Altriset®
Termiticide

syngenta®

ACTIVE CONSTITUENT: 200 g/L CHLORANTRANILIPROLE

GROUP 28 INSECTICIDE

For use in the management of Subterranean Termites as specified in the Directions for Use

FOR PROFESSIONAL USE ONLY

Syngenta Australia Pty Ltd
Level 1, 2-4 Lyonpark Road, Macquarie Park NSW 2113

In a transport emergency dial 000, Police or Fire Brigade
For specialist advice in an emergency only, call 1800 033 111 (24 hours)

APVMA Approval No: 64594/109049
Item number

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DIRECTIONS FOR USE

Restraints
DO NOT apply to excessively wet soils, immediately after or during heavy rain, to avoid runoff of the chemical
DO NOT use in cavity walls, except for direct treatment of active termites

Situation	Pest	Rate	Critical Comments
Pre-construction Chemical treated soil zones under and around new buildings and structures	Subterranean Termites including (but not limited to) *Coptotermes acinaciformis*, *Heterotermes ferox, Mastotermes darwiniensis*, *Nasutitermes exitiosus, Schedorhinotermes* spp.	Horizontal treatments 12.5 mL/m^2 soil Vertical treatments 250 mL/m^3 soil	Application by LICENSED PEST CONTROL OPERATORS. Mix the required quantity of ALTRISET with the specified volume of water. Apply to form a continuous chemical treated zone (horizontal and vertical or as an external perimeter) around and under the structure to be protected as per AS3660.1. Create a treated zone by using a combination of conventional spraying and trenching, or an approved reticulation system as listed below. Soil injection equipment (rodding) must only be used where trenching and treating the backfill is not possible or practical. Immediately following treatment, the moisture resistant membrane should be positioned over the treated zone to prevent disturbance. Chemical treated zones that have been disturbed will need to be retreated to restore the complete treatment.
Post-construction Chemical treated soil zones under and around existing buildings and structures			Mix the required quantity of ALTRISET with the specified volume of water and apply to form a continuous chemical soil treated zone (horizontal and vertical or as an external perimeter) around and under the structure to be protected according to AS3660.2. The treated zone may be created using a combination of conventional spraying and trenching. Soil injection equipment (rodding) must only be used where trenching and treating the backfill is not possible or practical. Application of chemical treated zones beneath concrete slabs and paths will require drilling and injection of termiticide using rodding equipment. Construction practices, soil subsidence, difficult to wet soils and other factors may create situations where the use of non-ionic wetting agents or foam generating equipment may be useful. Where the entry point(s) can be located, efforts should be made to break leads and apply ALTRISET to the soil at the entry point. Chemical treated zones that have been disturbed will need to be reapplied to restore the complete treated zone. For more details, including required water volume, refer to General Instructions.

Situation	Pest	Rate	Critical Comments
Above ground areas of termite activity Active workings in timber and infested wall cavities	Subterranean Termites including (but not limited to) *Coptotermes acinaciformis*, *Heterotermes ferox, Mastotermes darwiniensis*, *Nasutitermes exitiosus, Schedorhinotermes* spp.	250 mL/100 L water	Mix the required amount of ALTRISET in water. It is highly recommended to use in conjunction with a suitable non-repellent foaming agent to aid in distribution. For wall cavities behind plasterboards use a dry foam (expansion ratio of 20:1 is recommended) to reduce the risk of water/mud staining the plasterboard. To attain an expansion ratio of 20:1 use 15 mL foaming agent/L. For treating infested wood, drill holes and inject foam. Hole spacing/amount injected should be adjusted to avoid foam emerging from adjacent holes. Ensure that any electrical wiring is located prior to making any application in wall cavities. DO NOT apply in the vicinity of live electrical wires. Inject dilution directly into termite galleries or foam into infested voids to ensure maximum coverage. Applications to active workings should not be used as a stand alone treatment. To gain complete control from Subterranean Termites, ALTRISET should be applied to form a continuous chemical soil treated zone (horizontal and vertical or as an external perimeter) around and under the structure to be protected according to AS3660.2.
Reticulation Systems Perimeter and/or service penetration treatment, Complete under slab installations		Horizontal treatments 12.5 mL/m^2 soil Vertical treatments 250 mL/m^3 soil	The system must be installed according to the manufacturer's specifications. The system must be capable of delivering and distributing the required amount of ALTRISET in accordance with the General Instructions in this label and the Australian Standard AS3660 series. ALTRISET must only be applied via a reticulation system that has been installed with a prepared sand/soil bed of a minimum depth of 100 mm and even compaction. If in doubt as to the capability of the system to provide a complete treated zone, additional termite protection needs to be arranged for the areas in question (see General Instructions for further requirements). Vertical treatments: The system installer must ensure that the installation will result in the application of not less than 250 mL product/m^3 of soil applied in a continuous treated zone not less than 100 mm thick. Horizontal treatments under slab: Not less than 12.5 mL of product is required/m^2. Guidelines should be sought from the manufacturer regarding the delivery capability of the system installed with the soil type present to ensure the correct application of termiticide.
Protection of poles and fence posts		250 mL/100 L water	Only posts and poles in contact with the ground need to be treated. For existing posts create a continuous barrier 150 mm wide by soil rodding or spraying the backfilled soil to a depth of 450 mm. Infested posts may also be drilled and injected with spray solution. The use of ALTRISET as a foam will assist the penetration of the chemical into the termite workings. Note that it is impossible to treat the soil at the bottom of a sound post so future attack via this route cannot be ruled out. For new posts treat the bottom of the hole and the backfill using a minimum of 10 L of solution/hole.

