



U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (H7505C)  
401 "M" St., S.W.  
Washington, D.C. 20460

EPA Reg. Number:

62719-243

Date of Issuance:

10 MAR 1994

NOTICE OF PESTICIDE:

Registration  
 Reregistration

Term of Issuance: Unconditional

Name of Pesticide Product:

NAF-46

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

DowElanco  
9002 Purdue Road  
Indianapolis, IN 46268-1189

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA sec. 3(c)(5) of the Act with a termination date of December 15, 1996 provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.

2. Make the following label changes:

a. Revise the EPA Registration Number to read, "EPA Reg. No. 62719-243".

b. Consider incorporating the attached comments which were stated as part of the efficacy review for this product.

3. Report to the Agency your progress with State and local authorities in developing appropriate training curricula, effective monitoring techniques, and specific labeling that may prove significant in the administration of this product in those jurisdictions. The registrant must update the Agency every six months from the date of registration, and all pertinent findings must be received by June 15, 1996 for final evaluation.

Signature of Approving Official:

Date:

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4. Submit two copies of the revised final printed label for the record.

5. This registration will expire automatically on March 10, 1996 if you fail to adhere to the requirements of this registration.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.



Robert S. Brennis  
Acting Product Manager 10  
Insecticide-Rodenticide Branch  
Registration Division (7505C)

(Base Label)

(Logo) DowElanco

# NAF-46

**A termite bait for use in an integrated management system for control of subterranean termites**

**Active Ingredient:**

hexaflumuron: N(((3,5-dichloro-4-(1,1,2,2-tetrafluoroethoxy)phenyl)amino)carbonyl)-2,6-difluorobenzamide .....	0.1%
Inert Ingredients .....	99.9%
Total .....	100.0%

Contains 0.1 grams of hexaflumuron per 100 grams of formulation.

## Precautionary Statements

### Hazards to Humans and Domestic Animals

**Keep Out Of Reach Of Children**

## CAUTION

Do not tamper with bait matrix.

### Environmental Hazards

This product is highly toxic to aquatic invertebrates and possibly to fish. Bait stations should not be placed in depressions or low areas that may be flooded or near down spout openings. They should not be used near ponds, streams, springs or other water sources where the bait or its hexaflumuron contents could be washed out of the bait station into water at or near the surface of the ground.

## Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before using. Refer to attached label booklet for complete Directions for Use.

## STORAGE AND DISPOSAL

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

**Storage:** Store in original container in a dry storage area. Do not store above 122°F for extended periods of time.

**Disposal:** Used Baitube\* devices that are damaged or no longer needed should be stored until they can be collected by a representative of DowElanco for disposal or recycling.

**Notice:** Read the entire label. Use only according to label directions. Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" sections inside of label booklet.

In case of emergency endangering health or the environment involving this product, call collect 517-636-4400

EPA Reg. No. 62719- \_\_\_\_\_

EPA Est. \_\_\_\_\_

\* Trademark of DowElanco

DowElanco - Indianapolis, IN 46268, U.S.A.

**Insect Growth Regulator**

**Net Contents** \_\_\_\_\_

ACCEPTED  
with COMMENTS  
in EPA Letter Dated  
MAR 10 1994  
62719-243

(Label Booklet)

(Logo) DowElanco

# NAF-46

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## CAUTION

Refer to inside of label booklet for additional precautionary information and complete Directions for Use including STORAGE AND DISPOSAL.

**Notice:** Read the entire label. Use only according to label directions. Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" sections inside of label booklet.

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EPA Reg. No. 62719- \_\_\_\_\_

EPA Est. \_\_\_\_\_

DowElanco - Indianapolis, IN 46268, U.S.A.

**Insect Growth Regulator**

**Net Contents** \_\_\_\_\_

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**Precautionary Statements****Hazards to Humans and Domestic Animals****Keep Out Of Reach Of Children****CAUTION**

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**Environmental Hazards**

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**Directions for Use**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before using.

**STORAGE AND DISPOSAL**

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

**Storage:** Store in original container in a dry storage area. Do not store above 122°F for extended periods of time.

**Disposal:** Used Baitube® devices that are damaged or no longer needed should be stored until they can be collected by a representative of DowElanco for disposal or recycling.

**Handling Procedures**

Do not break open or cut into the Baitube. Do not remove protective wrapper from the Baitube until ready for use.

