



Approved Pesticides for Termite Treatments

Environmental Health Guide

Scientific research and evaluation occur on an ongoing basis into the development of new products for controlling termites and other pests. This sheet provides information on all the pesticides registered by the Australian Pesticides and Veterinary Medicines Authority for the control of termites, at the time of publication.

Approved Pesticides for Barrier Treatments of Homes

Four pesticides are currently registered for use as barrier treatments around existing buildings. These vary in the type of chemical, toxicity and lifespan.

The names given here are the names of the active ingredients only. The brand names under which these chemicals are sold will usually differ.

Bifenthrin

Bifenthrin is a synthetic pyrethroid pesticide registered for both pre-construction barrier treatments in new buildings and for perimeter barrier treatments around existing buildings. Currently, there is a choice of three concentrations at which this chemical may be legally applied. These concentrations are 0.1%, 0.05% and 0.25%. Each of these rates provides a different length of protection as follows - at least 10 years, 10 years and 3 years respectively. Bifenthrin is classified as being of medium to high toxicity to humans.

Chlorpyrifos

Chlorpyrifos is an organophosphorus insecticide registered for both pre-construction barrier treatments in new buildings and for perimeter barrier treatments around existing buildings. The concentration of application varies depending on the actual brand used. Generally, chlorpyrifos will provide up to 5 years protection. Chlorpyrifos is classified as being of medium to high toxicity to humans.

Imidacloprid

Imidacloprid is an insecticide registered for termite barrier treatments to existing buildings only. Imidacloprid is applied at 0.25% and will provide up to 3 years protection. Imidacloprid is of low to medium toxicity to humans.

Fipronil

Fipronil is an extremely active insecticide belonging to the phenylpyrazole family. It is used to create a barrier around existing buildings only. Termites are attracted to the chemical where they die, partly from the effect of the chemical and partly from infection with fungi and other soil microorganisms. Fipronil is of low to medium toxicity to humans.

Approved Pesticides for Spot Treatments

Two pesticide powder formulations are currently registered for the control of active termites in and around existing buildings. Both of these products are applied directly to the active termites by a puffer device, so that the powder may be carried back to the nest. These products are:

Arsenic trioxide

Arsenic trioxide is a pesticide powder of high to very high toxicity to humans. One to two grams of powder is applied upon each application and the point of application should be adequately sealed upon completion to prevent any persons from coming into contact with the product. This product is a known carcinogen so should you find any residue or spillage following a treatment which you suspect to be arsenic, contact your pest control firm to arrange clean-up. Do not attempt to clean up any residue yourself.



Triflumuron

Triflumuron dust is an insect growth regulator which interrupts the life-cycle of termites preventing immature termites from developing into adult termites. This product is of low to medium toxicity to humans. It targets a specific enzyme in insects, such as termites, which is not found in humans.

Approved Pesticides for Other Treatments

Permethrin

Permethrin insecticide powder is registered for the control of active termites in trees and tree stumps only, for the purpose of nest destruction. This product is of low to medium toxicity to humans.

Hexaflumuron

Hexaflumuron is an insect growth regulator, which is currently only registered for use in a bait matrix system. It is not applied directly to active termites, as are the previous three pesticides. It interrupts the life cycle of the termites by preventing the development of immature termites into adult termites. Hexaflumuron is of low toxicity to humans.

Chlorfluazuron

Chlorfluazuron is an insect development inhibitor, which is registered for use in bait matrix systems. It is generally applied to bait stations and to active termite galleries where termites are encouraged to feed on cellulose material impregnated with Chlorfluazuron. Chlorfluazuron is an unscheduled termiticide and poses no threat to human health when used in accordance with label directions.

Toxic Effects

All pesticides can be toxic to humans if sufficient amounts are absorbed through the skin, inhaled or swallowed, and some can also be moderately irritating to the skin and eyes. If small amounts of the pesticides are absorbed, the human body is able to detoxify them before excreting them in the normal manner. Occupants of the building are unlikely to suffer any reaction to the pesticide if the treatment has been carried out correctly and in accordance with the directions provided on the product label.

If occupants are exposed, either through misapplication or as a result of an accident, the toxic effect experienced will be determined by the pesticide used, its concentration, the period of exposure, the body part exposed and the route of exposure (e.g. spillage on arm versus groin region), the amount of chemical absorbed and characteristics of the individual who is exposed (e.g. age, fitness).

If exposed, symptoms of poisoning may occur. These symptoms will vary depending on the type of pesticide and are often non-specific, being similar to those produced by a number of common illnesses or diseases. If some or all of the following symptoms occur after exposure, contact your Medical Practitioner: *skin irritation, headache, increased salivation and sweating, excessive contraction of the pupil, dizziness, blurred vision, difficulty breathing, coughing, abdominal pain and cramps, nausea, vomiting, confusion, disorientation.*

Further information on the treatment of termites and the use of termiticides can be found on the Therapeutic Goods Administration website, which can be accessed at www.tga.gov.au/docs/pdf/termite.pdf.

For further information on the safe use of these and other pesticides, contact

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