

Separation of Aliphatic Amines using p-CEC system

1. Instruments and Reagent

Experiments were performed on a TriSepTM-2100 Capillary Electrochromatography system (Unimicro Technologies, Inc.) with a 0-30kV high voltage power supply, a Laser Induced Fluorescence detector, a solvent delivery system and HW system software.

Reagent: Methanol (HPLC grade); deionized water; ethanol(AR)

2. Conditions

Capillary Column: EP100-20-45-3 C18

File name: HW-001(00003,20050524 14;22;20)

Mobile phase:

10%(v/v) ACN + 10% 40mM NaH₂PO₄ +100ul 1% H₃PO₄+H₂O

65%(v/v) ACN + 10% 40mM NaH₂PO₄ +100ul 1% H₃PO₄+ H₂O

Gradient: 0~30min 100% to 0%

Flow rate: 0.05ml/min

Separate voltage: 5kv

Pressure: 10MPa

Detector: LIF Excitation wav. : 473nm

Emission wav. : 520nm

Compound: Aliphatic Amines C1~C14 (Peak 1 to Peak 14)

Concentration: 5×10^{-8} mol/L

3. Results

