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Binary Adsorption Equilibria of Various Flavors and Materials Contained in a Box of a Tobacco Product

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An experimental study has been carried out on the binary adsorption of flavors and water for typical materials used in a box of a tobacco product. The component of L-menthol, which was sublimated from the solid state, was adsorbed onto the surfaces of each material without phase re-transition under an unsaturated condition. For tobaccos, papers and filters, flavors with a polar nature were adsorbed to a greater degree than otherwise, while for activated carbons, this dependence showed the opposite tendency except for

behaviors of the binary adsorption equilibria of various flavors and follows; (a) for the tobacco and paper, the flavors were mainly adsorbed on the adsorbed water, and to some extent, on the hydrophobic sites (b) for the filter, they were adsorbed on the hydrophobic sites such as inside the tow, (c) for activated carbon, their adsorption was attributed to the adsorption of flavor molecules in the inner surface of the micropores, but depends on the

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