

Vaporization Enthalpies and Vapor Pressures of (-) Ambroxide and Galaxolide by Correlation Gas Chromatography

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The vapor pressures and vaporization enthalpies of dibenzofuran, (-) Ambroxide and Galaxolide are evaluated by correlation gas chromatography. The latter two substances are important commercial products, the latter of which has been the subject of some controversy regarding its impact on the environment. All three are cyclic ethers. Dibenzofuran, with established literature values was chosen to evaluate the effectiveness of using hydrocarbons to evaluate both vaporization enthalpies and liquid vapor pressures of simple ethers. Vaporization enthalpy results on dibenzofuran are consistent with previous reports. Current results suggest that hydrocarbons can also be employed to successfully evaluate liquid vapor pressures and vaporization enthalpies at ambient temperatures for substances of this sort, particularly when they are only available in mixtures and/or are difficult to obtain in a pure form other than by gas chromatography.