

# ISOPTHOR TERMITE BAIT

**Active Ingredient** diflubenzuron N-[[[4-chlorophenyl]amino]carbonyl]-2,6-difluorobenzamide.....0.25%  
**Inert Ingredients**.....99.75%  
**Total**.....100.00%  
Contains .25 grams of diflubenzuron per 100 grams of formulation

**Important:** Before buying or using this product, read the entire label including the "Warranty Disclaimer", "Inherent Risks of Use" and "Limitation of Remedies" sections of this label. If terms are not acceptable, return the unopened product container at once. Use this product only according to label directions.

EPA Reg. No. 68850-2 EPA Est. No. 68850-NC-001

## Precautionary Statements

### Hazards to Humans and Domestic Animals

### Keep Out of Reach of Children

## CAUTION

In case of an emergency endangering life, property or the environment involving this product, call 1-888-398-3772.

### Environmental Hazards

This product is highly toxic to aquatic invertebrates. Do not place Isopthor in any area where, because of the movement of water, it could be washed into a body of water containing aquatic life, such as ponds or streams.

### Storage and Disposal

Do not contaminate water, food or feed by storage or disposal.

**Storage** - Store in original container in a dry storage area out of reach of children and animals.

**Container Disposal** - Nonrefillable container. Do not reuse or refill this container. If empty: Place in trash or offer for recycling if available. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

**Pesticide Disposal** - Wrap product not disposed of by use according to label directions in paper and place in a trash can.

### Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read the Information and Use Directions carefully before using. Isopthor is intended for use only in receptacles approved for such use by Ensystem. Use of Isopthor in any other type of receptacle or system is prohibited. Contact Ensystem at 1-888-EXTERRA (1-888-398-3772) for assistance in using Isopthor.

### Information

Isopthor is intended for use in an ongoing program of management and control of subterranean termite colonies around and under any type of building or other object (structure). Isopthor does not exclude termites from a structure. Instead, it suppresses or eliminates termite colonies. Isopthor affects termite colonies only if they consume it. Sufficient consumption of Isopthor by all subterranean termite colonies that present an existing or potential hazard to the structure may, subject to the limitations stated herein, protect the structure against subterranean termite attack.

The active ingredient in Isopthor, diflubenzuron, is an insect development inhibitor. When consumed by a termite, diflubenzuron impairs the ability of a termite to molt. Molting is the process by which termites, at certain points in their development, shed their existing exoskeleton and form a replacement exoskeleton. Termites that attempt to molt after ingesting an amount of Isopthor sufficient to impair their molting process either die or are incapacitated by their inability to complete the molting process. Insect development inhibitors such as diflubenzuron are characterized as slow acting toxicants, however their action is slow only to the extent that they affect a termite only at the points in its life cycle when it molts. Because all the termites in a colony do not molt at the same time, the effect of diflubenzuron on the colony as a whole is progressive. This progressive effect is one of the key attributes of diflubenzuron as a termite colony toxicant.

Sufficient consumption of Isopthor by a termite colony can cause a decline in the number of members of the colony. Such a decline, if sustained by continued consumption of Isopthor by the colony, can significantly impair the vitality of the colony. Further, continued consumption of Isopthor by remaining colony members may ultimately result in the total elimination of the colony. The extent of the decline of the colony, the speed of its decline and the possibility of its

elimination depends upon the extent to which Isopthor is made continuously available to a colony for consumption and the extent to which members of the colony consume it. Close adherence to the Use Directions can increase the likelihood of colony elimination, however conditions or circumstances beyond the control of the user may prevent or substantially delay colony elimination. Such conditions include: alternate non-bait food sources that reduce the extent to which the colony depends on Isopthor as a food source, excess moisture, low or high temperatures or abandonment of feeding on the bait by the colony.

Because termites cannot be attracted, they must instead be intercepted as they randomly forage for food. Interception is the process by which termite activity is established at a location prior to the application of Isopthor at that location. Once they are intercepted, termites can normally be induced to consume Isopthor. These intercepted termites then guide other colony members back to the interception location where they also consume Isopthor. The addition of moisture to Isopthor can, under certain conditions, enhance the acceptance of Isopthor by termites.

Termite colonies are intercepted and baited inside bait receptacles that are placed in the ground and, depending on the circumstances, above ground. In ground bait receptacles are buried in or placed in contact with the ground around or under structures to be protected. Above ground bait receptacles are attached to above ground parts of a structure infested with termite activity.

