

Solvent Effects on OH Stretching Frequencies for 3-Arylallyl Alcohols

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Eight 3-arylallyl alcohols were prepared, and their OH stretching frequencies were measured in twenty non-HBD solvents at room temperature. The observed stretching bands were highly sensitive to the nature of the solvents. Multiple parameter equations were applied to investigate the solvent effect on the O–H stretching frequency. The most significant solvent parameters were the nucleophilicity parameter and the Gutmann donor number, while the electrophilicity parameter was not significant.

Key words: Solvent Effects; Allyl Alcohols; IR-Spectroscopy.