**General Information**

NAF-46 contains an insect growth regulator (IGR) that prevents successful molting and development of subterranean termites. This disruption of development ultimately can result in the decline of the termite colony to the point where the colony can no longer sustain itself.

NAF-46 is intended for use in the Sentricon® System which represents an integrated pest management approach for the control of subterranean termite colonies, including *Coptotermes*, *Reticulitermes*, and *Heterotermes spp.* and is intended to form the basis of an on-going program providing structural protection from subterranean termites. Use of this management system involves three basic steps: (1) monitoring for the presence of termite activity in and around the target site; (2) delivery of a slow acting insect growth regulator such as NAF-46 when the presence of subterranean termites has been detected; and (3) continued inspection and monitoring of the site for the presence of termite activity after control or suppression of the colony has been achieved. Although the third phase of the management system is an optional service offered to the owner of the structure, it can provide an on-going preventive service in order to detect any new termite activity.

When termite activity is detected and feeding of NAF-46 termite bait is established, Baitubes should continue to be replenished as long as the bait matrix is being consumed and termites remain active in the Baitubes. When termite activity ceases in the Baitube, monitoring to detect the presence of renewed termite activity may be resumed by substituting a monitoring device for the Baitube.

Do not re-use Baitubes or NAF-46 termite bait. Subterranean termites excrete colony specific pheromones that become incorporated into the matrix while feeding and foraging. The pheromones left in the matrix by one colony will cause feeding deterrence or repellency to other colonies, causing it to be ineffective.

It is important for operators to understand the biology and behavior of subterranean termite species, and construction and landscape features conducive to infestation by subterranean termites.

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## Monitoring

The purpose of the monitoring phase is to detect the presence of subterranean termites. This procedure does not attract termites from other locations. When present, termites can be collected from monitoring devices placed in the soil or Sentricon stations. Upon collection, these termites can be placed inside the Baitube containing NAF-46 to force tunneling through the bait matrix. This facilitates their return to the colony to recruit other nest mates to feed on NAF-46. This "self-recruiting" process further encourages the subterranean termite population to forage into and feed on NAF-46 termite bait.

The applicator should first identify critical areas suitable for placing monitoring devices. Critical areas include locations within or adjacent to visible termite activity such as indicated by: foraging tubes, termite infested plants, wood, and other materials; and areas conducive to termite foraging (moist soil in shaded areas, near irrigation sprinkler heads, roof down spouts and other water sources, and near planting beds or other areas with plant root systems). After placement in select critical areas, additional monitoring devices should be installed around the target site at intervals which do not exceed 20 feet. The target site can include buildings, fences, utility poles, decking, landscape plantings and trees or other features which could be damaged by termite feeding and foraging activity.

## NAF 46 Delivery

Proper use of the Baitube containing NAF-46 termite bait maximizes recruitment nest mates and exposure of a large number of termites from a target colony to the IGR containing matrix.

1. **Installation of the Baitube containing NAF-46:** When termites are detected in a monitoring device, the monitoring device should be removed from its location and replaced with a Baitube.

Prior to placement of the Baitube, peel off the adhesive label at the perforations to expose the termite access holes. Be sure the matrix is covering the top access holes of the Baitube since some settling may occur during transportation and storage. If this is evident, invert the Baitube (with the cap still in place) and tap it to force the matrix to cover the top holes.

A Baitube is to be placed where an infested monitoring device has been removed. The empty chamber at the open end (top) of the Baitube provides a space for introduction of termites collected from the monitoring device. Follow the instructions under "Self-Recruitment" Procedure" then replace the cap after termites are introduced into the Baitube.

## Self-Recruitment Procedure

Remove termites from the monitoring device and introduce them into the chamber in the top of the Baitube as follows (refer to Figure 1):

- (1) Remove the cap of the Baitube to expose the recruitment chamber.
- (2) Carefully remove debris, such as soil and carton material, from the surface of the monitoring device. The debris collected can be placed in and around the baiting site to further entice termites to feed at this foraging location.
- (3) While holding it over the Baitube, separate the monitoring device into its pre-formed sections.
- (4) Gently tap the sections of the monitoring device to dislodge as many termites as possible into the Baitube without harming them.
- (5) Replace the cap on the Baitube without harming termites placed in the chamber. If the chamber is overfilled, wait for excess termites to crawl out of the open end of the tube to avoid injuring them when replacing the cap. Dead termites may repel nestmates from feeding at the bait station.

