

Product Name: SOLFAC DUO RESIDUAL INSECTICIDE  
APVMA Approval No: 68410/132922



Label Name:	SOLFAC DUO RESIDUAL INSECTICIDE
Signal Headings:	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Constituent Statements:	ACTIVE CONSTITUENTS: 50 g/L IMIDACLOPRID 25 g/L BETACYFLUTHRIN
Mode of Action:	GROUP 3A   4A INSECTICIDE
Statement of Claims:	For the control of insect pests in various indoor and outdoor situations as specified in the Directions for Use.
Net Contents:	125 mL - 10 L
Restrains:	DO NOT apply spray treatment outdoors if heavy rains are expected to occur within 48 hours of application, or if area is about to be irrigated, unless indicated in the directions below.
Directions for Use:	This section contains file attachment.
Other Limitations:	
Withholding Periods:	

Trade Advice:	
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General Instructions:	This section contains file attachment.
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Resistance Warning:	<p><b>INSECTICIDE RESISTANCE WARNING GROUP 3A 4A INSECTICIDE</b></p> <p>For insecticide resistance management SOLFAC DUO is a Group 3A &amp; 4A insecticide. Some naturally occurring insect biotypes resistant to SOLFAC DUO and other Group 3A and 4A insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if SOLFAC DUO or other Group 3A and 4A insecticides are used repeatedly. The effectiveness of SOLFAC DUO 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 failure of SOLFAC DUO to control resistant insects. For further information on managing insecticide resistance contact your local supplier or Bayer representative.</p>
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Precautions:	<p>Re-entry: DO NOT enter treated areas until the spray has dried, 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.</p> <p>For surface treatment only. DO NOT spray into the atmosphere using foggers or other devices designed to create an aerosol.</p> <p>When using in animal houses, DO NOT spray directly onto livestock, their food, water, litter, feed bins or surfaces that are accessible to the stock.</p> <p>DO NOT spray directly on humans, clothing, bed covers or bed linen. DO NOT use in cots where infants sleep.</p> <p>DO NOT apply directly on pets or pets' bedding.</p> <p>If delicate fabrics or materials which may be damaged by water require treatment, test the spray on a small inconspicuous area first.</p> <p>DO NOT spray exposed food, food utensils or food preparation areas. Before use, remove or cover all exposed foodstuffs. Cover all dishes and utensils and surfaces where food is prepared or stored. After use, thoroughly ventilate treated areas. Clean up thoroughly before processing/serving resumes.</p> <p>Avoid contact of spray with timber to which a stain is subsequently to be applied unless the owner is notified that the timber will need additional preparation consistent with that if water alone had contacted the timber. (Evidence of water contact on timber is sometimes only evident once the stain has been applied.)</p> <p>Note on application to carpets Carpets are considered porous surfaces however excessive liquid application may produce water stains and therefore the non-porous surface rate should be adopted if possible. For short-pile carpet, the 1L spray solution per 20 m2 dilution rate should be sufficient. For long pile or shag carpet, the 2L spray solution per 20 m2 may be required to ensure effective penetration and application to all of the carpet pile. Excessive liquid application to carpets may produce water-stains. Since carpets vary in their thickness, colour and material it is</p>
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	<p>highly recommended that a small, inconspicuous area of carpet be sprayed and allowed to dry first to ensure that application volumes are appropriate and that staining will not occur. Allow treated carpets to dry before resuming activity on them.</p> <p>Note on ornamentals and native plants SOLFAC DUO Residual Insecticide has been used on a wide range of ornamental plant species without damage, including but not limited to roses, azaleas, hibiscus, pelargoniums, magnolia, melaleuca, eucalyptus, viburnum, camellia and lilly pillly. However, some species and varieties are particularly sensitive to chemical sprays and as this is often related to local conditions it is advisable to treat only a small number of plants first, in order to ascertain their reaction before treating larger quantities.</p>
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<p>Protections:</p>	<p>PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS Refer to Note on Ornamentals and Native Plants.</p> <p>PROTECTION OF LIVESTOCK Dangerous to bees. DO NOT spray any plants in flower while bees are foraging. DO NOT graze treated turf or feed turf clippings from any treated area to poultry or livestock.</p> <p>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT Toxic to mammals. Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers. Cover fish tanks before using. Toxic to beneficial arthropods. Not compatible with integrated pest management (IPM) programs utilising beneficial arthropods. Minimise spray drift to reduce harmful effects on beneficial arthropods in non-crop areas.</p>
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<p>Storage and Disposal:</p>	<p>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.</p>
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<p>Safety Directions:</p>	<p>May irritate the eyes and skin. Facial skin contact may cause temporary facial numbness. Avoid contact with eyes and skin. When preparing product for use 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 a washable hat. Wash hands after use. After each day's use, wash gloves and contaminated clothing.</p>
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<p>First Aid Instructions:</p>	<p>If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26; New Zealand 0800 764 766.</p>
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<p>First Aid Warnings:</p>	
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**DIRECTIONS FOR USE**

