

Study of the association of 2-oxoindolines in carbon tetrachloride solutions by IR spectra, dipole moments and average molecular weight measurements.

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Streszczenie

Dipole moments, average molecular weights and IR spectra of 2-oxindoline (I), 2-oxo-3-methylindoline (II) and 2-oxo-3,3-dimethylindoline (III) and their *N*-methyl-substituted analogues were studied in CCl₄ solutions at various concentrations. It was shown that the molecules with an N—B bond associate exclusively to cyclic dimers. The values of the association constants (*K*) were determined by IR spectrometry. Other methods gave too broad intervals of possible *K* values. The spectroscopic association constants of compounds I–III are very similar, 380, 350 and 370 dm³ mol^{−1}, respectively. The $\nu_s(\text{NH})$ band shift on association is 275 cm^{−1}.

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