Bait receptacles include bait stations, bait bags and bait cartridges. Bait stations consist of a rigid hollow body with perforations in one or more of its sides allowing for termite entry, an inspection/baiting opening and a removable, tamper resistant cover that is affixed over the opening. Isopthor can be placed directly into bait stations or alternately can be first placed within bait cartridges or bait bags that are loaded into the bait station. Bait bags are made of a flexible fabric containing perforations large enough to permit termite entry and are securely closed after bait is loaded into the bag. Bait bags containing Isopthor can be used alone in lieu of bait stations when they are placed below hardened surfaces, such as through openings in the slab, or are buried below ground.

Termites are intercepted within in ground bait stations with interceptors that are placed inside the station but are accessible to termite attack through the perforations in the station sides. Interceptors are a nontoxic, cellulose containing substance readily consumed by subterranean termites, such as wood. The interceptors provide a pre-baiting food source for termites that, upon being fed on by termites, establishes termite activity within the station. After interception of a termite colony within an in ground station, Isopthor is made continuously available for colony consumption by placing Isopthor in the station and replenishing consumed amounts of Isopthor for as long as termite activity is present in the station.

To reduce the time between bait receptacle installation and initiation of termite feeding on Isopthor within a receptacle, Isopthor can be placed within any installed in ground receptacle at any time, including any time prior to the establishment of termite activity within the receptacle, with or without interceptors. When interceptors are not used Isopthor is used to intercept the termites.

When using above ground receptacles, the step of intercepting termites prior to Isopthor application is eliminated. Termites are instead intercepted with Isopthor.

After termite activity has been absent from a baited in ground receptacle for at least 60 days, the interception process is resumed by cleaning out the station or cavity and replacing the interceptors. After termite activity has been absent from an above ground receptacle for at least 30 days, the receptacle is removed.

In order to affect as many of the termites as possible that currently or could potentially infest a structure, every termite colony that inhabits the ground under and around the structure must be intercepted and baited with Isopthor. If the cycle of interception and baiting around a structure is interrupted or discontinued, new colonies occupying the territory of eliminated colonies, existing colonies that were suppressed but not eliminated or existing colonies never intercepted may forage at points of possible entry into and infest the structure. For this reason, continue the cycle of interception and baiting for as long as it is desired to exclude subterranean termites from the structure.

If a conventional termite liquid barrier treatment is performed in conjunction with an installation of Isopthor, care must be taken not to treat in the area of installed receptacles (preferably not within two feet of receptacles). Do not treat in areas of installed receptacles during routine pesticide applications.

Preventative critical area soil or wood treatments may be performed in conjunction with receptacle installation. Because the use of Isopthor is a multistep process, localized supplemental treatment(s) of areas of the structure infested with active termites at the time of station installation, using barrier or contact type termiticides, may provide more immediate control of termites in those parts of the structure than Isopthor. Because they can disrupt termite feeding in the structure, supplemental treatments must not be made to areas of the structure containing above ground receptacles for so long as above ground receptacles are installed in that area.

## Use Directions

### Preconstruction Use

Isophthor can be used for preventative treatment (before signs of infestation) of structures under construction or newly completed (as a substitute for and in lieu of preconstruction soil treatment). Place receptacles around the outside of the structure only after the final exterior grade is installed (and preferably after landscaping is completed).

### Postconstruction Use

Isophthor can be used for remedial treatment of infested existing structures or for preventative treatment (before signs of infestation) of existing structures.

### Spot and Critical Area Only Use

Spot or critical area only applications of Isophthor can be made at a structure to supplement the application at the same structure of a termite control treatment product labeled for stand alone protection against termite attack. Application of a stand alone termite protection product is defined as the application of a product labeled for the protection of an entire structure against termite attack when applied to the structure alone without the use of other termite control products and such application is made to the extent necessary to provide stand alone protection. Spot and critical area applications of Isophthor are defined as the use of Isophthor according to any of the application techniques contained in this label, alone or in combination, only to the extent, duration or frequency deemed necessary or useful by the applicator as an adjunct to the application of the stand alone product.

