weevils/25 sweeps is reached. The objective is to control adult weevils BEFORE they lay eggs on the pea pods. Since Pea weevils are mobile and tend to infest from outside the crop, pay particular attention to crop edges by applying a border spray. Due to their migratory nature, a single spray may not be sufficient to eradicate Pea weevil in sprayed areas and repeat applications may be necessary.

For control of **Etiella moth** in lentils, monitor fields regularly and time the spray application to prevent the moths from laying eggs on the pods. If larvae are already present in the crop, control them while they are still small and before they become shielded from the chemical spray by the web lined shelters they create. Failure to control moths or small larvae may result in damage to the pods.

Note that **Bluegreen aphids** and **Cowpea aphids** require different rates of Sumi-Alpha Flex. This is because Cowpea aphid is generally more difficult to control. The key to successful control of aphids is to apply the insecticide early while the aphid population is in the rapid growth phase with many juveniles present. Old, established populations require higher rates and multiple applications.



Bluegreen aphid \*



Cowpea aphid \*



## For Control of Pests in Oilseed Crops (Refer to product label for detailed recommendation)

PEST	CONTROLLED IN	RATE/HA
Cabbage white butterfly	Canola	400 to 500 mL
Cabbage centre grub	Canola	400 to 500 mL
Cabbage moth	Canola	250 mL
Native budworm ( <i>H. punctigera</i> )	Canola Linseed Safflower Soybeans Sunflower	130 to 330 mL
False native budworm ( <i>H. punctifera</i> )	Canola	330 mL
Brown pasture looper	Canola	70 mL (WA only)
Cutworm	Canola	70 mL (WA only)
Vegetable weevil	Canola	400 to 500 mL
Redlegged earth mite	Canola Linseed Safflower	Pre-emergence "bare earth" rate: 100 mL Post emergence rate: 50 to 70 mL
Blue oat mite	Canola Linseed Safflower	Pre-emergence "bare earth" rate: 100 mL Post emergence rate: 50 to 70 mL
<i>Helicoverpa armigera</i>	Linseed Soybeans Sunflower	500 mL (QLD and N. NSW only)
Soybean looper	Soybeans	400 to 500 mL (QLD only)



Redlegged earth mite \*



Blue oat mite \*

Border sprays contribute to the control of **Vegetable weevils** in canola, because these migratory beetles infest the crop from external host plants. Or, if the preceding crop was a legume pasture and when there is Capeweed in the vicinity, infestation may occur as early as emergence.

Sumi-Alpha Flex is now also registered for control of **Redlegged earth mite** and **Blue oat mite**, both as a pre-emergence "bare earth" spray or as an early-corrective spray soon after crop emergence. At extremely low and economical rates, Sumi-Alpha Flex has been shown to give extended residual control of both mite species.



Vegetable weevil \*

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## For Control of Pests in Forage Crops (Refer to product label for detailed recommendation)



*Cabbage centre grub* \*



*Pasture webworm* \*



*Brown pasture looper* \*



*Cabbage white butterfly* \*

PEST	CONTROLLED IN	RATE/HA
Plague thrips	Lucerne	130 mL
Native budworm ( <i>H. punctigera</i> )	Lucerne Chou Moellier Fodder rape	130 to 330 mL
Bluegreen aphid	Lucerne	100 mL
Redlegged earth mite	Lucerne Pastures	Pre-emergence "bare earth" rate: 100 mL Post emergence rate: 50 to 70 mL
Blue oat mite	Lucerne Pastures	Pre-emergence "bare earth" rate: 100 mL Post emergence rate: 50 to 70 mL
Brown pasture looper	Pastures Chou Moellier Fodder rape	35 to 70 mL (WA only)
Cutworm	Pastures Chou Moellier Fodder rape	70 mL (WA only)
Pasture webworm ( <i>Hednota</i> sp.)	Pastures	70 mL
Cabbage white butterfly	Chou Moellier Fodder rape	400 to 500 mL
Cabbage centre grub	Chou Moellier Fodder rape	400 to 500 mL
Cabbage moth	Chou Moellier Fodder rape	250 mL

## For Control of Pests in Summer Row Crops (Refer to product label for detailed recommendation)

PEST	CONTROLLED IN	RATE/HA
Native budworm ( <i>H. punctigera</i> )	Cotton	500 to 700 mL (QLD and NSW only)
	Maize	300 to 500 mL
	Sweet corn	300 to 500 mL
	Sorghum	350 to 450 mL
<i>Helicoverpa armigera</i> (Corn earworm)	Cotton	500 to 700 mL (QLD and NSW only)
	Maize	300 to 500 mL
	Sweet corn	300 to 500 mL
	Sorghum	450 mL
Pink spotted bollworm	Cotton	400 mL (central QLD only)
Sorghum midge	Sorghum	100 to 300 mL

To confirm the appropriate application window for cotton, always refer to the most recent Insecticide Resistance Management Strategies as published by the Cotton CRC.



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## For Control of **Vegetable Pests** (Refer to product label for detailed recommendation)



PEST	CONTROLLED IN	RATE/HA
Cabbage moth ( <i>Plutella xylostella</i> )	Brassica crops: Cabbages, Cauliflowers, Brussel sprouts, Broccoli, Kale, Kohlrabi	190 to 380 mL/ha or or 25 mL/100 L
Cabbage white butterfly	Brassica crops	190 to 380 mL/ha
Native budworm ( <i>H. punctigera</i> )	Brassica crops Garden peas Green beans Tomatoes	380 mL/ha or 25 mL/100 L 130 to 500 mL/ha 130 to 330 mL/ha 190 to 400 mL/ha or 25 to 55 mL/100 L
<i>Helicoverpa armigera</i>	Brassica crops Garden peas Tomatoes	380 mL/ha or 25 mL/100 L 500 mL/ha (QLD only) 190 to 400 mL/ha or 25 to 55 mL/100 L
Cabbage centre grub	Brassica crops	380 mL/ha or 25 mL/100 L
Lucerne leaf roller	Celery	50 mL/100 L (WA only)
Plague thrips	Garden peas Green beans Tomatoes	130 mL/ha 130 mL/ha 130 mL/ha or 12 mL/100 L
Cluster caterpillar ( <i>Spodoptera litura</i> )	Tomatoes	190 to 400 mL/ha or 25 to 55 mL/100 L

Sumi-Alpha Flex is also registered for control of **Garden weevils** in grapevines.



