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Selected abstract

Submitter	Mr Roland Marini
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Type	Poster only
Category	Chiral Analysis
Title	Enantiomeric purity testing of S-timolol by non-aqueous CE using heptakis(2,3-di-O-methyl-6-O-sulfo)- β -cyclodextrin as chiral additive - Validation using the accuracy profile strategy and estimation of uncertainty

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Abstract text

Type	Poster only
Category	Chiral Analysis
Title	Enantiomeric purity testing of S-timolol by non-aqueous CE using heptakis(2,3-di-O-methyl-6-O-sulfo)- β -cyclodextrin as chiral additive - Validation using the accuracy profile strategy and estimation of uncertainty
Text	Non-aqueous capillary electrophoresis (NACE) was successfully applied to the enantiomeric purity testing of S-timolol maleate using heptakis(2,3-di-O-methyl-6-O-sulfo)- β -cyclodextrin (HDMS- β -CD) as chiral selector. With a background electrolyte made of a methanolic solution of 0.75 M formic acid, 30 mM potassium camphorsulfonate and containing 30 mM HDMS- β -CD, the determination of 0.1% of R-timolol in S-timolol could be achieved with an enantioresolution of 8.5. Pyridoxine was used as internal standard. The NACE method was then fully validated by applying a novel strategy using accuracy (total error) profiles. This strategy is based on β -expectation tolerance intervals for the total measurement error which includes trueness and intermediate precision. The uncertainty of measurements derived from β -expectation tolerance intervals was estimated at each concentration level of the validation standards. To confirm the suitability of the method, several real samples of S-timolol maleate containing R-timolol maleate at different concentrations were analyzed and the results were compared to those obtained by liquid chromatography.
Link	https://secure.caos.nl/hplc2007/abstract.asp?hash=cd3b2c5