### Bait Receptacle and Restriction to Access Approval

Use Isophthor only in receptacles approved by Ensysyex for use with Isophthor. Approved receptacles available from Ensysyex include stations, bags and cartridges. Use only restrictions to bait bag access approved by Ensysyex. Approved restrictions to access available from Ensysyex include wall void access cover panels and slab plugs.

## Above Ground Use of Isophthor

Isophthor is used above ground only when termites are known or suspected to be actively infesting the structure and areas of above ground termite infestation in the structure can be identified and are accessible.

### Above Ground Bait Receptacle Selection

Bags are used in lieu of stations only within voids behind, between or within walls (wall voids) where station installation would be difficult or not feasible and access to the wall void can be securely restricted.

### Above Ground Bait Receptacle Location Selection

Locate receptacles close to or in contact with areas of the structure that contain evidence of known or suspected termite activity. Examples of such evidence include inhabited termite tubing running across structural elements and evidence of active termite infestations within wooden elements.

A station can be located in or on any surface of the structure to which it can be securely attached. To reduce the potential for tampering with and disturbance of stations, choose points of station installation that, where possible, minimize station visibility. Use bags only within wall voids to which access can be securely restricted.

If termites have not been present in a receptacle for at least 30 days, remove the receptacle. At that time, check surrounding areas for evidence of continued above ground termite activity. If continued above ground termite activity is located, reinitiate above ground baiting by installing one or more new receptacles in the area of continuing termite activity.

### Above Ground Bait Receptacle Installation and Initial Baiting

Moisten Isophthor before installing it in the receptacle.

Install a station by attaching it to the structure securely. Position termite access openings in the stations flush with a surface close to or on which an active termite infestation is located. Bait the station by filling it with Isophthor. Replace the station cover securely.

Install a bag by placing the bag within a wall void, creating an access to the wall void if necessary. Restrict access to the wall void securely.

### Above Ground Receptacle Inspection and Rebaiting

To inspect a station, remove the station cover and visually examine the interior of the station for active termites, carefully probing the Isophthor if necessary. If live termites are present in the station and consumption of Isophthor sufficient to warrant rebaiting has occurred, refill the station with Isophthor. Replace the station cover securely.

To inspect a bag, remove the restriction to wall void access and visually examine the interior of the bag for active termites, carefully probing the Isophthor if necessary. If live termites are present in the bag and consumption of Isophthor sufficient to warrant rebaiting has occurred, place another bag containing

Isophthor adjacent to the infested bag. Resecure the restriction to wall void access.

## Scheduling Above Ground Receptacle Inspections

Inspect a receptacle approximately 30 days after the date of installation and thereafter within approximately 30 days after the date of the last inspection of the receptacle.

### Adjustments to Above Ground Receptacle Inspection Scheduling

Decreases in elapsed time between inspections may be warranted if consumption of all the bait in a receptacle occurs during the interval between any two inspections.

## In Ground Use of Isophthor

### In Ground Bait Receptacle Location Selection

To reduce the potential for tampering with and disturbance of receptacles, choose points of receptacle installation that, where possible, minimize receptacle visibility. Areas where barrier type termiticides may have been previously applied, such as within two feet of the foundation wall, must be avoided if possible.

Install receptacles at or near points of known or suspected termite entry into the structure. If a point of accessible ground is not located within ten feet of a point of known termite entry (due to an intervening hardened construction surface such as a concrete slab), it may be advisable to create an access to the ground through that surface close to the point of known entry and install a receptacle at that access.

Install receptacles at or preferably within five feet of points of known, probable or suspected termite foraging and at other critical areas. Such areas may include areas with concentrations of cellulose-containing debris, such as mulch or wood scraps in contact with the ground, areas of moderate soil moisture, shaded areas, areas containing plant root systems, bath traps, visible termite foraging tubes, etc.

Install receptacles around a structure such that, except where sufficient access to the ground is not available, the maximum interval between any two adjacent receptacles does not exceed twenty feet. If the distance between two points of accessible ground around the structure exceeds thirty feet, it may be advisable to form one or more openings in the surface creating the inaccessibility to facilitate baiting between those points.

If the structure has an accessible crawl space, receptacles can be installed in the crawl space in lieu of or in addition to installing receptacles around the structure. Receptacles can be installed within a slab structure at existing or created openings in the slab surface through which ground is accessible and into which a receptacle can be installed in a secure manner.