SITUATION	PEST	RATE per L WATER	CRITICAL COMMENTS
Internal and external areas and surrounds of domestic, commercial, industrial and public buildings, facilities and structures.	<b>Indoor pests</b>	10 mL	<p>Refer to <b>APPLICATION</b> details under <b>GENERAL INSTRUCTIONS</b>.</p> <p>Treat where pests have been seen or found or can find shelter. Treat areas where pests normally feed or hide, such as skirting boards, corners, around water pipes, behind and under refrigerators, cabinets, sinks and stoves. This product can be applied to wall/floor junctions, ceilings, in and around cabinets, between, behind and beneath equipment and appliances, around floor drains, window and door frames, vents and eaves and around plumbing, sinks and other possible pest harbourage sites. Void applications can be made behind veneers, piers and chimney bases, into rubble foundations, into block voids and structural voids, wall voids, under slabs, porches or to the soil in crawl spaces and other similar voids.</p>
	<b>Outdoor pests</b>		<p>Refer to <b>APPLICATION</b> details under <b>GENERAL INSTRUCTIONS</b>.</p> <p><b>Residual Spray:</b> Apply this product to surfaces on building exteriors, porches, patios and other structures, around doors and windows, eaves and attic vents, utility entry points and other exterior openings (including foundation cracks or drilled holes) where pests enter the structure or where they have been seen or found or can find shelter.</p> <p><b>Perimeter treatments:</b> Treat the outside of the structure, including walls (to a height of 0.5 – 1.0 m), around door and window frames and eaves where pests are active or may hide. Treat the soil, turf or other ground covering adjacent to the structure (in a band up to 3 m wide) where pests are seen, have been found or can find shelter.</p> <p>In ant management programs, apply to flower, shrub or ornamental plant beds where ants may be nesting, find food or forage.</p>

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

## GENERAL INSTRUCTIONS

Solfac® Duo Residual Insecticide controls indoor and outdoor pests in domestic, commercial, industrial and public buildings, facilities and structures including but not limited to aeroplanes, barracks, factories, farm buildings, food processing establishments, hospitals, hotels and backpacker accommodation, offices, private dwellings, schools, ships, shops, storerooms and trains. Solfac Duo controls a range of pests including crawling insects such as ants, bed bugs, carpet beetles, clothes moths, cockroaches, fleas, silverfish, spiders (web-spinning and non-web-spinning), ticks (not paralysis ticks); flying insects such as house flies and mosquitoes and stored product insect pests.

## MIXING

Ensure that the sprayer is clean and free of residues. If necessary wash out the sprayer with water and detergent before use and treat washings as hazardous waste. Fill the sprayer with half the required volume of water. Measure out precisely the required quantity of product and pour carefully into the spray tank. Complete the filling of the sprayer with water to the appropriate level and agitate.

## COMPATIBILITY

Solfac Duo Residual Insecticide is compatible with Starycide® Insect Growth Regulator.

## APPLICATION

Apply as a coarse directed spray with any suitable hand sprayer or mechanical sprayer, **not exceeding the point of run off**. As a guide, for application to non-porous surfaces, apply 1 L of spray solution per 20 m<sup>2</sup>. For application to porous surfaces or through use of power equipment, a more dilute spray solution (e.g. required dose rate mixed in 2L water) may be needed to treat the same area.

This product may be applied to any surface which is not damaged by water alone. It is recommended to test a small area with the spray mixture first before commencing application.

DO NOT spray the moving parts of any machinery, electric motors or switchgear with the water-based product.

Use a flat fan nozzle for treatment of surfaces and a pin-stream nozzle or special crack and crevice extension to spray cracks and crevices.

Apply as a broadcast application for the treatment of carpets and rugs. Spray overlapping bands of 0.5 m apart to ensure an even coverage of spray. Refer to **Note on application to carpets**.

For application in wet areas, spray harbourages and cracks and crevices only in areas inaccessible to routine cleaning with a maximum band width of 0.1 m. Spray barrier on walls inaccessible to routine cleaning with a maximum band width of 0.5 m.

## Ants

**Direct nest treatment** Where possible locate the nest and spray directly into nest entrances. Penetration of insecticide can be assisted by pre-wetting dry, sandy, porous and hydrophobic soils with water. A thorough soaking treatment with insecticide mixture is required to destroy the nest.

**Treatment when nests cannot be located** Apply to all ant trails and areas where ants are foraging. Search for ants underneath materials (e.g. rocks, timber) and apply to these areas. Where indoor infestation has been identified it is recommended that an external perimeter treatment be installed (refer below) and that indoor areas are treated with a suitably registered bait product (e.g., Maxforce® Quantum Liquid Ant Bait).

**External perimeter treatments** Apply to all potential entrance points of the structure (e.g. cracks and crevices in brickwork and gaps in timber weatherboards). Treat the outside of the structure; walls, and around doors, windows, and other areas where ants are active or may enter or hide. Ensure application in wall voids or other enclosed cavities is made with spray nozzle adjusted to produce a fine mist in order to avoid run-off. Treat the soil, turf or other ground covering adjacent to the structure (in a band up to 3 metres wide) where ants are seen, have been found, or can find shelter.

