



Waters Application Library

Determination of Migration Order of
Methylphenobarbital Enantiomers by Chiral
MEKC

CE-Chiral Application Library

Compound: Methylphenobarbital
Type: 90/10 Enantiomeric Mixture
Matrix: Water
Secondary Matrix:

Conditions:

Column / Capillary: AccuSep
Column / Capillary Dimensions: 50 μ m by 60 cm
Column / Capillary Part Number: WAT250-01
Flow Rate / Voltage: 15 KV
Temperature: 30 degrees C
Injection Volume / Type: Hydrostatic
Injection Conditions: 5 seconds
Sample Concentration: 10/90 S/R
Sample Preparation:
Run Time: 17 min.

Mobile Phase / Electrolyte: 25 mM PO₄/BO₄, pH 9.0, 50 mM Enantioselect-(S)-Val-1

Gradient Conditions:

Detection (Primary): 214 nm

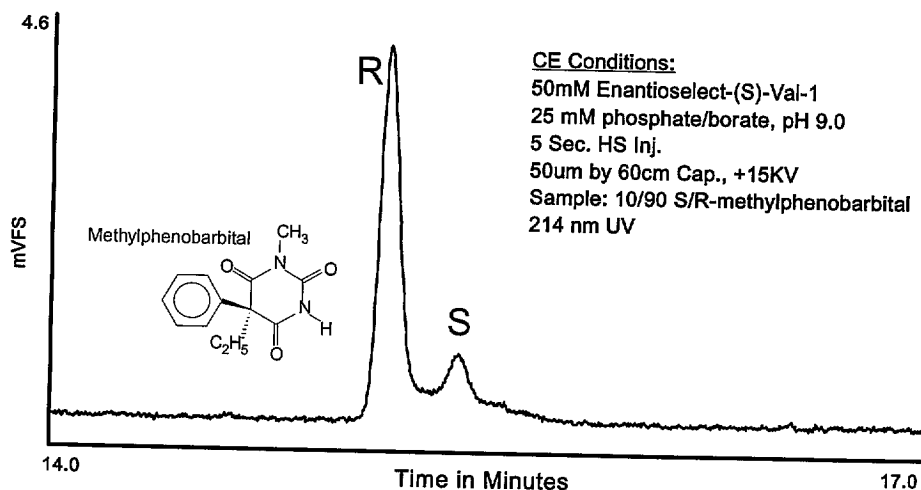
Detection (Secondary):

Instrumentation /System:

Waters Q4000E
Millennium Chromatography Manager V2.1 Control

Chromatogram / Electropherogram:

Experimental Determination of Elution Order: Spiked Methylphenobarbital



Objectives:

Determine elution order of enantiomers of methylphenobarbital.

Details:

Migration order can be reversed by using Enantioselect-(R)-Val-1 if required for better quantitation, detection, or identification.

Ordering Information:

| Part Number | Description | Quantity |
|-------------|--------------------------------------|----------|
| WAT066270 | WATERS ENANTIOSELECT CHIRAL TEST KIT | 1 |