Once termite interception has occurred at a receptacle and bait consumption has begun, it may be advisable, depending on the rate of bait consumption in that receptacle and nearby receptacles, to locate one or more supplemental receptacles in the immediate vicinity of the infested receptacle(s) in order that bait consumption by the colony be maximized.

If termites have not been present in a receptacle for at least approximately 60 days, remove any remaining bait (clean out station or remove bag) and replace the interceptors. If termites have abandoned the receptacle possibly due to reductions in termite activity related to low temperatures during the period of predicted limited termite activity (see below), it may be advisable to leave the bait in place and recheck the receptacle after the period of predicted limited termite activity has elapsed before removing the bait. If termites have abandoned the receptacle possibly due to excessive moisture, it may be advisable to remove the saturated bait (clean out station or remove bag) and rebait at that time or after the excess moisture condition has abated.

If a receptacle, upon repeated inspection, is found to contain excess moisture (water standing at the bottom of the station or cavity, etc.), it may be advisable to relocate the receptacle, if possible, to a nearby area where the soil is better drained or alternately, modify the receptacle location to prevent water from collecting in the receptacle by, for example, creating a sump area under an installed station or at the bottom of the cavity.

### In Ground Bait Receptacle Installation

To install a station, excavate or form a hole in the ground or harden surface (such as a concrete slab, asphalt, etc.) approximately the same size and dimensions as those of the station. Insert the station into the hole. Maximizing contact between the exterior of the station and the earth during installation will increase the probability of termite interception within the station. Replace the station cover securely.

To create a bait bag cavity beneath a hardened surface, locate or form an opening through the surface, exposing the ground beneath the surface. Form a cavity in the exposed ground large enough to accommodate the bait bag.

Bait bags containing Isophthor can be installed in the ground at any point a station can be installed. Bags that are not installed below a harden surface should be buried below the ground surface and their location recorded.

## Inspecting a Receptacle Before First Use of Isopthor in that Receptacle

Remove the station cover or restriction to bag access and visually examine the interceptors for the presence of termites, being careful to minimize disturbance of the interceptors. If termites are present, bait the receptacle according to First Use of Isopthor in a Receptacle. If termites are not present, further inspect interceptors for excessive decay or moisture saturation. Replace excessively decayed interceptors and also replace saturated interceptors if experience in your area shows that moisture in interceptors does not readily dissipate naturally. Replace the station cover or restriction to cavity access securely.

### First Use of Isopthor in a Receptacle

Receptacles can be baited either after termite activity has been established in a receptacle or at any time before activity has been established in the receptacle, including at the time of receptacle installation.

The amount of Isopthor placed in a receptacle will determine the length of the interval between inspections of receptacles (see *Scheduling In Ground Receptacle Inspections*). A receptacle must be initially baited with no less than 93 grams of Isopthor. Baiting a receptacle with 120 or more grams of Isopthor will permit the maximum length inspection interval between receptacle inspections to be used.

Optionally, moisten Isopthor before installing it in a receptacle. Optionally, place Isopthor (whether or not it has been moistened) in a cartridge before placing it in a receptacle.

To bait a station place at least 93 grams of Isopthor in the station and replace the cover.

To bait a bait bag cavity, place a bag containing at least 93 grams of Isopthor in contact with the interceptors in the cavity and replace any restriction to cavity access securely.

## Inspecting and Rebaiting a Previously Baited Receptacle

To inspect a station, remove the station cover and visually examine the interior of the station for active termites, carefully probing the Isopthor if necessary. If live termites are present in the station and sufficient consumption of Isopthor has occurred to warrant rebaiting, rebait the station by refilling the station with Isopthor. If a bait cartridge or bait bag is in use in the station, either refill the in use cartridge or bag or fill a new cartridge or bag with the appropriate amount of bait and place it in the station. Replace the station cover securely.

To inspect a bag, remove the restriction to cavity access (if any) or dig up the bag and visually examine the interior of the bag for active termites, carefully probing the Isopthor if necessary. If live termites are present in the bag and consumption of Isopthor sufficient to warrant rebaiting has occurred, place another bag containing Isopthor adjacent to the infested bag or refill the bag. Resecure the restriction to cavity access or rebury the bag(s).