## Mixing and Application



Sumi-Alpha Flex is a contact and residual insecticide. For this reason, correct application and thorough coverage are critical to achieving good results. Being a dual-purpose formulation, Sumi-Alpha Flex offers growers the choice to mix either with water through a conventional boom spray, or to mix with a crop oil for application as a ULV insecticide. In general, ULV spraying is more appropriate in spring when high temperatures result in increased evaporation and the subsequent loss of water based sprays.

### Ultra Low Volume (ULV) application

Apply in a minimum of 1.5 L spray volume per ha. Only use equipment that delivers a droplet size of approximately 80-100 microns. When Sumi-Alpha Flex is mixed with oil, it should ONLY be mixed with specific non-aqueous ULV formulations of other insecticides.

### Application in water

DO NOT mix with hard water. It is advisable to add BS1000 or equivalent non-ionic wetting agent at 100 mL/100 L spray mixture just before the tank is filled. This will assist with coverage.

Sprays containing Sumi-Alpha Flex should be used within three hours of preparation. If not possible, the spray mixture should be agitated continuously during this period.

Unless otherwise directed on the product label, apply 50 to 200 L spray mixture/ha for ground application, and 20L per ha for aerial application.

When mixing Sumi-Alpha Flex with products formulated as wettable powders, those should only be added to the spray tank after Sumi-Alpha Flex has been added to the water.

### General common sense considerations to ensure a good effect from Sumi-Alpha Flex

- When spraying Brassica crops at high volume, the total spray volume per hectare will depend on plant size at time of application but as general rule the total volume per hectare should progressively increase from 250 L/ha on young plants to 1500 L per hectare on mature crops.
- Since the leaf surface of Brassica crops has a waxy layer, it is advisable to always add a spreader/sticker – type adjuvant to the spray mixture.
- For control of Redlegged earth mite and Blue oat mite prior to crop emergence (bare earth application), DO NOT apply as a ULV application. For post emergent control of soil mites, use of the higher rate in the range applies when there has been an increase in crop canopy volume, when the pest pressure is high, or when longer residual control is required.
- Border sprays are an effective way to reduce the incidence of pest invasion from outside the cropping area.
- For some pests (e.g. *Etiella* moth in lentils, Pea weevil in field peas), timing of the insecticide spray is determined by monitoring and may be synchronized to a certain activity or stage – for example, before damage to pods can occur. Familiarity with the pest biology, adherence to threshold values and monitoring will all improve the efficacy of Sumi-Alpha Flex.
- For aerial application, apply in a minimum of 20 L water/ha, using equipment that will generate a droplet size of 100 to 150 microns VMD.
- Sometimes, if the pest has a nocturnal feeding pattern, applying the product at night may give a better result. Typical examples are Cutworm and Armyworm in cereals, and Garden weevil in grapevines.

# SUMI-ALPHA<sup>®</sup> FLEX

## Safety and Environmental Consideration



Dangerous to bees. Do not spray onto crops in flower where bees are actively foraging. It is good agricultural practice to restrict insecticide applications to those hours of the day when bees are not actively foraging (e.g. early in the morning, late in the afternoon, or at night).

Dangerous to fish. Do not contaminate ponds, waterways and drains with product or used containers.

### Export Trade Advice – Livestock

*Consumption by livestock of any materials previously treated with this product may produce residues in the animal that may not be acceptable in some export markets. Before you use this product, you are advised to contact Sumitomo Chemical Australia and/or the relevant livestock industry body about any potential trade issues and their management. You should also be prepared to inform other livestock producers, who intend using this material as stockfeed, of its chemical exposure history.*

May irritate the eyes and skin. Facial skin contact may cause temporary facial numbness. Avoid contact with eyes and skin. DO NOT inhale spray mist. When preparing and using the spray, wear cotton overalls buttoned to neck and wrist, washable hat, elbow-length Chemical Resistant gloves and face shield. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, face shield and contaminated clothing.

Additional Safety and First Aid information is contained in the MSDS which is available at [www.sumitomo-chem.com.au](http://www.sumitomo-chem.com.au), or from the Poisons Information Centre, phone Australia 131 126 and New Zealand 0800 764 766.

# General Product Information

## Withholding periods and grazing intervals

Please refer to the most recent product label for detailed information.

## Rainfastness

Sumi-Alpha Flex should not be applied if rainfall is expected within six hours.

## Insect resistance

For insecticide resistance management, Sumi-Alpha Flex is a Group 3A insecticide, and may be subject to specific resistance strategies. For further information, consult your local supplier, Sumitomo Chemical Australia or the CropLife Australia website.

In NSW and QLD, application of this product to *Helicoverpa armigera* larvae longer than 5 mm may not only be ineffective, but may also increase the level of synthetic pyrethroid resistance. This product should not be used to treat an infestation that was not controlled by it or another synthetic pyrethroid. Infestations not controlled by this product should be treated with an insecticide from another chemical group.



## SUMI-ALPHA<sup>®</sup> FLEX

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\* Photo courtesy of Dr. Andrew Weeks, CESAR Consultants.

△ Photos from SARDI Entomology.



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