

HPLC SEPARATIONS OF *N*-AZOLE COMPOUNDS IN POLAR ORGANIC AND NORMAL PHASE MODE UTILIZING AMYLOSE-BASED CHIRAL STATIONARY PHASES

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The enantioseparation of potential pharmaceuticals with *N*-azole and *N*-benzazole functional groups attached to lactone and amide skeletons was investigated using amylose-based chiral stationary phases. The influence of acid and base additives was found to affect enantiorecognitions and retentions slightly in both normal phase (NPM) and polar organic mode (POM). The effect of mobile phase composition on the enantioseparation was investigated in both modes, and several examples for the reversal of enantiomer elution order were found. Based on the chromatographic parameters relationships were evaluated between the structure of the selector and selectand. The hysteresis effect of Phenomenex Lux Amylose-1 (amylose tris-(3,5-dimethylphenylcarbamate)) column was investigated under various conditions in POM. Importance of the column pretreatment has been proven in both NPM and POM in case of the applied lactone and amide compounds.

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