Situation	Pest	Rate	Critical Comments
Nests in poles and trees	Subterranean Termites including (but not limited to) *Coptotermes acinaciformis*, *Heterotermes ferox, Mastotermes darwiniensis*, *Nasutitermes exitiosus, Schedorhinotermes* spp.	250 mL/100 L water	Locate the nest by drilling holes into the pole or tree. Make sure that the full size of the nest is identified especially the highest point. The volume applied will depend on the size of the nest (as a guide use 10 to 20 L of ALTRISET dilution/nest). The use of ALTRISET as a foam will assist the penetration of the chemical into the nest (refer to foaming product label). Drill holes should be sealed after application.

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

GENERAL INSTRUCTIONS

ALTRISET is an anthranilic diamide insecticide in the form of a water based suspension concentrate. Delayed mortality effects may be observed, meaning termites may live and continue to be active several weeks after contacting the treated zone. This delayed mortality effect allows for effective horizontal transfer of the active ingredient to nest mates which causes additional termite mortality to untreated colony members.

The use of ALTRISET should form part of a property termite management program. The key aspects of such a program are outlined below.

- Eliminate/reduce the conditions conducive to termite attack
  - Reduce water/moisture around and under properties by improving drainage and repairing leaks
  - Improve ventilation in sub-floor areas
  - Ensure sub-floor area is free from waste timber
  - Where possible, ensure soil level is kept below the exposed edge of any concrete slab
  - Avoid the use of wood mulch and plants in the immediate perimeter surrounding the property
- Treat to ensure a complete chemical treated zone under and around the property in accordance with AS 3660 series.
- Property owner/management needs to be aware of the need to avoid disturbing soil in the treated zone. If it is disturbed the treated zone must be restored to ensure continued protection.
- Efforts should be made to ensure any nests in the property vicinity should be located and eliminated.
- Any treatments of active termite activity should be assessed post-application to ensure success.
- Regular inspections should be made in accordance with AS 3600 series, at least annually.

Any chemical treatment should be carried out by a licensed pest control operator.

When treating structures for control/protection against termite infestations, to maximise the effectiveness of ALTRISET, apply the product in a manner as to provide a continuous zone. Every attempt to maintain the continuous treated area must be made.

Australian Standards
Licensed Pest Control Operators installing a chemical soil treated zone under and around an existing building should be familiar with the Australian Standard 3660 series, which provides information relating to installation of chemical soil termite treatment zones.

Mixing
Application equipment must be clean and free of visible pesticide deposits before mixing ALTRISET. Mix ALTRISET in the following manner

1. Use clean, well maintained application equipment
2. Fill sprayer tank 1/4 to 1/2 full with water
3. Start pump to begin bypass agitation and place end of treating tool in tank to allow circulation through hose
4. Shake the container of ALTRISET well before pouring into tank
5. Add required amount of ALTRISET
6. Add the remaining amount of water
7. Let pump run and allow recirculation through the hose for at least 2 minutes

Note: The spray tank mixture should not be stored in the tank overnight. If this cannot be avoided re-agitate the solution before using.

