

**EFFICACY STUDY REVIEW**

by Kevin J. Sweeney, Entomologist - IB

*Kevin J. Sweeney*  
*6/8/04*

To: Joseph Tavano

Date: June 8, 2004

EPA Reg. No.: 121-34, 121-57; 121-59; 121-66; and 121-68

Product Name: 121-34 Cutter Original Insect Repellent Pump Spray Formula MMI  
121-57 Cutter Insect Repellent #30CR  
121-59 Cutter Insect Repellent #30ST  
121-66 Cutter Insect Repellent #CTR014  
121-68 Cutter Insect Repellent #CA23

Registrant: Spectrum - Division of United Industries Corporation

PM: Richard Gebken, Acting PM 10

Dec #: 328961; 331283; 331284; 328965; 3289864

DP : 296022; 295702; 295701; 295699; 295720

Chemical: DEET, insecticide (I) - repellent

121-34 23% DEET  
121-57 30% DEET  
121-59 30% DEET  
121-66 30% DEET  
121-68 23% DEET

Studies Submitted:

**MRID # 44517601 Evaluation of the Efficacy of Topical Repellents Against Mosquitoes in the Field by ICR.**

**This study tested 121-68 and a product with an equal concentration of DEET to product 121-34 and 121-68. I previously reviewed this study in support in 8-hour repellency claims for 121-68 on April 21, 1998. I accepted the study for 8-hour repellency claims against mosquitoes only.**

1. This study showed that the subject product provided complete protection against *Aedes* spp. saltmarsh mosquitoes for 11 hours. This repellency claim applies to mosquitoes only and does not support a repellency time for any other pest on the label. The study supports the claim for all of the subject products except 121-59 because [REDACTED] in this formulation and therefore, it is not similar to the other products. For the submitted field study to support this product Chemsico must submit a lab study demonstrating similarity in terms of product performance for 121-68 and 121-59.

2. From my 1998 review: Delete the 8 hour claim for fleas, chiggers, ticks, biting flies and no-see-ums from the label. Efficacy data MUST be submitted or cited to support repellency claims for these pests. The data must prove the specified period of protection in hours. The old label (1994) has these pests on the label. Similar wording may be used but it should say "Repels ...." or "Provides protection against biting.....". The database for many of these pests, especially fleas, is lacking. However, this will be addressed during the DCI for DEET products.

Note that the data request for the above pests is still applicable when a PDCI is issued for product performance.

3. Regarding the notification submitted in late 2003 for the addition of the claim, "Repels mosquitoes that may carry/transmit West Nile virus", the registrant should cite or submit data showing the performance of the subject product against *Culex* spp. mosquitoes that transmit WNV to humans.