P42 - EXPOSURE CHARACTERIZATIONS OF THREE FRAGRANCED PRODUCTS

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Objective: Quantification of personal and environmental exposure to volatile organic compounds (VOCs) from three plug-in air fresheners. Three products were tested, one plug-in air freshener containing Eucalyptus oil and a blend of fragrances (LL); a second plug-in air freshener containing linalool (L); and a third a heated oil formulation containing linalool (H). A variety of exposure data was collected, including particle concentrations and vapor phase concentrations.

METHODS AND MATERIALS

Introduction: The objective of this study was to develop a comprehensive exposure characterization methodology for evaluating the exposure to a variety of compounds. This methodology was used to evaluate exposure to compounds from three plug-in air fresheners: one containing Eucalyptus oil and a blend of fragrances (LL); another containing linalool (L); and a third a heated oil formulation containing linalool (H). A variety of exposure data was collected, including particle concentrations and vapor phase concentrations.

RESULTS

The results of this study showed that the plug-in air freshener containing linalool (L) released a higher concentration of vapor phase compounds than the other two products. The heated oil formulation containing linalool (H) released a higher concentration of particulate matter than the other two products.

CONCLUSIONS

The results of this study demonstrated the importance of understanding the release patterns of volatile and particulate compounds from plug-in air fresheners. This information can be used to improve exposure management strategies and to reduce exposure to volatile and particulate compounds.


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