

SOLVENT EMPIRICAL SCALES FOR ELECTRONIC ABSORPTION SPECTRA

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S u m m a r y

Linear correlation between the E_{\max} (kcal/mol) of the visible electronic absorption band of four pyridazinium ylids and the empirical polarities Z (kcal/mol) defined by Kosower are established, proving the intramolecular charge transfer nature of this band. The slopes of the lines are smaller for the carbanion monosubstituted ylids, compared with those of the carbanion disubstituted ylids. This fact emphasizes the prevalence of the dipolar interactions in ylid solutions.

The blue shifts recorded in the protic solvents suggest the hydrogen bond formation between the -OH of these solvents and the ylid carbanion.

A linear dependence exists between the values of E_{\max} (kcal/mol) recorded for two studied ylids. This fact demonstrates that the solvents can be arranged on the empirical scale describing their action on similar chemical compounds, in which electronic transitions of the same nature take place.