EFFICACY REVIEW
by Mark Suarez, Entomologist - IB

DATE: 4 January 2005
EPA REG. NUMBER: 64405-1
PRODUCT NAME: Bora-Care
REGISTRANT: Nisus Corp.
PM: Richard Gebken, Acting PM10
REVIEWER: Patricia Quarles
DECISION #: 345499
DP BARCODE: 305459
ACTION: R34; Non-Fast Track
ACTIVE INGREDIENT(S): 011103, Boron Sodium Oxide, tetrahydrate
(TYPE: (B$_8$Na$_2$O$_{13}$))..............................40%
Injected Foam Termiticide
OPPTS GUIDELINE(S): 810.1000
MRID: 810.3000
810.3600 to the extent that it applies.
GLP ?: 46306701
Yes.
SITES: Wood.
PESTS: Drywood Termites
STUDY APPLICATION RATE: 1:1 Bora Care:water; 20:1 Foam Expansion Rate
1:5 Bora Care:water; 20:1 Foam Expansion Rate
LABEL APPLICATION RATE: 1:1 or 1:2 Bora Care:water, applied either through foam or misting.
STUDY SUMMARIES:

The submitted study examined the efficacy of the product when applied as a remedial treatment for the control of drywood termites. The product was applied to infestations in five structures. Each structure was initially inspected for drywood termites. Inspections were conducted using Term-A-Trac (a microwave based detection system), an AED (Acoustic Emissions Device), or through visual verification. One to three infestations were noted within each structure.

The structures were spot treated at, and around, the site of infestation, if possible. Infestations were treated with either a 1:1 or 1:5 dilution of Bora Care to water foam with a 20x expansion rate. Foam was applied directly into any galleries and all wall voids and/or surrounding wood area (up to five feet).

Follow-up inspections were conducted at 1, 2, and 3 months. In no case was evidence of termite activity detected during the three month re-inspection interval.

ENTOMOLOGIST'S COMMENTS AND RECOMMENDATIONS:

The submitted study is deficient for several reasons, these deficiencies are presented below:

1.) The species of termite to which the product was applied was not disclosed.

2.) Infestations were presumed by the applicator to be active drywood termites. However, the pest species was not identified. Identification of the infestation requires visual confirmation of activity at the infestation by living individuals of the target species. The presence of pellets and damaged wood consistent with drywood termites is not necessarily indicative of an active infestation.

3.) The use of alternative detection methods is acceptable only to verify the presence or absence of insects following an initial confirmation of pest presence and activity. (See #1 above.)

4.) The size of the colonies was not specified. The colonies controlled should represent average, or larger than average, drywood termite colonies. (i.e., at least several hundred individuals.)

5.) The directions for use against drywood termites on the label are inadequate:
   a. The application of the product as a mist was not tested. Submit data demonstrating the efficacy of this application method, cite data demonstrating the efficacy of the product applied as a mist, or remove directions for this method from the label.
   b. Conversely, the foaming application method is not mentioned on the label. Include directions for application of the product as a foam, if remedial control of drywood termites is to be included on the label.
Recommendations:
- Drywood termites may remain on the label, under two conditions:
  - Efficacy data supporting the application rates and methods described on the label against drywood termites are to be provided within six months, or relevant data are to be cited.
  - Directions for foam application must be included on the label under drywood termite control.
- A protocol may be submitted to the Agency, for guidance purposes, prior to initiation of studies.