Soil Preparation
Some soils will be difficult to wet, eg heavy clay soils, and there will be a greater chance of runoff of liquid from the surface. In these situations it will be necessary to loosen the soil to allow spray solution to percolate to form the treated zone, the soil should be scarified to a depth between 50 to 80 mm. In situations with very heavy soils the complete removal and replacement of the soil with a sandy loam type is recommended in order to form the treated zone. The replacement soil can be treated with ALTRISET before placing into the trench via the use of appropriate soil mixing vessels. If soil replacement is not possible then the water volume should be reduced to ensure that runoff is minimised. A reduction in the water volume used should not be associated with a reduction in the mix rate of ALTRISET, the same amount of active ingredient should be applied per given area or volume of soil, an increase in the concentration of ALTRISET will therefore be required. The tables below indicate mix rates if application volumes need to be reduced. It is not recommended that water volumes below 3 L/m² are used.

Horizontal Treated Zones

Water Rate	Dilution Rate
5 L/m²	250 mL/100 L water
4 L/m²	250 mL/80 L water
3 L/m²	250 mL/60 L water

Vertical Treated Zones

Water Rate	Dilution Rate
100 L/m³	250 mL/100 L water
90 L/m³	250 mL/90 L water
80 L/m³	250 mL/80 L water
70 L/m³	250 mL/70 L water

If the treated zone is being applied to a building on a slope, a furrow should also be formed of a similar depth along the contour of the slope to prevent runoff of ALTRISET. In situations where the surface is very dry or with sandy or porous soils, the area will require moistening prior to application of chemical to prevent loss of chemical through piping or excessive percolation. Difficult to wet soils may create situations where the use of non-ionic wetting agents may be useful. The use of rodding equipment in heavy clay soil can result in an uneven distribution of chemical, in such situations the preferred method of installing a treated zone is to trench and backfill.

Horizontal Treated Zones
Horizontal treated zones are to be applied to deter termites from gaining concealed vertical access to the building substructure. Horizontal treated zones should cover all areas of soil beneath suspended floors where there is inadequate access or where there is less than 400 mm clearance. The treated zone should also be continuous beneath a concrete slab-on-ground or on fill. The treated zone should surround any connection between the building and the soil and completely abutt any internal vertical treated zone around any substructure. Otherwise install perimeter treated zones around each individual pier, stump, penetration point and substructure wall. Horizontal treated zones must be a minimum depth of 80 mm. It may be necessary to loosen the soil to allow spray solution to percolate to form the treated zone. The soil should be scarified to a depth between 50 to 80 mm. Apply 5 L of prepared spray/m^2 of soil.

Injecting Under Concrete (along walls, cracks in slabs, expansion joints and around service penetrations)
When the termiticide needs to be injected through a concrete slab to create a horizontal treated zone, suitable equipment should be used to inject termiticide through pre-drilled holes. Use a drill hole spacing between 150 and 300 mm centre to centre and no further than 150 mm distance from walls, cracks in slabs, expansion joints and around service penetrations. As uneven distribution of termiticide is likely when applying by this method, the application volume should be increased by up to 10 L of spray solution/m^2.

Use a slab injector fitted with a multi-directional tip. When applying through such structures, the rod should be held vertically at 90° to the slab and rotated during application. Ensure a strong seal with the top of the drill hole to minimise leakage and that drill holes are plugged after treatment. The following table shows the recommended volume of spray solution required per hole at various drill hole spacings for full horizontal treated zone application.

Soil Type	Hole Spacing	Holes/m^2	Volume/Hole to Achieve 10 L/m^2
Heavy clay	150 mm	44	0.225 L (225 mL) 44 x 0.225 = approximately 10 L
Clay loams	200 mm	25	0.4 L (400 mL) 25 x 0.4 = 10 L
Loams	250 mm	16	0.625 L (625 mL) 16 x 0.625 = 10 L
Sands	300 mm	11	0.9 L (900 mL) 11 x 0.9 = approximately 10 L

If soil subsidence has occurred beneath the concrete, the use of a foam carrier may assist in treating critical areas.

Foam Applications
Construction practices, soil subsidence under concrete slabs and other factors may create situations where a continuous horizontal treated zone cannot be achieved using conventional liquid treatments alone. In such situations conventional liquid application methods can be supplemented through the use of foam generating equipment. The table below provides a guide for foaming ratios and application rates/m^2. For applications under slab the higher volume applications, equivalent to 10 L of liquid/m^2 should be used.

