

EFFICACY REVIEW

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PETITION OR EXP. PERMIT NO. \_\_\_\_\_

DATE DIV. RECEIVED June 19, 1991

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TYPE PRODUCT(S): (D, D, H, F, N, R, S) \_\_\_\_\_

DATA ACCESSION NO(S). 419178-02  
419178-03; D165915; S398594; Case# 053142; Action Code: 345

PRODUCT MGR. NO. 13-LaRocca/LeMaster

PRODUCT NAME(S) COMBAT<sup>®</sup> Roach Control System<sup>™</sup>

COMPANY NAME The Kingsford Products Company dba Combat Insect Control Systems

SUBMISSION PURPOSE Provide performance data demonstrating superiority of alternate bait formulation to that currently marketed and in support of amended claims for resistant roaches.

CHEMICAL & FORMULATION Hydramethylnon [tetrahydro-5,5-dimethyl-2(1H)-pyrimidinone(3-[4-(trifluoromethyl)phenyl]-1-(2-[4-(trifluoromethyl)phenyl]ethenyl)-2-propenylidene)hydrazone] 1.65%

(9.165 lbs. per gallon bait in 0.699 ounce net weight container w/ 12 bait trays)(small) or 2.3 ounces net weight container w/ 8 bait trays)(large)

CONCLUSIONS & RECOMMENDATIONS The data presented in EPA Accession (MRID) Number 419178-02, having been obtained from field testing conducted according to a company protocol which meets the requirements of § 95-11(b) parts (1), (3)-(5) and (7) on p. 268 and the standard of § 95-11(c)(3)(a)(2) and (c) on pp. 270-1 of the Product Performance Guidelines, are adequate to demonstrate that Formula MFB#4733-03-01 is faster acting than the present Formula MFB#19972 in competitive field testing under actual use conditions and thus support improvement claims number 1, 5, 7 and 9 as listed in Jim Wolfe's letter of May 10, 1991. The data presented in MRID No. 419178-03, being merely summaries of previous work of which the greater proportion has yet to be published or is in the process of being published, are not adequate to support claims 3 and 6 of the same letter as regarding effectiveness against sulfluramid-resistant roaches, for the following reasons: 1) based on time/mortality curves in Figures I and II, pp. 15-16, only the Jacksonville and Reddick strains exhibited high resistance ratios; 2) although Table V indicates a much longer time for sulfluramid to achieve 100% mortality, this is somewhat misleading when compared to LT<sub>50</sub>'s for the Easton, Navy #2 and Kenly strains in Table IV where sulfluramid was significantly faster; 3) in the absence of raw data and information on distribution of resistant strains, the significance of sulfluramid resistance for practical control of roaches in households cannot be properly assessed and such label claims are premature. According to Cochran (1989), only malathion among OP's and bendiocarb among carbamates presented real resistance

problems for practical roach control. Nevertheless, we will accept claims 2 and part of 6 based on these data. Claims 4 and 8 are misleading comparative unless qualified by phrases relative to time or greater palatability. RL Dean L. McFarland, IRB