



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

DEC 14 1994

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

SUBJECT: Transmittal of all outstanding deliverables relating to  
Cyhalothrin Action D188684

TO: George LaRocca/Adam Heyward  
Product Manager, 13  
Registration Division

FROM: *for* Anthony Maciorowski, Chief, *Douglas J. McKee*  
Ecological Effects Branch  
Environmental Fate and Effects Branch

12/14/94

Action D188684 a study (MRID 426757-02) in which carp (Cyprinus carpio) and Daphnia (Daphnia magna) are exposed to cyhalothrin with and without sediment. The study indicates that sediment would sorb some cyhalothrin or otherwise make it unavailable for assimilation by the test organisms. On the other hand, it is difficult or impossible to relate the results of these studies to actual field conditions. For example, in the Daphnia study, the test containers are filled with 20 grams of soil mixed with 250 ml of water. If all this soil was suspended, it would be equivalent to a suspended sediment load of 80,000 ppm (suspended sediment concentrations in ponds are typically around 200 ppm). The carp were exposed to a similar loading of soil. It has been common in the past to assume, during EEC calculation, that there is binding to the hydrosol and the suspended sediment of the simulated pond. The EEC provided by the Environmental Fate and Groundwater Branch is assumed to take into account this binding. Therefore, the refined exposure concentration is assumed to be available to be assimilated by the test organism.

In conducting the recent amendments for lambda-cyhalothrin including D193875 and D200997 we utilized material in the EFGWB document "Refined Aquatic Exposure" prepared by EFGWB under D201467. The Refined Aquatic Exposure document had basis in the information in MRID NO. 426757-01 which was reviewed by EFGWB in D188686.



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