ALTRISET Add recommended quantity of foaming agent	Water	Foam Expansion Ratio	Volume of Finished Foam Required/m^2
12.5 mL	5 L	5:1	25 L
	10 L		50 L
	5 L	10:1	50 L
	10 L		100 L
	5 L	25:1	125 L
	10 L		250 L

If sufficient foam volumes cannot be applied to achieve the recommended rate of ALTRISET required, apply additional prepared liquid solution to ensure the correct amount of active ingredient is present/m^2 of area treated.

Vertical Treated Zones
Vertical treated zones are designed to deter termites from gaining concealed horizontal access to a building or structure. Apply at least 100 L of prepared spray/m^3 of soil. Vertical treated zones should be a minimum of 150 mm wide and applied to a depth 50 mm below the top of the footing. The vertical treated zone should adjoin horizontal barriers. The most effective method of creating an even and continuous treated zone is by trenching and treating the soil as it is backfilled. Soil injection equipment (rodding) must only be used where trenching and treating the backfill is not possible or practical.

Trenching
Excavating a trench, treating the exposed trench, backfilling and treating the backfill is the preferred method of installing a vertical treated zone. The trench needs to be a minimum of 150 mm wide and continue to at least 50 mm below the top of the footing. Assuming a 150 mm wide trench with a 300 mm distance to the top of the footing, this would equate to a 150 mm x 350 mm trench in which 5.25 L of prepared spray would be applied/lineal metre of trench. Any variation of dimensions needs to be recalculated on the basis of applying 100 L of prepared spray/m^3 of soil. If soil injection equipment needs to be used then the minimum distance between injection points should be 150 mm.

Injecting under Concrete
Drill along walls, cracks in slabs, expansion joints and service penetrations. When applying a vertical treated zone underneath a concrete obstruction, eg a path, a soil rod with a 3 or 4 way multidirectional tip should be used. The rod should be rotated during application (90° for a 4 - way tip and 120° for a 3 - way tip). The tip should be inserted down as close to the footing as possible to ensure a complete vertical treated zone. Ensure that chemical is applied during insertion and withdrawal of the rod. As uneven distribution of

ALTRISET is likely when applying by this method under concrete, the application volume should be increased to 200 L spray solution/m^3 of soil. Hole spacing should not exceed 300 mm centre to centre and should not be drilled further than 150 mm from the walls, crack, expansion joint or service penetration. Application volume should be adjusted depending on soil type (as indicated in the table below) and the depth of the footing. The table below provides the recommended volume/hole when injecting to a depth of 300 mm. Any variation of dimensions needs to be re-calculated on the basis of applying 200 L of prepared spray/m^3 of soil.

Soil Type	Hole Spacing	Volume/Hole
Heavy clays	150 mm	1.5 L
Clay loams	200 mm	2 L
Loams	250 mm	2.5 L
Sand	300 mm	3 L

Period of Protection
Data from ongoing Australian trials have shown that correct application of ALTRISET at the 12.5 mL/m^2 or 250 mL/m^3 application rate can deliver up to 8 years protection from Subterranean Termite attack in areas south of the Tropic of Capricorn, and up to 4 years protection when applied in areas north of the Tropic of Capricorn. The actual protection period will also be affected by factors such as termite pressure, climatic and soil conditions and subsequent soil disturbance. Ongoing annual inspections should determine the need for retreatment. To re-establish a treated zone, re-application according to the label is required.

Inspection Intervals
When treatment of active termites has occurred, inspection should occur within 3 months of application. Ongoing inspections should continue at least annually in accordance with AS 3660 series.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT
Very toxic to aquatic life. DO NOT apply to areas where surface water is present. Rinse waters and runoff from treated areas MUST be prevented from entering drains or waterways. DO NOT apply if heavy rains are expected to occur within 48 hours of application. DO NOT contaminate streams, rivers, wetlands or watercourses with this product or used containers.

STORAGE AND DISPOSAL
KEEP OUT OF REACH OF CHILDREN.
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.

FIRST AID
If poisoning occurs, contact a doctor or Poisons Information Centre. Phone 131 126.

SAFETY DATA SHEET
If additional hazard information is required refer to the Material Safety Data Sheet. For a copy phone 1800 067 108 or visit our website at www.syngenta.com.au

DISCLAIMER
This product complies with the specifications in its statutory registration. Implied terms and warranties are excluded. Syngenta's liability for breach of the express or any non-excludable implied warranty is limited to product replacement or purchase price refund. The purchaser must determine suitability for intended purpose and take all proper precautions in the handling, storage and use of the product including those on the label and/or safety data sheet failing which Syngenta shall have no liability.

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