

1. ABSTRACT

1.1. ANALYSIS OF CALCIUM PANTOTHENAT, METHYLPARABEN AND PROPYLPARABEN BY MICELLAR ELECTROKINETIC CHROMATOGRAPHY

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In this study, a new micellar electrokinetic chromatography (MEKC) has been developed for the simultaneous analysis of calcium pantothenat, methylparaben and propylparaben. Separations were carried out in a fused silica capillary (7,5 cm × 75 μm i.d.) at 20 kV with UV detection at 200 nm. The optimal background electrolyte was 40 mM tricine buffer (pH* 8.2) containing 50 mM sodium dodecyl sulfate as a surfactant and 20 % (V/V) methanol. Rectilinear calibration ranges were 50.0 – 500.0 mg/100ml for calcium pantothenat, 2.0 – 20.0 mg/100ml for methylparaben and 0.5 – 5.0 mg/100ml for propylparaben. The validated MEKC method was applied to the determination of the analytes in a pharmaceutical preparation. The total analysis time was <3 min.