## Scheduling In Ground Receptacle Inspections

### If using less than 120 grams of Isopthor in an in ground receptacle

If termite activity is known to be present in the structure at the time receptacles are initially installed, inspect all receptacles two times at approximately 45 and 90 days after the date of completion of initial receptacle installation. If no termite activity is present in the structure at the time receptacles are initially installed, inspect all receptacles for the first time within approximately 90 days after the date of completion of initial receptacle installation.

Thereafter inspect all receptacles approximately every 90 days.

### If using 120 or more grams of Isopthor in an in ground receptacle

If termite activity is known to be present in the structure at the time receptacles are initially installed, inspect all receptacles two times at approximately 60 and 120 days after the date of completion of initial receptacle installation. If no termite activity is present in the structure at the time receptacles are initially installed, inspect all receptacles for the first time within approximately 120 days after the date of completion of initial receptacle installation.

Thereafter inspect all receptacles approximately every 120 days.

## Adjustments to In Ground Receptacle Inspection Scheduling

Decreases in elapsed time between inspections of a baited receptacle may be warranted if consumption of all the bait in the receptacle occurs during the interval between any two inspections.

Because subterranean termites are cold blooded (poikilothermic) animals, low temperatures can substantially reduce or stop their activity close to the earth's surface during a certain period of the year. For this reason, if the temperature falls low enough, termites may cease to feed in receptacles or the onset of feeding in receptacles may be delayed until temperatures have recovered above a certain level for a long enough period of time. Reductions in termite activity that are the result of low temperatures may make inspections of receptacles unnecessary for as long as low temperatures prevail in the area.

The temperature at which termite activity is substantially curtailed may vary significantly between different geographic areas and with different species of

termites. However, generally speaking, termite activity will be reduced in the receptacles during those times of the year during which the average daily mean exterior air temperature is below 50 ° F. For this reason, the following rule may be applied when counting the number of elapsed days between inspections unless, in the opinion of the operator, increases in the elapsed time between inspections are unwarranted based on local circumstances.

In counting the number of days between inspections, exclude from the total number of days elapsed since the last inspection any days whose date falls between the first date in the fall/winter that long term climate data predicts that the mean exterior air temperature for that date at that application site will be below 50 ° F (begin period of predicted limited activity) and the first date in the winter/spring that the climate data predicts that the average mean exterior air temperature for that date at that application site will be above 50 ° F (end period of predicted limited activity).

However, if the number of days excluded according to this rule exceed 90 then schedule the date of the first inspection after the end of the period of predicted limited activity according to the rule or within 30 days of the date of the end of the period of predicted limited activity, whichever of these two dates occurs first. However, under no circumstances should more than six months elapse between inspections of receptacles. Climate data used should be for the National Weather Service reporting station closest to the application site. Information on determining the period of limited activity for any application site based on the zip code of the site can be found at [www.ensystex.com](http://www.ensystex.com).

Allowing extra time between inspections as provided for by this rule may not be advisable if receptacles are located within an area in or under a structure in which the average daily mean air temperature is expected to remain above 50 ° F and termites are actively consuming bait in the receptacles.

## Warranty Disclaimer

Ensystex warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions for use, subject to the inherent risks set forth below. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ENSYSTEX MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.**

## Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Lack of performance or other unintended consequences may result because of factors such as use of the product contrary to the label directions, adverse conditions (such as unfavorable temperatures, soil conditions, excessive rainfall, etc.), abnormal conditions (such as drought, tornadoes, hurricanes, earthquakes, etc.), presence of other materials, the manner of application or other factors, all of which are beyond the control of ENSYSTEX or the seller. All such risks shall be assumed by the Buyer and User.

## Limitation of Remedies

To the extent consistent with applicable law, the exclusive remedy for losses or damages resulting from the use of this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at ENSYSTEX's election, one of the following:

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used.

ENSYSTEX shall not be liable for losses or damages resulting from handling or use of this product unless ENSYSTEX is promptly notified of such loss or damage in writing. In no case shall ENSYSTEX be liable for consequential or incidental damages or losses even if ENSYSTEX knew of, was advised of or should have been aware of the possibility of such damages.

The terms of the "Warranty Disclaimer" above and this "Limitation of Remedies" cannot be varied by any written or verbal statements or agreements. No employee or sales agent of ENSYSTEX or the seller is authorized to vary or exceed the terms of the "Warranty Disclaimer" or this "Limitation of Remedies" in any manner.

Isopthor is a trademark of Ensystex, Inc.

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