



Department of Pesticide Regulation



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MEMORANDUM

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TO: Rachel Naves, Registration Specialist
Pesticide Registration Branch HSM-02004

FROM: Michael H. Dong, Ph.D., CNS, DABT, Staff Toxicologist
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DATE: January 14, 2002

SUBJECT: RECONSIDERATION OF EXPOSURE SIGNIFICANCE FOR REDZONE
BAIT USED TO CONTROL ANTS, ROACHES, AND SILVERFISH

Under reconsideration of exposure significance is Redzone Bait (EPA Reg. No. 64405-2 ZA[?]) manufactured by Nisus Corporation for use to control ants, cockroaches, crickets, mole crickets, and silverfish. The product contains 5.0% of orthoboric acid by weight as the active ingredient. The exposure significance for this bait product, along with five similar products manufactured by the same company, was first assessed last September (Dong, 2001). The registrant later referenced some registration data to address the concerns stated in that September review.

This review continues to support its earlier conclusion that an appropriate respirator or dusk mask is required for applications in new construction or otherwise in places where the product can be dusted or broadcast liberally. The current (04/11/00) label does not specify at all the use of any respirator. Yet the label explicitly specifies that this product may be applied in appropriate areas with a power duster. The same label also specifies that "Children and pets should not be in the treatment areas until after application is completed," which *per se* is inconsistent with the assurance that there will be no hand-to-mouth exposure potential for toddlers or young children living in treated homes or otherwise having access to treated areas.

The referenced registration data on acute inhalation toxicity (Robbins, 1994) indicated that neither a Wright dust generator nor a DeVilbiss powder blower were considered suitable (presumably meant suitable to deliver the test particles to treatment areas) due to the physical nature of the test substance then referred to as Redzone *Beetle* Bait. If that test substance is indeed exactly the same as the bait product Redzone Bait currently under review, in terms of contents, formulation, and packaging, then this review concurs that the application of the subject bait particles *per se* will not and cannot generate an airborne dust.

However, it is not clear at this point if the inert ingredients of Redzone *Beetle* Bait were include as part of the test material, or if they were the same as those of Redzone Bait used primarily to control household and institutional pests. The formulation, the packaging, and the inert ingredients all have an impact on the adherence (or lack of) between the test particles (or those particles currently under review). Redzone Bait and the other five bait products in the earlier review all have the EPA Reg. No. 64405-2, with two of them specifically being labeled as *fine* granular bait. It is also important to note that the potential nuisance or irritation effects of fine particles accompanying granular products are still of health concern justifying the use of a respirator. Certain granules tend to be fragile or vulnerable and some portion of them hence can easily be broken down or crushed into fine particles during packaging and transport.



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It is beyond the purview of this review to *verify* the actual physical nature or appearance of bait granules bulkily kept in a barrel or the kind. Registration's Chemistry unit can take on the responsibility to certify that the subject product as packaged and used is free of *fine* particles and airborne *dust*, if this is indeed the case. In the absence of such a written confirmation, this review is not readily convinced that the use of a respirator is unwarranted, unless the label does not allow the product to be applied with a (power) duster, or to be broadcast liberally.

References

Dong MH, 2001. Insignificant Exposure Assessment for Niban Products Used to Control Ants, Roaches, Crickets, and Silverfish. HSM-01021. Worker Health and Safety Branch, Cal/EPA Department of Pesticide Regulation, dated September 7.

Ribbons GR, 1994. Acute Inhalation Toxicity in Rats (Test Substance: Redzone Beetle Bait C.S.E. #S3255-39). Cal/EPA Department of Pesticide Regulation Registration Document No. 50366-103.

cc: Joseph P. Frank, D.Sc.