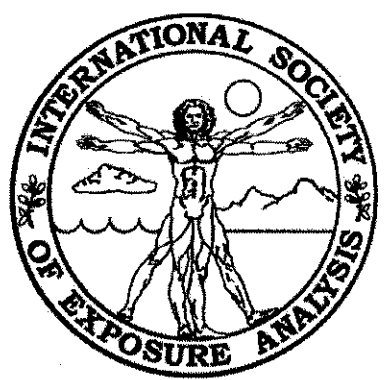


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ABSTRACT BOOK

Poster Tp Risk Assessment**Abstract T-24p****Estimation of inhalation exposures to the OFF!® Mosquito Coil III following indoor use.**

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Pyrethrins are widely used insecticides due to their capacity to rapidly "knockdown" insects and their exhibition of low toxicity in humans. The OFF!® Mosquito Coil III (S.C. Johnson & Son, Inc.) is a commonly used insecticidal product designed for outdoor use, however, because of its effectiveness at killing mosquitoes, it is sometimes mis-used indoors (e.g. infrequently used cabins by sportsmen). Based on a report of sleep disturbances (e.g. extraordinary dreams) following in-cabin use of this product, we conducted an evaluation to assess the human hazard associated with indoor use of the product. The active ingredient in the OFF!® Mosquito Coil III is d/l-allethrolone d-trans chrysanthemate, a pyrethrin for which no toxicity information is available, aside from the MSDS LC50 of 1100 mg/m³. However, chemicals in the classes of pyrethrins and pyrethroids (synthetic pyrethrins) generally exhibit CNS effects in humans and lab animals, with the most common effect being sensory paresthesia. Short-term exposures to d/l-allethrolone d-trans chrysanthemate in an indoor cabin use scenario were assessed. Concentrations were modeled using the Multi-Chamber Concentration and Exposure Model for one and two room cabins, with windows both open and closed. All concentrations were extremely low as compared to the LC50, with the maximum concentration reaching 0.30 mg/m³ for the 2-room cabin scenario with the windows closed. A toxicity assessment was conducted using information obtained from EPA's Pesticide Dockets for pyrethrins, and potential risks were characterized using a margin of exposure (MOE) analysis.