

Principles of Termite treatment



Treating for termites is tricky! The complication is, that unlike other pest control jobs, treating for termites requires a sound understanding of structural construction as well as the mode of action of the termiticide being used. A call back to an unsuccessful termite job is a time-consuming and costly and without a sound understanding of termiticide treatment, it may be impossible to fully satisfy your client.

In order to ensure that your termite treatments are a success, follow Bayer's 7 principles of termiticide success:

1. *Understand the **Mode of Action** of the product you are using*

A good understanding of the "**Mode of Action**" of new generation termiticides compared to older generation termiticides is needed. Older generation termiticides (Chlordane and Aldrin) produced dead insects almost immediately. New generation termiticides such as **Premise® 200 SC** will not produce dead insects almost immediately, but rather cause a disruption in behaviour and grooming of the termites. This results in the out of control growth of their fungus gardens which will lead to the death of the termites and cause them to abandon their nests and hence come out into the buildings where there is no timber to consume. It must be noted that this is rather a slow process with results normally noted within three months and total control of the termite colony after approximately six months. Due to this unconventional mode of action, PCO's sometimes assume product failure when they see termites coming out of a structure, not realizing that the termites are merely trying to get away from the contaminated area or nest. This behaviour is evident from the type of termite activity observed after the treatment, where the termites surface with no intent to attack timber and seem to be walking around aimlessly on surfaces and not building tunnels to a food source.

2. *Construction method understanding.*

An understanding of construction methods is essential to determine how termites can enter a structure and to plan the treatment process correctly. The floor level must be determined so that the termiticide can be injected just below the floor slab. This is to ensure good penetration in the area where the back fill normally subsides, just below the floor slab, creating a cavity which the termites normally move within. A good practice is to measure the distance from the bottom of the window to the floor on the inside of the building and then using that measurement on the outside to measure from the bottom of the window downwards to determine the height of the floor slab. The correct practice is then to drill horizontally at a forty-five-degree angle one brick below the top of the floor slab so that you will clear all conduits and electrical or plumbing pipes and reach the cavity just below the floor slab.

3. *Treat the wall voids.*

The outside perimeter walls are always constructed with a double wall and this is how termites move around undetected and protected from environmental factors, even accessing the roof from this cavity. Care must be taken to also treat these zones during application. After injecting 5 litres of **Premise® 200 SC** under the sub floor, withdraw the injection nozzle halfway out the hole to access the cavity between the two rows of bricks and inject to saturate the cavity.

4. *Check water quality and pH.*

Always check the water source to ensure that the water quality is between 5.5 to 6.5 pH. Incorrect pH can contribute to the degradation of the product. Borehole water is notorious to have a pH of 4.5 which is very acidic. If you have treated water with a white milky appearance, it could suggest that the pH could be as high as 9 which will make the water more alkaline.



Troubleshooting Termiticides



5. Apply the product within 4 hours of mixing.

Half-life of the product is also very important as all product mixtures need to be applied at least within four hours of mixing. This is because most products reach their half-life at approximately four hours after mixing because of the naturally occurring salts and esters in the water which degrade the product. This translates to the product only having 50% of its strength after 4 hours, 25% of its strength after another four hours and after another four hours it will only be at 12.5% of its original strength. The degradation in termiticides is not always that severe as termiticide products are designed to have a longer effect but care should still be taken to apply the product within 4 hours to avoid the risk of degradation.

6. Ensure that you mix and calibrate carefully.

Correct mixing of the product is essential. For **Premise® 200 SC** one should mix 125 ml / 100 l water for pre-construction treatments and 250 ml / 100 l water for post-construction treatments where there is active infestation. Following the correct product mixture, calibration of equipment is imperative to ensure that the correct amount of termiticide is applied for the correct result. The recommended dose is 5 litre per square meter or hole which is calculated by filling up a 5-litre bucket with your application equipment set at the correct pressure and timing the process to see how long it takes, in seconds, to fill up the 5-litre container. Duplicate the timing result for every hole injected to ensure that every square meter receives the correct 5 litre dose.

7. Store the product in a cool place.

Always store the product in a cool and well-ventilated area keeping in mind that a closed vehicle left in the sun will reach 55 °C and effectively cook your termiticide in the vehicle thereby compromising the integrity of the product. Make provision to store the concentrate packed in its original containers in cooler bags especially in hot areas in South Africa and the rest of Africa.



USE INSECTICIDES RESPONSIBLY. ALWAYS READ THE LABEL AND PRODUCT INFORMATION BEFORE USE. PAY ATTENTION TO THE WARNINGS AND FOLLOW THE PRECAUTIONS ON THE LABEL.

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Reg. No. L7451 Act No. 36 of 1947 Namibian Reg. No. N-AR 0899 **Active Ingredient:** Imidacloprid (chloro-nicotinyl) 200 g/l **HARMFUL**

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