

用高效液相色谱手性固定相法拆分芳香仲醇及芳香乙二醇类手性化合物

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**摘要** 在ChiralcelOD和ChiralcelOJ两支多糖类手性固定相上,以各种不同配比的正己烷-异丙醇为洗脱剂对38种带有不同取代基的芳香仲醇及芳香乙二醇类手性化合物的对映体进行拆分,考察了这些外消旋体在这两支手性柱上的色谱行为。结果表明,扬长避短一柱对这些化合物的拆分能力与化合物取代基的性质和位置有关,这些化合物与手性固定相之间的氢键作用和 $\pi$ - $\pi$ 作用是影响手性拆分的重要原因。拆分方法已应用于潜手性酮不对称还原产物的光学纯度的鉴定,并取得了很好的效果。

**关键词** [高速液体色谱](#) [手性试剂](#) [消旋体拆分](#) [固定相](#) [芳香族醇](#) [乙二醇P](#)

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## Enantiomeric resolution of secondary aromatic alcohols and arylethanedioles by HPLC on chiral stationary phase

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**Abstract** Separation of racemic mixtures of thirty-eight secondary aromatic alcohols and arylethanedioles with different substituting group was achieved with HPLC by using Chiralcel OD and Chiralcel LJ as chiral stationary phase and hexane/2-propanol mixtures of different ratios as eluents. The chromatographic parameters of these racemates on OD and OJ columns were examined. The results showed enantiomeric resolution ability of the racemic mixtures on these columns was strongly dependent on the site and the property of substituents. The hydrogen bonding and  $\pi$ - $\pi$  interactions between the chiral stationary phase and the polar group of secondary aromatic alcohols and arylethanedioles may be responsible for the chiral resolution. This method had been applied to determination of the optical purity of the asymmetric reduction products of prochiral ketones.

**Key words** [HIGH SPEED LIQUID CHROMATOGRAPHY](#) [CHIRAL REAGENT](#) [MESOTOMY](#) [STATIONARY PHASE](#) [AROMATIC ALCOHOL](#) [ETHANEDIOL P](#)

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