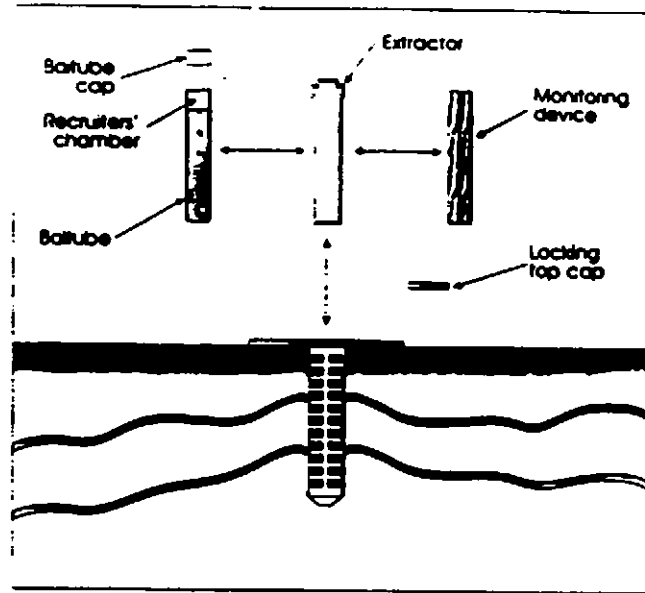
After the capped Baitube is in the Sentricon Station, replace the top cap of the station.

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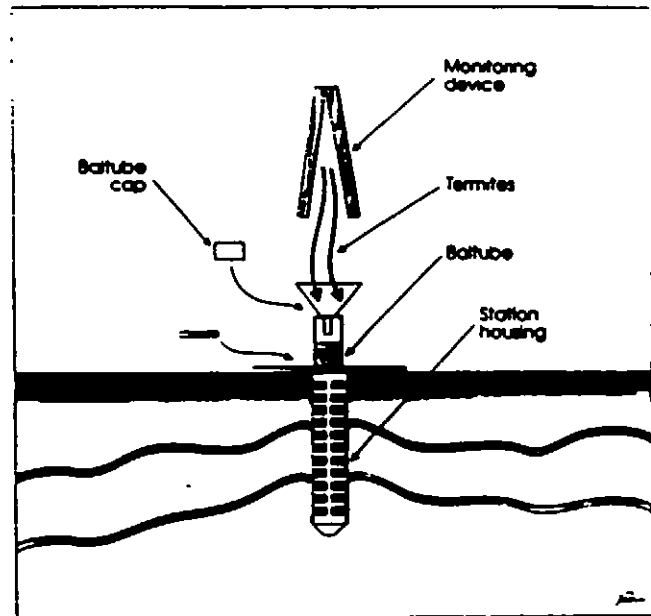
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**Figure 1. (Refer to "Self-Recruitment Procedure")**

**1a. When termites are present during an inspection of the monitoring device, it should be removed and replaced with a Baitube containing NAF-46.**



**1b. Remove termites from the monitoring device and introduce them into the top of the Baitube.**



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**2. Inspection of the Baitube:** Baitubes are inspected by visually examining the device for termites. Once active termites are no longer found in all the Baitubes, or matrix is no longer being consumed, they can be replaced with a monitoring devices. If termites are active in the Baitube and the matrix is nearly or totally consumed (or if the matrix appears to be degraded or moldy), replace it with another Baitube containing NAF-46. If possible, gently tap the termites from the consumed Baitube matrix into the replacement device using the "Self-Recruitment Procedure" described above. Baitubes should be inspected at least monthly while termites are actively feeding to maintain NAF-46 as a food source. It is not desirable to have the entire Baitube contents consumed before replacing it, as termites may forage elsewhere in search of food. Inspect adjacent monitoring device locations and initiate placement of Baitubes in the soil or Sentricon stations when and where termites are found in monitoring devices.

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**WARRANTY DISCLAIMER**

DowElanco 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, subject to the inherent risks set forth below. DowElanco makes no other express or implied warranty of merchantability or fitness for a particular purpose or any other express or implied warranty.

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**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 such factors as use of the product contrary to the label instructions (including adverse conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of DowElanco or the seller. All such risks shall be assumed by the buyer.

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**LIMITATION OF REMEDIES**

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 DowElanco'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.

DowElanco shall not be liable for losses or damages resulting from handling or use of this product unless DowElanco is promptly notified of such loss or damage in writing. In no case shall DowElanco be liable for consequential or incidental damages or losses.

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 DowElanco or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

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