



# Waters Application Library

Separation of Pentobarbital Enantiomers by  
Chiral MEKC

CE-Chiral      Application Library

**Compound:** Pentobarbital  
**Type:** Enantiomeric Mixture  
**Matrix:** Water  
**Secondary Matrix:**

## Conditions:

**Column / Capillary:** AccuSep  
**Column / Capillary Dimensions:** 50  $\mu$ 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:** 10 seconds  
**Sample Concentration:** 100ug/mL  
**Sample Preparation:**  
**Run Time:** 17 min.

**Mobile Phase / Electrolyte:** 25 mM PO<sub>4</sub>/BO<sub>4</sub>, pH 9.0, 50 mM Enantioselect-(S)-Val-1

**Gradient Conditions:**

**Detection (Primary):** 214 nm

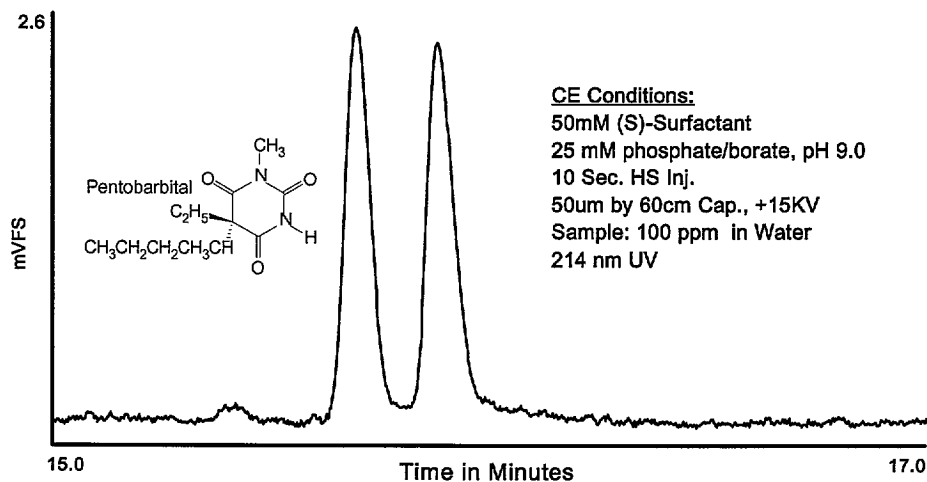
**Detection (Secondary):**

## Instrumentation /System:

Waters Q4000E  
Millennium Chromatography Manager V2.1 Control

Chromatogram / Electropherogram:

## Chiral MEKC Separation of Pentobarbital Enantiomers: Optimized Conditions



**Objectives:**

Separation of pentobarbital enantiomers by Chiral MEKC.

**Details:**

Separation was optimized by adjusting the pH. These conditions will also separate mixtures of various other barbiturates.

**Ordering Information:**

Part Number	Description	Quantity
WAT066270	WATERS ENANTIOSELECT CHIRAL TEST KIT	1