

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

# GREEN GUARD<sup>®</sup> ULV

## BIOLOGICAL INSECTICIDE

ACTIVE CONSTITUENT:

300 g/L *Metarhizium anisopliae* var. *acridum* spores

For the *Biological* Control of Locusts and Grasshoppers

Contents: 14 Litres



Made in Australia by:

**Becker Underwood Pty Ltd**

under licence from

Commonwealth Scientific and Industrial Research Organisation

(CSIRO) Entomology

**BECKER  
UNDERWOOD<sup>®</sup>**

# GREEN GUARD® ULV

## Directions for use

### Restraints:

**DO NOT apply when wind speed is less than 2 metres per second.**

**DO NOT apply in gusty conditions greater than 8 metres per second or if rain is imminent in the next 6 hours.**

SITUATION	PEST	RATE/ha	CRITICAL COMMENTS
Agricultural areas, pastures, crops, forage crops and non-crop areas	Nymphs of the Australian plague locust ( <i>Chortoicetes terminifera</i> )	40 - 250 mL (12-75 g spores)	Bulk the relevant volume of product to 500 mL with Summer Spray Oil and apply 500 mL of spray mixture per hectare.* Use higher rates where thick ground cover (vegetation) is present. *
	Nymphs of the Migratory locust ( <i>Locusta migratoria</i> ), Wingless grasshopper ( <i>Phaulacridium vittatum</i> ) and pest grasshoppers Nymphs and adults of Spur-throated locust ( <i>Austracris guttulosa</i> )	250 mL (75 g spores)	Dilute product 1:1 with Summer Spray Oil and apply 500 mL of spray mixture per hectare. * <b>*Refer to "Mixing Instructions" below; incorrect dilution will reduce the effectiveness of the product.</b>

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

### GENERAL INSTRUCTIONS

GREEN GUARD® ULV is specifically designed for broadacre application (i.e. agricultural areas, pastures, crops, forage crops and non-crop areas).

At the warm to hot (25° - 35°C) temperatures common during spring and summer, locusts and grasshoppers treated with GREEN GUARD® ULV take 8-12 days to die. Mortality may take longer when it is cool or cloudy.

Because mortality can take 8-12 days or more, the best strategy with most locusts and grasshoppers is to begin treatment early in the nymphal stage. However, with the Spur-throated locust that lives for several months, treatment during either the nymph or adult stage is appropriate.

**Mixing Instructions:** Prior to diluting GREEN GUARD ULV in Summer Spray Oil (SSO), agitate vigorously if containers have been allowed to stand. Thoroughly mix GREEN GUARD ULV and Summer Spray Oil solution and apply spray mixture immediately at 500 mL per hectare. Ensure any spore residue is rinsed from each container.

### A general guide to determine the appropriate rate of GREEN GUARD ULV to be used:

- Use 40 mL (12 g spores) of GREEN GUARD ULV / ha for Australian plague locust under ideal conditions only, i.e. very large marching bands, short vegetation and wind speed around 3 to 5 metres per second.
- For low vegetation, most common with the Australian plague locust, use 85 mL (25 g spores) of GREEN GUARD ULV / ha.
- For moderately tall, approx 1-1.5m, and thick vegetation, common with all species, use 165 mL (50 g spores) of GREEN GUARD ULV / ha.
- For very tall vegetation or trees, common with Spur-throated locust, use 250mL (75 g spores) of GREEN GUARD ULV / ha.

**Application:** GREEN GUARD® ULV is intended for spray application using ULV rotary atomisers. Apply by aircraft or ground rigs through ULV spray units. Adjust atomisers such that most of the product is applied as droplets in the range of 40-160 µm in diameter. When using aircraft, apply from a height of 10 m at a track spacing of 50-100 m. Agitate diluted product while spraying.

**Compatibility:** This oil-based product should not be used with other pesticides.

### PRECAUTIONS:

Do not use human flaggers/markers unless they are protected by engineering controls such as enclosed cabs.

**Re-entry periods:** DO NOT enter treated area for at least 24 hours after spraying, unless wearing a disposable mist mask, cotton overalls buttoned to neck and wrist and washable hat and rubber gloves. After each day's use, wash clothing and gloves.

### PROTECTION OF BEES:

This product is a potential hazard to bees. DO NOT spray on plants in flower while bees are foraging.

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

DO NOT contaminate streams, rivers or waterways with GREEN GUARD® ULV or with used containers. DO NOT apply under weather conditions, or from spray equipment, that may cause spray to drift onto nearby natural streams, rivers or waterways. DO NOT aerial spray within 100 m upwind of wetlands, waterbodies or watercourses.

### STORAGE AND DISPOSAL:

Keep out of reach of children. Store in the closed, original container below 5°C (do not freeze). Just prior to use, short term storage at room temperature is acceptable. DO NOT store in direct sunlight. Triple or preferably pressure rinse containers in Summer Spray Oil before disposal. Add rinsings to spray tank. DO NOT dispose undiluted product on site.

If recycling, replace cap and return clean containers to recycler or designated collection point.

If not recycling, break, crush, or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

### SAFETY DIRECTIONS:

Avoid contact with eyes. May irritate the eyes. Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. When preparing the product for use, wear cotton overalls buttoned to neck and wrist and a washable hat, elbow-length rubber gloves and face shield. When using the prepared spray by other than aerial application, wear a disposable mist mask. After use, wash hands thoroughly with soap and water.

### FIRST AID:

If poisoning occurs contact a doctor or Poisons Information Centre (Phone Australia 131126).

### MATERIAL SAFETY DATA SHEET:

Additional information is listed in the Material Safety Data Sheet. For a copy, phone Australia 1800 558 399.

### WARRANTY:

The product must be used strictly in accordance with the label directions and instructions. Becker Underwood accepts no liability or responsibility for any consequential loss or otherwise arising from failure to follow these directions and instructions. The liability of Becker Underwood is limited to that imposed by Statutes and, in any case, the liability is strictly limited to replacement of the product or (at the option of Becker Underwood) the refund of the price paid.

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Summer Spray Oil is a trade mark of Caltex Australia Limited.

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