## **Bed bugs**

Professional Pest Managers undertaking a bedbug treatment are expected to be familiar with the AEPMA Code of Practice (CoP) for the Control of Bedbug Infestations in Australia and consider the recommendations included within this document in relation to bedbug management. Prior to treatment, a thorough inspection of all infested and potentially infested areas should be carried out. Treatment should be directed to all areas of infestation, e.g. the bed-frame and walls, cracks, crevices and skirting boards in the vicinity of the bed. It may also be applied to the edges and seams of the mattress but DO NOT treat the flat surfaces which people sleep on. Consideration should also be given to appropriate non-chemical methods of control in areas where insecticide application is not possible. Control of pyrethroid-resistant strains of bedbug is dependent on direct spray application rather than residual activity. Re-inspection is essential (in accordance with the recommendations of the CoP).

## **Carpet beetles**

Apply to infested carpets particularly in areas of little or no traffic and underneath windows where adult beetles may be entering the building. Refer to **Note on application to carpets**.

## **Clothes moths**

Spray surfaces in areas where clothes are stored. DO NOT spray the clothes themselves.

## **Cockroaches**

Conduct a thorough inspection and apply to known and potential cockroach harbourages. A barrier application around areas where cockroach infestations may be originating is also suggested. Note: The use of an Insect Growth Regulator such as Starycide® Insect Growth Regulator is considered a useful supplementary treatment for cockroach control when cockroach infestation is severe. Repeat application as required. Where application of a spray is not suitable it is recommended that a suitably registered gel such as such as from the Maxforce Gel range be applied as per the registered label on that product.

## **Crickets**

Spray infested areas. In addition, a barrier treatment can be sprayed across areas where these pests enter buildings.

## **Fleas**

For indoor areas, clean and vacuum infested areas and dispose of dust collected in the garbage in a sealed plastic bag. Lightly spray infested areas concentrating on areas under furniture etc. For outdoor areas, apply to outside surfaces of buildings and surrounds including but not limited to foundations, soil, turf, pet housing and other areas where fleas may be present. For dry and hydrophobic soils, pre-wetting the soil with water and/or the addition of a soil wetting agent is recommended. Treat pets with a suitably registered flea control product. The use of an Insect Growth Regulator such as Starycide® is considered a useful supplementary treatment for flea control. Refer to **Note on application to carpets**.

## **Millipedes**

Apply as a coarse spray to infested areas. Recommended for use on non-porous surfaces only.

## **Mosquitoes and Flies**

Spray surfaces where flies and mosquitoes are known to come to rest. Flies – include external surfaces that are exposed to the morning sun. Mosquitoes – spray walls, awnings, fences and vegetated areas in proximity to buildings. DO NOT apply to edible plants. Note: The perception of the level of control of flying insects achieved within any given area treated with a residual surface spray will be affected by the extent of in-migration of individuals from external (un-treated) areas. A residual surface spray will only control those insects that alight on the treated surfaces and therefore complete elimination of flying insects from the treated area should not necessarily always be expected.

### **Paper nest wasps**

Apply diluted spray to the point of run-off directly to the paper nest ensuring thorough and even coverage. When all adult wasps have been knocked down the nest may be safely removed from the structure.

### **Silverfish**

Direct spray to areas of potential and existing infestations e.g. under skirting boards and furniture where dark conditions may favour silverfish populations. If spraying inside cupboards or storage areas remove clothing and utensils etc. before spraying. NOTE: The use of an Insect Growth Regulator (such as Starycide Insect Growth Regulator) is recommended as a supplementary treatment for silverfish control.

### **Skin and hide beetles**

Apply as a coarse spray paying particular attention to the flesh side of the hides.

### **Spiders**

Apply to areas where spiders are known to occur, their webbing and areas where spiders may hide. It is recommended that any webbing is left in place for a few days after application to optimise efficacy.

### **Stored Product Pests**

The use of this product in the control of stored product pests should be considered part of an integrated strategy to prevent development of insect populations. Best results will be obtained where good hygiene is maintained. Infested areas should be cleaned prior to application and regularly cleaned thereafter to reduce food sources for pests. When treating for beetle pests pay special attention to sheltered areas such as cracks and crevices, under furniture and equipment, floors, walls and shelves. Adult moths can be controlled by applying this product to walls and surfaces where the flying adult moths come to rest. Ensure food items in store are not exposed to spray. If necessary remove food items from the area to be treated. Allow all treated surfaces to dry before replacing food items. Where possible avoid spraying actual surfaces which food is likely to directly contact. Do NOT allow spray to contact food packaging material. Discard any foodstuff accidentally contaminated with spray solution.

### **Ticks (not paralysis ticks)**

For use in external areas and surrounds of domestic, commercial and public buildings and structures, untended verges, surrounds of sporting venues etc. and other areas where ticks are found. Apply to outside surfaces of buildings and surrounds including but not limited to foundations, soil, turf, trunks of woody ornamentals and other areas where ticks congregate or have been seen. This treatment is intended to control ticks which are present at the time of application. Repeat application may be required during times of high tick activity. When used in domestic garden situations where domestic pets are present it is recommended that the animals are also treated with an appropriately registered ectoparasiticide.